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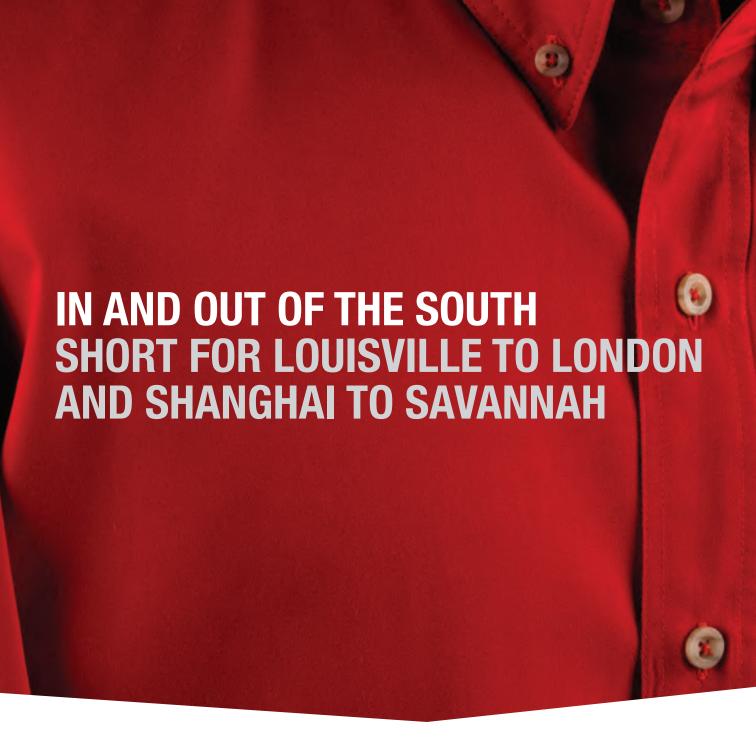












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# Management TIVE SUMMARY OF INDUSTRY NEWS UPDATE

- There's a new kid on the (parcel) block. With its sights set on providing small shippers with a cost-effective option to the parcel giants FedEx, UPS, and the United States Postal Service, EquaShip made its debut last month. The Seattle-based company is geared towards e-commerce sellers and small shippers and says it can offer price breaks that have historically only been available to large enterprise shippers. Shippers go to the company's website to access an interactive pricing map where they make what EquaShip describes as "apples-to-apples" price comparisons among FedEx, UPS, and the USPS as well as calculate potential savings under various scenarios.
- Tepid holiday cheer says NRF. At a time when the economy needs all the help it can get from consumers, the National Retail Federation (NRF) said in October that projected 2011 holiday sales—defined by the NRF as sales in the months of November and December—will be up 2.8 percent over 2010, coming in at \$465.6 billion. This expected growth pales in comparison to the 5.2 percent annual increase in 2010 over 2009. Even though the projected 2.8 percent rate for 2011 is less than a year ago, it's worth noting that the NRF said it's slightly higher than the 10-year average holiday sales increase of 2.6 percent.
- Pulse of Commerce Index takes a dip. The most recent edition of the Ceridian-UCLA Pulse of Commerce Index (PCI) brought home about the only consistent theme regarding the stalled economy of recent months: not much seems to be changing. The PCI, which dropped 1 percent in September from August, is based on an analysis of real-time diesel fuel consumption data from over-the-road trucking and is tracked by Ceridian, a provider of electronic and stored value card payment services at more than 7,000 U.S. locations.
- It is not easy being a green 3PL. In the 18th Annual Survey of Third-Party Logistics Providers released at the Council of Supply Chain Management Professionals Annual Global Conference, it was disclosed that 3PLs are getting serious about sustainable supply chain operations, but most initiatives today are internally focused. What's more, few 3PLs are

- winning or keeping business as a result of their sustainability competency. According to the survey, despite the volatility of the global economy, 3PLs continue to expand their involvement in environmental sustainability issues, and only 16 of 36 CEOs reported that their companies launched new sustainability initiatives in 2010, and 19 reported that they expanded existing sustainability projects. "'Green' is still of limited significance in getting and maintaining 3PL contracts," the authors concluded.
- Nike's green grass roots. The annual GreenBiz Innovation Forum in San Francisco last month vielded some remarkable information and insight on how major U.S. corporations are entering a new phase of sustainable supply chain creation. Hannah Jones, the vice president of sustainable business and innovation for Nike, noted that her company—along with mega multinationals like Procter & Gamble and Eli Lilly—are reconfiguring their distribution models by constantly monitoring "grass roots communities" as well as their complex networks. And, she said, companies like hers are actively educating consumers on the value of purchasing "greener" products. Nike uses 75,000 materials that go into its various products in the course of just one year, said Jones, and a good deal of those are recyclable and part of an elaborate reverse logistics process.

#### ■ N.H. Senator: Let's nix proposed HOS rules.

Senator Kelly Ayotte (R-NH) introduced an amendment to the Fiscal Year 2012 Transportation Appropriations bill that her office said would block the White House and FMCSA from implementing new Hours-of-Service (HOS) rules. Among the rules introduced by the Department of Transportation's Federal Motor Carrier Safety Administration were lowering the maximum time on-duty within the driving window from 14 hours per day to 13 hours per day and reducing the legal daily driving time from 11 hours to 10, among others. If these proposals become law, many industry stakeholders contend that they will collectively reduce the amount of time carriers have to move freight and hinder available trucking capacity.

continued, page 3 >>



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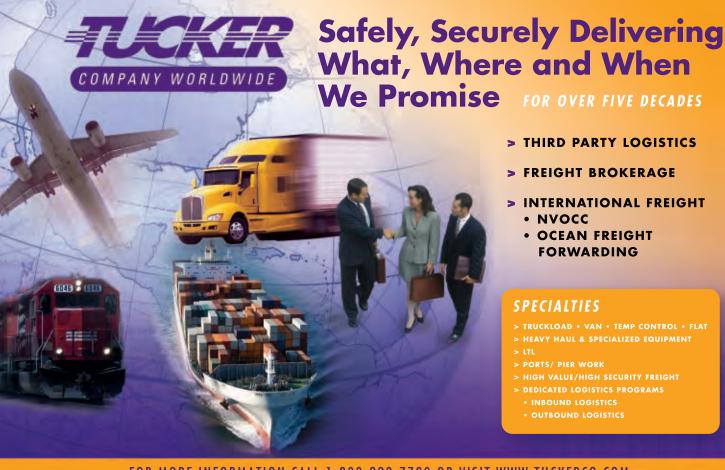
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### Management UPDATE

continued

- **Spot market volumes climb**. Spot market truckload volumes continue to post impressive numbers. according to data from TransCore. September volumes were 3.2 percent better than August and were up 45 percent compared to September 2010. marking the highest spot market freight availability since the aftermath of Hurricane Katrina in 2005, according to TransCore officials. TransCore added that the increase from August to September is a typical, seasonal pattern. Truckload freight rates. excluding fuel surcharges, were up for all equipment types in September, with national average rates for dry vans up 2.3 percent in September and up 3.9 percent annually. Reefer rates were up 1.3 percent from August and up 2.1 percent annually, while flatbed rates were up 0.6 percent sequentially and 10.2 percent annually, due to high demand.
- Transplace, Celtic International buddy up. Taking steps to expand its extensive logistics services menu for shippers, non-asset-based third-party logistics (3PL) services provider Transplace has teamed up with Chicago-based intermodal marketing company (IMC) Celtic International to form a "leading North American logistics provider." The combined company will have revenue north of \$1 billion, coupled with a strong presence in transportation management, logistics technology, intermodal services, and truck brokerage. Transplace CEO Tom Sanderson told LM that this deal should provide opportunities for Transplace customers to grow their intermodal operations in the Eastern two-thirds of the U.S.
- Make way for more containers. Ocean cargo shippers will have access to more than a million twenty-foot equivalent units (TEU), thanks to the continuing introduction of new vessel capacity. According to the Paris-based consultancy Alphaliner, this threshold was reached in mid-October, and represents the distribution of space spread across 154 vessels. Furthermore, said analysts, 0.28 million TEU are planned to be delivered over the next 10 weeks, bringing the expected deliveries to 1.28 million TEU for the full year. Non-deliveries due to cancellations, deferrals, and slippage have fallen to 8.5 percent, as the bulk of the delivery deferrals were negotiated in 2009 and 2010. "Some market sources, that predicted earlier this year that the non-delivery rate for 2011 could be as high as 45 percent of the

- scheduled vessel deliveries, reckoned erroneously that deferrals and delays for 2011 would repeat the figures recorded for 2009 and 2010," said Stephen Fletcher, Alphaliner's commercial director.
- Oakland's major milestone. The Port of Oakland recently reached a major funding milestone of nearly \$350 million for harbor deepening and maintenance, thereby enhancing its position as a leading U.S. ocean cargo export gateway. "Deeper vessel channels mean that the port can remain globally competitive, support job retention and growth, and drive positive economic impact for the region, stat,e and nation," said Congresswoman Barbara Lee, who helped drive the initiative. Of the nearly \$350 million, Lee has ensured that the port received \$242 million for harbor deepening and \$103 million for maintenance dredging. The U.S. Army Corps of Engineers has already begun its annual maintenance dredging that keeps Oakland's harbor navigable and at a depth of minus 50 feet.
- Stay cool, pharma. UPS has announced that it will offer an innovative air freight container for healthcare products, providing a premium level of shipment monitoring and product protection for temperature-sensitive pharmaceuticals, vaccines, and biologics. Only available through UPS, the PharmaPort 360 addresses a key industry issue of safeguarding healthcare shipments in the supply chain by enabling near real-time monitoring and maintaining product temperatures in extreme outside conditions.
- **Carper takes top AAPA award.** The nation's inland waterways are a vital and "green" transportation resource that has only a handful of champions in Government. It's reassuring, then, to note that Sen. Tom Carper (D-Del.) was recently honored as the American Association of Port Authorities' (AAPA) "U.S. Port Person of the Year" at a special luncheon given by the Port of Wilmington Maritime Society. AAPA President and CEO Kurt Nagle presented the award in recognition of Sen. Carper's many contributions toward improving the nation's transportation infrastructure, including its deep-draft navigation channels. The award also credits Sen. Carper for his work on enhancing U.S. port security and reducing harmful diesel emissions at seaports and other transportation facilities.



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U.S. Transportation Secretary Ray LaHood is named NITL Executive of the Year for his passion, enthusiasm, and his ability to navigate the shoals of our now hyper-partisan capitol.





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#### Still doing more with less

Findings reveal that inventory turns are not improving, more DCs are closing rather than opening, and many companies are remaining cautious with equipment investment.



Private fleets 30



Supply chain visibility 36



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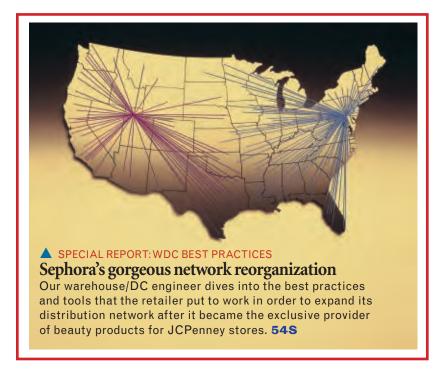
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#### Logistics Management ExclusiveWebcast

2011 Warehouse & DC Operations Survey Results: Still doing more with less Wednesday, November 30 @ 2:00 pm E.T. Register: logisticsmgmt.com/wdcbenchmark2011

Just when we thought things were finally looking up for investment inside the four walls, the results of *Logistics Management's 6th Annual Warehouse and Distribution Center (DC) Operations Survey* show that there might be some slowdown ahead.

Playing out in front of the backdrop of a shaky global economy, this year's findings reveal that inventory turns are not improving, more DCs are closing rather than opening, and many companies are opting to be more cautious, leveraging cost reduction measures that require little or no investment.

So, how do your warehouse/DC operations stack up?

Join Group Editorial Director Michael Levans and the research team of Don Derewecki and Norm Saenz from TranSystems as they put context behind this annual survey designed to give the market the most up-to-date snapshot of current activities and trends in warehouse and DC management.

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## LaHood: Man on the move

I'M PLEASED TO ANNOUNCE that the National Industrial Transportation League (NITL) and Logistics Management (LM) magazine are presenting U.S. Secretary of Transportation Ray LaHood with the 2011 McCullough/NITL Executive of the Year Award.

This honor, which recognizes an individual for achievement and leadership in the logistics and transportation industry, is co-sponsored by NITL and *LM* and is named after John T. McCullough, a former chief editor of *Distribution* magazine, a predecessor of *LM*. I will be presenting the award to Secretary LaHood on Tuesday, November 15, at a luncheon during the 104th Annual Meeting & TransComp Exhibition in Atlanta.

At first glance, some in our industry may be taken aback by the news that Secretary LaHood has been bestowed this year's honor. In fact, many shippers may bristle when they consider the amount of regulation that their carriers and private fleets have been forced to wade through since President Obama took office—rules that are pushing up the cost of equipment, increasing scrutiny of their fleet operations, and may now lead to a reduction in driver hours of service.

However, many others applaud the work the Secretary and the Administration have done over the past three years to not only put safety at the forefront of the Department of Transportation's agenda, but to relentlessly push the need for transportation infrastructure improvement into the headlines of our leading news sources—and subsequently on to the teleprompters of our congressmen and senators.

It's for his pure passion, enthusiasm, and dedication to bringing transportation safety and infrastructure improvement into the legislative and national conversation that Secretary LaHood is being honored with this year's award.

"I think it's fair to say that NITL members saw Secretary LaHood doing his best to navigate the shoals of our now hyper-partisan capitol on matters like basic infrastructure that have traditionally been seen as non-partisan," NITL's President and CEO Brace Carlton shares in this month's cover story. "Being the lone Republican in the President's cabinet, he's had to use the skills he learned serving as a member of Congress to try to bridge the now deep divisions."

Our John Schulz recently caught up with the Secretary on one of the

And he does it all with an infectious smile and a Mid-Western good humor that makes him appear that he really loves what he's doing.

rare days he's actually in his office. "The man really is a whirling dervish, crisscrossing the country, opening up interstate links in Washington state one day, dedicating a bridge in Michigan the next, back on Capitol Hill the day after that lobbying his former House colleagues," says Schulz.

And he does it all with an infectious smile and a Mid-Western good humor that makes him appear that he really loves what he's doing.

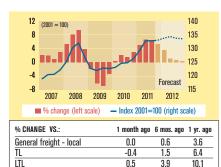
"And he does," says Schulz. "That's the thing that strikes you first about the Secretary. Here's the lone Republican in the cabinet, trying to carry Obama's agenda upstream, and you're expecting a cold, calculating operator. Instead, the guy is like that uncle who shows up at Thanksgiving with the best chocolate, the nicest wine, gifts for all the nephews, and knows a little something about each child at the table."

Schulz' terrific portrait of the 16th Secretary of Transportation unfolds on page 24.

Michael A. Levans, Group Editorial Director

Comments? E-mail me at mlevans@ehpub.com

#### Pricing Across the Transportation Modes



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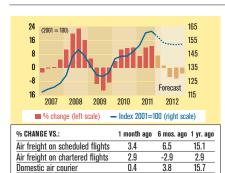
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#### TRUCKING

The trucking industry's inflation trajectory definitely hit a speed bump this past summer that probably presages slower price increases in 2012. The price index for all trucking services was unchanged from a month ago in September. That followed price declines in July and August as well as no change in June. According to surveys of LTL companies only, average transaction prices increased 0.5%. At the same time, TL operators reported a 0.4% price decline. Despite these disparate one-month price changes, prices for the entire third quarter of 2011 in both LTL and TL markets each declined by 0.1% from the previous quarter. For TL carriers, this marked the first quarterly price decline since Q4 of 2009.



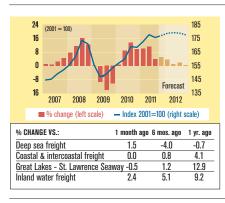
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#### AIR

With the Euro under threat and U.S. consumer confidence falling back to 2009 levels, a double-dip recession appears more likely. Our new forecast for airfreight prices (scheduled flights of U.S. carriers only) calls for tags to fall 3.4% in 2012 after a 9.6% increase in 2011. Looking at September transaction prices charged by U.S.-owned airliners only, airfreight prices for scheduled flights and nonscheduled flights, respectively, increased 3.4% and 2.9% from month-ago levels. Compared to September 2010, scheduled and nonscheduled airfreight prices were up a respective 15.1% and 2.9%. U.S. carriers, however, did raise nonscheduled international airfreight prices 11.4% above year-ago levels.



#### **WATER**

Despite a 1.1% price hike in September, the U.S. water transportation service industry's aggregate price index declined by 1.2% in the third quarter of 2011. Still, compared to same-quarter-year-ago, the water transportation price index was up 3.8%. Notably, this price index remained 1.2% higher than the third quarter of 2008 peak price, before the great global recession sent all transport prices plummeting downward. We assume a double-dip U.S. recession, but also see export opportunities opening up. Our U.S. water transportation forecast continues to call for modest price hikes in the first half of 2012 followed by modest cuts in the second half, ending next year with a 1.6% annual price gain.



