





November 2016 • Vol. 36 • No. 11

INSIGHT

6 CHECKING IN

Will blockchain disrupt global trade finance for the better?

8 DIALOG

The ongoing conversation.

10 GOOD QUESTION

When choosing a carrier/supplier, what's more important: cost or customer service?

12 10 TIPS

Using a systems integrator for distribution center automation.

14 LEADERSHIP

Meet Target Freight Management CEO Mike Wagner.

30 WHAT'S DRIVING THE AIRFREIGHT INDUSTRY TODAY?

KnowledgeBase sponsored by DB Schenker.

32 LEAN SUPPLY CHAIN

How supply chain strategies impact e-commerce success.

34 TRADE COMPLIANCE STRATEGIST

Export control reform strikes again.

36 IT MATTERS

Using IoT today enables the supply chain of tomorrow.

INPRACTICE

6 READER PROFILE Bert De Winter: Springing Forward with Innovation

Bert De Winter, director of EMEA logistics with HP Inc., ensures operational excellence while finding innovative new ways of doing business to stay ahead of the competition.



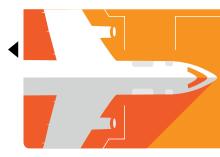
INDEPTH

28 Top 10 U.S. Cargo Airports

With efficient cargo facilities and reliable handling capabilities, these airports will treat your shipments with top-flight care.

An ASAP Fable: Fast But Steady Wins the Expedited Race

When incorporated into a strategic transportation plan, expedited shipping helps companies over the customer service finish line.



52 Airfreight Forwarders Ride Headwinds and Tailwinds

Despite turbulence, forwarders continue to find cruising altitudes, providing reliable transport for shippers who need to quickly move goods – from fashionable apparel to critical components.

Inbound Logistics (ISSN 0888-8493, USPS 703990) is mailed monthly to approximately 60,000 business professionals who buy, specify, or recommend logistics technology, transportation, and related services, by Thomas Publishing Company LLC, 5 Penn Plaza, NY, NY 10001. José E. Andrade, chairman; Carl T. Holst-Knudsen, president. Periodicals postage paid at New York, NY, and additional mailing offices. All rights reserved. The publisher accepts no responsibility for the validity of claims of any products or services described. No part of this publication may be reproduced or transmitted in any form or by any electronic means, or stored in any information retrieval system, without permission from the publisher. POSTMASTER SEND ADDRESS CHANGES TO: Inbound Logistics, 5 Penn Plaza, New York, NY 10001

November 2016 • Inbound Logistics 1



November 2016 • Vol. 36 • No. 11

INFOCUS:

- 19 NOTED
- 23 TRENDS

Damaged holiday packages negatively impact brands; Robot cargo pilots successfully tested; Lack of a procurement department negatively affects the bottom line.

27 GLOBAL

DHL survey gives insight into international trade; Trade growth expected between Canada and United States; Hanjin Shipping shuts down operations in Europe.

INFO

- **72 WEB_CITE CITY**
- **76 IN BRIEF**
- **78 WHITEPAPER DIGEST**
- **80 VIDEO LOG**
- **82 CALENDAR**
- **84 CLASSIFIED**
- **86 RESOURCE CENTER**
- 88 LAST MILE: FREIGHT CAN'T WAIT? TAKE THE ELECTRIC ROUTE!



Inbound Logistics' annual guide spotlights the airfreight partners that help shippers soar.

SPONSORED CONTEMT H.O.W. (Help on the Way)Looking to choose a single-source logistics provider or use demand chain management to increase profits? Find out H.O.W. to handle these challenges in our annual compilation of logistics best practices.

The Best of the Best:
Site Selection Assistance From Coast to Coast

From Nevada to New Jersey, these seven U.S. locations attract site selectors looking for long-term logistics efficiency and economic success.





We get your customers' perishables quickly and carefully to their destinations, so they arrive fresh and pristine. And now with more routes and new freighters on the way, Alaska Air Cargo can meet even more of your shipping needs.

For more information or to book your shipment, visit alaskaair.com/cargo or call us at 1-800-225-2752.







QUICKBYTES

WEB_CITE CITY®

The most comprehensive and clutter-free online directory of supply chain websites - organized by category, cross-referenced, and fully searchable. You can browse by category or search for companies by name.

bit.ly/IL_WCC

WHITEPAPER DIGEST

Looking for insight into supply chain best practices and trends? Want to review the latest logistics sector research? Our whitepaper database is packed with up-todate information on all aspects of supply chain operations.

bit.ly/IL_WPDigest

INBOUND LOGISTICS PLANNER APP

The inbound logistics planner app is your premier supply chain and logistics resource that can help cut transportation and logistics costs, boost efficiency, and improve supply chain operations.

bit.ly/ILPlannerApp

Keep up to date with the very latest:

- facebook.com/InboundLogistics
- @ILMagazine
- in linkedin.com/company/ inbound-logistics
- youtube.com/InboundLogistics

ONLINE EXCLUSIVES



Accurate Product Data Drives Supply Chain Systems bit.ly/ProductData

Isabel DuPont, SVP, Production and Product Delivery, Gladson

Supply chain applications stumble when they use inaccurate product data. Here's how to make sure data is consistent and comes from well-crafted and executed processes.



Top 5 Things Shippers Need to Know About the Canadian eManifest bit.ly/CanadianeManifest

Glenn Palanacki, Product Manager, North America Customs, Descartes

The Canadian eManifest improves security by receiving cargo and conveyance information before a shipment arrives at the border. Here's what companies should know about the regulation to improve efficiency.



Shedding Light on Warehouse Savings bit.ly/LightingSaves

Justin Moon, Director, Strategic Marketing, Industrial Solutions, Acuity Brands

Companies can reap operational savings by looking up...at warehouse lighting. Here's how switching to LED solutions cuts more than costs.

AIRFREIGHT RESOURCES

Find an Airfreight Forwarder bit.ly/AirfreightDST

Inbound Logistics' Air Forwarder Decision Support Tool allows you to select the services that match your needs, then generate a list of qualified airfreight forwarders that match your selections. You can also submit an RFP automatically.

Airfreight Request for Proposal bit.ly/AirfreightRFP

Use this Airfreight Forwarder RFP to have time-definite solutions experts look at your expedited challenges and needs, and give you free, no-obligation advice, solutions, and information specific to your request.



CHECKINGIN





Blockchain Supply Chain?

nyone doing business in a global environment knows that a lot of friction in trade activities is directly related to finance: regulatory and compliance speed bumps, fraud, letters of credit, manual and fax-based documentation. In trade finance, the sheer number of borders, intermediaries, regulatory authorities—and lack of technology—can sometimes stall your product, no matter what else you've done right. Sometimes it ain't easy moving green.

Enter disruptive Bitcoin technology, which recently made a small experimental debut in global supply chain management.

Bitcoin originated as a counterculture global electronic currency that, at its inception, was the underground financial system used by those who did not want to participate in open financial markets. Governments and their banking partners did not like it because it made global financial transactions difficult to track.

MONEY WILL MOVE FASTER

The heart of Bitcoin currency is blockchain technology: a web-based transaction processing system that creates a "golden record" of a set of data that is indelibly and irrevocably secure and visible to all parties in each trade network, eliminating any need for third-party verification. Think Paypal for global trade.

R3, a consortium of 70 of the world's biggest financial and trade finance concerns and banks, has been researching ways to harness the speed, accuracy, and efficiency blockchain affords. In October 2016, we moved beyond research with a truly innovative global trade experiment that could be the harbinger of disruption to global finance and add a new dimension of velocity and security to trade financial transactions and the supply chains dependent upon them.

Commonwealth Bank of Australia, Wells Fargo, and trading company Brighann Cotton shipped 88 bales of cotton worth approximately \$35,000, financed with blockchain technology, striving to prove for the first time that the combination of blockchain and smart contracts can amp global trade finance. Chris Lewis, trade services manager for Wells Fargo, says the bank is committed to new technology, but "significant regulatory, legal and other concerns remain to be addressed."

Global trade on speed–simplified and secure with electronic contracts that transfer ownership of the goods, authorize the release of payment as digital-ledger technology encrypts, and store the details of the contract–ensures all trading parties work off the same synchronized version, which cannot be unilaterally altered or tampered with. Will blockchain disrupt global trade finance for the better by enabling money to increase supply chain velocity? Yes.

6 Inbound Logistics • November 2016

inbound OCISTICS Vol. 36, No. 11 November 2016

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS

www.inboundlogistics.com

STAFE

PUBLISHER Keith G. Biondo

publisher@inboundlogistics.com
EDITOR Felecia J. Stratton

editor@inboundlogistics.com

MANAGING EDITOR Lauren Muskett Imuskett@inboundlogistics.com

SENIOR ASSOCIATE Katrina Arabe

EDITOR karabe@inboundlogistics.com

CONTRIBUTING EDITORS

Merrill Douglas • Karen M. Kroll • Chris Lewis •

Jason McDowell • Gary Wollenhaupt

CREATIVE DIRECTOR Sean Doyle

sdoyle@inboundlogistics.com

CREATIVE DIRECTOR Jeof Vita jvita@inboundlogistics.com

DIGITAL DESIGN Amy Palmisano

MANAGER apalmisano@inboundlogistics.com

PUBLICATION MANAGER Sonia Casiano

sonia@inboundlogistics.com

CIRCULATION DIRECTOR Carolyn Smolin

SALES OFFICES

PUBLISHER: Keith Biondo

212-629-1560 • FAX: 212-629-1565 publisher@inboundlogistics.com

WEST/MIDWEST/SOUTHWEST: Harold L. Leddy

847-446-8764 • FAX: 847-305-5890 haroldleddy@inboundlogistics.com

Marshall Leddy

612-234-7436 • FAX: 847-305-5890 marshall@inboundlogistics.com

SOUTHEAST: Gordon H. Harper

404-229-9691 · FAX: 404-355-2036 south@inboundlogistics.com

MIDWEST/ECONOMIC DEVELOPMENT: Joseph Biondo

516-578-8924

jbiondo@inboundlogistics.com

NORTHEAST: Rachael Sprinz

212-629-1560 • FAX: 212-629-1565 rachael@inboundlogistics.com

FREE SUBSCRIPTIONS

www.inboundlogistics.com/free



Inbound Logistics supports sustainable best practices. Our mission is rooted in helping companies match demand to supply, eliminating waste from the supply chain. This magazine is printed on paper sourced from fast growth renewable timber.

Inbound Logistics welcomes comments and submissions. Email us at editorial@inboundlogistics.com; call (212) 629-1560; or mail 5 Penn Plaza, NY, NY 10001. For advertising or subscription information, call (212) 629-1560, or e-mail publisher@inboundlogistics.com. Inbound Logistics is distributed without cost to those qualified in North America. Interested readers may subscribe online at bit.ly/get_il. Subscription price to others: in North America: \$95 per year. Foreign subscriptions: \$229. Single copy price: No. Amer. 510, foreign \$19, back issues \$15.