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#### **RAIL**

While rail carriers did cut transaction prices at unprecedented rates in 2008-2009, the industry regained control quickly compared to other modes. For nine consecutive quarters, U.S. railroads reported price increases, including a 3.5% hike in Q1 of 2011 and a hefty 5% increase in Q2. Finally, in the most recent third quarter, rail industry prices slowed to 0.6%. The cause of the inflation slowdown now has been intermodal rail. Average transaction prices for intermodal rail service fell 0.8% in September, ending the third quarter also down 0.8%. In our macro forecast, we predict nearterm price cuts in rail. Inside scoop: expanding our forecast horizon to 2013 will provide cover for upward revisions to the forecast.

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

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- LaHood will "push hard" for Infrastructure Bank
- TSA will not move forward with U.S. inbound air cargo screening deadline

# NEWS

# & ANALYSI

# Peak Season plans fail to materialize

Despite previous hopes for a traditional Peak Season, economic uncertainty and cautious consumers mute prospects.

By Jeff Berman, Group News Editor

FRAMINGHAM, Mass—While hopes were high earlier this year for the return to a "traditional" Peak Season, things have not gone according to plan based on freight trends, volumes, and insight from industry stakeholders.

Earlier this year, the general consensus that peak would return was being driven by the fact that freight volumes and economic trends were largely encouraging—and if that continued, prospects for a vigorous Peak Season were realistic. This sentiment was reflected in a

June Logistics Management readership survey that found that 78 percent of the respondents expected a Peak Season this year, with another 45 percent expecting it to be more active than a year ago.

But fast forward roughly four months later and that no longer appears to be the case. Unemployment is still high, retail sales are mostly flat, and consumers remain cautious.

This has also played out with U.S.-bound imports. At the Ports of Los Angeles and Long Beach—

the two largest container ports in the country—September volumes were flat or down, with Long Beach imports down 8.9 percent and Los Angeles imports down 0.16 percent. This has also played out in other modes of freight transportation, with railroads and trucking carriers indicating volumes from July through September were mostly flat on an annual basis.

"On the [import] side, we are not seeing much of a Peak Season," said POLA Director of Communications Philip Sanfield. "We were pretty



#### **NEWS & ANALYSIS**

much flat in September, and there was some hope among retailers and others that there would be a bigger volume surge in September, which is not happening yet."

In terms of traditional Peak Season shipping volumes, Sanfield said it's possible that volumes have already hit a plateau, leaving open the possibility that October could see some gains, but not at a peak level.

Ben Hackett, president of Hackett Associates and author of the monthly *Port Tracker* report that his firm publishes with the National Retail Federation (NRF), said that despite evidence of some growth, "the Peak Season is gone, never came, and is not here." Hackett defines Peak Season as typically running from mid- or late-July through late September.

And unlike a year ago when shippers were leery of tight capacity and brought merchandise into the U.S. well ahead of the traditional Peak Season timeframe, the same activity did not repeat itself a year later, based on the abundant supply of ocean capacity—coupled with less-than-needed demand to fill those vessels.

In many respects, the lack of a true Peak Season is directly tied to consumer spending, which accounts for about 70 percent of total economic activity in the U.S. According to Ed Leamer, chief PCI economist and director of the UCLA Anderson Forecast, this has been made clear this year, with retailers postponing their order commitments and holding off until things become clearer regarding the overall health of the economy—while risking stock outages by having very lean inventories.

"There is no locomotive that is pulling the U.S. economy forward," explained Leamer.

"And we have a frugal consumer. In the past, consumers spent money they were never going to earn and used their homes as ATM machines before coming to the realization that was not a good idea."

Even though imports are down at major U.S ports, Stifel Nicolaus analyst David Ross wrote in a research note that port data reflects retailers' view of holiday demand and has little correlation to actual demand.

"The year 2008 was bad for retailers," Ross wrote, "because they got caught with too much inventory. In 2009, retailers had too little inventory, causing stock outs and a surge in airfreight. Then in 2010, retailers feared a Peak Season capacity crunch and moved ocean volumes early, which proved unnecessary. So…in our opinion, retailers are just being smarter this year—better to have too little inventory than too much." □



During last month's hearing chaired by House T&I Committee Chairman Mica, critics pointed out that a new Infrastructure Bank would consume a mass amount of resources and do what TIFIA and SIBs could do.

not only aging infrastructure like roads and bridges, but all the other things communities [need] in order to operate."

LaHood says that being the only Republican in the president's cabinet will be helpful as he tries to lobby his former colleagues into passing the \$447 billion American Jobs Act, which includes the Infrastructure Bank seed money. "I have a good relationship with people on both sides of the aisle," LaHood told *Logistics Management*. "I think it has really helped us move our agenda at DOT having the relationships on Capitol Hill."

LaHood said that he reminds his former House colleagues that there are no Republican or Democratic infrastructure projects, only improvements. "They're bipartisan and I think my relationship has been helpful to the administration, to the President, and to moving the transportation agenda."

Democrats view the Infrastructure Bank as a quick way to provide federal funding to specific, critical transportation projects of national importance. LaHood, the lone Republican in the cabinet, told *LM* he favors creation of such a bank.

Not surprisingly, LaHood's fellow Republicans differ. They view the Infrastructure Bank as an unnecessary new federal program that would be very similar to the existing Transportation Infrastructure Finance and Innovation Act (TIFIA) program. TIFIA provides federal credit assistance to multi-modal surface transportation projects of

#### **TRANSPORTATION**

#### LaHood will "push hard" for Infrastructure Bank, but Mica calls proposal "dead on arrival"

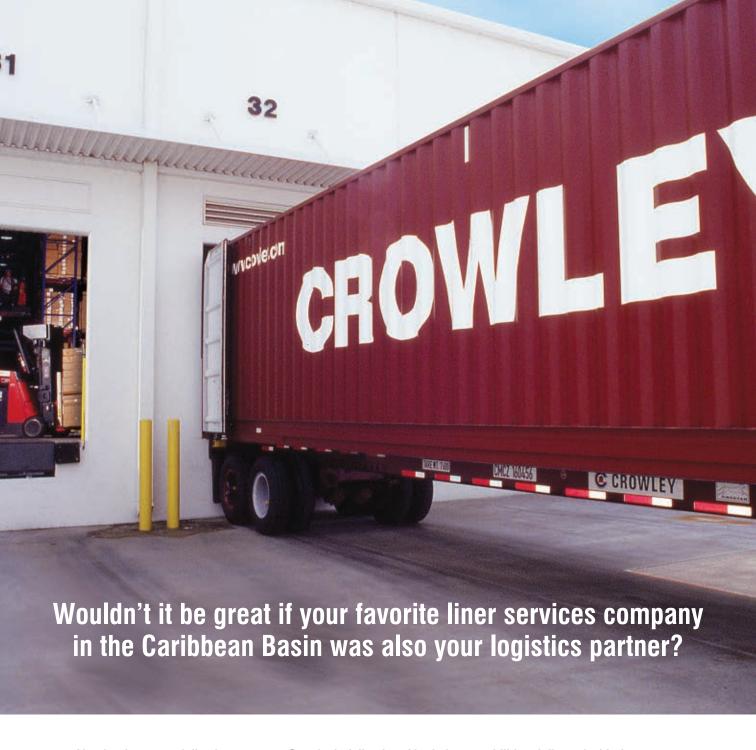
WASHINGTON, D.C.—Transportation Secretary Ray H. LaHood is vowing to go to the mat against his former House Republican colleagues in winning \$10 billion in seed money to create a national Infrastructure Bank to fund freight projects of national significance.

That comes in the wake of House Transportation & Infrastructure Committee Chairman John Mica (R-Fla.) calling the Infrastructure Bank idea "dead on arrival" in the House.

"The Infrastructure Bank is some-

thing that President Obama has pushed very hard for," LaHood said. "We support it in the American Jobs Act [where] there is \$10 billion dollars for the Infrastructure Bank."

"That money could be used to leverage billions of private dollars to build roads, to build bridges, to build some infrastructure on the waterways to build water treatment plants, and to build sewage treatment plants," LaHood said. "[An Infrastructure Bank] would give communities the opportunity to take



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#### **NEWS & ANALYSIS**

regional and national significance.

Republicans say that the Infrastructure Bank proposal is similar to State Infrastructure Banks (SIBs), revolving fund mechanisms that allow states to finance highway and transit projects through loans and credit enhancements by utilizing their federal aid highway funds. During a hearing last month chaired by House T&I Committee Chairman Mica, critics pointed out that establishing and operating a new

Infrastructure Bank would consume a significant amount of resources, and serve a function that could be fulfilled by TIFIA and SIBs.

Specifically, Republicans questioned the wisdom of spending an estimated \$270 million in a year-long process of creating another federally backed agency designed to pick project winners and losers.

"Unfortunately, they still haven't learned that 'shovel ready' is a national joke," Mica said in a statement. "While

the administration is pushing these projects forward with current red tape and rules, they just push further back or stall hundreds of other projects pending federal approval. We must expedite the review process for all projects, not just a handful. When the entire infrastructure project process is mired in red tape, the administration's plan is a drop in the bucket compared to what must be done."

—John D. Schulz, Contributing Editor

#### SECURITY

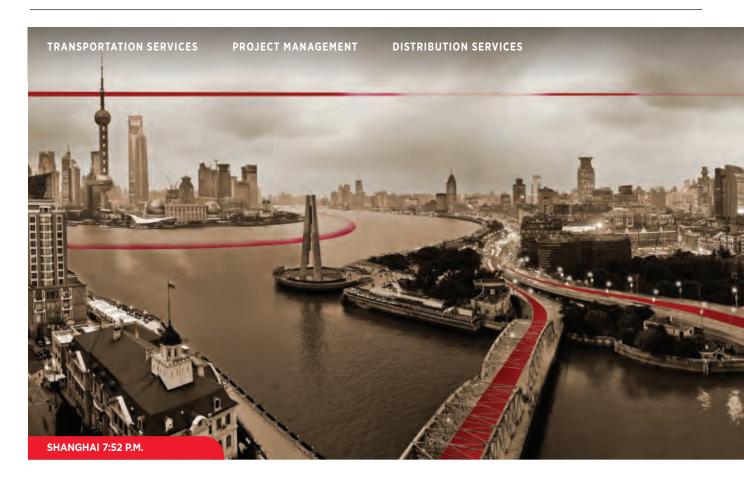
#### TSA will not move forward with U.S. inbound air cargo screening

WASHINGTON, D.C.—The Department of Homeland Security's Transportation Security Administration (TSA) said last month that it no longer plans to proceed with its intended move to accelerate the deadline for screening United States-bound air cargo to December 31, 2011.

Had this deadline come to fruition, it would have been well ahead of the previous deadline of 2013 previously laid out by TSA, based on a June 2010 testimony by TSA Assistant Administrator John Sammon.

The push for an expedited inbound U.S. air cargo screening deadline was

spurred to a large degree by an October 2010 attempt by terrorists to send explosives originating from Yemen to the United States on cargo and passenger planes. The January TSA proposal followed a law mandating 100 percent screening of cargo transported on passenger aircraft, which took effect last August.



The law was part of H.R. 1, Implementing the 9/11 Commission Recommendations Act of 2007, that required the Secretary of Homeland Security to establish a system to enable the airline industry to establish a system to screen 100 percent of cargo transported on passenger aircraft equal with the level of security used for checked baggage.

This requires all air cargo to be screened at the piece level prior to transport on a passenger aircraft for flights originating in the United States, according to the TSA. Included in this endeavor is TSA's Certified Cargo Screening Program (CCSP) that enables Indirect Air Carriers (IACs), shippers, and Independent Cargo Screening Facilities (ICSFs) to screen cargo for flights originating in the U.S.

According to TSA, most shippers involved in CCSP have readily incorporated physical search into their packing/shipping operation at minimal cost without needing to invest in

screening equipment.

"We are not in favor of 100 percent screening," said Brandon Fried, executive director of the Washington, D.C.-based Airforwarders Association. "We believe in more of a supply chain approach to perform screening like CCSP. While screening plays a role, it is not the solution we are looking for to be 100 percent secure. We have to use a very empathically risk-based approach, a multilayered approach that incorporates lots of different ways to screen cargo and is based on targeted, risk-based assessment."

Fried added that screening cargo is much different than screening bags on an airplane. The main reason, he said, is that passenger cargo goes through the same type of screening device. But on the cargo side, he said that TSA has neither vetted nor certified a piece of technology that can screen a pallet that contains multiple commodities, which H.R. 1 requires on a piece level.

Another challenge for TSA cited by Fried is that other nations are not providing TSA with the visibility for their screening protocols, which prevents TSA from knowing if other nations' screening protocols are commensurate with TSA's own standards.

"This is a big issue and needs to be elevated beyond the level of the Department of Homeland Security," said Fried. "We would like to see other agencies like the Department of State and Department of Commerce involved, too, and have Secretary of State Clinton go to her counterparts in other countries to make sure TSA gets the visibility it needs."

This sentiment was shared by The International Air Cargo Association (TIACA). TIACA officials said that TSA's move not to proceed with a December 31 deadline is the right decision.

—Jeff Berman, Group News Editor

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#### Moore on



#### **Unbundling fleet outsourcing**

THE USE OF DEDICATED AND PRIVATE truck fleets seams to wax and wane with the economy. I'm referring, of course, to those who are trying to optimize transportation cost through use of dedicated equipment and not those who justify a private fleet primarily as a marketing tool.

I recently completed an analysis of the fleet cost for a consumer products retailer and explained to the CEO that he was paying both a trailer lease cost and near full-market price for hauling his goods—resulting in excess costs of over a million dollars per year. His response was that the fleet was a rolling billboard, and a million dollars was a cheap price to pay for the exposure the company was getting. This column is for those motivated by cost, or those "economic buyers," rather than this CEO.

As many firms evaluate the fixed vs. variable transportation cost model, we see economic buyers in industry move in and out of the market. In fact, decisions about fleet contracting should be made on factors such as the density of the areas that a logistics operation is trying to serve and the type of contract that the shipper and service provider are capable of supporting.

When we enter into a fleet management arrangement we're adopting a significant portion of the risk elements of a trucking company in exchange for a potentially lower annual cost. To achieve a margin of savings, we have to keep the loaded miles percentage high. Thus, the analysis often centers on commercial density in the areas where the fleet is to operate. High density means more orders for our products and a higher chance of backhauls or additional loads within the hours of service limitation of the drivers. If you have not yet considered a dedicated fleet or fleet outsourcing, the developing period of driver and equipment shortages should perk your interest.

Here are two key areas to consider. First, many dedicated/contract carriage providers will help you evaluate the potential to be successful in fleet

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outsourcing. You can model whether you have the density and market presence to be successful. As in all highway transportation, when contracting it's important to factor in the major cost drivers of fuel, operator pay, insurance, maintenance, and safety. As you take on the largely fixed cost of a dedicated fleet you will need to be aware of the economic risks and how you will manage those along with the provider.

The second area to consider is whether you and a service provider can create a contract that is designed around a long-term partnership that focuses on mutual profitability. As in other outsourcing areas, the concept of "vesting" in the other party implies a change from the boilerplate, defensive contract the service provider will typically present for your signature.

It also implies a sharing of common customer service vision and mutual trust. I recently had the opportunity to review some tools that companies were using to see if there's alignment in terms of whether they're prepared to outsource—and whether they trust their partner in this contractual relationship.

The results can be quite shocking. I can see why firms who outsource fleets can have buyer's remorse after one or two years into the contract. In fact, the issue over time is often with the contract reflecting underlying mistrust and misunderstanding that gets in the way of a successful relationship.

Fleet management contracts are serious business deals. Often public companies have to note these contracts in their financial statements. Thus, your deal can have scrutiny at the highest levels and with stockholders.

Buyers and providers need to learn what makes a successful partnership built not on dry terms and conditions but on a shared commitment to the delivery of the perfect order to customers. Of equal importance, the partnership has to result in the efficient use of talented people and equipment to perform at below market prices. I encourage those currently in a contract, and those considering entering the fleet outsourcing market, to unbundle the fleet package and make sure each element is supporting your business objectives.

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## **Building the digital** supply network

In the future, companies' physical end-to-end supply chains will work in concert with equally comprehensive and far reaching "digital supply networks"—from systems that support initial design and development work, all the way to those that help manage delivery and post-sale service.

The technology foundations of these networks exist now, but complete integration still has a way to go. When it happens, however, most every supply chain function will benefit from more frequent and open communication with every other function. Processes will become more efficient. Costs will drop; operational flexibility will increase; and more timely, reliable, and complete information will raise the accuracy of demand forecasts, as supplier and customer inventories become largely transparent.

#### **HUBS OF CONNECTIVITY**

Think of the digital supply network as having five "hubs of connectivity"—metaphorical crossroads where information flows automatically to and from other areas of the organization.