Want to join the conversation?

Follow us:

facebook.com/InboundLogistics

twitter.com/ILMagazine

in. linkedin.com/company/inbound-logistics

youtube.com/user/InboundLogistics **Drop us a line:**

editorial@inboundlogistics.com



MEET OUR SCHOLARSHIP WINNER

We are proud to announce the winner of the 2016 *Inbound Logistics*/APICS Supply Chain Scholarship: Devan Dunneback.

Age: 22 Grade: Senior

School: Michigan State University **Major:** Supply chain management **Position:** Customer-facing supply chain intern, Nestlé Purina PetCare Company **Post-graduation plans:** Supply chain

management trainee rotational development program, Nestlé Purina PetCare

"I strive to become the director of supply chain with Nestlé," writes Dunneback in his application essay. "I will build positive professional relationships with suppliers and use my title to levy for better working conditions for on-the-floor production employees."

Dunneback wins a \$2,500 education scholarship. "Since I've received this scholarship, I have become motivated to give back to my community," he says. Well done and congratulations, Devan!



HASH IT OUT

@ILMagazine

Saturday: rain, coffee, and logistics. I know the best way to save LTL dollars. Exactly what I do!

Jennifer Pauley
@logistchick

HOT TOPICS | *IL* articles getting the most impressions on LinkedIn: Hazmat Transportation: Have a Safe Trip: bit.ly/safehazmat • Logistics

Outsourcing: An Active Culture at Dannon: bit.ly/dannonculture • Logistics Leadership: Secrets to Success: bit.ly/elevateyourcareer • 2016 Trucking Perspectives: bit.ly/truckingperspectives • Intermodal Transport: The Little Engine That Could: bit.ly/intermodalengine • Retail Logistics: When Fast Isn't Fast Enough: bit.ly/fasterthanfast



18 Sure-Fire Ways to Save on LTL Shipments

Carriers and 3PLs reveal road-tested secrets for cutting trucking costs. bit.ly/18LTLtips

Dan Carruthers

Good article. The costs are reduced when you look at how you organize shipments and use consolidate processes to better structure the shipment activity, and tie it in with the sales and order management processes. Pushing rates down doesn't solve the root cause.



Most Thumbs-up on Facebook

Retail Logistics: When Fast Isn't Fast Enough bit.ly/fasterthanfast



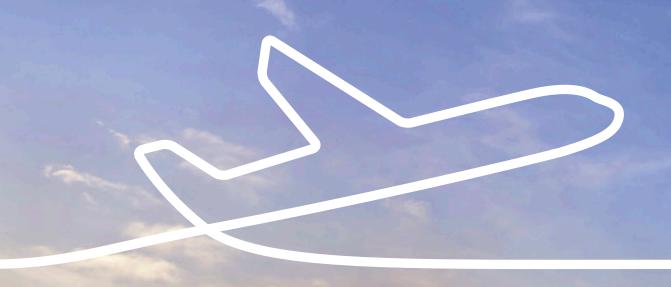
RFP Submission to Inbound Logistics

Inbound Logistics' free service lets you send your specific logistics, supply chain, or transportation challenge to leading logistics experts. They will respond directly to you. bit.ly/3PLRFP

Thanks so much. Looking forward to hearing from the companies.

Ken Polito

Airfreight Solutions THAT CATER FOR ALL YOUR NEEDS



AIRFAST

For time-sensitive shipping



TIME SENSITIVE 1-3 Days Transit

AIRFLEX

Reliable and tailored product handling



PRODUCT SPECIFIC Customized Service

AIRSAVE

A cost-effective solution



COST FOCUS With High Quality



GEODIS

We logistic your growth

Good Question...

READERS WEIGH IN

When choosing a carrier/supplier, what's more important: cost or customer service?

While reducing operational costs is top of mind for businesses, customer service comes first to ensure rising expectations are met with improved visibility and accuracy—especially in today's increasingly competitive environment where loyalty must be earned and options are many.

Steve Rice

Director of Product Management
TAKE Supply Chain

Bang for the buck. There are a lot of providers—customer service levels can be excruciatingly low at even the higher-priced vendors. Service providers should stop thinking they can charge a premium to be 50-percent reliable. You want to charge a premium? Then you must give 90-percent reliability—anything else, you're the same as the low-cost provider.

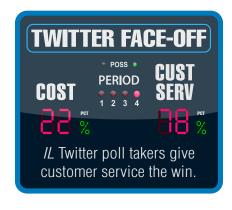
Matt Tillman

Co-founder and CEO, Haven

This is possibly the most difficult question we face on a day-to-day basis. Some shipments cannot be late and service becomes the most important aspect of the move. There are other shipments that do not have a strict deadline (or are ready early) and price then becomes the most important factor. As a partner, we help our customers identify when and where each is more relevant and where cost savings exist.

Craig Laughlin

Logistics Solutions Consultant Zipline Logistics



Cost is generally a key consideration, because if the cost isn't in the ballpark, the level of service is essentially irrelevant. However, once the cost is in range, significant differentiation on service can often be the deciding factor.

Kris Hedstrom

Manufacturing Manager Cambridge Security Seals

Within a reasonable range of variance, service should trump cost. The cost of poor service can often outweigh any upfront cost savings once you factor in back-office support, brand damage, or other soft costs. Great service builds customer trust and loyalty, which, in the end, is key to business success.

Mike Doyle

Director of Customer Success, Kuebix

Depends on the product. I've seen many examples of companies having "low-cost" carriers that are never used or consistently over-ridden when the TMS selects them because the planners know the carrier's service is substandard for the product being shipped.

Terry Wray

Vice President, Implementation Services 3Gtms

Hands down—customer service. Chasing the lowest cost often has costs of its own, whereas the partnership that comes from true customer service always drives long-term value. And when the market changes, you'll benefit from having a trusted partner with mutual goals.

Nick Fryer

Director of Marketing, AFN Logistics

It is just as important—if not more—to choose customer service over cost. A 3PL provider with exceptional service and account management can bring a wider scope of benefits—including cost savings—by improving efficiencies and managing risk and change.

Chris O'Brien

Chief Commercial Officer, C.H. Robinson

HAVE A GREAT ANSWER TO A GOOD QUESTION?

Be sure to participate next month. We want to know:

What logistics concerns keep you up at night?

We'll publish some answers.
Tell us at editorial@inboundlogistics.com or tweet us @ILMagazine #ILgoodquestion





Using a Systems Integrator for DC Automation

mplementing materials handling automation within a distribution center requires an experienced systems integrator, which acts as a matchmaker to ensure the software communicates fully and freely with the facility's equipment. Systems integrators are also responsible for the deployment's speed, progress and outcome; they are the keepers of schedules and standards, the maestros who ensure that the whole becomes greater than the sum of its parts.

Joe Colletti, CEO and president of DMW&H, a materials handling systems integrator, offers these tips for effectively using a systems integrator to implement materials handling automation.

Look for experience. Materials handling is a broad field, so make sure your systems integrator candidates have successful work experience in the industry and type of project you're undertaking. Review their track record and check references from clients, software and equipment vendors, and other industry sources.

Review objectivity. Systems integrators should not have an allegiance to any particular software or equipment. They should just pick the best solution for the job.

Think spatially. When designing the distribution center, think in a spatial or 3D relationship. Visualize the overhead conveyors, line conveyors, sortation units, and mezzanines. See how items interact with each other to avoid potential design or fit problems.

Examine key workflow patterns and operating areas. Before adopting a complex automation system, identify which areas are most stable and efficient and which have the potential to be streamlined. This objective evaluation will help pinpoint the processes that are appropriate for immediate materials handling automation and which ones should await further consideration.

Implement in steps. Don't just add new equipment; run it in parallel with existing operations so you can still fulfill orders during installation.

Select order-picking technology first. Order-picking systems decisions are closely tied to location and storage mode decisions. Different order-picking technologies are best suited to SKU velocity profiles for a given unit of measure. Order-picking technology investments offer different ROI, depending on the level of activity within a pick zone.

Have staff availability. Make sure the systems integrator can commit the personnel and resources to meet your project's goals and schedules.

Provide a Statement of Work. The statement defines all deliverables, timelines, obligations, and responsibilities, which form the foundation of a successful project. This statement should precede the contract, and then become part of the contract to govern all project activities, including problem resolution.

Evaluate compatibility. DC automation is an intense process, so count on a reasonably long-term relationship with the integrator you select. As the de facto team leader, the integrator needs to collaborate with a range of internal and external colleagues, and engage and motivate all players. Are the candidate's temperament, communication style, and personality a good fit for your environment?

Make sure your DC is flexible. Flexibility during seasonal peaks enables you to speed picking and packing operations. Don't have processes and procedures in place that are so rigid you can't add labor or conveyors and other equipment to improve fulfillment rates and productivity.



Helping Santa Claus and other great Supply Chains deliver Christmas from coast to coast since 1997.

Expedited Truckload Multi-Stops 24/7 Tracking











Photo by Martha Rial

Right on Target

NE DAY, WHILE WORKING AS A salesman for Overnite Transportation (now UPS Freight), Mike Wagner offered a customer a great set of rates. But the shipper said he didn't need Wagner; the rates he already had with Overnite were lower than any Wagner could produce on his own. The shipper had obtained those rates from a third-party logistics (3PL) provider.

"That's when I decided I had to get into the 3PL business," Wagner says. Six months later, he started working for AFS Logistics. And less than four years after that, he founded his own 3PL, Target Freight Management (TFM), based in Pittsburgh. It took Wagner four months to sign his first account, but by month eight he turned a profit. In 2016, TFM expects to gross \$65 million.

In a recent conversation, Wagner told us the story behind his fast-growing company and explained how growing up poor in Pittsburgh helped to shape him as an entrepreneur and leader.

IL: Why and how did you start Target Freight Management?

In my last position as national sales manager for KDL Freight Management, I developed the sales team, and we did a fantastic job. I made good money, but realized that if I did this for myself I'd make a lot more. I then thought about founding my own company.

I met Mark Raymond, who became my business partner, when a neighbor brought me to Mark's house to play volleyball. It turned out we grew up in the same tight-knit neighborhood in Pittsburgh, although about 15 years apart. We became friends. I never asked him for money, but he knew I wanted to start a business, and he kept asking about my plans. In October 2008, he called and offered to make an investment. I left KDL and started my business in January 2009.

IL: Why did the market need a new 3PL? What made TFM different?

In January 2009, the stock market crashed and everyone was scared. When I quit my comfortable job, people asked, "Are you crazy?" They didn't understand that TFM specializes in saving companies money on less-than-truckload (LTL) shipping. In a down economy, a plethora of companies needed my services.

Back then, there probably wasn't a big difference between me and other 3PLs, and they likely had better technology than we did. But I had tenacity. While my competitors made 20 sales calls, we made 500. We got in front of more people, talked to more C-level executives, and earned more opportunities as a result.

TIL: TFM has scaled up quickly. What kind of growing pains has the company gone through?

There were times when we signed so many new accounts at once, our operations couldn't keep up with the volume. I hired more operational people, and then we had to catch up on sales. It's

hard to achieve the perfect balance of signing accounts at a clip that operations can manage. But you get better at it over time. We built an internal system to automate many operations tasks, and that allows us to bring on more customers than we could if we relied solely on human involvement.

IL: A lot of friends and family members work for you. How do you make that work?

You just have to hire the right ones. I have told friends and relatives who have asked me for jobs, "This isn't a good fit for you." I'm careful about the people I choose to work for me. I look for a certain work ethic and set of skills that match what the company needs.

It hasn't always worked out; I had to let one of my best friends go a few years ago. To his credit, he was fine with it and we're still friends. While it's not always easy, it's great working with people you know. We have a lot of fun when things are going great.

IL: What's at the top of your agenda at the company right now?

Staying ahead of the software curve. LTL carriers constantly change their pricing structures, based on factors such as density and dimension. We've developed a solution that alerts us every time the National Motor Freight Traffic Association makes a change to the freight classifications. Now we know in advance when one of those changes will affect our customers, giving us time to negotiate before the change goes into effect. I've started a separate company, Freight Innovation Density Analytics, to work on that.

IL: What early experiences helped to shape you as a leader?

My childhood motivated me to get where I am today. From age 9, I often felt I was raising myself. My father was never around, and my mother had a lot of issues, including a chronic illness. There was never much money. I didn't want to be the kid who came from nothing and just followed the same track.

Then I became a father when I was only 20. That made things difficult at the time, but ended up being the best thing that ever happened to me. The minute my daughter was born, my focus changed. I was not a good student in grade school or high school,

but I earned an MBA at 23. While the education opened better opportunities and jobs for me early on, my street smarts are what help me grow this company.

IL: What's your leadership style?

I'm involved in everything. Face time is important to me. People certainly have control and the ability to make decisions, but they like to bounce things off me. When people are working on projects and have questions, I try to be there for them. My door is open all the time, and people walk in all day.

IL: What's the most difficult aspect of your job?

I just don't have enough time in a day. I want to get so many good things done, but I'm only one person. The upside is, I love what I do. I sit down at my desk in the morning, and when I look up again it's 6 p.m. I'm a family guy, so I want to get home at a decent hour. My kids play tons of sports, and I go everywhere with them. I make it a point to always have dinner with the family.

But after the kids go to bed, I often come back to work.

Customers, Everywhere He Looks

While his role as CEO keeps Mike Wagner involved in every aspect of the business at Target Freight Management, at heart he's still a salesman, and he still maintains his own accounts. Visits to those customers deliver some of his greatest on-the-job fun.

"I love when customers walk me through their operation," Wagner says. "I get to meet so many smart business people with great ideas—entrepreneurs, just like me, who started different companies." The variety is amazing, he adds. "I don't walk in and see somebody making widgets every day; I see so many different products. And when I see those products in movies, or on store shelves, I say, 'Oh, that's my account! And that's my account!""

November 2016 • Inbound Logistics 15

PROFILE



Bert De Winter is director of EMEA logistics with HP Inc., and based in Amstelveen, the Netherlands. He has been with HP (and previously, Compaq) for 29 years.

RESPONSIBILITIES

Operational and profit and loss management of EMEA inbound and outbound transportation flows, distribution centers, warehousing, and customs; regional procurement and management of transport, customs brokerage, and vendor-managed inventory hub activities.

EXPERIENCE

Various positions with HP and Compaq, including EMEA Printing and Personal Systems logistics operations director; logistics and warehouse manager; senior program manager, EMEA business operations; and EMEA project manager, supply chain development. Senior economic analyst and financial controller with KLM Royal Dutch Airlines.

EDUCATION

Bachelor's degree, business administration, Economic University of Rotterdam, the Netherlands.

16 Inbound Logistics • November 2016

Bert De Winter: Springing Forward with Innovation

ENJOY THE DYNAMIC ENVIRONMENT OF LOGISTICS AND supply chain. You need to make sure that day in, day out, you focus on operational excellence. That's a constant challenge. You also need to find innovative new ways of doing business and staying ahead of the competition.

HP has done a lot of logistics development over the past few years. While our supply chain is geared to optimize cost, we recognize that cash flow speed is also a virtue. That's why we're developing multimodal supply chain and logistics capabilities that allow us to switch between fast, expensive transport modes and slower, more economical modes, if they meet customer requirements and business expectations.

For instance, more production has

moved from coastal to inland China as labor rates increased. That has presented a logistics challenge, because the inland production has to get to a coast, and then on a boat to the EMEA (Europe, Middle East and Africa) region.

Working with the transport ministries of China, Kazakhstan, and Russia, we connected a train that runs from mid-China through those countries and into Western Europe. That saves us about two weeks of transit time.

The Big Questions

If you could attend any event in the world, what would you choose?

Although it's not possible anymore, I would have loved to see a David Bowie concert. If I could choose another event, I would visit the Australian Open.

What book have you read lately that has left an impact?

A Dutch book, *This Can't Be True*. The author interviewed 200 bankers in London and the United States about the bank crisis. He learned that what happened in 2008 could happen again.

If you had one million euro to start a business or a philanthropic organization, what would you do?

My son is starting to study bioscience, which looks at how all the cells operate internally in the body and how DNA is triggered. If you understand how DNA hangs together and influences your cells, you can make better medicines. I would contribute to this effort.

Who do you admire?

Musicians. They can bring joy to people's lives. To have that kind of skill is amazing.

Initially, it was an HP private train and ran about once per week. Now, other companies can move their products on the train. We've been able to increase the frequency to three to four trains each week.

Another project involved ocean shipments. We used to have ocean vessels pass through the Suez Canal, and into Rotterdam. However, some products would then go from Western Europe back to Israel and Egypt.

If you look at a map, you'll see it doesn't make sense. So we developed a gateway at Piraeus, a harbor in Greece. The shipments that don't need to go to Western Europe stop there, and then go to sea feeder vessels into Israel, Jordan, and Egypt. It saves time and cost.

One accomplishment I led at Compaq was setting up a pan-European capability

for global accounts. Before, each country had its own ERP and CRM systems and call center. We moved to one European ERP, CRM, and call center, which set us up to serve global customers so they experience the same performance wherever they order.

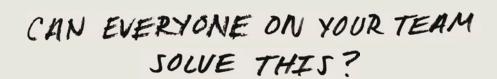
During this project, I learned you always need to go back to your sponsors and make sure you're on the right path to meet the business objective, whether it's cost savings or a faster supply chain that can react better to customer expectations. Don't get sidetracked trying to deliver a process capability.

I started my career as a financial controller, but it wasn't dynamic enough. I applied for a job at Compaq, which at that time in the Netherlands was almost a startup. I joined as the 20th employee in the country, and had a team of four people

in financial reporting, demand planning, order intake, and distribution. As time passed, it started to ramp up, and became more dynamic and entrepreneurial.

We're currently working on a few imperatives. One is to continuously optimize our physical network. If one way to get products from Point A to Point B isn't working, we need to find alternative ways. We've also started to deploy our 3D printing business, and need to make sure we set up the right logistics to bring those printers to market.

Whenever you take on new assignments, it's normal to feel a bit uncomfortable, but that's also one of the best ways to learn and develop. You dive in and plow on. If it's a stretch, and then eventually you make it happen, you can look back with pride.



 $ICC = \frac{C + T + I + W + X + (S - R1) + (O - R2)}{Annual # Material Cast}$

If not, they should be reading this.

Spread the good news by getting your vendors, partners, and team members reading *Inbound Logistics*.

Point them to bit.ly/get il





ICC=inventory carrying costs C=capital T=taxes I=insurance W=warehouse costs X=shrinkage S=scrap O=obsolescence costs R=recovery

November 2016 • Inbound Logistics 17

RR DONNELLEY

SET SAIL WITH OUR LEVERAGED PLATFORM

With the unmatched resources of RR Donnelley, DLS Worldwide provides a choice of modes, carriers, and integrated services from a reliable single source.



Contact us today at 888.757.0291 or dlswintl@rrd.com to learn more about how the leveraged platform of DLS Worldwide can go to work for you.

Copyright © 2015 R.R. Donnelley & Sons Company. All rights reserved.

1000 Windham Parkway, Bolingbrook, IL 60490 888.757.0291, dlswintl@rrd.com, dls-ww.com Licensed NVOCC, CTPAT and IATA Certified

NOTED

THE SUPPLY CHAIN IN BRIEF

GREEN SEEDS

UPS plans to add 200 new hybrid electric delivery trucks to its alternative fuel and advanced technology fleet. The vehicles are equipped with lithium ion batteries and a range extender engine, giving them approximately four times the fuel economy of a gasoline-powered vehicle. UPS will begin deploying the new trucks in January 2017.



GOOD WORKS



▲ Yusen Logistics (Americas) was recognized by Boeing Co. for coordinating shipments of relief supplies from Seattle, Wash., to Charleston, S.C., to support Boeing employees and the local community as they recover from Hurricane Matthew. Supplies included bottled water, diapers, blankets, and sanitizing wipes.

The logistics group of **Crowley Maritime** supported Hurricane Matthew relief efforts in Haiti and the southeastern United States by ensuring delivery of water, generators, and food in partnership with U.S. agencies and the State of Florida. Crowley's distribution facility in Miami maintains a standing role as a disaster response warehouse for the U.S. Agency for International Development.

Bonded Logistics, a third-party logistics company, packed 6,000 shoeboxes with socks, shirts, toothbrushes, crayons, notepads, coloring pages, stuffed animals, and toys for Operation Christmas Child. Samaritan's Purse, an international charity, delivers the boxes to children affected by war, poverty, natural disaster, famine, and disease.

mxa

St. George
Logistics, a
provider of
outsourced
container freight
stations and
warehousing
services, merged
with import/export
specialist and
logistics service
provider AZ
Corporation. The

combined business features 24 port and inland facilities totaling more than 4 million square feet, and a network of more than 80 partner installations.

Third-party logistics company EPES Logistics Services acquired transportation broker Atlantic Logistics. The purchase strengthens the service portfolio of both companies, and expands EPES Logistics Services' presence in the southeastern U.S. market.