By leveraging digital capabilities available in supplier relationship management technology, companies can improve collaboration, sourcing, transaction execution, and performance monitoring between themselves and their trading partners.

**Digital Node 1: Customer Interface.** With cocreation and crowd-sourcing, companies are finding new ways to understand and leverage the desires, preferences and ideas of consumers. Take FashionStake.com, creator of a "crowd-curated fashion marketplace." On its highly interactive website, consumers vote on apparel designs before they have been produced. A vote becomes a purchase if

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enough votes are cast to justify a production run. In effect, manufacturing decisions are determined by consumer demand.

The supply chain planning implications of this approach are dramatic. Companies can gauge what will be popular in a virtual way before they commit to a physical product, thereby reducing inventory risk. Plus, insights from consumers' choices can be applied to demand forecasts associated with other selling channels, like brick-and-mortar retail.

**Digital Node 2: Product Lifecycle Management.** Today's product-development processes are often separated from the rest of the organization. In a digital network environment, however, sophisticated systems capture product updates and continually share product information with anyone whose current or future tasks might be affected. Data from purchasing, suppliers, operations, sales, and marketing supports planning in ways that control costs and accelerate the delivery of finished goods.

Innovative collaboration tools are helping Car-

refour and its suppliers simplify product lifecycle management for private label products. According to Carrefour, this process—which ranges from design to in-store management—is key to ensuring the quality of Carrefour brand products.

#### Digital Node 3: Integrated Demand and Supply Plan-

ning. In the digital supply network, more people participate in the demand planning process. Digitized information is pushed throughout the organization to departments such as product development, marketing, production, logistics, and transportation. With this information on a server in a private cloud, authorized people around the world can readily access it. Forecast quality improves, which in turn reduces stock-outs, lowers inventories, and increases inventory turns.

Procter & Gamble gets dates and locations for all events with its retail partners—such as a cluster of Walmart stores in south Florida—and prepares for predictable increases in demand. For instance, if a set of stores plans a buy-two-get-one-free promotion on diapers, P&G systems are fully prepared to "custom coordinate" production and distribution in that region.

**Digital Node 4: Suppliers.** By leveraging digital capabilities available in supplier relationship management (SRM) technology, companies can improve collaboration, sourcing, transaction execution, and performance monitoring between themselves and their trading partners. This helps an organization increase enterprisewide visibility into spending and trading partner activity, while enhancing control across the sourcing and procurement cycle.

Jaguar Land Rover (JLR) has teamed up with Covisint, a provider of communication and collaboration systems, to enhance information-sharing with suppliers and streamline joint business processes. JLR now shares an unprecedented number of company-specific applications with its global supplier base and gives suppliers access to a massive library of up-to-date information.

**Digital Node 5: Logistics.** Digital network leaders use mobile devices to track inventory from warehouse

to dock to store, thus improving their ability to fill orders reliably and efficiently; support routing decisions; and make rapid adjustments to changing conditions. Another logistical advance is sharing data from manufacturing planning systems with third-party logistics services providers. With better visibility into newproduct developments and production volumes, the 3PL can more-effectively plan operations and reduce costs for both parties.

The United States Postal Services integrates multiple mail-tracking systems into a single system, called Surface Visibility. Barcodes on mail containers are scanned at the dock, thus providing advance notification of mail entering and departing a facility. USPS containers have dimensions embedded into the container barcodes, which helps optimize trailer cube.

#### **CONNECTING THE DOTS**

Connecting all five digital nodes in the digital supply network is virgin territory for most companies. But it may not remain so, given the very real opportunity to obtain more accurate, more timely and more complete information, and thereby reduce stockouts, improve forecasts, and increase resilience.

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#### Andreoli on



## Demography and its impact on oil and fuel markets

IT'S A SAFE BET THAT FEW OF YOU CAN NAME a famous demographer alive today. I certainly can't, and I studied the subject as a graduate and post-graduate student. Yet demography—the statistical study of the size, structure, and distribution of population over time—provides an essential foundation for those wishing to understand oil economics and the development of oil and fuel markets.

Demographers use fertility rates, mortality rates, and migration rates to forecast population by gender and age cohort far into the future. And if it weren't for wars, epidemics, and famines, demographers' already accurate projections would be even more accurate.

From these population projections, economists calculate how the evolution of important economic determinants, like the size of the labor force and the dependency ratio, is likely to impact a nation's economy over time. Demographic shifts and economic development can further be used to forecast a nation's demand for resources, like oil, provided that resource intensity can be predicted.

To the extent that demography is taught to nondemographers, it is usually limited to an introduction of population pyramids and the all-important demographic transition model—the former providing a tool for visualizing the latter. Though some more detailed variants exist, demographic transition is conventionally portrayed in three stages driven by economic development.

The first stage is characterized by high birth rates and death rates, and a low and stable population. The second stage is characterized by explosive population growth as death rates decline and birth rates remain high. By the third stage, birth rates have declined, and the population has stabilized at a much higher level than in the first stage.

When evaluating oil markets, one can take a simple approach that considers global oil production (supply) and consumption (demand), or a more complex approach that takes demographic change into account. Each approach has pros and cons, and while simple aggregate approaches can be extremely enlightening, simple models fail to account for the impacts that demographic shifts have on oil markets.

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In order to understand these impacts, we must first recognize that oil markets are imperfect. Some countries discourage consumption through taxation. Anyone who has traveled to the Netherlands, where a gallon of gas costs more than \$8, understands how effective these taxes are at curbing consumption.

On the other side of the coin, a number of countries do the exact opposite by subsidizing fuel consumption. In Saudi Arabia, a gallon of gasoline will set you back \$0.91, and the guaranteed price charged to thermoelectric power plants is far cheaper. Across the board, Saudi prices seem cheap until you consider that in Nigeria that same gallon of gas only costs \$0.38, and that filling a 10-gallon tank will set you back a scant \$1.20 in Venezuela.

# The consequences of ignoring the impacts of demographic shifts on oil and fuel prices, and therefore your bottom line, could be dire.

In addition to cheap gas, each of these countries shares a few other important characteristics: They are all net oil exporters; they are all in the second stage of the demographic transition (hence their populations are exploding); and the leaders of each know that the provision of cheap fuel is critical to maintaining their despotic regimes.

As a consequence, dual oil markets exist not just in Saudi Arabia, Nigeria, and Venezuela, but also in the majority of net oil-exporting countries. In these places, domestic oil and fuel demand is satisfied first, and only the surplus oil is sold on the world oil market where competition amongst oil importers sets the price.

Net oil importers, a group including nine of the 10 largest economies, rely on a steady supply of oil from net oil exporting countries. Unfortunately, only two of the world's net oil exporters—Canada and Norway—have progressed to the third stage of the demographic transition.

All other net oil exporters are in the midst of population explosions. This fact strongly suggests that subsidized domestic consumption will continue to rise rapidly and cut into the oil exports upon which the world's largest economies depend. This will be the case even if per capita consumption in places like Saudi Arabia remains unchanged. The problem, of course, is that per capita consumption is rising along with these nations' populations.

There is a simple explanation for the compounded exponential growth of oil consumption across most oil exporting nations. Rapidly rising oil incomes support investment and generate jobs. In turn, increased national income and rising employment lead to increased oil demand, and because domestic oil and fuel prices are inflexible, oil and fuel can in practice become cheaper in real terms.

The perverse incentive of subsidized oil and fuel consumption is essentially mandated, albeit indirectly, by the fact these nations' populations are exploding. Take Saudi Arabia as a case in point. Despite the fact that Saudi Arabia's oil income increased apace with oil prices through 2008, the unemployment rate rose from just over 8 percent to 12 percent between 2000 and 2006 before falling back to 9.8 percent in 2008. Due to the Saudi population explosion, both total employment and the unemployment rate have risen concurrently.

Because oil is the master resource that provides both energy and industrial feed-stocks, rapidly rising oil prices exert strong inflationary pressures across the global economy. This is especially true of food and other essential commodities and even truer in net oil exporting economies that become flush with rising income.

The combination of food inflation and rising unemployment across the oil-rich Middle East and North Africa (MENA) region has proven to be an intoxicating recipe for domestic discontent, which has evolved from sporadic, unorganized bread riots to the highly effective Arab Spring revolts that toppled the Mubarak and Qadaffi regimes and caused dictators and despots across the MENA

region to react.

In Saudi Arabia and elsewhere discontent has been quelled, though certainly not eradicated, by approaches which mix carrot and stick incentives. The carrots come in the form of federal spending programs, and the sticks come in the form of violent, often deadly, suppression.

The increase in social spending programs in places like Saudi Arabia has caused the fiscal break-even oil price to rise. Saudi Arabia and Nigeria both need roughly \$84/bbl to balance their federal budgets. That figure sounds high because it is high, but not as high as it is in Iran (~\$90/bbl), Algeria and Bahrain (~\$100/bbl), Russia (~\$115/bbl), and Iraq (~\$120/bbl). And so long as the populations of net oil exporting

countries continues to boom, high break-even oil prices will persist.

Most oil market analysts have a short view that largely ignores demographic shifts and focuses solely on production and consumption. While the short view helps oil traders guess what each other are thinking, shippers and carriers must take a long view educated by the work of demographers whose names we'll never remember.

The fact that nearly all oil-exporting economies are in the second stage of the demographic transition all but guarantees tight world oil markets and high fuel prices. The consequences of ignoring the impacts of demographic shifts on oil and fuel prices, and therefore your bottom line, could be dire.



#### 2011 McCULLOUGH/NITL EXECUTIVE of the YEAR

# Man on the move

U.S. Transportation Secretary Ray LaHood is named the NITL Executive of the Year for his passion, enthusiasm, and his ability to navigate the shoals of our now hyper-partisan capitol.

BY JOHN D. SCHULZ, CONTRIBUTING EDITOR

here have been all types of people who have served as U.S. Transportation Secretary since President Lyndon Johnson tapped Alan Boyd to be the first back in 1967. There have been personalities ranging from the stoic Drew Lewis (1981-83), to the bubbling Elizabeth Dole (1983-87), to the businesslike Samuel Skinner (1989-91), to the heroic Norman Mineta (2001-2006) who was ultimately responsible for safely landing more than 4,000 planes within four hours on that horrific day of Sept. 11, 2001.

But there's been no one possessing the unique combination of charm, quirkiness, effectiveness, and good humor of the current Transportation Secretary, Ray LaHood. To say that LaHood is enthusiastic about his job is like saying the sky is kind of blue in Montana, or the trout are kind of running in Idaho, or that the shrimp Creole in Louisiana is kind of hot.

The man is a whirling dervish. He's opening up interstate links in Washington state one day, dedicating a bridge in Michigan the next, lobbying former House colleagues at the Capitol the day after that, and then dedicating high speed rail corridors in California on another day. And he does it all with a smile and effervescence that is unusual for a power player inside Washington, D.C.

And it's for this youthful enthusiasm and dedication to the position that the National Industrial Transportation League (NITL) and *Logistics Management* (*LM*) magazine is honoring LaHood as its 2011 Logistics Executive of the Year, also known at the McCullough Award. The award is named after John T. McCullough, a former chief editor of Distribution magazine, a predecessor of *LM*. LaHood will receive the award on Tuesday, November 15, at a luncheon during the

104th Annual Meeting & TransComp Exhibition in Atlanta.

Nominations for the McCullough Award come from NITL shipper members and not the Washington-based staff of the League, notes NITL President and CEO Bruce Carlton. The NITL Board of Directors then makes the selection by ballot.

Indeed, it was a timely choice by NITL members. LaHood, who will turn 67 on December 6, recently disclosed that he will be leaving his post following the 2012 elections. Explaining that he has accomplished much of the President's transport agenda, LaHood is leaving a legacy of multimodalism and enthusiasm for greater spending on transport at the Department of Transportation.

"I think it's fair to say that NITL members saw Secretary LaHood doing his best to navigate the shoals of our now hyper-partisan capitol on matters like basic infrastructure that have traditionally been seen as non-partisan," says Carlton. "Being the lone Republican in the President's cabinet, he's had to use the skills he learned serving as a member of Congress—and his personal ties, no doubt—to try to bridge the now deep divisions."

LaHood did not waver on the Federal Aviation Administration budget showdown last summer as he stood with the flying public and the agency. "And he's certainly had successes within the Administration in keeping road maintenance and new construction at the top of the list in every budget debate," says Carlton.

"I think his focus on safety is seen as genuine and real, especially his crusade against distracted driving. It's a plague in this country. It's killing and maiming thousands, and he's not afraid to say it even if some are offended," Carlton adds.

To be sure, not everyone is enamored with the smiling



Transportation Secretary. Trucking officials, in particular, bristle at what they perceive to be regulatory overkill of their industry—everything ranging from more expensive equipment, to increased safety scrutiny, to a possible reduction in driver hours of service.

When President Barack Obama tapped the seven-term Republican congressman from Illinois to be the nation's 16th Transportation Secretary, it was his way of extending an olive branch to the GOP and expressing his bipartisan nature. LaHood openly admits he was chosen, in his words,

"because of the bipartisan thing."

But what few people could have guessed back in late 2008 was how engaged—and engaging—LaHood would be in the job. "I don't think they picked me because they thought I'd be that great a transportation person," LaHood told the *New York Times* in a refreshing bit of candor that is typical of the affable Midwesterner.

But don't let LaHood's "aw-shucks" demeanor fool you. He's a powerhouse player in Washington, overseeing an agency with a \$74 billion budget and more than 55,000



employees that have a visible impact on Americans in virtually every election district in the nation.

As the lone Republican in the president's cabinet, LaHood has proven to be an invaluable member of Obama's inner circle in trying to carry out the president's agenda. He's most valuable when it comes to bridging the ideological gap between the Republicancontrolled House and Democratic-led Senate and White House. Prior to landing the position, LaHood was not considered a transportation expert. Insiders say he got the job mainly because of his close ties with Rahm Emanuel, Obama's first chief of staff and current. mayor of Chicago. But he has since forged strong ties with the President himself.

Behind his desk in Washington hangs a photograph of President Obama adjusting LaHood's neckwear with the priceless inscription in the President's own handwriting: "This isn't the House, straighten your tie."

Yet the almost always-dapper LaHood has been a staunch backer of the President's high-speed rail initiatives, which have been met coolly in Congress and by some Republican governors. And as befits his title, he's perhaps the most traveled member of Obama's cabinet, traveling to nearly all 50 states over the past few years—and just returning from a tour of Alaska.

However, last month we were able

to catch him in his Washington office where he sat down with us for an exclusive interview on the state of transportation and his goals for the coming year. Here's what he had to say:

**Logistics Management:** You seem to have a lot of fun in your job.

Transportation Secretary LaHood: This is a good job for two different reasons. I feel like I got a front row seat in making history. The President hired me to run the Department of Transportation and said, 'If there's a problem I'll let you know. If you don't hear from me you must be doing something right.' And so for two and a half years I think we've made a difference. We've got \$48 billion in stimulus money and we put 65,000 people to work in 15,000 projects. We made a difference over the last two years.

**LM:** Tell me about your program to rid the roads of distracted drivers?

LaHood: We've been able to pay a lot of attention to distracted driving, which is one of our top safety initiatives. I think we got distracted driving to the point now where a lot of people are paying attention to whether they're using their cell phones while driving or texting while driving. And they know it's dangerous, so that's been one of our safety initiatives. If we had a flashing neon light it would be flashing 'safety.' That's what we think about every day.

Last month, Contributing Editor
John Schulz sat down with U.S.
Secretary of Transportation Ray
LaHood in his Washington office for
an exclusive interview on the state of
transportation and his goals for the
coming year.

**LM:** What needs to happen to get a multiyear highway bill passed?

LaHood: I think that there's a consensus in Congress on what the needs are in America. Everybody knows where the bad roads are. Everybody knows where the bad bridges are that need to be fixed. People know that we have transit systems that are outdated that need to be brought up to a state of good repair. The President would like to get into high-speed rail, so we've invested \$10 billion. I think there's a pretty good consensus on what needs to be done.

LM: What about paying for it?

LaHood: Probably the biggest dilemma is how to pay for it, and how many years it should be. When I was on the transportation committee we passed two transportation bills, both passed with over 380 votes in the House and over 80 votes in the Senate. Transportation has always been bipartisan. There are no Republican or Democratic bridges. There are no Democratic or Republican roads. There just aren't. There are Americans who know how to build infrastructure, who know how to build American infrastructure. So I think if Congress can figure how to pay for it they can pass a long-term bill.

**LM:** Why is it that nobody seems to want to raise the federal fuel tax that hasn't been raised or adjusted for inflation since 1993 to pay for the highway bill?

LaHood: I'll tell you the President's point of view on this. With 9 percent unemployment, with so many people out of work, with a very bad economy, the President feels like it's not the time to be raising the gasoline taxes. There are a lot of people out of work, a lot of families are hurting, and the President has said we shouldn't be raising the gasoline tax. There are some other ways to do it (pay for the highway bill). In fact,





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#### LaHood grades U.S. infrastructure a low 'D'

WASHINGTON—BEFORE ENTERING POLITICS, Transportation Secretary Ray LaHood taught junior high social studies back in his hometown of Peoria, III. You can take the man out of the school, but you can't take the teacher out of the man.