Logistics software developer **Descartes Systems Group** acquired cloud-based supply chain integration solutions provider **Appterra**. The addition of Appterra's solutions to the Descartes product suite gives users access to broader data integration capabilities for standardizing and automating buying and selling processes.

November 2016 • Inbound Logistics 19



SEALED DEALS



▲ With French President François
Hollande attending the opening of
its new facility, European online shoe
retailer Sarenza teamed up with
logistics provider XPO Logistics to
implement a tailored, automated
logistics solution designed to
accommodate Sarenza's growth. The
200,000-square-foot dedicated
warehouse allows XPO to manage the
storage of 2.6 million items, as well as
order picking and shipment of nearly
6 million items annually.

Encompass Supply Chain Solutions, a provider of third- and fourth-party logistics services, inked a deal to manage the parts supply chain for Dongbu Daewoo Electronics' Kenmore brand of refrigerators. Encompass procures, warehouses, and distributes replacement parts and accessories for the entire product line, and also supports the brand by selling parts through its e-commerce site.

Supermarket chain **Giant Eagle** implemented supply chain software provider **Manhattan Associates**' transportation management system as part of an effort to reduce supply chain complexity. The implementation integrates Giant Eagle's inbound and outbound transportation systems, and consolidates three different systems into one, helping to eliminate empty miles, reduce operating expenses, and improve customer service.

Craft brewer **Oskar Blues Brewery** selected supply chain software provider **HighJump's** *Brewer's Edge* warehouse management solution and e-commerce platform to manage inventory across three breweries in two states. The WMS helps the brewer streamline operations from order capture to fulfillment and delivery.

SHOVEL READY



▲ Distribution and Marketing
Services Inc. (DMSI), a third-party
logistics provider, leased 350,000
square feet of industrial space at
Wonderful Industrial Park in Shafter,
Calif. Once complete, DMSI will use the
facility to provide warehousing and
distribution solutions to retailers and
manufacturers.

20 Inbound Logistics • November 2016

Henningson Cold Storage, a

refrigerated warehousing company, broke ground on a new 166,000-square-foot facility in Salem, Ore. The new warehouse provides much-needed infrastructure for the region's food processing industry, and is expected to open in spring 2017.

recognition



▲ Ocean carrier and transportation and logistics firm **Bahri** was enrolled in the U.S. Coast Guard's **QUALSHIP 21** program, which recognizes foreign-flagged vessels that meet the most stringent quality and safety standards. Fewer than 10 percent of ships that call at U.S. ports qualify for enrollment in QUALSHIP 21.

The Reusable Packaging Association honored healthcare supply chain services provider **Cardinal Health** with its **2016 Excellence in Reusable Packaging award**. The judges cited material safety, material reuse, ergonomics, fuel and emissions, and cost savings as key factors in selecting Cardinal for the award.

Paul Thompson,

chairman and founder of third-party logistics provider **Transportation Insight**, received the **Cultural Leader of the Year award** from *Business North Carolina* magazine. The award recognizes corporate leaders

who cultivate cultural change in the workplace that inspires employees, enhances company performance, and influences local communities in a sustainable manner.



Even More Ways to Get Your Product to Market

OHL IS NOW GEODIS



As GEODIS, our ability to offer even more innovative and efficient transportation solutions — close to home and across 120 countries — ensures you can keep the satisfaction of your customers up and your costs down. Learn how we can make a big difference for your business at GEODIS.com/OHLisNowGEODIS.





Only pay for the speed you need... Dynamic Routing![™]





On time and on budget.

At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden you only pay for the speed you need!

lynden.com | 1-888-596-3361

TRENDS

SHAPING THE FUTURE OF LOGISTICS



Consumers Demand Damage Control

hippers need to take steps to make sure packages arrive safely at their destinations this holiday season. Sixty-four percent of consumers have received a damaged package, according to *State of Online Shopper Expectations and Actions*, a recent survey by shipping services company OSM Worldwide. The study shows that 75 percent of online shoppers will share their frustrations over a damaged package with friends and family, and 87 percent will call customer service to complain.

by Jason McDowell

Leaving consumers unsatisfied about the shipping process can affect future sales. Word of mouth is the primary factor behind between 20 and 50 percent of all purchasing decisions, the study shows.

"When consumers receive damaged packages, even if the damage is not the company's

fault, the brand can take a hit to its reputation," says Gaston Curk, CEO of OSM Worldwide. "Our data shows that three-fourths of consumers will broadcast their frustration to their social network—their friends and family.

"Reaching an even larger audience, 18 percent of consumers would share their

November 2016 • Inbound Logistics 23



frustrations to social media," he adds.

"It is difficult to quantify the damage to brands, but if large numbers of consumers receive damaged packages from the same brand, the negative perception of that brand can amplify quickly, both by word of mouth and through social media," Curk says.

To avoid this type of negative publicity, shippers need to make sure they use quality shipping providers. "The best thing shippers can do is have an open line of communication with their shipping partner

and a proper tracking system in place," Curk says. "If there is a problem with damaged packages, retailers and brands that have a good relationship with their shipping partner should be able to find out fairly easily where and why the problem is occurring.

"A good shipping partner will know how to operate quickly and efficiently, and if brands communicate order spikes to them ahead of time, they can prepare for the increase in volume and mitigate the risk that comes with high-volume shipping, either by hiring on additional help or by opening up additional shipping lanes," he adds

A wrecked holiday package has the potential to ruin a consumer's holiday, and in the end, the blowback on your company's brand just isn't worth it. Take another look at your business's shipping processes and make sure your organization isn't labeled a Grinch all over Facebook this peak season.

Hey, Where Did All This Stuff Come From?

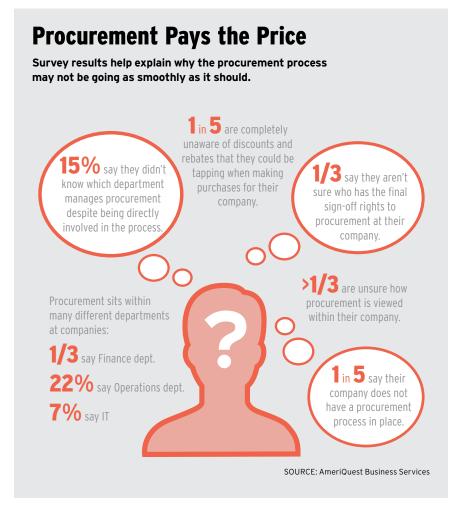
f companies are to effectively manage their spend, they must procure in the most efficient way possible. But, as it turns out, even many procurement professionals don't understand the purchasing processes at their own companies, according to a survey by technology provider AmeriQuest Business Services.

One in five respondents say their company has no procurement process, and one in five also say they have no knowledge of discounts or rebates that could save their company money. More than one-third aren't sure how their company views procurement and another one in five say their company has no visibility at all into the procurement process (see chart, right).

It gets worse. Fifteen percent of respondents who are directly involved in procurement say they don't know which department manages procurement at their organization—varying answers spread the responsibility across finance, operations, and IT departments. In addition, one-third say they don't know who to go to for final sign-off rights to a purchase.

While these numbers are not majority figures by any means, it's clear that many companies may be hemorrhaging money in the form of bad procurement practices. "When there is confusion about procurement procedures, a company is not as profitable as it could be," says Reginald Peterson, director of indirect products at AmeriQuest Business Services.

When a company has no procurement department, the odds that the business will overspend in its purchasing climb exponentially. Procurement can be a complicated endeavor, and shouldn't be left to other departments. Considering the direct impact on the bottom line, individuals who have the correct training to get the job done most efficiently should handle procurement.



Robots Air a Pilot Episode

sing self-driving vehicles to ease truck driver shortages is a hot topic. But programs to develop robots that can fly military and commercial planes—and combat a less-publicized pilot shortage—are also underway. The Pentagon's Defense Advanced Research Projects Agency and private contractor Aurora Flight Sciences unveiled a robotic pilot prototype in October 2016.

The prototype, dubbed Aircrew Labor In-Cockpit Automation System (ALIAS), isn't meant to remove the human equation, however. ALIAS only replaces the second pilot, reducing demand for human pilots while still having one onboard for emergencies and decisions that are not easily quantified. ALIAS' drop-in design allows it to be implemented into any plane or helicopter—even old, pre-electronic aircraft. So far, the prototype has completed



A new program seeks to pair a human pilot with a robot co-pilot.

successful test flights in a Diamond DA-42, a Cessna Caravan, and a Bell UH-1 helicopter.

"ALIAS enables the pilot to turn over

core flight functions and direct their attention to non-flight related issues such as adverse weather, potential threats, or even updating logistical plans," says John Wissler, vice president of research and development for Aurora Flight Sciences.

ALIAS faces a multitude of regulatory hurdles, even though the concept of computers flying planes isn't exactly new. Commercial passenger and cargo planes already run on autopilot for the majority of flights. Some can even land automatically in bad weather where visibility is low. However—as any company that was hoping to deliver packages with drones in the near future can tell you — the FAA takes its time providing regulations for new disruptive technologies. So it may be awhile vet-officials working on the technology estimate at least some components will be in use within the next five years-before robots fly your cargo to its destination.





December 12-13, 2016 • The Westin Philadelphia, Pennsylvania

Be Supply Chain Smart

The Premier Event for Chemical Supply Chain & Logistics Professionals

Sponsors:

















THIS CUSTOMER WANTS IT FASTER. THAT CUSTOMER WANTS IT CHEAPER. YOU NEED THE ANSWER.

SOLVE FOR X.

What does your supply chain need? Is it automation? A new process? A breakthrough technology to enhance efficiency? Find your "X" at ProMat, the manufacturing and supply chain industry's premier international trade event.

At ProMat, you'll discover the latest innovations from 850+ solution providers. Network with your peers and learn from industry thought leaders in keynotes and more than 100 seminar sessions.

ProMat Keynotes:

Monday, April 3 8:45 AM - 9:45 AM

Building Supply Chain Sustainability for Competitive Advantage: Lessons learned from leaders in innovative facility design

ANDREW WINSTON
Sustainability Expert and author of *Green to Gold*

Tuesday, April 4 8:45 AM - 9:45 AM

Industry 4.0 – How intelligent machines are transforming supply chains

MARKUS LORENZ
Partner and Managing
Director, The Boston
Consulting Group

Wednesday, April 5 8:45 AM - 9:45 AM

Preview of MHI 2017 Annual Industry Report

GEORGE W. PREST CEO, MHI

SCOTT SOPHER
Principal, Deloitte
Consulting LLP

Wednesday, April 5 1:00 PM - 2:00 PM

The Power of Magic: Know your customer and where they are going

EARVIN "MAGIC" JOHNSONChairman and CEO,
Magic Johnson Enterprises

Come find what's next. Come solve for X. Only at ProMat 2017.



Find what's next.

Learn more and register for free admission at **ProMatShow.com**



GLOBAL

THE WORLD AT A GLANCE

by Jason McDowell



Shippers Hesitant to Plunge Into Global Trade

Expanding internationally might seem like a no-brainer in a world where consumers are connected to global businesses through the internet and myriad global shipping options. Yet, a number of obstacles keep companies from taking the plunge into international waters, or from expanding existing global operations.

Many shippers say that the current trade climate makes global business much too difficult, according to a new DHL survey. "While we did not expect the results to show that almost half of our customers find customs and confusing trade laws to be a major hurdle to international growth, we understand that international trade is a complex process," says Eugene Laney, head of international trade affairs for DHL Express. "Customs authorities should come together to align their regulations. DHL is advocating for countries to provide better access to trade rules so everyone can see where the rules stand, and pushing for higher de minimis in other countries.

"Trade facilitation improvements such as a single-window system would also increase efficiency for traders," he adds.

In addition to convoluted customs and trade laws, nearly 60 percent of respondents express concerns over how Brexit will affect them. With so much still undecided, it isn't clear how Britain's exit from the European Union will impact trade

November 2016 • Inbound Logistics 27





China is the top market for global expansion, according to the results of a new DHL survey.

between the two entities, or with the rest of the world.

"In the short term, we expect the vote to be rather neutral with no impact on the day-to-day operating business," says Laney. "The mid- to long-term impact will be very dependent on further political reactions such as access to a single market and trade agreements - and resulting macroeconomic reactions. It is clear that the UK is to remain an important part of global GDP and trade, so we will make any adaptions to our business if needed."

DHL also asked about markets where their customers expect to expand in the future. Despite recent economic struggles, respondents chose China as the top market for expansion.

"With the growth of e-commerce, trading with China has become easier than ever," says Laney. "China is still growing in terms of manufacturing, so we are seeing that growth inbound because U.S. consumers still want to buy from Asia. Additionally, the growth of the Chinese middle class is helping make U.S.-China shipping routes more two-sided."

The survey results also show significant interest in India. "For companies considering doing business in emerging markets, India offers significant promise," Laney says. "There are a number of reasons why the country's economic potential has risen, but one leading factor is the emergence of business-oriented

Prime Minister Narendra Modi. Modi has embarked on plans to boost foreign direct investment (FDI), combat corruption in the public sector, and promote manufacturing in India as

a central economic driver. His 'Make in India' initiative is at the center of the economic movement, and it has already achieved success.

"In May 2015, for instance, data showed a 56-percent increase in FDI in the five months after 'Make in India' was launched," Laney adds. "The country's GDP growth surpassed that of China in July through September of last year, and is predicted to reach 7.8 percent in 2016. India's large population and growing manufacturing focus present many opportunities for U.S. businesses."

Canada: A Friend with Trade Benefits

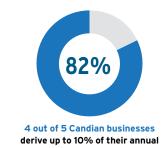
Even with regulatory and compliance hurdles boosting cross-border trade costs, Canadian businesses expect to increase trade with the United States in the near future, according to a survey of 531 companies by Economist Intelligence Unit and American Express.

"U.S.-Canadian trade is among the most valuable in the world," says Paul Roman, vice president and general manager, global commercial payments, American Express

Canada. "The results show there are some issues to be looked at, including access to trade finance and infrastructure, but it is positive to see optimism among a majority of Canadian firms that their trade with the United States will increase."

The United States is a top trading partner for 76 percent of Canadian businesses, and 94 percent of Canadian companies get as much as 30 percent of their global annual revenue from U.S. markets, according to

CANADIAN BUSINESSES SEE AMERICANS AS BOTH KEY SUPPLIERS & VALUED CUSTOMERS



revenue from U.S.-based customers.



More than 1 in 4 companies spend more than 10% of their annual costs in purchases from the U.S.



More than half of Canadian companies expect their trade with the U.S. to increase in the next five years.

Source: Economist Intelligence Unit and American Express survey

the study. Fifty-eight percent of Canadian companies believe trade with the United States will grow in the next five years. A majority of Canadian businesses believe that the Trans-Pacific Partnership will provide them with additional revenue from the United States.

Despite the optimism, however, the survey reveals challenges that exist for Canadian businesses looking to trade south of the border. Seventy-two percent of Canadian companies surveyed claim an increase in business costs due to regulatory and compliance issues over the past year, with 42 percent of that number seeing an increase of more than 10 percent.

In addition, 46 percent of Canadian businesses claim to struggle when trying to access trade financing, and 46 percent also consider trade-related transportation infrastructure to be a challenge.

Hanjin Says Auf Wiedersehen, Europe

The decline of Hanjin Shipping continued in late October 2016 as it received approval from the Seoul Central District Court to begin winding down its European operation. Hanjin operates 10 offices in Europe, including a regional headquarters in Germany, all of which have begun the process of closing.

Like it did with its Asia-U.S. assets and container terminal at the Port of Long Beach, Hanjin reached out to competitors



in the European market in an attempt to sell off as much as possible, including stakes in many global container terminals and at least five containerships. Fellow South Korean shipping line Hyundai Merchant Marine is expected to pick up at least some of the assets. But, as with Hanjin's attempts sell off belongings in other parts of the world, it will be difficult to convince competitors to pick up additional equipment and real estate in global areas where they already face overcapacity and low freight rates.

In related news, the majority of cargo left trapped in Hanjin vessels that were stranded at sea or seized in ports has been unloaded. As such, the effect of the company's financial troubles on peak season sales across the globe should be minimal.

CHART YOUR COURSE with Inbound Logistics.



Your free subscription to *Inbound Logistics* helps you navigate the latest information and innovations in supply chain management, logistics, and transportation. Explore why *Inbound Logistics* has been an industry leading publication for more than 30 years.

Request your free subscription today: Bit.ly/get_il



print • web • digital • tablet • mobile • newsletter • networking



knowledgebase

Andreas P. Pohl, Senior Vice President and Head of Airfreight Americas, Schenker, Inc. 847-813-2609 • andreas.pohl@dbschenker.com

What's Driving the Air Freight Industry Today?

ast year in this space, I referenced research results published by SandlerResearch.org that predicted the worldwide air cargo logistics market will experience a 5.97% compounded annual growth rate from 2014 to 2019. Since we are nearing the middle of this period, let's look at how things have changed and where industry growth stands in shipment volumes at this point in 2016.

The International Air Transport Association (IATA) released data for global air freight markets in August 2016 showing that demand rose 3.9% year-on-year. Freight capacity measured in available freight tonne kilometers (AFTKs) increased by 4.1% over the same period. Load factors remained historically low, keeping yields under pressure.

Carriers in all regions except Latin America reported an increase in year-on-year demand in August, however, regional results varied considerably.

North American carriers saw freight volumes expand 5.5% in August 2016 year-on-year, and capacity increase by 3.7%. International freight volumes grew by 4.6% in August – their fastest pace since the U.S. seaports disruption boosted demand earlier in 2015. However, seasonally adjusted activity has barely altered from 2008 levels. The strength of the U.S. dollar continues to keep the U.S. export market under pressure.

Latin American airlines saw demand contract in annual terms for the sixth consecutive month. FTKs in August 2016 fell by 3.3% compared to the same period last year and capacity decreased by 0.2%. The region continues to be blighted by weak economic and political conditions, particularly in Brazil.

Overall, the market is not exactly as strong as we would like it to be. At DB Schenker air freight divisions in the Americas, we have seen increases in the consumer electronics, health care, and pharmaceutical markets, with retail fashion holding steady year over year.

Even the transportation of perishable cargo, once an exclusive domain for the air cargo industry, continues to evolve in light of a changing regulatory environment and continued pressure to find a more cost-effective way to transport these goods while maintaining high quality. We have seen a mode shift from air to ocean for some products and are now watching trials, approved by the USDA and Customs and Border Protection (CBP) in which both modes of transportation are used to expedite perishable shipments from Latin America via Miami by ocean and from Miami via airfreight to APAC or EMEA.

That is a significant development since, prior to the cooperation with USDA and CBP to make these types of transit shipments possible, the cargo would have been shipped by air only.

Another development that we are watching closely is the 3D printer market for both consumers and large industrial customers. Here we have an example where these leading edge electronic machines are being manufactured in the U.S. and exported all over the world. High volume, valuable articles like these must also be transported securely and damage-free.

The 3D printer market is also having a small, but growing effect on the logistics industry as a whole. While it is not a concern today, 3D printers may alter supply chains around the world in coming years.

For example, one major aircraft manufacturer has more than 20,000 non-metallic 3D manufactured parts that are on airplanes now. When 3D printed parts need replacing, they don't have to be brought from a warehouse; they can be replaced with 3D printed parts right on site.

The transportation industry continues to evolve and that makes this industry so exciting and, at times, challenging. We at DB Schenker are well prepared to deal with the opportunities and challenges, and continue to find solutions for our customers.



American Airlines Cargo and the Flight Symbol logo are marks of American Airlines, Inc. ©2016 American Airlines, Inc. All rights reserved.

Find a solution that works for you at aacargo.com



LEAN SUPPLY CHAIN

BY PAUL A. MYERSON

Professor of Practice in Supply Chain Management at Lehigh University and author of several books on Lean for McGraw-Hill, and one on Supply Chain for Pearson pmyerson@lehigh.edu | 610-758-1576

How Supply Chain Strategies Impact E-commerce Success

-commerce has emerged as part of a company's omni-channel marketing program. Achieving success requires not only an agile, lean supply chain, but also a strategy to get there.

Many e-commerce companies sell a variety of products, and each type of product establishes different strategic needs. For example, functional products require lean and flexible network strategies, while innovative products require more responsive or agile strategies.

Some key factors to consider when employing an e-commerce strategy include:

- Individual product characteristics
- Demand volatility
- Product variety
- Product life cycle length and position
- Criteria for orders, profit margins, and dominant costs—for example, physical vs. marketing
- Quality of information available
- Type of forecast used—qualitative vs. quantitative

In many cases, considering all these factors may result in the need to develop segmented strategies for each supply chain and individual groups of products. E-commerce has evolved into a combination of retail and industrial product types and industries, as well as internet technology and devices, the transportation and logistics sectors, and inventory tracking and fulfillment systems.

As a result, e-commerce requires strategies that address the following major elements:

- The internet and mobile devices.
- The platform where sales happen is moving from personal computers to mobile devices such as tablets and smartphones (also referred to as m-commerce).
- Omni-channel retailing. This process integrates brick and mortar, TV, catalog, social media, e-commerce and m-commerce channels both for purchases and for returns.
- Changing supply chains. In retail, inventory must become more transparent to create efficiencies in new supply chains with direct-to-consumer shipments from online orders, sometimes with returns to stores. Adding to the

complexity are ship-to-store and ship-from-store customer orders.