When asked to grade this nation's infrastructure, LaHood proved he was a tough grader. "Our infrastructure is in very, very poor condition," says LaHood. "I would rate it at a D, and a low D. We need to make these investments. We need to begin to fix up our bridges. We need to begin to fix up our roads. We need to finish the interstate system. We need to continue to make progress on high speed rail."

Specifically, LaHood mentioned the need to upgrade the nation's transit systems. "You go out to Chicago and you ride their trains, which thousands of people do every day, and these are old trains up on tracks and some of them need the kind of resources that are necessary to bring them into a state of good repair."

LaHood adds that the country has not made the types of investments in infrastructure that are necessary to be competitive in the 21st century. "My point is we have not invested—whether it's ports or roads or rails. We've made some investments in airports but we could do more. We're being outcompeted by other countries."

He singles out China, where he says "they're building hundreds of airports all over the country. They're building hundreds of roads all over the country. They're outcompeting us. They are where we were maybe five decades ago when Eisenhower signed the interstate bill and we started making huge investments in roads and bridges and transit systems. That's what they're doing now in China."

The nation's 16th Transportation Secretary says it's time to get back to the investment levels of 30 or 40 years ago when the United States was a leader in infrastructure investment.

"That's when we're the leader in infrastructure, we're the leader in safe roads, we're the leader in safe bridges, we're the leader in good transit systems. We're not there yet. We've got a long way to go. But we're going to keep working at it," he adds.

—John D. Schulz, Contributing Editor

the President has proposed to pay for it with his \$440 billion American Jobs Act. Another way would be raising taxes on people who make a lot of money or who have a lot of money.

**LM**: How viable is the Infrastructure Bank concept in improving our nation? LaHood: The Infrastructure Bank is something that President Obama has pushed very hard for. In the American Jobs Act there is \$10 billion for the Infrastructure Bank. That money could be used to leverage billions of private dollars to build roads, to build bridges, to build some infrastructure on the waterways, to build water treatment plants, to build sewage treatment plants...to give communities the opportunity to take not only aging infrastructure like roads and bridges, but all the other things those communities need in order to operate.

There's a program on the Mississippi and Illinois rivers for the locks and dams that are over 50 years old, and an Infrastructure Bank would be used to

fix up the locks and dams. We're going to push this very hard. We believe this is a pot of money that leverages a lot of other money that really gets the private sector involved.

**LM:** There have been calls for a national freight policy that would give freight interests a seat at the table, so to speak. What needs to happen to elevate freight needs?

**LaHood:** I think this administration has played a very big role in highlighting freight. Freight companies, the Class 1 (railroad) companies, are making money, they're doing well, they're delivering a lot of goods across the country, and we have made some investments in our freight rails. We made a half-billion dollar investment in some of the freight companies so they can fix up the tracks so trains can go higher speeds so we can implement highspeed rail. President Obama's administration has invested more in the freight Class 1 railroads than any other administration that's ever invested.

Some of it is so we can get the tracks fixed up to get the high speed so we can use some of the freight rail for high speed rail. But we believe in freight rail. We believe they provide a lot of jobs. We believe that we have a state-of-theart freight rail system, second to none anywhere in the world. We're the envy of the world when it comes to freight rail, and we appreciate our friends in the freight rail business and we're going to continue to make investments and partner with them on our opportunities to implement high-speed rails.

**LM:**What was your reaction to The National Industrial Transportation League honoring you as its Executive of the Year?

**LaHood:** I appreciate the honor. But the honor really goes to the 55,000 people who work in the Department of Transportation who show up here everyday thinking about safety, thinking about how to move goods.

**LM:** Do Americans take transportation too much for granted?

Lahood: Well, thanks to the leadership of the President, giving me a long leash here, I can't tell you how many times people have said to me that they can't remember the last time they knew the name of the Secretary of Transportation. We have raised transportation to an allnew level of awareness for many, many people. I think we've raised that level of awareness because of our safety agenda. Because of our multimodal agenda, we're making investments all across America like we've never made before.

I think people understand that transportation is one of the quickest ways to put Americans to work. If Congress were to pass a surface transportation bill, Americans would go to work. If Congress were to pass the American Jobs Act, people would go to work. They'd see the orange cones, they'd see the orange rails, and they know their friends and neighbors would be working. People know that transportation is the way to put people to work. That's our message along with safety. I think we've raised the awareness of transportation in our country higher than it's been in a long, long time.

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#### PRIVATE FLEET MANAGEMENT:

# necessary evil to strategic asset

BY BOB PITTS, MIKE REISS, AND SCOTT HIRSCH, ACCENTURE

Taking a holistic, integrated approach to fleet management can make a significant and continuous contribution to higher, company-wide productivity and lower costs. Our team sets out to help managers overcome current fleet-optimization issues and offers ways to create value in private fleet management.

rivate motor carrier fleets comprise 82 percent of the medium- and heavy-duty trucks registered in the United States. According to the National Private Truck Council, private fleets also account for roughly 53 percent of all U.S. miles traveled by medium- and heavy-duty trucks. With slightly more than two million vehicles on the road, private fleets represent the largest single segment of the trucking industry.

But even though private fleets constitute a majority of vehicles and miles traveled, there is still much confusion, misinformation, and disagreement about their value. For example, many operator-owners view fleet management as a consequence of doing business—a cost center, non-core competency, or even a

"necessary evil."

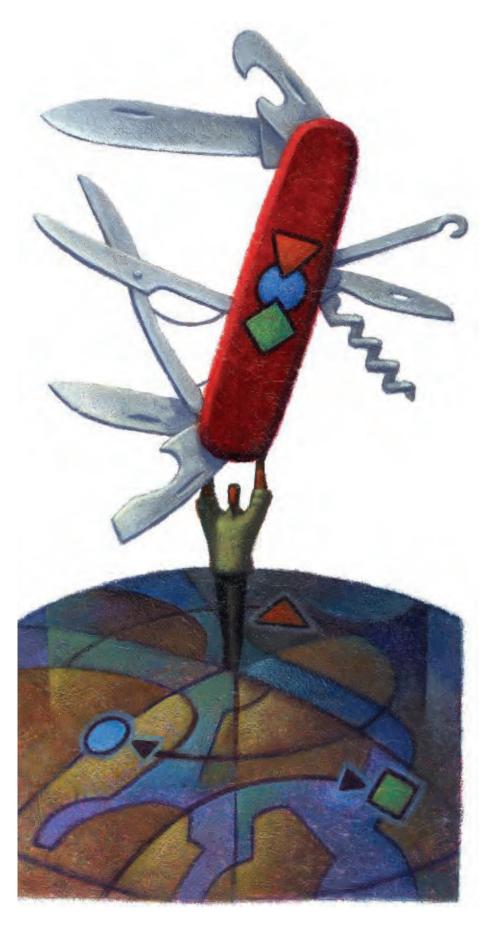
Moreover, if you ask a typical fleet manager what his or her total fleet costs are, the answer will be something like "the sum of costs incurred for leasing or acquisitions, maintenance, fuel, insurance, and registration fees." Most organizations accept this approach, despite the fact that it usually—and often significantly—misrepresents the cost and complexity of owning and operating a private fleet.

The fact that many private fleets are considered non-core competencies isn't particularly surprising. With the exception of transportation companies and third party logistics providers (3PL), transportation is seldom deemed a strategic or differentiating asset. However, there is also the common implication that transportation departments are

largely insignificant—that they have very little influence on the company's success and a correspondingly small effect on capital budgets.

Other than ordering transportation managers to trim costs, little senior-level attention is usually paid to this aspect of the business. As a consequence, specialized fleets tend to be larger and more costly than they need to be, because this is the easiest way to avoid service failures.

Fortunately, a growing number of companies are recognizing that substantial value can be gleaned from well-managed private or dedicated fleets, and significant improvements in cost, not simply belt tightening, are possible. With so much capital tied up in fleet assets, this is clearly the right way to think. Over the next few pages we'll



discuss fleet-optimization problems in more depth and offer ways to understand and create value in private fleet management.

#### **COMMON TROUBLE SPOTS**

Change is not easy, even among companies that are committed to reducing fleet costs while improving performance. One reason is that fleet costs are particularly difficult to identify and analyze. Hidden expenses are everywhere. In addition, many corporate fleets are the product of mergers and acquisitions, the result of which can be a patchwork of dissimilar, barely compatible support systems, decision-making responsibilities, processes, and HR skills.

In situations like these, it isn't uncommon for a company's CFO to manage transportation's financing and capital budgets; the treasurer or controller to oversee allocations of fleet-related capital; and the procurement organization to make purchasing decisions based on input from operational decision makers (e.g., COOs). Adding to the confusion, all these activities may be reflected across balance sheets, income statements, and multiple corporate and departmental budgets.

Further exacerbating the issue, the above functions may not be talking to each other about fleet management. And when they do, there probably won't be a great deal of hard evidence with which to make informed decisions about costs and performance. Even when there is sufficient data the people examining that data often lack the engineering and logistical insights to fully interpret what they're seeing.

Lastly, there are myriad practices that add costs and drag down productivity, including:

Redeployment of capital. Capital fleet budgets are frequently redeployed as capital reserves for other asset groups, thereby reducing maintenance budgets or the number of vehicles that can be

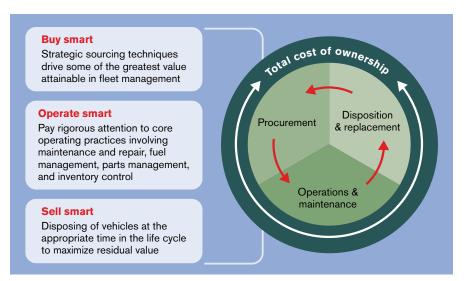
#### **Trnsportation Best Practices**

purchased. This increases the average age of fleet vehicles, which in turn raises maintenance and operating costs.

It's an easy trap to fall into ("We got through last year without buying new vehicles, so let's try to do it again this year"). Sooner or later, however, this is the path to the "perfect storm"—when an entire fleet requires sweeping overhauls or replacements in a concentrated period.

Poor replacement policies. Inconsistent buying patterns, opportunistic buying, and loosely defined replacement criteria make coordinated fleet management far more difficult. For example, new or evolving capital restrictions often force companies to disregard their own replacement guidelines, so fleet managers end up in the same scenario as noted above—holding on to aging vehicles longer than they should.

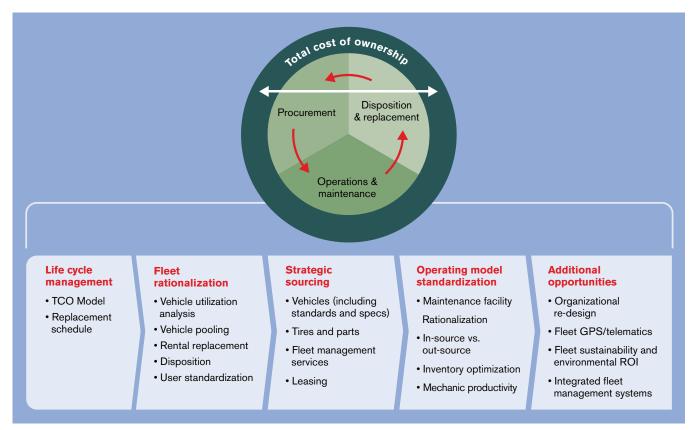
Insufficient standards. Without rigorous standards and clear buying criteria, companies end up purchasing vehicle types based on what they want, rather



An integrated view of the three major fleet lifecycle activities-procurement, operations & maintenance, and disposition & replacement-can help companies calculate private fleet TCO.

than what they need. A common example is buying vehicles with expensive options—such as 4x4 capabilities—that are rarely used. Another is owning a variety of makes

or models, a practice that can dramatically increase maintenance costs and boost spare parts inventories. Owning multiple brands also reduces buying



An integrated fleet management program requires that all TCO-related activities (e.g., procuring, operating, and replacing) be analyzed, measured, and managed as a group of interdependent fleet management functions.

#### **Trnsportation Best Practices**

leverage with OEMs.

Waste and abuse. Companies may not be doing enough to curb costly practices such as excess idling, unsafe driving behavior, unreported vehicle use, non-existent or underused pooling programs, and poorly coordinated or managed maintenance and repair programs.

#### **NEW DIRECTION**

Transformational change is seldom associated with fleet management. Pragmatic and continuous improvement is more common. Thanks in no small part to rapidly advancing technology, however, continuous improvement is highly achievable.

Regardless of the means (transformation or continuous improvement), the goal should be to give fleet management a new edge by reducing its costs, improving its effectiveness, and ultimately positioning it as a value-added competitive weapon. This is basically a two-part proposition:

- 1: Use "total cost of ownership" (TCO) principles to reduce operating costs and improve asset management. Understanding, and subsequently reducing, TCO can be represented emblematically by the continuous process diagram shown in the figure "Buy Smart, Operate Smart, Sell Smart" (page 32).
- 2: Develop a comprehensive "integrated fleet management program" focused on improving strategic and competitive value. The components of this multi-part initiative are illustrated in the second figure.

These two fundamental concepts are interrelated: Building a successful integrated fleet management program requires a deep understanding of your fleet's TCO, and the result of a properly executed integrated fleet management program is a significant reduction in your TCO. Together, these concepts can help unlock a significant amount of unrealized potential.

#### **TOTAL COST OF OWNERSHIP**

TCO is an easy-to-understand, but tricky to calculate, number that fleet owners can use to discern how similar vehicle costs compare across your fleet and against others, how these costs trend over time, and when vehicles should be replaced.

#### **Onboard** innovations

TELEMATICS MAY BE THE HIGHEST-PROFILE INNOVATION for helping private fleet managers understand vehicle operations and reduce costs. However, there are other opportunities with strong potential that quickly pay for themselves.

These include wide-base tires and automatic tire-inflation systems, both of which minimize roll resistance and aerodynamic drag. The U.S. Environmental Protection Agency believes that using wide-base tires on a long-haul truck can save more than 400 gallons of fuel per year, while cutting CO2 emissions by more than four metric tons. Low-viscosity lubricants can create similar benefits.

Advances in tractor-trailer aerodynamics also affect fuel consumption. Here, the EPA has determined that tractor-roof fairings, cab extenders and side fairings can significantly reduce wind resistance, thus improving fuel economy and eliminating up to five metric tons of CO2 emissions annually.

-Pitts, Reiss, Hirsch

To calculate TCO, it is extremely important to develop or purchase an application for capturing, validating, consolidating, storing, retrieving, and sharing operating data on each vehicle. Such a system should capture costs from fuel and maintenance records, as well as less-obvious metrics such as acquisition, insurance, and registration details. The most important contributors to TCO include:

- acquisition costs, including upfitting and delivery;
- maintenance and repair costs;
- operating costs (fuel, title/tax/registration, permits, insurance, etc.);
- administration and overhead costs;
- technology costs;
- fleet management services (3rd party);
- residual value;
- auction fees:
- life cycle (in years); and
- miles driven per year.

Using the data elements above, an organization can calculate TCO, develop optimal replacement cycles and create scenario-based tools to understand how changes in the fleet can affect the company's overall financial performance.

There are many tools available to capture the data needed for TCO modeling. GPS telematics, for example, can help companies track vehicle locations while remotely monitoring speed, breaking, gear-shifting, idle time, and out-of-route miles. Industry research has shown that telematics can reduce fuel consumption by up to 14 percent, while paring vehicle maintenance costs

by roughly the same amount.

Telematics-related information also enables companies to understand tradeoffs that relate to myriad other fleet-management decisions, such as buying-versus-leasing and extending the life of vehicles. Plus, captured information can be shared up and down the organizational chain, thus bringing higher-level people into the decision-making process.

Transportation management systems (TMS) are another technology moving rapidly from luxury to necessity. As fuel prices rise, the ability to consolidate shipments into more cost-effective loads and optimize routes becomes even more important; and private fleet managers who formerly perceived TMS as an unaffordable option may now wish to rethink that decision.

#### INTEGRATED FLEET MANAGEMENT

Armed with better TCO information on loading, routing, and vehicle use, companies are better positioned to elevate the overall fleet management program: rationalizing transportation assets and specifications; pooling and disposing of vehicles as needed; optimizing sourcing, maintenance and repair operations; and revisiting administrative policies.

Think of this sequence as an "integrated fleet management" program with the nine basic "mile markers" detailed below. One can derive benefit from focusing on just a few of these elements, but the real value comes from a comprehensive implementation, accomplished in a logical order and supported by a proactively designed

#### **Trnsportation Best Practices**

organization and up-to-date technology.