- Distribution and fulfillment centers. In the world of e-commerce, companies design and build fulfillment centers to satisfy online orders, which, in many cases, are for a single item. E-commerce orders typically are smaller than those for traditional brickand-mortar distribution centers, and often require one-day fulfillment.
- Automated inventory systems. Beyond the increased current use of RFID, barcode readers, handheld mobile computers, and automated carousels, e-commerce requires companies to plan for the design and implementation of robotic systems in their fulfillment centers and supply chains. These systems can range from the use of automated guide vehicles and robots to the (far) future use of drones for delivery.

Online retailing has been growing by an annual average of more than 18 percent globally in recent years, while non-internet sales are growing by only 1.3 percent annually. As a result, e-commerce is one strategy retailers should not take lightly.



REGISTER NOW

GAFOREIGNTRADE.COM GFTC 2017

49TH ANNUAL
GEORGIA FOREIGN
TRADE CONFERENCE

February 5-7, 2017 · The Cloister · Sea Island, Georgia Visit gaforeigntrade.com for current information and conference updates.

Media Sponsors include:





American Shipper









THE JOURNAL OF COMMERCE



© 2013-2016 Georgia Foreign Trade Conference and the Georgia Ports Authority. All rights reserved.



TRADE COMPLIANCE STRATEGIST

BY RENEE ROE

Director, BPE Global renee@bpeglobal.com | 831-316-0677

Export Control Reform Strikes Again

he U.S. Bureau of Industry and Security revised almost every section of the U.S. Export Administration Regulations (EAR) on Sept. 20, 2016. The fairly significant changes impact most U.S. companies. Here's what you need to know.

Although you may not sell product that would be defined as hardware, software, or technology under the EAR, you likely use telecommunications and information security hardware, software, or technology to support your business.

These export shipments are often urgent to support a business activity. Whether the item is a server, router, switch, security appliance, test equipment, manufacturing equipment, or software, the item was, and is, controlled under the U.S. Export Administration Regulations. The challenge is understanding the new rules. Here's an overview of key changes:

- The Commerce Control List—Category 5 Part 2 Telecommunications and Information Security previously was only for items with encryption. Now there are three subsections:
 - 1. Cryptographic information security.
- **2.** Non-cryptographic information security—New Export Control Classification Number (ECCN) 5A003.
- **3.** Defeating, weakening, or bypassing information security—New ECCN 5A004.
- ECCNs 5A992/5D992 a and b, as well as 5E992.a, were removed.

- Keeps "mass market" ECCNs 5A992/5D992.c and 5E992.b.
- Changes to license exception ENC, TSU, TMP with increased use of license exception ENC, instead of licensing, for certain encryption products and end users.
- New definition of "more sensitive government end users" and "less-sensitive government end users."

Staying Compliant

Ensure your organization conducts a review of these changes. Include the hardware, software, and technology that you may export as part of that review, along with the end users/end use, and take appropriate related steps. You may have items currently pending fulfillment that are impacted.

There are several steps you can take to ensure compliance with these new regulations, including:

- Conduct an ECCN review.
- Update product classifications.
- Keep systems where the ECCN classifications are stored—so they are printed on export documents and used for reporting—up to date. Don't check

only your ERP system, but also your customer relationship management system, transportation management system, global trade management system, and shipping systems (FedEx, UPS, DHL).

- Evaluate active export licenses and check them against pending shipments. Determine if a license exception now applies. Again, update all systems from order/request to shipment to reflect any changes. There are cases where licenses will need to be inactivated, and a license exception or EAR99, the basket designation, may apply.
- Make sure your company is prepared for annual reporting on Feb. 1, 2017 and semi-annual encryption reporting on Feb. 1, 2017 and Aug. 1, 2017 with the new information.
- U.S. exporters have an affirmative obligation to review the facts surrounding export transactions. Identify now who within your company has global trade compliance as their largest responsibility. Work with them to understand your role and responsibilities related to trade compliance.
- Seek out export compliance related training. Locate related policies and procedures on your intranet, and read the sections of your Export Management and Control Program Manual that relate to your function. Integrate yourself and your function into the process to ensure compliance with the EAR.



Reliable



Ok, so it doesn't work here... but works nearly everywhere else.

Performance and Reliability are the cornerstones of SATO's reputation. The CLNX™ Series of industrial thermal printers, along with our extensive line of labels, ribbons, tags and RFID solutions have raised the expectations and standards of customers around the world. Behind each product is over 75 years of dedication in design and quality manufacturing. Reliability and Performance you can trust.

A Best Channel Vendor for Reliability as voted by Resellers and Integrators across North America. **Business Solutions Magazine 2016**









Easy integration. Reliable operation.





BY KRISTI MONTGOMERY

Vice President, Kenco Innovation Labs kristi.montgomery@kencogroup.com | 800-758-3289

Using IoT to Enable Tomorrow's Supply Chain

he Internet of Things (IoT) is starting to change warehouse and distribution services around the globe, with an estimated 5.5 million new devices being connected every day. The supply chain is next. Scary? Not really. Worthwhile? Absolutely.

Billions of traditional networking devices—including hubs, routers, servers, personal computers, and mobile phones—are already connected to the internet And in the supply chain sector, the IoT revolution is connecting non-traditional "things" such as pallets, lifts, and trailers, to the internet.

The potential benefits are impressive. These innovations could slash supply chain waste by \$2.7 trillion over the next 10 years.

Because 96 percent of all companies are expected to be IoT users within the next three years, you will almost certainly be developing strategies and solutions if you haven't already.

Consider this amazing fact—of all the things that could be connected to the internet, only 0.06 percent are. This yawning gap helps explain why the rate of increase for IoT connection should be 30 percent in 2016. Driving this rush is the fact that 94 percent of all businesses are expected to realize a return on their investment soon.

Even though some developments are still years away, the opportunity for IoT implementation exists today with market-ready devices that increase visibility and boost efficiency. These devices include:

Robots, which can operate 24/7, lights-out, with significant labor savings, can be introduced into warehouses with relatively inexpensive initial trials.

Autonomous guided vehicles (AGVs) can fulfill orders, stock replenishment lines, and respond efficiently to warehouse demands.

Smart lift trucks stream data that permit the development of individual driver profiles for enhanced safety and training. Sensor-equipped lift trucks self-report collisions, and send alerts when mechanical problems arise.

Not only do you need to understand what the data is reporting, you also need to know what you will do with that information. It's time to get to know providers of supply chain, cloud-based IoT platform integration tools that take in data from myriad sources in a variety of formats and deliver it to you in a single, manageable format.

As you establish near-term IoT initiatives, also keep an eye on what is likely to develop during the next three

to five years. Precise asset/inventory location—using Wi-Fi and Bluetooth to enable real-time tracking, positioning, guidance, and visibility—will be enhanced by the introduction of:

Heads-up displays in the form of lightweight glasses that overlay real-world views with task assignments, location and directional guidance, highlighted pick locations, picture-based SKU identification, and pallet optimization.

Drone yard management to verify trailer location and update yard management systems in real time.

Smart trailers for live tracking that enables end-to-end stock visibility, perishables temperature monitoring, and correct truck-trailer pairing.

Coming within a decade are **driverless vehicles**, operating singly or, more likely, in platoons and piloted by a manned vehicle.

Robots, AGVs, and smart lift trucks have matured sufficiently for immediate adoption and can provide significant savings while you develop your longerterm IoT vision.

The impetus for moving ahead with IoT strategies is strong because competitors around the world are already moving forward. If you doubt it, look to China, which is already the world's largest industrial IoT implementer.

The United States, by the way, is second.

ADD ZORO TO YOUR TOOLBOX

WITH ZORO, YOU'LL **WORRY LESS** ABOUT GETTING YOUR STUFF...
AND MORE ABOUT **GETTING STUFF DONE**.

Check back this holiday season for special deals.

VISIT

ZORO.COM/INBOUNDLOG

AND RECEIVE

20% OFF YOUR ORDER OF \$50 OR MORE*

STOCKUP25

Enter code at checkout | One time use code. Offer valid until Feb. 21, 2017 11:59 p.m. CT*



FROM **AA BATTERIES** TO **Z CLAMPS**,

ZORO'S GOT YOU COVERED.

- Helpful customer service
- Net 30 terms available**
- S Great everyday prices
- **♥** Trusted brands
- Easy ordering
- Fast delivery

*10% off your first order on \$50 minimum purchases. Maximum savings of \$2,000. Enter code above at checkout. Limit one (1) use per customer. May not be combined with any other promotions or discounts. Order minimum is required - excluding tax and shipping. Offer may not be applied to previous purchases. Promotion is non-transferable. Offer valid until Feb. 21, 2017—expires 11:59 p.m. CT.

**Standard credit terms are \$1,000 with 30 days to pay. Credit is subject to Zoro's credit policies as determined from time to time in its sole discretion. Zoro reserves the right to terminate this offer at any time at its sole discretion.

zoro.com

 $f \bigcirc in \checkmark p$

© 2016 Zoro, Inc.

Shop now at Z D R D . C D M

TOP 1 U.S. CARGO AIRPORTS

With efficient cargo facilities, abundant access to infrastructure, and reliable handling capabilities, these airports will treat your shipments with top-flight care.*



s is the case with every mode of transportation, a variety of facets influence long-term success at cargo airports—employee performance, technological advancements, risk management, and many others. But the old adage regarding success always applies: location, location, location.

According to the Airports Council International-North America, the following 10 U.S. airports were the most successful in 2015, based on total cargo volume. Most on the list offer dedicated cargo facilities, a reliable infrastructure, and some unique handling capabilities.

And in terms of cargo transport, the airports' locations are generally considered ideal. With each of these facets considered, the following airports are expected to remain among the U.S. leaders in cargo volume well into the future.

*Top 10 airports chosen based on 2015 total cargo volume

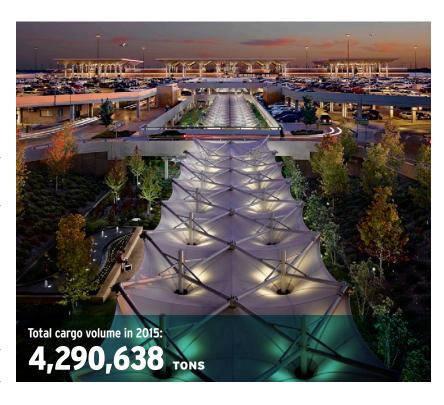
Memphis International Airport, Tennessee www.mscaa.com

For years, Memphis International Airport has been recognized as one of the world's busiest airports. In fact, in 2015, it led all U.S. airports in one specific category: total cargo tonnage. Due to its popularity among passengers (140,000 are served each month, on average) and logistics professionals alike, the airport also has an estimated annual economic impact of \$23.3 billion, and has a direct or indirect impact on 25 percent of the city's jobs, according to the University of Memphis.

"The Memphis-Shelby County Airport Authority fully understands the importance of cargo to the local, regional, and national economy, and will continue to foster our industry's growth," says Glen Thomas, public information officer, Memphis International Airport.

Dedicated cargo facilities: With its headquarters based in Memphis, FedEx represents roughly 98 percent of the airport's total cargo and handles more than 180,000 packages every hour at its World Hub, which is located at the airport.

Likewise, UPS has a presence at the Memphis Airport. The expeditor recently expanded its handling facility to 424,000 square feet, allowing it to sort up to 60,000 packages per hour. In addition, the Memphis-Shelby County Airport Authority owns and operates a nearly 1-million-square-foot common-use cargo facility at the airport.



- **Special handling capabilities:** Located within the World Hub, FedEx's 83,000-square-foot Cold Chain Center maintains perishable shipments, including healthcare supplies, in a prearranged temperature range so they stay protected during flight delays.
- Infrastructure benefits: Featuring five major freight railroads, two interstate highways (I-40 and I-55), and the Mississippi River, Memphis offers a unique combination of rail, road, runway, and river that is suitable for a wide range of cargo transportation and activity.



Ted Stevens Anchorage International Airport, Alaska www.dot.state.ak.us/anc

As a result of Anchorage's population of approximately 710,000, most of Ted Stevens Anchorage International Airport's (ANC) traffic is freight. In fact, about 80 percent of all goods shipped by freighter aircraft over the Pacific are transported through the airport.

Despite its location - 9.5 hours from 90 percent of the industrialized world — the airport is also regularly ranked among the world's top five airports for cargo throughput.



"Alaska enjoys special liberalized U.S. Department of Transportation cargo transfer regulations, which allow carriers to exchange cargo for increased efficiency," says John Parrott, airport manager, Ted Stevens Anchorage International Airport. "Each week, the airport sees about 600 wide-body freighters, and aircraft using the airport can carry an additional 100,000 to 125,000 pounds of cargo."

- **Dedicated cargo facilities:** Although a few cargo facilities are located at the airport, ANC does not own or operate any of them. Instead, they are all privately owned by air carriers including Alaska Airlines, Northern Air Cargo, and TransNorthern Aviation. In addition, a cargo transfer facility, Alaska CargoPort, provides air cargo transfer and warehouse services.
- Special handling capabilities: Some cargo facilities also handle seafood as part of the cool supply chain. These facilities are also owned and operated by private companies, including Great Pacific Seafood.
- Infrastructure benefits: Despite Alaska's connectivity to rail, roads, and water, one important factor must be considered: 82 percent of Alaskan communities are not located on any road system, according to Parrott. Consequently, any cargo that arrives via barge or truck is delivered to the airport, so that it can be flown to rural customers afterwards.

To counter the state's lack of roads, the airport provides 24/7 capability for Design Group VI size aircraft that can reach 90 percent of the industrialized world.

Louisville International Airport, Kentucky www.flylouisville.com

In 2014, the Louisville Regional Airport Authority invested nearly \$56 million in new construction projects at each of its airports: Bowman Field and Louisville International Airport. As a result, a terminal at the Louisville International Airport is currently being renovated, while aesthetic improvements-including new carpet and interior paint-are also in the works, among various other projects.

As these renovations continue, Louisville International Airport remains one of the world's most popular airports. For example, it accommodated 3.4 million passengers in 2015. And, due to its renowned Worldport, owned by UPS, the airport handled more than 5 billion pounds of cargo, freight, and mail in 2015.

■ Dedicated cargo facilities: The 5.2-million-square-

Total cargo volume in 2015:

2,350,656 TONS

foot Worldport, which opened in 2002, sorts up to 416,000 packages per hour, and services approximately 250 inbound and outbound flights each day. At the same time, UPS's 653,000-square-foot Worldport Freight Facility, located across from Worldport, is able to process up to 1.6 million pounds of heavy freight.

- Special handling capabilities: As the world's largest fully automated package handling facility, Worldport offers a variety of proficiencies, including IT systems that swiftly transfer Customs information, so that international shipments can be distributed as quickly as possible. It also features specially designed hub floors and docks that allow employees to move packages from one section of the facility to another through 1.2 million casters and ball transfer units.
- Infrastructure benefits: With access to interstates I-64, I-65, and I-71 and three Class I railroads-Canadian Pacific, CSX, and Norfolk Southern-as well as two public inland ports and nearly 50 private terminals on the Ohio River, Louisville is one of the ideal locations in the United States for logistics infrastructure.



Miami International Airport, Florida

www.miami-airport.com

Owned by the Miami-Dade County government and operated by the Miami-Dade Aviation Department, the Miami International Airport is currently the nation's top airport for international freight. It is also the second-busiest airport in the United States for international passengers. As a result of this global focus, Miami is also one of the country's most financially successful airports; on average, it generates \$33.7 billion in business revenue each year.

"In addition to leading the United States in global freight shipments and perishable imports, we want to lead the way in transport innovation," says Emilio T. González, Miami-Dade aviation director. "In August 2016, Miami International Airport became one of the first six U.S. cargo hub airports to launch the e-AWB 360 campaign, which removes the requirement for a paper air waybill, and will pave the way toward a completely e-freight cargo industry locally."

- **Dedicated cargo facilities:** Miami International Airport's cargo facilities currently feature 18 warehouses, with a capacity of more than 3.4 million square feet of space.
- **Special handling capabilities:** Due to the launch of the e-AWB 360 campaign, the airport is replacing manual data entry with a more efficient and reliable digital system. This initiative is

expected to reduce the airport's long-term costs, while also improving its handling proficiency.

■ Infrastructure benefits: With access to the Florida Turnpike and interstates including I-95 and I-75; proximity to PortMiami, one of the country's busiest ports; and access to the Florida East Coast Railway, Miami International Airport is an ideal location for handling national and international shipments.

Los Angeles International Airport, California

www.lawa.org/welcomelax.aspx

As the principal international gateway on the West Coast, Los Angeles International Airport serves a local economy as large as many countries' gross national product. Its scheduled freighter and passenger flights cover the international destinations that are served by all other western regional airports combined.

Consequently, Los Angeles is regularly listed among the United States' top five cargo airports with regards to total tonnage. In fact, its total tonnage is equivalent to the combined tonnage of cargo that is processed by the West Coast's next five largest airports: Oakland, Ontario, San Francisco, Seattle, and Portland, according to Los Angeles World Airports.

■ **Dedicated cargo facilities:** The Los Angeles International Airport hosts more than 20 dedicated cargo facilities, featuring

more than 2.1 million square feet of developed cargo operating space that is used by air carriers and third-party logistics providers. Freight forwarders use another 4 million square feet of facilities located near the airport.

■ Special handling capabilities: Although the airport does not feature a centralized cold storage facility for perishables, it does provide comprehensive capabilities handled by individual airlines and ground handlers. For example, a perishable facility at one of Mercury Air Cargo's sites is recognized as the West Coast's largest on-airport facility of its kind.



■ Infrastructure benefits: Los Angeles International Airport offers access to Southern California's large freeway network, including north-south routes such as I-110, I-405, and SR 1, as well as east-west routes such as I-10 and I-105. Rail lines including Union Pacific and BNSF Railway also provide connectivity from Los Angeles to Canada and Mexico.

Chicago O'Hare International Airport, Illinois

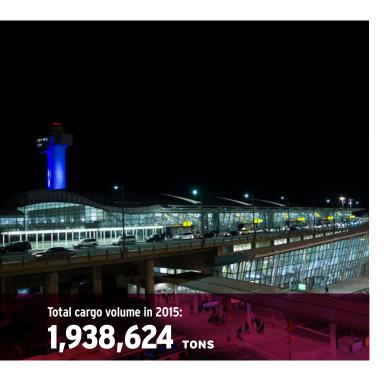
www.flychicago.com/ohare

Consistently recognized as one of the busiest airports in the world, Chicago O'Hare International Airport is not only a national aviation hub, it is also a global air cargo gateway, providing billions of dollars in trade to Chicago's economy. In 2015, its total annual imports and exports were valued at \$173 billion, according to WorldCity.

To ensure continued success for decades to come, the airport is currently developing a cargo facility on its Northeast Ramp; the first phase of the project opened in 2016. The airport now maintains nearly 4 million square feet of cargo facility space within its boundary, allowing it to handle dozens of jumbo freighters at once—as well as direct jumbo freighter service to countries including China, Japan, and Qatar, according to the Chicago Department of Aviation.

- **Dedicated cargo facilities:** The Chicago O'Hare International Airport features four airside cargo facilities: the 350,000-square-foot FedEx campus on the Southwest Ramp; a 300,000-square-foot facility on the South Central Ramp; an 800,000-square-foot facility, featuring seven buildings, on the Southeast Ramp; and a 650,000-square-foot facility on the Northeast Ramp, the first phase of which opened in 2016. It also houses two landside cargo facilities the 900,000-square-foot Express Center and the 800,000-square-foot Express North.
- **Special handling capabilities:** The airport currently offers a fumigation chamber that streamlines customs operations for perishable cargo, and can fully accommodate Group VI B747-8F aircraft.
- Infrastructure benefits: In addition to direct access to I-90, I-190, and I-294, and proximity to I-55, I-88, I-94, and I-290, a CTA rapid transit rail station and a Metra regional rail station are also available.





John F. Kennedy International Airport, New York www.panynj.gov/airports/jfk.html

Operated by the Port Authority of New York and New Jersey, under a lease with the City of New York, the John F. Kennedy International Airport is regularly recognized as one of the world's leading international air cargo centers. The airport contributes an average of \$37.3 billion in annual economic activity to the New York-New Jersey metro region.

To continue this success, the Port Authority has invested approximately \$7 billion in the airport to date. It recently constructed a new cargo building in the northern area of the airport; it will measure roughly 600,000 square feet when it is completed. In addition, the JFK Airport Travel Plaza, which opened in 2013, provides fuel, food, and rest services for truckers, as well as parking — the first facility of its kind in a North American airport.

- **Dedicated cargo facilities:** The John F. Kennedy International Airport currently maintains 20 cargo facilities.
- Special handling capabilities: Most facilities offer cold storage capabilities for a variety of commodities, including pharmaceuticals, food, and perishables. The ARK at JFK—a 78,000-square-foot animal handling facility that offers kenneling and veterinary capabilities—is set to open in early 2017. The facility will also handle exotic animals, as well as bovine, equine, and swine.
- Infrastructure benefits: Aside from its access to I-678 and proximity to interstates such as I-78 and I-95, the airport is also near one of the world's busiest ports, the Port of New York and New Jersey. Access to a variety of railways offers connection throughout the East Coast, as well as the rest of the United States.