#### 1. Collect and validate data:

- Assess vehicle quantities and VINs, age of units, classes of vehicles
- Gauge last 12 months of costs
- Calculate mileage and utilization

#### 2. Rationalize the fleet:

- Reduce overall fleet size by using best practice utilization data
- Replace long-term rentals with surplus units
- Reduce average age to best-practice standards

#### 3. Rationalize specifications:

- Reduce variations in standards and specifications to ensure a smaller number of larger classes
- Reengineer specifications that exceed work requirements

#### 4. Pool assets:

- Allocate vehicles designated for assignment to pools (geographic or local) or for disposition
- Improve management of short term rentals

#### 5. Dispose of surplus assets:

- Eliminate excess vehicles identified through rationalization

#### 6. Revisit/revise sourcing decisions:

- Launch a multi-year Strategic Sourcing initiative for all major classes using a levelized replacement calendar
- Implement bid-optimization technology

#### 7. Rationalize maintenance and repair:

- Reengineer operating practices (e.g., move maintenance to 2nd or 3rd shift where possible, implement vendor-managed inventory practices, automate time and productivity reporting, benchmark mechanic productivity)

#### 8. Optimize finance and administration:

- Evaluate benefits/drawbacks of lease versus own
- Compare costs and benefits of insourcing versus outsourcing
- Leverage fleet-management services
- Assess/enhance maintenance & repair (M&R) administration (e.g., call center, vendor management)

#### 9. Develop a new fleet model:

- Implement or enhance a life cycle management program
- Institute levelized replacement policies
- Rationalize specifications based on function
- Right-size the fleet by eliminating low-use vehicles

Throughout the program, it will also be important to compare fleet capabilities to industry peers and top performers in other industries, and to define key performance indicators that allow you to accurately measure success. Several other program-wide components are similarly vital. One is intraorganizational collaboration—working



A shift in corporate mindset is is equally valuable: moving from a "cost of doing business perspective" to a "strategic asset" point of view.

across departments to fully understand transportation objectives and obtaining executive support for transportation.

The latter is doubly important, because finding a "champion" who understands the real value of fleet management is often a make-or-break factor. A shift in corporate mindset is equally valuable: moving from a "cost of doing business perspective" to a "strategic asset" perspective. Oftentimes, the fleet is a window through which customers view the company; and no matter what the reality on your factory

floor, local service counters, or distribution center, the delivery segment of the supply chain is what customers see.

#### **MOVING AHEAD**

Taking a holistic, integrated approach to private fleet management can make a significant and continuous contribution to higher, company-wide productivity and lower costs. It's also likely that companies will increase visibility into their true fleet-management costs and enjoy better employee/crew productivity and morale—all of which create a better image and experience for customers. Based on Accenture's experience, potential benefits can include:

- reductions of 5 percent to 10 percent in fleet operating expenses;
- capital deployment improvements of 10 percent to 15 percent—the result of reducing asset costs and quantity requirements, and improving asset utilization;
- increasingly accurate tracking of performance across business units; and
- new abilities to integrate fleet management into a company's or business unit's strategic roadmap—consequently improving revenue-generation potential and enhancing the customer experience.

Lastly, a word about sustainability. More and more companies are paying attention to how their products are made and the environmental impact associated with production and transportation. Companies with clear and consistent sustainability programs manage all aspects of their supply chain, from emissions, to safety, to the waste stream.

In the process, they glean a competitive market advantage over industry peers that have not acted similarly. Innovative fleet management can be a significant contributor to a company's sustainability initiatives, delivering benefits and competitive advantages that are, in all likelihood, highly sustainable.  $\square$ 

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# Osteps to supply chain visibility

When executed properly, supply chain visibility will come into play on a day-to-day basis. But how do logistics managers get there? Our technology correspondent shows you the way.

BY BRIDGET MCCREA, CONTRIBUTING EDITOR

Then shippers, vendors, and customers can seamlessly pinpoint the location of any shipment at any point of a supply chain, all parties are sent into a nirvana-like state of visibility, knowing that they can keep tabs on everything from the raw materials to the final product.

If your own organization hasn't quite gotten to this point yet, we can help. After conferring with a number of top supply chain technology experts and analysts, we developed a list of steps that logistics professionals—who are equipped with the technology and the drive—can follow on the path to optimal visibility.

#### STEP 1: ASSESS YOUR LOGISTICS STRATEGY

The introduction of a new process always starts with an introspective look. Supply chain visibility is no different. "You really need to take a step back and remove the hinges off of your logistics strategy before getting into any visibility implementation," says Shanton Wilcox, principal for Capgemini Consulting's supply chain management practice.

Look carefully at how your operations work right now and what can be done to enhance the level of visibility across all functions. The firm that relies on 3PLs and is looking to improve its warehouse visibility, for example, should consider whether to enhance its operations internally, or turn to the outside providers that already possess the platforms necessary to achieve better levels of visibility.

"By focusing on which visibility platform makes the most sense for your individual firm and factoring in your existing logistics strategy," says Wilcox, "you'll be able to make the most sound decisions regarding your visibility initiative."

#### **STEP 2: DETERMINE OWNERSHIP**

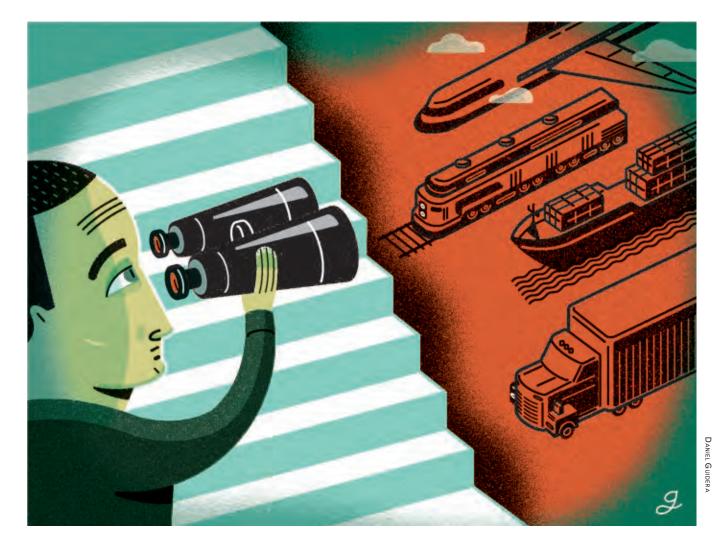
The concept of visibility looks good on paper, but if no one takes ownership of the initiative it will fail. You can avoid this trap by determining ownership early in the game and by setting up processes, alerts, and functions to ensure that the visibility is used to benefit your entire organization.

Decide whom the decision makers will be when an alert goes off for a specific trade lane or carrier, or when a shipment turns up missing. In some cases the logistics manager may be the most valid choice, but in others the customer service department could be the right candidate. "You really have to figure out who owns the process and how things will be handled once the technology tells you that there's a problem," says Wilcox. "Only then can you get the most value out of your visibility initiatives."

#### **STEP 3: INTEGRATE WITH TRADING PARTNERS**

Supply chain visibility proves its worth when shippers automate specific actions and then use the resultant information—which comes in the form of alerts, notices, and other messages—to make educated decisions based on the data received.

Shippers that take the time to integrate their technology with that of their trading partners—who may be using EDI or even manual systems of emails and faxes—will gain the most benefit from their visibility programs.



"Gaining visibility is all about getting timely, complete information from a variety of trading partners who may or may not be up to speed with technology themselves," says Adrian Gonzalez, director at Logistics Viewpoints, a blog focused on logistics trends, technology, and services.

#### STEP 4: RETHINK THAT LEAN INVENTORY STRATEGY

In response to challenging economic times, many companies have stripped back their inventory levels to avoid getting stuck with too many goods. Unfortunately, this strategy doesn't lend itself to optimized visibility, and it can even open the shipper up to further problems once business partners can "see" that inventory levels are low.

"Companies have leaned out their inventories too much," observes Jerry O'Dwyer, principal at Deloitte Consulting, "and they now really need to do a better job of inventory planning." To get started on that path, O'Dwyer advises logistics managers to talk to their finance departments to "figure out how to get a bit of extra inventory into the system, rather than focusing on the fear of getting caught with too much product that doesn't move."

#### STEP 5: OPEN LINES OF COMMUNICATIONS WITH CUSTOMERS

Your customers can play an important role in helping your organization achieve better supply chain visibility—that is if

you let them get involved. In fact, such initiatives can serve as market differentiators in today's competitive business environment where customers want everything delivered yesterday and at the lowest possible costs.

"Talk to your customers about your visibility initiatives and the role that they can play in those efforts," Wilcox advises. Make those customers a part of the community by sharing bills of lading, tracking, and alert mechanisms with them.

Create an atmosphere of joint responsibility, says Wilcox, by tracking shipments together and deciding if it makes more sense to expedite an order or retrieve the items from a different location. "From a pipeline perspective," he adds, "getting your customers involved can go a long way in helping to balance both expectations and costs."

#### STEP 6: GO BEYOND JUST TAKING ORDERS

Shippers striving for improved supply chain visibility have the opportunity to go beyond just taking orders and often transcend into more advisory roles for both their vendors and customers. There's true value in knowing what day a shipment was received, when it arrived in the warehouse, when it was shipped back out, and exactly what time it will get to its destination.

And knowing a year's worth of shipping data for a specific client—and being able to pull up that data at a moment's notice—puts the shipper in an even more positive light.

#### **Defining visibility**

MADE EASIER THROUGH THE USE OF technology, supply chain visibility works best when quality data is gathered from both the supply side (where the goods are coming from) and the demand side (sales, returns, customer buying trends) of the equation. Once the data is collected—most often through the use of supply chain software—it's then analyzed and used for accurate forecasting, planning, and production.

Visibility comes into play across many supply chain scenarios, whether they're localized or global in nature. The company whose supply chain extends across various continents, for example, can find its transportation modes literally halted overnight by events like erupting volcanoes, tsunamis, and political unrest. Through accurate visibility, that company can quickly tell how its shipments will be affected and adjust accordingly. Without that "window" into its transportation operations, the company would be left to guess as to when-if ever-the goods would make it to the U.S.

"With solid visibility made possible by technology, that company could query all of its shipments by bill of lading number to

"Companies that achieve a high level of visibility across their operations put themselves in a great position to provide additional recommendations and advisory services to their customers," says O'Dwyer. figure out which shipments are already in transit, and which are sitting in port," explains Shanton Wilcox, a principal in Capgemini's supply chain management practice. "That gives the company a starting point, and puts it in a much better position to deal with the catastrophic scenario."

When executed properly, supply chain visibility will also come into play on a day-to-day basis. For example, shippers can obtain information about finished goods availability (ie. What's in the pipeline right now? What goods are in transit? Which shipments cleared customs?) from trading partners, and then use that data to ensure that customer demand is being met, and not exceeded. "When you achieve good supply chain visibility," says Wilcox, "you gain consistent control over your operations and processes."

—Bridget McCrea, Contributing Editor

For the full text version of Bridget McCrea's "Defining visibility" which appeared in the September issue of LM, go to logisticsmgmt.com/visibility

#### STEP 7: THINK GLOBALLY

There was time in the not-too-distant past when international orders languished for months at sea, on docks, or in trucks. During transit, those shipments were difficult to track, at best. By combining technology with visibility strategies, shippers can get granular details about those overseas activities.

By linking into freight forwarders, ocean carriers, 3PLs, and other providers' networks, shippers can monitor ETAs (using "transit messages" and alerts) on a minute-by-minute basis and make decisions based on that information. "If a ship's drive shaft breaks and delays the shipment by three days," says Dwight Klappich, research vice president for Gartner, Inc., "you'll know immediately and be able to adjust accordingly."

#### STEP 8: USE THE INFORMATION WISELY

In some cases, "adjusting accordingly" could simply mean letting the customer know that delivery will be behind schedule by three days. It could also mean pulling inventory from another DC to cover the late order—knowing that the new shipment will be arriving within 72 hours.

"Just because something is late doesn't necessarily mean there is a problem," says Klappich, who expects visibility solutions to be tied more closely with event management programs in the near future. "We're not quite there yet, but as the two are tied more closely together shippers will be even better equipped to diagnose and resolve problems."

Bridget McCrea is a Contributing Editor to Logistics Management

#### Is intelligent visibility on the horizon?

ACCORDING TO LOGISTICS VIEWPOINTS' Adrian Gonzalez, the odds that today's shippers will drown in the information and data generated by their supply chains is very high. After all, we live in an age of information overload.

"There are more information sources than ever, and the biggest challenges for shippers right now is getting the information that they really need to make smart, quick decisions," says Gonzalez.

Peeking into his crystal ball, Gonzalez sees a time when "intelligent visibility"

becomes more important for shippers who are tired of sifting through reams of data to get to the information that they really need.

For example, the shipper that knows exactly what's unfolding in its supply chain—and also has a handle on what the exceptions are—can take actions to correct problems and resolve issues before they affect customers. "In the future, shippers will be better equipped to predict certain scenarios and situations based on incoming information," says Gonzalez.

Also on the near horizon are systems that not only track and identify problems, but also take possible actions. Gonzalez sees this type of automation as yet another solution to help shippers manage information overload.

"You'll be able to see what's happening, get possible actions, and then automate those actions," says Gonzales. "The system will be able to determine the best approach to the issue and then start executing actions to resolve it."

—Bridget McCrea, Contributing Editor



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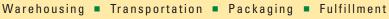
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# W.R. Grace solves global puzzle

The foremost specialty chemicals and materials company brought on a transformational logistics leader, shed its transportation and warehouse assets, and ramped up a rapid worldwide expansion. Here's how it happened.

BY PATRICK BURNSON, EXECUTIVE EDITOR

hen Tom Brossart, W.R. Grace & Co.'s director of global logistics and trade compliance, took a leadership role at the company in 2005, he brought with him nearly two decades of management experience. A Six Sigma Black Belt, he worked for other multinationals as diverse as SAIC Corp. to GE Global Exchange Services. Admittedly, he says, there were a lot of lessons learned in that time, but when he landed at Grace he quickly realized that he needed to shed some of those preconceived ideals and take a fresh look at a rather complicated situation.

"Six years ago Grace attempted to manage all of its freight resources in house with private trucking fleets and its own warehouses and DCs in a mixed fashion," says Brossart of his early days with the company. "Some of it was managed by plant, some by country, with little to no leveraging of spend. Additionally, the company had very limited visibility into what it was buying."

Once he understood that he was hired to quickly broaden the company's footprint in emerging markets, Brossart—who reports to the company's CFO—soon got the company to change its strategy. By evaluating a sampling of regional third-party logistics providers (3PLs) and fourth-party providers (4PLs), he determined where each would fit into the company's global logistical model. Then he made his boldest move: advising Grace to shed its trucking fleets, warehouses, DCs, and other transport assets.

"Even though Grace currently operates in more than 40 countries, we want to be 'asset agnostic," he says. "We'd rather rent than own."

Under Brossart's leadership, the company now uses two 3PLs and one 4PL to target, penetrate, and distribute its goods and services to markets in North America, South America, the

Middle East, and Asia. Products range from chemical reaction catalysts for the manufacture of plastics to silica-based engineered and specialty materials. Grace also manufactures sealants and coatings for food and beverage packaging, as well as specialty chemicals, additives, and building materials for commercial and residential construction.

"It's a complex product offering, says Brossart, "requiring complex strategic partnerships. One logistics provider is not going to get the whole job done."

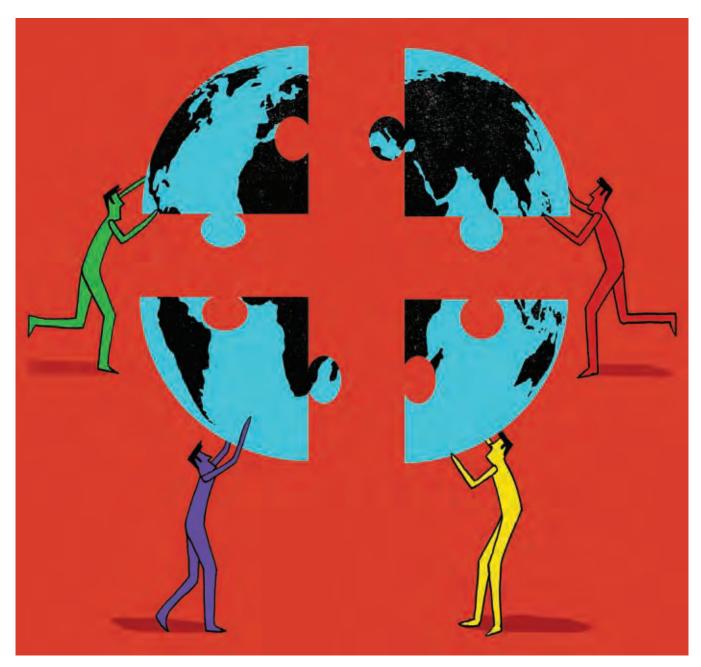
#### **PIECES FALL TOGETHER**

Indeed, the North American piece of the puzzle alone proved to be quite challenging. Because he had worked with them before, Brossart decided to engage Odyssey Logistics & Technology (OL&T) to manage the regulatory compliance segment of outbound business. As it turns out, Brossart came to rely on the 3PL when it expanded into Europe and the Middle East as well.

"Odyssey really helped us get out of the domestic trucking business entirely," recalls Brossart. "Now they manage our motor carrier business and spot lanes where we can cut cost and improve efficiency. And now they help negotiate with the liquid logistics provider—Tristar—overseas."

OL&T also helps Grace with ocean contracting by bringing in their own negotiating team to work with Grace on seasonal contracts. This was formerly done on a piece meal basis with each specific carrier. "We do it every year here at our Columbus, Ohio, headquarters," says Brossart. "It's a very formalized process that leaves no room for doubt or misunderstandings."

Seeking to expand into Asia in 2007, Grace engaged Elite, an Asia-centric 3PL, for shipping in and out of the region. According to Brossart, the provider has an intimate knowl-



edge of the rules, regulations, tariffs, duties, and customs that vary widely even in a region as closely networked as the Asian cluster of countries.

"It's far cheaper to pay Elite for its expertise than to build it internally as we were doing in the past," he says. "They are regionally focused in the Asia-Pacific region and perform work in Australia, Malaysia, Thailand, and China." The partnership did not develop without considerable diligence, however. Brossart recalls how Grace spoke with multiple providers all using different agents before finding the right 3PL.

"We put out an RFP and discovered that they were the only ones who could deliver everything we were looking for in Asia," he says. "That includes all the nuances of trade laws, regulations, and agreements. These are subject to sudden change or alteration, but our 3PL can turn on a dime."

As it turned out, its 3PL partner can also provide value-added strategic solutions that Grace was lacking in the past. According to Brossart, the 3PL observed that Grace was losing inventory by relying on badly designed trucks. Coming up with its own prototype, Elite showed Grace how to move bulk commodities more efficiently with a new vehicle. "This is simply something that could not have been done without a strategic partnership," says Brossart.

Finally, in 2009, Grace began looking for a logistics provider to handle most of their global long-haul work. For this, Brossart went to a privately-held 4PL, BDP International. Headquartered in Philadelphia, BDP operates freight logistics centers in more than 20 cities throughout North America with a network of subsidiaries, joint ventures, and strategic partnerships in 122 countries.

"This logistics provider not only ships our products from the U.S. and Europe around the world, but it also moves whole factories making silica gel from their point of assembly in Saudi Arabia to Latin American countries," explains Brossart. "We call these factories 'plantin-a-box' because they are completely

self-contained operations designed to be set up as soon as they arrive."

#### **GLOBAL COLLABORATION**

Brossart has now orchestrated significant collaboration between Odyssey, BDP, and Elite in their work for Grace. For example, when Odyssey helps Grace with ocean rate negotiations and creating rate routing guides, it shares that intelligence with BDP. And when BDP receives new route requests, they send them to Odyssey for negotiation.

"When it comes to ocean carriage, we go with our negotiated contracts with selected providers," says Brossart. "BDP is also an non-vessel operator, so they could provide that service as an intermediary as well. But unless it's an emergency, we stick to our own plan."

Brossart recalls that when BDP had to perform an importation into Thailand, they encountered issues with duties and fees. So, they reached out and enlisted Elite's help to take advantage of their significant local expertise. "There is some geographic overlap between the three companies, so we have a hedge against missing a delivery," he says.

That risk is exacerbated by several industry trends, Brossart adds. "Slow steaming" in the transpacific for example, has caused him to consider allwater deployments through the Suez Canal rather than make Asia-direct calls to the U.S. West Coast. "And all bets are off when the Panama Canal

is expanded in 2014," he says. "We are pleased to learn that some ocean carriers are promising shippers 'time-definite' service to counter this strategy, and we will give them more of our business if they can perform up to expectations."

Nor does Brossart see a wholesale softening of ocean carrier rates in 2012, despite the glut of capacity being introduced on nearly all the major trade



lanes. He says carriers will demand rates that will keep them in business, and if those rates are "reasonable," shippers should compromise. The trucking issue is more problematic, says Brossart, as there are so many issues affecting that sector.

"The hours-of-service rules, changing wage scales, and a persistent driver shortage is something that we are all going to have to deal with," he says. "Fortunately, we have 3PLs

that can help us manage freight. They can locate current truckload rates on lanes we run, and track lane history and compare spot market to contract rates."

For rail and intermodal, Brossart lets his 3PL compile industry facts and statistics that demonstrate to carriers that Grace is a desirable—and sustainable—customer.

"Again, it's all about partnership," he says. "Our 3PLs explain how Grace is growing and what new technology is available. Then they describe how imports will affect domestic movements and help carriers determine the value placed on moving our commodities versus other commodities and traffic types."

The mode of last resort for Grace—air—is only used when all else fails, says Brossart, noting that the company's high-end, high-value, electronic goods or chemical catalysts comprise this cargo delivery solution. "And we don't like using it," he admits with a sigh. "But when it has got to get there on time, we do what it takes." Furthermore, says Brossart, dependence on a more complex modal mix may come into play if Grace continues to expand in Latin America.

As a supply chain executive with bottom line accountability, Brossart may soon be charged with bringing in another "lead logistics partner" to leverage a mutually beneficial deal in Latin America. Does he find this to be a daunting challenge? Not if he keeps his head down with a focus on "strategic collaboration," he says, suggesting that "grace under pressure" personifies both the company and the man.

#### Intermediaries add value to the supply chain

INDUSTRY ANALYSTS AND EDUCATORS SAY that despite the macroeconomic downturns and sluggish recovery in the U.S. sector, the third-party logistics (3PL) business will continue to churn forward on a promising path.

The 18th Annual Survey of Third-Party Logistics Providers, released at the Council of Supply Chain Management Professionals Annual Global Conference last month, contained even more encouraging news.

Authored by Dr. Robert Lieb, professor of supply chain management at Northeastern University and Joe Gallick, senior vice president of sales for Penske Logistics, the findings analyze responses from 36 third-party logistics company CEOs across North America, Europe, and Asia-Pacific whose companies were responsible for generating approximately \$58 billion in revenue in 2010.

#### **KEY FINDINGS OF THE SURVEY INCLUDE:**

 3PLs experienced improved economic conditions in 2010, with 88 percent of companies surveyed in North America meeting or exceeding their revenue projections, as compared with only 50 percent in 2009.

- In Europe, economic conditions continued to be challenging for third-party logistics companies, with only 55 percent of companies surveyed meeting or exceeding their revenue growth projections for the year, as opposed to 90 percent of companies surveyed in Asia-Pacific.
- Growth projections are most optimistic in Asia, with companies expecting to grow 15.8 percent in the next year, as compared to 10.8 percent expected in North America and 8.4 percent in Europe.
- A quarter of the North American 3PL CEOs reported that some of their customers had experienced a loss of sales in Japan due to the tsunami and earthquake in the region. Thirteen percent of the European CEOs reported similar experiences, as did 50 percent of the CEOS surveyed in the APAC region.
- Sixteen of the 36 CEOs reported their companies launched new sustainability initiatives during 2010.
  - —Patrick Burnson, Executive Editor









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#### 2011 WAREHOUSE/DC OPERATIONS SURVEY



# Still doing more with less

Our 2011 findings reveal that inventory turns are not improving, more DCs are closing rather than opening, and many companies are remaining cautious with equipment investment.

BY MAIDA NAPOLITANO, CONTRIBUTING EDITOR

ust when we thought things were finally looking up, the results of *Logistics Management*'s 6th Annual Warehouse and Distribution Center (DC) Operations Survey show that there might be some slowdown ahead. Playing out in front of the backdrop of a shaky global economy, this year's findings reveal that inventory turns are not improving, more DCs are closing rather than opening, and many companies are opting to be more cautious, leveraging cost reduction measures that require little or no investment.

Designed to gauge activities and trends in

warehousing and distribution center management, our annual survey reveals the current state of warehouse and DC operations. In September 2011, a survey was sent via email invitation to *Logistics Management (LM)* subscribers. A total of 598 qualified responses (a jump up from 521 in 2010) were received from mid-level, upper-level, and senior-level managers who are personally involved in decisions regarding their company's warehouse and DC operations.

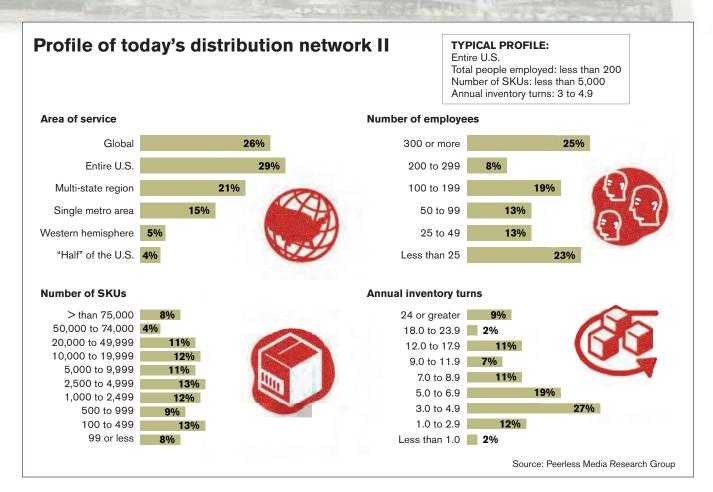
Most participating companies came from manufacturing (36 percent), followed by distributors

#### 2011 WAREHOUSE/DC OPERATIONS SURVEY WEBCAST

Join the research team as they dig into all of the findings in detail **Wednesday, November 30th @ 2:00 p.m. ET** 



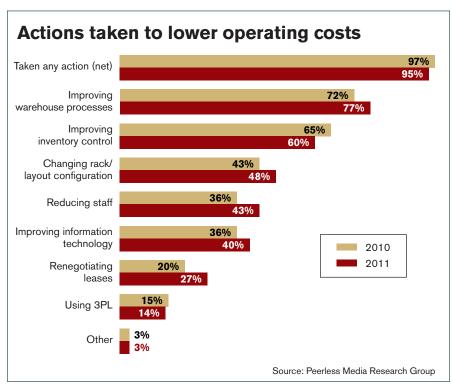
#### Profile of today's distribution network TYPICAL PROFILE: Distribution network made up of more than 3 buildings Total area of network: Less than 249,999 square feet Most common clear height: 20 to 29 feet DC supports a manufacturer **Buildings in distribution network** Size of network in square feet 2M+ 10% 1 building 35% 1M to 1.99M **17**% 500K to 999K 2 buildings 250K to 499K 3 buildings 100K to 249K 25% 13% 50K to 99K More than 3 buildings 36% <50K Most common clear height in feet (for more than 3 buildings in network) **Company description** 36% Over 50 feet 5% Manufacturing 40 to 49 feet Distributor 30 to 39 feet 28% 3PL 15% 20 to 29 feet 13% Retailer <20 feet Other Source: Peerless Media Research Group



(26 percent), third party providers (15 percent), and retailers (13 percent). A broad assortment of products handled in the DC was once again well-represented, with food and grocery leading the pack at 14 percent, followed by building materials/construction at 8 percent, and general merchandise, electronics, apparel, paper/packaging and parts, all tied for third at 7 percent each.

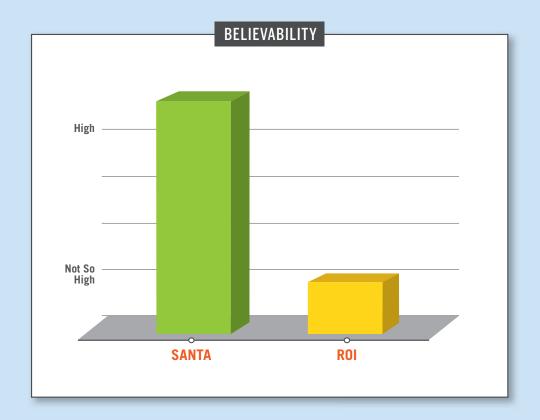
Norm Saenz, senior vice president and principal of TranSystems, a supply chain consulting firm and our research partner for this survey, sums up this year's findings in four words: "More done with less. In fact, most companies are trying to do more with fewer people, fewer buildings, and less automation investment." As a result, they're operating with a reduced staff, consolidating facilities, and taking the more conventional route in terms of storage and picking.

"Much of this stems from top



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management pressuring distribution to reduce costs," notes Don Derewecki, senior business consultant with research partner TranSystems. "But this comes with a catch for warehouse and DC management. Top brass wants a reduction in costs without reducing service to customers in an effort to stay cost-competitive in the market place," he adds.

This year, portions of the survey were updated to capture these and other emerging trends, while critical measures of warehousing activities were continued as in years past. Over the next few pages, we present in greater detail how the nation's warehouses and DCs have fared over the past 12 months. And with another year of results locked into our database, definitive trends in warehousing and supply chain management are also identified. Now, it's time to see how your warehouse and DC operations stack up.

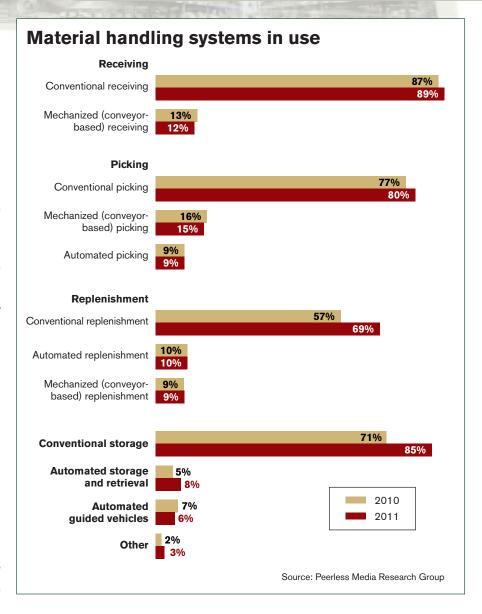
#### CLEAR TRENDS AND CONCLUSIONS

One finding that immediately leaps out is that after years of decrease, there are more respondents operating single-facility networks this year than the past year—from 30 percent in 2010 to 35 percent in 2011.

We also noticed slight decreases in networks with multiple facilities. Saenz believes that this is proof of managers trying to do more with less, trying to operate with fewer facilities. "Companies are clearly consolidating their distribution networks to reduce facility costs," says Saenz.

Derewecki agrees, "From what we're seeing right now, companies for the most part have been trying to reduce the number of buildings that they're in."

However, companies are not just consolidating; they're also actively trying out other options. To lower operating costs, over 75 percent of respondents are improving warehousing processes, 60 percent are improving inventory control, while nearly half have changed racks as well as their layouts. When compared to last year's results, significantly more companies are reducing staff—43 percent compared to last year's 36 percent—yet another testament of how companies



are doing more with fewer people.

There was also a 7 percent increase in companies renegotiating their leases to lower operating costs. Derewecki notes how this move makes perfect sense given the continuing glut of available space in the industrial real estate market that's putting downward pressure on rents. And to lower transportation costs, most (62 percent) continue to renegotiate their freight rates, followed by shifting their mix of common/contract carriers (31 percent).

The bottom line: Not many people are sitting back and doing nothing. In fact, 95 percent are actively taking steps to reduce operating costs, while 87 percent are keeping a lid on volatile

transportation costs.

While the recurring theme is one of cost reduction, there's also an overall reluctance by respondents to invest in automation and mechanization. There are sharp increases in conventional methods of storage and replenishment with statistically zero change in the use of automation or mechanization. "One of the reasons you put in automated storage methods is to reduce your footprint and reduce your occupancy cost," says Derewecki. "But when the developers and landlords have excess space, occupancy cost goes down, and there's less motivation to go to more sophisticated dense storage methods."

However, Saenz cautions against

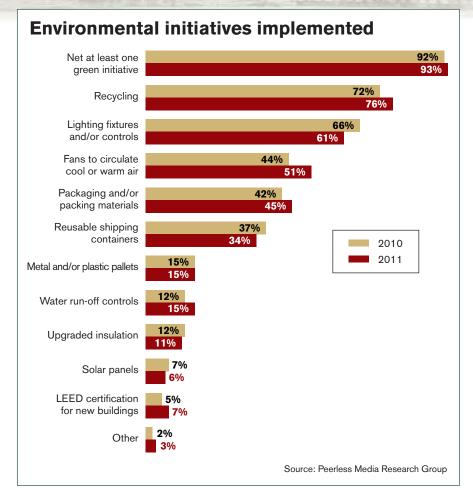
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being too conservative with investment inside your four walls. "You can only get so much throughput from conventional material handling systems. Companies looking to get more out of their existing facilities will at some point need to consider automation," says Saenz.

Another clear trend is the continued "leaning and greening" of distribution facilities. The implementation of lean improvements to the supply chain has grown significantly over the years, from just 30 percent in 2007 to 46 percent in 2011—growth of over 50 percent. Saenz attributes lean's continued popularity to its low-investment nature while getting the most out of existing facilities. "The lean movement is largely process improvements that don't cost anything for the most part," says Saenz. "These kinds of process improvements are generally smart and eliminate wastes, without necessarily investing in technology, equipment, and software."

We also found this year that more companies continue to go "green," with sustainability initiatives rising steadily from 89 percent in 2008 to 93 percent in 2011. Recycling remains the top initiative implemented, while the use of "fans to circulate cool or warm air" gained the most momentum during this past year.

Saenz points out that while the installation of fans is a great way to reduce utility costs, energy-efficient lighting is still more popular. "Lighting may be showing a decline only because so many companies have already improved their lighting over the past few years," he adds.

#### CATASTROPHE AND NETWORK PLANNING

Whether it's earthquakes, tsunamis, hurricanes, system hackers, or labor strikes, so many catastrophic events seem to keep grabbing headlines these days that we've decided to add it to this year's survey and investigate their impact on warehouse and DC operations.

When asked whether any part of their supply chain experienced a catastrophic event in the past two years, almost 30 percent answered in the affirmative. "This underscores the need for contingency planning," says Derewecki. "When the tsunami struck Japan, a lot of people got a wake-up call. We had plants in this country that shut down because they couldn't get parts from that region of Japan."

When asked what actions they've taken to protect against supply chain disruptions one respondent—a paper and printed goods manufactureroffered the following response: "We continually implement our business continuity plan, build redundancy networks within our DC infrastructure, and require our suppliers to maintain business continuity plans that we approve to ensure that they have multiple sources to obtain materials within their supply chain." Others have installed off-site back-up/cloud computing systems, added buffer inventory in a separate facility, and added more providers and carriers.

We also added a series of questions to investigate distribution networks and how often organizations study them. Our survey shows a significant number of respondents—72 percent—who actually undertook these studies, of which 38 percent execute them periodically, ranging from annually to every five years, while the remaining 34 percent do them only when necessary.

"The volatility of the global supply chain environment, competitive pressures, and the fluctuations in the price of fuel have caused more companies to use these studies to improve their supply chain networks," says Derewecki. "In fact, in six months we found this to be an area of high interest among the more aggressive, market-leading companies."

What's been done as a result of these network studies? Fifty-five percent are moving inventory among warehouses. Not a surprise, says Saenz. "If you put an

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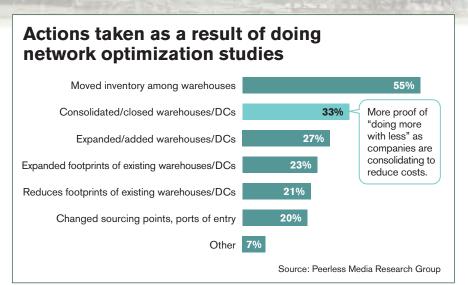
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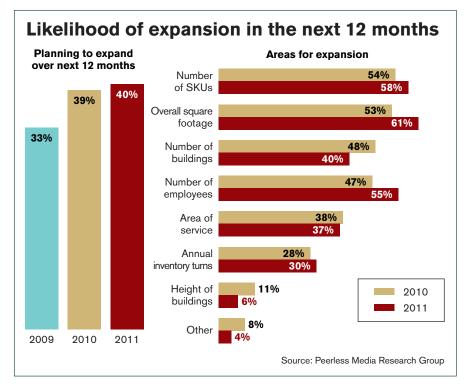


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investment number next to most of these options, moving inventory around doesn't really cost anything, yet it can improve service and potentially lower your space needs as well so that you don't have to invest in any physical expansion."

However, 33 percent have consolidated and/or closed warehouses—giving credence to how many are trying to drive costs down in their new networks. By closing warehouses, there's a reduction in manpower resulting in much needed labor savings. And by

combining inventory into fewer facilities, there's less inventory duplication, spurring a decrease in inventory costs. Saenz believes this again ties in with the previous finding of how companies are still "doing more with less."

#### **2011 DC NETWORK**

While the number of buildings within networks may have decreased, other properties of the distribution network have stayed essentially the same. This year we find that the typical size of all DCs in a distribution network remains in the range between 100,000 square feet and 249,999 square feet with clear heights of 20 feet to 29 feet. In 2010, 21 percent had total networks with areas of 100,000 square feet to 249,000 square feet, while this year 25 percent had networks with the same square footage.

This year, inventory turns have remained steady, even decreasing ever so slightly from a mean of 8.4 in 2010 to 8.2 in 2011. Derewecki speculates that, to some extent, many companies increased their inventory position in anticipation of 2011 being a better year. "But it clearly didn't turn out to be that much better," he adds.

The use of the DC for value-added services continues to be a common occurrence, with most respondents (81 percent) reporting some kind of special labeling (56 percent) and promotional packing (31 percent) being done inside the four walls.

RF tagging—as a value-added service—continues to spiral downward from 17 percent in 2010 to just 9 percent this year. "RFID is not really gaining any traction," says Derewecki. Why? One explanation can be gleaned from the fact that most of this year's respondents clearly favored more conventional routes in storage, picking, and replenishment. As such, there is less interest in using technology, specifically RFID technology.

Despite the overall slowdown, however, at least we're still moving up in terms of future plans for expansion. Those planning to expand their operations in the next 12 months continue to increase—up to 40 percent this year from a survey low of 33 percent in 2009. Most are planning to increase the square footage of their existing buildings (61 percent), followed by expanding the number of SKUs they plan to offer (58 percent). But, again, it looks like not as many new DCs will be opening up, as fewer respondents are planning to expand the number of buildings in their network this year.

Maida Napolitano is a Contributing Editor to Logistics Management

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# Sephora's gorgeous network reorganization

Our warehouse/DC engineer dives into the best practices and tools that the retailer put to work in order to expand its distribution network after it became the exclusive provider of beauty products for JCPenney stores.

By Maida Napolitano, Contributing Editor



hen talking "beauty" at Sephora, it clearly isn't skin deep. As a division of Europe's premier luxury goods provider Moët Hennessy Louis Vuitton (LVMH), this retailer has carved a deep niche in the global beauty market, becoming a major presence in hundreds of retail centers across 24 countries and on the Internet.

In the U.S. and Canada, Sephora has grown to over 280 stores in a little more than a decade. Its unique open-sell store environment, staffed by a team of beauty experts, provides customers—who the company calls its "clients"—direct access to a broad range of product categories including skincare, color, fragrance, bath & body,

(CHART COURTESY OF ST. ONGE, WWW.STONGE.COM)



smile care, and hair care. Launched in 1999, Sephora.com is now one of the Internet's foremost beauty shopping sites, making it its largest North American "store" in terms of sales and selection of products and brands.

With such rapid growth over multiple channels, its logistics and supply chain team knew it needed to keep a close watch on its lone 316,000-square-foot distribution center (DC) located in Belcamp, Md. All through 2005, it periodically conducted capacity surveys with Pennsylvania-based supply chain consulting firm St. Onge to determine whether this onefacility distribution operation could continue to support such a high rate of expansion—each time, the facility seemed to hold its own.

But 2006 ushered in a new challenge for the logistics team. Sephora became the exclusive provider of beauty products for JCPenney stores across the country, offering the same

signature Sephora look in hundreds of JCPenney stores, but within a smaller footprint. For the first time, serious doubts were raised on whether the Belcamp DC could support this new marketing push.

In addition, the lease for the DC was about to expire. The team was left sitting with some difficult questions: Was it best to stay in its existing Belcamp facility or should it move to a new, larger building at an optimal site? Should it open a second facility? If so, where should it be and what should its mission be?

Management needed to weigh all of its options and plan the best strategy going forward. To do this, it decided to engage St. Onge in an in-depth network study aiming for a distribution network that could support its expansion while continuing to provide a superior client experience and maintaining a balance of costs.

To the beauty retailer, the key has always

#### 6 tips for optimizing the distribution network

Tip #1: Involve high-level management. Traditionally, in many DC projects, business owners and stakeholders don't get involved until the very end when they give their approval on the overall output. But, engaging high-level management early on is a must.

Tip #2: Ask the right questions. A good distribution network redesign encompasses a number of key areas of the business that all need to be considered and questioned. Some critical questions that need to be answered: What are the storage and throughput capacity constraints associated within my existing distribution network? What perceived service level requirements are required for major markets being served in order to be competitive? If the delivery lead-time is changed then what is the anticipated impact on sales revenues for a given market? What are the logistics operating expenses, one-time expenses, inventory assets, and capital investments required for the baseline scenario? How do these compare to alternative scenarios?

Tip #3: Use an effective network modeling tool. Up to a certain scale, modeling your network in house using home-grown spreadsheets and databases can get cumbersome—if not impossible. Choose one of many commercially available network modeling tools.

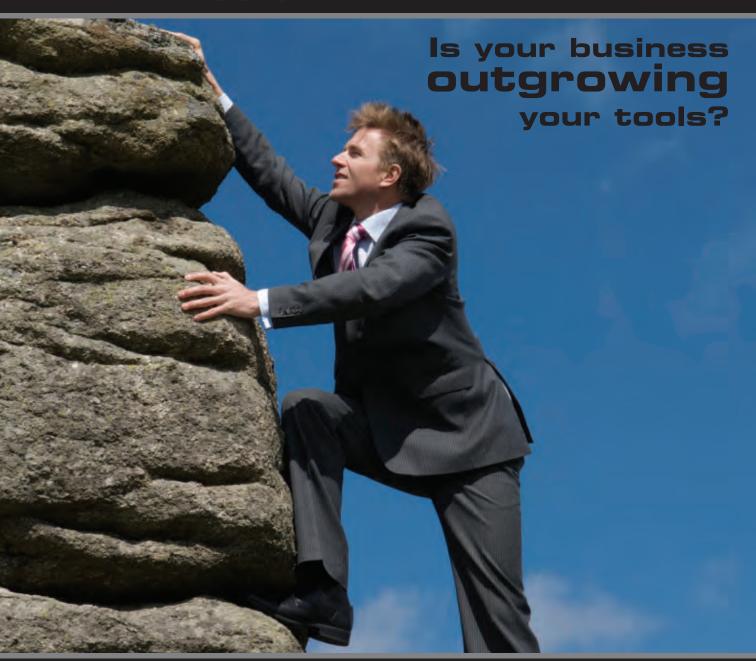
Tip #4: Perform an inventory optimization study. One of the most overlooked areas in many network designs is inventory. While adding more DCs may reduce transportation costs, it also requires you to carry more inventory—and many times this inventory is far from optimal. After the modeling tool identifies the number of facilities needed and roughly where they should be located, use algorithms to determine the right amount of inventory to achieve a specific level of service that can be customized for each of the facilities.

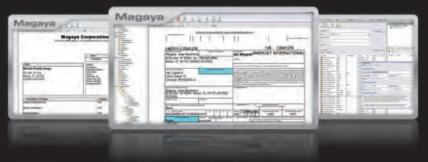
Tip #5: Make sure there is labor. Certain areas have become hotbeds for distribution primarily because of their proximity to the U.S. population. However, these popular areas that companies gravitate toward means that there could be fierce competition for the labor force. Turnover rates become high because workers would rather work down the street for another DC that's offering 25 cents more per hour.

Tip #6: Take your time. Depending on the complexity of the network, the availability of the data, and the experience of the project team, a typical network study can take up to six months.

—Maida Napolitano, Contributing Editor

# Supply Chain Solution





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### Improving Visibility Into Receivables – and Reaping the Cash Flow Benefits



BY YUJI FURUSAWA Senior Product Manager for Receivables, Global Transaction Services, Citi

A little visibility can be a cash flowenhancing thing.

That's what logistics professionals have recently discovered about their receivables operations. In the fragile "New Normal" that is today's global economy, ocean, freight and air cargo executives are looking to identify inefficiencies that when addressed can optimize working capital and enhance their bottom line.

It is during their analysis that they discover a troubling reality: True visibility into receivables can be elusive. How quickly are your clients paying? Via what channel (check, ACH, card)? How, where and how much are clients paying? And are remittance trends evolving? Without the visibility to provide answers to those questions, you may be forfeiting crucial business intelligence about the order-to-cash process.

Maintaining liquidity is critical for any logistics organization. But when receivables are processed across multiple collection channels and global divisions, it can often hinder visibility and obfuscate valuable data. And that can quickly undermine strategic financial goals.

An organization can aggregate receivables from multiple channels – paper checks, wires, ACH, etc. – in a single standard format.

#### A visible, global solution

Done right, true receivables visibility can yield the kind of business intelligence that shows where and why working capital is getting trapped. It can answer some of today's most burning questions for logistics providers:

- "How can we reduce cost of execution and collections?"
- "How can we reduce Days Sales Outstanding (DSO) and improve our cash flow and internal working capital?"
- "How can we reduce our dependence on credit for funding?"

Logistics providers – both carriers and 3PLs – who have solved the visibility puzzle have a distinct advantage over those who haven't. By discovering automated receivables analytics and reporting tools, they have increased their visibility into receivables data and streamlined accounts receivable processing allowing them to strategically manage receivables and accelerate cash flow.

Using a state-of-the-art receivables visibility solution, an organization can aggregate all receivables in a single standard format, across countries, currencies and transaction types – paper checks, wires, ACH, etc. benefitting from a consolidated view of the data in an engaging, easy-to-read graphical format.

#### Immediate, actionable intelligence

Best-in-class receivables visibility solutions include interactive, intuitive tools that provide analytics that transform data into actionable intelligence. Companies can use this

intelligence to optimize receivables management and unlock trapped cash.

This kind of analytics-based intelligence can deliver benefits across the enterprise. CFOs and Treasurers can observe receivables trends and anomalies over various time frames, locations and organizational levels, and make more reliable, data-driven forecasts. They can also easily view not only payments received, but also payments returned (for insufficient funds, for example), making it easy to manage by exception.

An A/R Manager can access daily views of channels and untruncated transaction details submitted for clearing, or leverage data to strategically manage DSO.

A Credit Control Manager can track trends and status of the previous day's collections and checks, even drilling down to a single piece of data and view information at the transactional level – that is, seeing the forest *and* the trees.

A Customer Service professional can access salient data to conduct a search and confirm a customer's payments.

Use actionable intelligence to optimize receivables management and unlock trapped cash.

#### Interactive search, scorecards and reports

Users can also take advantage of robust search capabilities. With an automated

smart search feature, for example, users can save preset criteria, whereupon smart search will automatically search the repository for matching transactions. When a transaction meets the criteria, it's flagged and held until viewed; results are updated every time the data is refreshed.

Aggregating receivables data is one thing. Presenting it in understandable fashion is another. A superior receivables visibility tool can present relevant data in convenient views – globally and across business units – that are easily accessed from a single web portal.

Data is presented graphically and through interactive performance scorecards. These critical business intelligence tools provide key analytics, snapshots of the current state of receivables, and insights into a company's receivables trends.

Users can set parameters to view specific scorecard data, or drill down into the data and produce reports that can be customized and saved for future retrieval.

#### Complete receivables visibility

Fair warning: Sophisticated receivables visibility solutions with as much functionality as the ones described above are difficult to find. But they do exist. Citi's ReceivablesVision<sup>SM</sup> is an integrated receivables portal that gives logistics providers a standard view (a "single version of the truth") into all their global remittance data – across all regions, business units and products – over multiple, user-defined criteria.

Companies can analyze trends over time, such as how this year will differ from last, who is paying more/less, and the sources of payments. The result: strategic management of receivables transactions and optimized cash flows.

One key to ReceivablesVision's success is its ability to work with a company's existing ERP systems. In fact, it fills in the blanks that those systems do not cover. For example, ReceivablesVision can ensure that your data is automatically integrated while an ERP system must make adjustments to ingest new payment flows. ReceivablesVision executes the function easily and automatically with complete, untruncated remittance details.

With this kind of end-to-end solution, logistics companies can achieve true global visibility in consistency, accuracy and timeliness across their entire financial supply chain. They can access the information they need to make strategic market segmentation decisions. And they gain not only significant reductions in DSO, but also the financial products to leverage the resulting cash flow.

An integrated receivables portal provides a "single version of the truth" about all global remittance data.

#### A track record of execution

One of the most critical issues in selecting a receivables visibility partner: execution.

Does the provider, for example, have an extensive history of executing effective solutions? Citi has a track record of success in delivering measurable cost savings to more than 1,200 freight forwarders and 95 carriers worldwide. Citi processes more than 2.8 million invoices worth nearly \$5 billion for these companies annually.

Does it have deep, long-term strategic relationships with global financial, technical and operational trading partners (relationships that far exceed the life spans of typical software vendors)? When a logistics company chooses Citi, they are choosing a knowledgeable partner with export and import solutions, as well as trade finance and specialized trade offerings.

Does it have global breadth and depth? With an international presence spanning more than 140 countries, Citi is a leader in global cash management, delivering innovative, custom-tailored solutions. And its global network of 3,000 correspondent banks means it can provide the services needed to compete in today's business environment.

Does it have technology that's reliable, scalable and secure? Citi's technology delivers 99.98% uptime with hot

rollover sites, all supported by rigorous, multitiered security. With Citi providing the IT solution, you don't have to worry about deploying your own budget-constrained IT resources to build or maintain another internal project.

#### Smoother financial sailing

In today's challenging global economy, logistics providers must optimize working capital to stay competitive. With an advanced receivables visibility solution, companies can improve efficiencies with increased global visibility and access to receivables data. They can streamline A/R processing, strategically manage receivables, unlock trapped liquidity and optimize working capital. And they can increase control and reduce risk by consolidating data across countries, currencies and transaction types.

All these benefits are built into Citi's on-demand ReceivablesVision technology platform. Providers gain a fully integrated hub of global remittance information and transactions – one that is locally embedded and globally accessible across regions, networks and channels.

The result: accelerated payment settlement and lower costs, and most importantly, the kind of receivables visibility that can optimize cash flow and working capital.

For more information, please visit www.transactionservices.citi.com

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been client satisfaction. "We want to delight our client," says Martin Flaherty, vice president of logistics for Sephora. "At the same time, we're also looking at improving profitability, adaptability, and velocity. We want to align our resources to drive success across the enterprise."

In the span of about 14 weeks, the project team built a model of the new distribution network, tested different scenarios using the latest software, and put together the best solution: a

Determining the best strategy required a systematic approach, the analysis of mountains of data using the latest network optimization software, and old-fashioned due diligence.

> two-facility network with the existing DC in Belcamp and the selection of Salt Lake City as the optimal site for a second facility.

In June of 2008, Sephora opened its second DC in Salt Lake City, Utah, which has not only relieved the capacity in Belcamp, but also increased its customer service capability by being physically closer to its clients in the western half of the country, reducing its cost per unit shipped.

Over the next few pages we'll dive into the best practices and tools the Sephora team put to work to transition to a two-facility distribution network that would shrink its order cycle time, getting products to stores quicker and reducing stock-outs.

#### Drawing up the plan

Determining the best strategy required a systematic approach, the analysis of mountains of data using the latest database and network optimization software, the input of experienced team members with first-hand knowledge of the business and its future trends, along with some good, old-fashioned due diligence.

And it all didn't happen overnight. The first two months were geared towards building a baseline model that mimicked Sephora's current distribution network, followed by a

few weeks of testing different logistics scenarios, culminating with a site-selection period of six months that winnowed the selection to the "perfect" site for the second DC. Here, the Sephora project team shares the steps to their success:

1. Form an integrated team. First, a project team was assembled. It was led by Flaherty and his internal logistics team and worked closely with St. Onge's network study team led by

Bryan Jensen, vice president for the consulting firm. Input from key personnel from finance, transportation, operations, information systems, and marketing departments was then periodically required to provide the data, establish assumptions, and offer direc-

tion for future trends.

**2.** Understand business issues. The entire team had to understand and agree on how Sephora did business. How did replenishment to stores work? What did the stores need in terms of service? Was there a dollar value associated with having a same day service time to its clients?

"Internal to the Sephora organization, we needed to make sure we got information, forward-looking expectations, and desires for the operation from the store managers," explains Jensen. "That determines the boundaries in which the network analysis will examine how they might get their product to the marketplace."

- **3. Develop baseline model "as-is net-work."** Over a four-week period, the team collected data from different areas of the business. Some of this data included a year's worth of transactional history for its direct-to-consumer (Sephora.com) business and its store business, inbound and outbound freight costs, warehouse operating costs, shipment volumes, and store locations. For most of the preliminary data analysis, St. Onge used SQL query tools that allow the users to manipulate massive data files.
  - St. Onge then spent the next four weeks





building a baseline model of the existing network. It used leading-edge software specific for distribution network optimization to bring all the above data and assumptions together. The goal was to validate the baseline model by replicating the current distribution network, applying the appropriate transportation costs and volumes, and comparing it against last year's actual historical costs. The costs determined by the model had to come within a very close one percent.

4. Establish logistics objectives. After the baseline model was validated, the team began to establish the objectives for the future network. According to Jensen, trying to nail down predictions for Sephora's future was the most challenging step. The team needed to understand not just the percentage growth in new stores per year, but where they were going to open these new stores as well as the plans for growth of their direct-to-consumer operation.

Would it geographically follow the store patterns and the store population throughout the country? Typically the standard is to look

The goal was to validate the baseline model by replicating the current distribution network, applying the appropriate transportation costs and volumes, and comparing it against last year's actual historical costs.

five years ahead, but Sephora also provided St. Onge with a 10-year outlook. "Clearly the further out you look the fuzzier your visions gets," says Jensen, "but at least you can understand directionally how things will trend beyond a normal five-year horizon. This can be important in a network analysis because implementing the solution can take considerable time."

**5. Identify logistics modeling scenarios.** Once growth projections and other future logistics requirements were entered into the model, the team then identified two main scenarios that they wanted to test. Scenario 1: What's the best East Coast site if Belcamp is closed? Scenario 2: If Belcamp is fixed, what's

our best second site?

For each scenario, the model was populated with statistical data regarding candidate locations. This data includes the average cost per square feet of a DC at that location and all the freight rates to and from that location. The model then rates the candidate sites and ranks them based on the cost to service.

**6. Model scenarios and evaluate.** With Scenario 1, the model was run with a clean slate to determine whether or not Belcamp was indeed the optimal site. It turned out that the absolute optimal location was just outside of Philadelphia on the New Jersey side of the Delaware River near Cherry Hill, which is only about 80 miles from Belcamp. "When you're that close you don't bother relocating for the amount of transportation costs that would actually be saved," says Jensen. Management then decided to extend Belcamp's lease.

In Scenario 2, with Belcamp fixed, the team then re-ran the model with an eye towards optimizing transportation, lead time, and expenses with a second site. "It put us in the

general area of Nevada, New Mexico, Colorado, Arizona, and Utah," says Sephora's Flaherty. "From there, we reviewed a variety of secondary criteria: the demographics; the cost of doing business such as business licenses, permits, tax credits, incen-

tives from the state; and utility costs." In the end, Salt Lake and Reno were neck and neck.

7. Prepare an implementation plan. Over six months, Flaherty began the task of implementing this two-DC network solution, personally travelling to both areas, checking out different buildings, and weighing out strengths and weaknesses of each site.

"While both cities looked very promising, Salt Lake City not only optimized our transportation costs, but the local and state governments were very responsive and eager to work closely with us to ensure that our facility was brought online in the shortest amount of time possible," says Flaherty. He adds how the Salt





Jeff Davidson Saia Account Representative, Houston, TX

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#### **Customer Service Indicators**



Lake City's entire business community never wavered in its support to bring Sephora to the city along with the jobs that it offered the area residents.

#### A network with benefits

It's been three years and Sephora's two-DC network has significantly improved its customer service cycle time. "Because I'm closer to my stores," says Flaherty, "I could get replenishment faster, making it less likely to go out of stock on a particular item." It has also achieved freight economies, while relieving capacity at the Belcamp DC.

Jensen points out another "priceless" advantage with the opening of this second DC. "When you have only one building, it's a critical point

"Last year we purchased the largest beauty retailer in Brazil, and we have plans to expand Sephora into that country beginning in 2012"

-Martin Flaherty, vice president of logistics, Sephora

of failure if a fire or a flood devastates it," says Jensen. "Having two facilities engenders a level of business continuity or additional redundancy to the network."

And Sephora continues to grow. "Last year we purchased the largest beauty retailer in Brazil, and we have plans to expand Sephora into that country beginning in 2012," says Flaherty. "Towards the end of this year, we will be expanding into Mexico."

Ever vigilant, the logistics team has just completed another network study to determine the need for a third facility—and so the cycle continues.

Maida Napolitano is a Contributing Editor to Logistics Management





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#### **FEATURES**

#### 8 The Supply Chain Top 25: Leadership in Action

The 2011 rankings of the Top 25 supply chains from Gartner Inc. are in. They include repeat winners and some new entrants. Perhaps even more important than the actual rankings, says Gartner Research Director Debra Hofman, are the lessons that can be learned from analyzing the leaders. This year, six specific qualities stand out.

#### 16 The Greening of Walmart's Supply Chain...Revisited

In 2007, SCMR ran an article on Walmart's sustainability program, focusing on eight specific initiatives being pursued. Four years later, the author of that original article, Érica Plambeck of Stanford, and colleague Lyn Denend revisit those initiatives to assess just how Walmart is doing on the sustainability

#### 24 Achieving Flexibility in a Volatile World

A new global survey from PRTM confirms the importance of operational flexibility in supply chain success and identifies five levers that leaders employ to make it happen. The consultants report that the financial and performance advantages of improved flexibility can be profound. They outline five basic steps that companies can take to start realizing those benefits.

#### 32 What's Your Mobility Index?

Mobile devices are everywhere these days. But what's the real potential of mobility in the key supply chain processes. And what's the best way to identify and tap into that potential?

Sumantra Sengupta of EVM Partners says the first step in answering these questions is to carefully determine your "Mobility Index." This article tells how it's done.

#### 40 The Case for Infrastructure Investment: Lessons from Medco and Staples

Smart investment in supply chain infrastructure—and in particular automated materials handling and distribution systems—can pay big dividends. Medco and Staples have proven that convincingly, as these case studies demonstrate. Their stories point to seven key takeaways that supply chains professionals in any business sector can learn from.

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Quest



The carriers and third-party logistics providers that our readers hold in high esteem where recently celebrated at our 2011 Awards Dinner at the Philadelphia Marriott.



Quest for Quality Awards Dinner sponsors YRC Worldwide, Holland, New Penn, and Reddaway were well represented at this year's event, taking home six awards combined.

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

The editorial staff of *Logistics Management (LM)* was thrilled to offer the logistics and transportation community the results of the 28th Annual Quest for Quality Awards in our August issue (logisticsmgmt.com). This year, 111 providers of transportation and logistics services received the ultimate vote of confidence, posting the highest scores across our lists of critical service criteria. The winners officially accepted their awards on Wednesday, October 5, in the Liberty Ballroom at the Philadelphia Marriott.

And when you consider the operating environment in which carriers and 3PLs found themselves operating over the past 12 months, the editorial staff agrees that securing reader faith and walking away with a Quest for Quality Award in 2011 is nothing less than a tremendous achievement.

The recovery from the Great Recession has proven to be more elusive and prolonged than any other in our history, and the slow growth presented another period of unprecedented challenges for carriers, services providers, and the shippers who put these companies to work—placing even more strain on the vital shipper/carrier relationship.

Although many industry observers are predicting strengthening for logistics services as we head through the second half of 2011, we're finding that the pieces may not be falling into place as quickly as we thought to support anything more than weak growth. Much of this uncertainty is translating into increased volatility, sending shippers out in search for capacity during sudden surges in demand—and carriers in search of a more sustainable revenue model.

And when considering these mounting challenges, we're happy to report that shippers believe that these 111 carriers and 3PLs have been equal to the task. Quest for Quality winners are voted on by the readers of *Logistics Management*—the customers that put these carriers and providers to the test around the clock in countries throughout the world. If fact, this year we had 4,575 logistics and supply chain decision makers place their vote during this sixmonth research project.



Quest for Quality Awards Dinner sponsors Lynden (top), FedEx Freight (middle), and Southwest Airlines (Bottom) all brought home 2011 Quest for Quality gold.

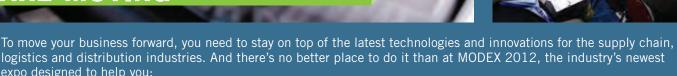


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Rated extremely/

very important

#### Performance attributes' importance

Company Type	On-time performance	e Value	Information technology	Customer service	Equipment & operations	
National/multiregional LTL and surface package car	riers 4.7	4.5	3.4	3.9	3.4	
Rated extremely/very important	97%	92%	57%	68%	58%	
Air cargo carriers/air express carriers/freight forward	rders 4.8	4.2	3.5	4.0	3.4	
Rated extremely/very important	96%	86%	56%	75%	52%	
Ocean carriers	4.5	4.4	3.5	4.1	3.8	
Rated extremely/very important	91%	87%	60%	77%	69%	
Truckload/van lines/expedited	4.8	4.4	3.3	4.0	3.9	
Rated extremely/very important	97%	90%	52%	70%	69%	
Rail/Intermodal service providers	4.6	4.4	3.1	3.8	3.7	
Rated extremely/very important	94%	87%	45%	63%	62%	
Carrier selection/ negotiation Order f		nsportation/ distribution	Inventory managemer	•	Logistics information systems	
<b>3PL</b> 3.9	1.0	3.9	3.3		3.7	

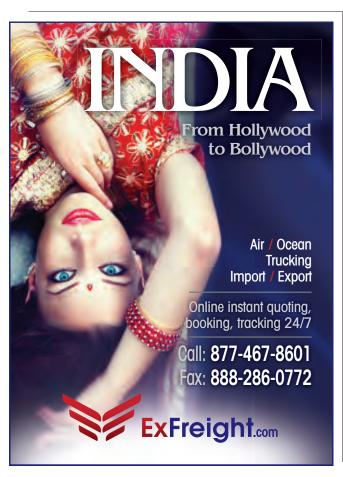
71%

Source: Logistics Management, Peerless Media Research Group

70%

Quest for Quality by the numbers: The Quest for Quality is *not* based on a simple "popular" vote. The overall weight evaluation itself is a weighted metric. In fact, the scores take into account the importance that readers attach to each performance attribute. Each year, readers are first asked to rank the attributes in each category on a five-point scale, with 5 representing the highest value and 1 representing the lowest value. Our research team then uses those attribute rankings to create weighted scores in each category. For example, readers have historically placed the single highest value on On-time Performance—and they've done so again in 2011.

72%





53%

65%

Transport America's EVP & COO Keith Klein accepts a 2011 Quest for Quality Award from Peerless Media's Group Editorial Director Michael Levans (right). Transport America was one of our 2011 Awards Dinner sponors.



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## Safety must be more than carrier ratings

By John A. Gentle, DLP

SINCE I ACQUIRED A SECOND HOME IN VERMONT this year, my car has new tires and adjustments have been made to my brakes. Once again, I have become an active traveler on America's busy interstate system; and what I have observed on these highways reminds me not only about the challenges that logistics professionals have in qualifying and selecting safe carriers, but the direct and indirect breadth of your safety responsibilities and oversight.

Certainly, the most important internal and direct focus is your critical and vigilant evaluation of the Federal Motor Carrier Safety Administration's (FMCSA) Safety and Fitness Electronic Records (SAFER) system that offers safety data information about your carriers. Beyond that, the internal focus has to include the plant or distribution centers' operating processes that affect driver safety.

This focus begins with how and where the driver can drive and park once he has presented himself

available for loading. Once on-site and parked, is it safe and well lit for the driver to move in between other vehicles to find the control center? If allowed into the facility, can he be easily identified with a bright safety vest and can he find a clearly marked floor route to rest rooms and cafeteria?

If your loading process is "live" and requires driver participation, have you vetted the loading methodology with your carriers' safety directors? If it requires the driver to operate equipment, are they qualified or licensed to do this work? If it requires lifting and carrying, has the cube and weight of the shipping unit been tested for the physical stress and fatigue it places on the driver?

If it is a flatbed shipment, is the driver required to climb on top of the load for tarping or load securement, and is a safety harness available and required? Is there a specific area on your company's site for flatbed straps to be safely applied without the strap hooks striking others. And, in the winter, is there a process

John A. Gentle is president of John A. Gentle & Associates, LLC, a logistics consulting firm specializing in contract/relationship management and regulatory compliance for shippers, carriers, brokers, and distribution centers. A recipient of several industry awards, he has more than 35 years of experience in transportation and logistics management. He can be reached at jag@RelaTranShips.com.

that requires drivers or the company to remove snow and ice from the top of trailers?

Driver safety extends to your customers as well. Do your customers have a hostile safety environment—either physical or bad operating practices? When carriers report that, do you counsel with your customers or just allow drivers to risk injury?

As I alluded to earlier, driving with big semis at high speeds on the interstate is very different than driving 35 mph on city and suburban roads. In the early 1990s, Congress directed the Federal Highway Administration to educate the driving public on how to safely share the roads with trucks, and the FMCSA introduced a program called "No Zone" in 1994.

While our children are being taught about the actual blind spots or areas around trucks and buses where their car "disappears" from the view of the drivers, many of our colleagues have forgotten about

Transportation and logistics leaders need to be proactively engaged with the state and local DOTs and metropolitan planning organizations to assist them with plans for the safe movement of freight in their areas.

the danger of these blind spots that are the Side No-Zone, Rear No-Zone, and Front No-Zone areas of the trucks—as well as how long it takes to bring a big rig to a safe stop.

For us, it is pretty intuitive that passing a truck should be done promptly and without interruption, and the risk is great if we choose to hang out in the No Zone. Don't delay, schedule No-Zone classes and hand out literature so this important information can be brought home and shared with spouses and friends.

Lastly, transportation and logistics leaders need to be proactively engaged with the state and local DOTs and metropolitan planning organizations to assist them with plans for the safe movement of freight in their areas.

Your responsibility around safety is much, much more encompassing than having someone check SAFER annually to make sure your carriers have a "satisfactory" safety rating. You must bring all of the aspects of safety to life.  $\square$ 



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