Indianapolis International Airport, Indiana

www.indianapolisairport.com

Located less than 20 minutes from downtown Indianapolis, the Indianapolis International Airport is one of the largest cargo centers in the United States, and is also home to the world's second-largest distribution logistics operator. As a result of its cargo capabilities, the airport generates an average of more than \$4.5 billion for the area's economy.

"The Indianapolis International Airport is a crucial hub for the Midwest logistics sector," says Mario Rodriguez, executive director, Indianapolis Airport Authority. "In addition to the cargo capacity it provides for complex companies that conduct business outside of Indiana and worldwide, the airport is also a significant factor in drawing new business to the central Indiana region—and throughout the state."

- **Dedicated cargo facilities:** The Indianapolis International Airport operates five dedicated cargo facilities. The world's second-largest FedEx hub is also located at the airport.
- **Special handling capabilities:** Cargo facilities include refrigeration and freezer applications, as well as roughly 40,000 square feet of controlled-temperature space, which is especially beneficial for the agriscience, bioscience, and pharmaceutical industries.
- Infrastructure benefits: As the Crossroads of America, Indianapolis offers access to five interstates I-65, I-69, I-70, I-74, and I-465 and five major railroads. The airport is located within a 36-hour drive from nearly 75 percent of all U.S.-based businesses.





Cincinnati/Northern Kentucky International Airport, Kentucky

www.cvgairport.com

As the busiest airport in Kentucky, and the second-busiest serving a metro area in Ohio, the Cincinnati/Northern Kentucky International Airport is consistently ranked not only among the United States' most successful cargo airports, but also among the world's most successful. It is also considered the fastest-growing cargo airport in North America, as cargo volume has risen by more than 50 percent since 2011, according to cygairport.com.

■ **Dedicated cargo facilities:** The Cincinnati/Northern Kentucky International Airport currently has four dedicated cargo facilities, and is home to the DHL Express Americas Hub—CVG, which processes roughly 50 million international shipments each

year. The airport has also selected Aeroterm to build a new facility with direct ramp access; the facility is projected to include 132,000 square feet of space.

■ Infrastructure benefits: With access to interstates such as I-71, I-75, I-74, and I-275, as well as several major railroad systems, including CSX and Norfolk Southern, the Cincinnati and northern Kentucky area is a vital gateway for logistics professionals, regardless of the direction they are traveling. In addition, the ports of Cincinnati and Northern Kentucky offer more than 200 miles of commercially navigable waterways.

Newark Liberty International Airport, New Jersey

www.panynj.gov/airports/newark-liberty.html

Since its opening in 1928, Newark Liberty International Airport has been a vital transportation hub for the New York-New Jersey metro area. After all, it is only 14 miles away from Manhattan. It is operated by the Port Authority of New York and New Jersey, and is owned by the city of Newark.

In addition, Newark has a rich history as the United States' oldest airfield, as well as its first commercial airline terminal, which was dedicated by Amelia Earhart in 1935. Today, the airport's present and future remains as rich as its past, as it is not only one of the world's busiest airports, but also one of its most successful — especially in terms of cargo volume.

- **Dedicated cargo facilities:** Newark Airport currently offers eight dedicated cargo facilities.
- **Special handling capabilities:** Most of the cargo facilities provide cold storage capabilities for a variety of products, including, but not limited to, food, perishables, and pharmaceuticals.
- Infrastructure benefits: Located at the crossroads of the New Jersey Turnpike and I-78, each of which are used to transport all types of cargo, Newark Airport is in an ideal setting. It is also conveniently located near the Port of New York and New Jersey, regularly regarded as one of the world's busiest ports.





FAST BUT STEADY FAST BUT STEADY WINS THE EXPEDITED RACE By Gary Wollenhaupt By Gary Wollenhaupt

When incorporated into a strategic transportation plan, expedited shipping helps companies over the customer service finish line.

hile shippers rely on expedited services to maintain supply chain integrity, carriers and technology providers are pushing solutions that could reduce demand for costly time-sensitive deliveries.

Once considered primarily for service recovery operations in manufacturing, expedited shipping has evolved into a key part of the logistics toolkit to keep customers happy, and prevent empty shelves and production delays. With sophisticated technology that chips away at the silos between a company's purchasing and transportation departments, algorithms are replacing intuition to decrease the occurrences when expedited shipping might be necessary.

While the definition of expedited service varies, it typically involves Point A to Point B shipments of must-have products in less-than-truckload quantities, by truck or by air, with service guarantees. Rates are higher than scheduled service, but in many cases, cost is not the issue.

"Shippers use an expedite service because they absolutely have to meet a time-critical deadline," says Troy Cooper, COO of Greenwich, Conn.-based third-party logistics provider XPO Logistics. "Reliability and capacity are the priorities, not price."

Expedited shipping helps companies recover from unexpected events, such as the West Coast port labor dispute in 2015, or the brutal winter of 2013-2014 that disrupted truck and intermodal rail service in the eastern United States.

Get With the Plan

In some cases, expedited is part of the plan. For example, XPO Logistics handles expedited logistics for the National Football League, Major League Baseball, and NCAA Basketball championship games. Fans are hungry for those championship team T-shirts and hats, so apparel makers produce items with either team as the winner. The instant the clock runs out, XPO runs the play, mobilizing a fleet of trucks and chartered airplanes to deliver the goods to retail outlets across the country within 12 hours of the big game's final buzzer.

More commonly, expedited shippers manufacture products ranging from automotive parts to pharmaceuticals that must meet unexpected demands. For instance, Cooper cites a Tier 1 auto supplier struggling to meet demand from its auto manufacturer customer facing a recall. The parts supplier



To speed the dispatch process, FedEx Custom Critical drivers can select the shipments they want to transport from their smartphone, tablet, or computer. Shipments are loaded onto a vehicle without handling by a dispatcher.

called for dedicated capacity with XPO to receive shipments of material faster, at a much higher turnaround rate, while maintaining normal plant production cycles.

Expedited shipping allows for more customized service. If a customer wants a shipment handled in a specific way, delivered at a specific time, or maintained at a specific temperature range, the carrier can direct suitable equipment and drivers to meet that request.

It's also faster. Because expedite is not part of a network, carriers can move a shipment the same day or the next day without a risk of loss or damage that might occur going through a network. Cross-country hauls in two days are possible with team drivers who trade off sleeping and driving around the clock.

What's the Emergency?

Retailers, pharmaceutical makers, and food service businesses rely on expedited shipping as part of their strategic transportation planning. It's no longer reserved for emergency situations.

"Expedite is increasingly being worked into shippers' supply chains as a regular practice," says Jason Frederick, vice president of operations at FedEx Custom Critical, which specializes in same-day and overnight delivery of expedited freight. "Some retailers, for example, expect quick product fulfillment to meet the 'delivery from store' guarantee they make to their customers."

The higher costs of expedited shipping

stem from fundamental economics. Typically, an expedited carrier uses 22-ft. straight trucks, which cost less than a semi truck and trailer combo. But due to the unpredictable nature of the business, the smaller truck has a lower utilization rate.

"An expeditor usually will run 20 percent or more deadhead, whereas a truckload carrier runs empty around 10 percent of the time," says Bob Poulos, CEO of Seville, Ohio-based V3 Transportation, an expedited freight provider. "If we can solve that problem, and find a way to get additional revenue miles and consistent freight in straight trucks, then the smaller straight trucks become more of a planned piece of equipment in the future."

For an expedited carrier, the response time to have a truck at the loading dock falls in the two- to six-hour range, compared to 48-hour notice for a truckload carrier, Poulos notes.

Moving into New Verticals

In addition to obvious niches such as automotive manufacturing, more industries are turning to expedited shipping to keep pace with unexpected events and customer demands. For example, as regulations evolve, cold chain shipping for pharmaceuticals will continue to grow, and may expand into the food side of the Food and Drug Administration's (FDA) portfolio.

"The requirements of the FDA's drug side will cross over to the food side because the integrity of the food supply chain will be critical," Poulos says.

FedEx and UPS have invested to grab a portion of the burgeoning pharmaceutical market. FedEx acquired TNT Express N.V., a Dutch delivery firm, for access to the



Providers such as XPO collaborate with shippers to identify expedited opportunities and areas for cost savings.

European parcel market. UPS announced it is expanding its specialized services for temperature control precision tracking for drugs and biological specimens.

Consumer products manufacturers also are beginning to see fast shipping as a competitive advantage.

"Keeping shelf incumbency is very competitive for consumer product goods (CPG) companies," Poulos says. "There's a lot of competition for space on store shelves, so CPG companies are seeing a need to expedite."

ArrowStream, a Chicago-based supply chain software provider, supplies the food service industry with solutions to optimize loads and inventory turns, but relies on expedited shipping to avoid stock-outs.

"If a customer orders at a burger chain that has run out of buns, that customer is likely not coming back," says Bill Michalski, chief solutions officer for ArrowStream. "The cost of losing a customer for life is enormous. It's tough to quantify, but that's the way food chains think. In the end, they will absolutely pay the cost of expedited freight to protect the customer experience."

XPO is expanding into Mexico with expedited ground and air charter options to serve the growth in nearshore manufacturing. The company can have service to Mexico ready within two hours, Cooper says, with flatbed, heavy haul, and temperature-controlled highway equipment, as well as air charter and air freight.

Shipping in Batches

Batch-production operations, such as chemical manufacturing, are turning to more flexible expedited movements. "Chemical manufacturers run a batch of product, and then have to ship it immediately," Poulous explains. "Truckload carriers have a difficult time adjusting to changing pickup and delivery times, so batch operations are well suited for expedited carriers."

Large consumer items, such as mattresses and treadmills, are in the home delivery pipeline as retailers battle the "Amazon Effect." These items require white-glove service, in which truck drivers not only deliver the product, but also assemble it in the customer's home. Some business customers require personalized service as well, expecting delivery

personnel to hang up clothes on store racks instead of just dropping off boxes, or stocking automotive components on a storeroom shelf.

Recently, Progistics Distribution of Oakland received 75 truckloads of bedding at one of its warehouses after an online mattress warehouse customer ran a promotion. All those mattresses and box springs have to be delivered in a short window to live up to customer commitments.

"Five years ago, the idea of buying a mattress online was rare; a customer went to a local store, which would deliver it," says Joel Rich, CEO of Progistics. "Today, the last-mile experience is still kind of glued together. It's a rudimentary system that works, but with enormous flaws."

Progistics is also branching out into grocery, restaurant, and retail deliveries as companies look for faster online order fulfillment

"The last mile is ground zero," Rich says. "Consumers are getting used to the idea that they can order a product from Staples and have it delivered from the store to their home in two hours. In every boardroom of every large retailer, executives are asking how they can create a same-day world to compete with Amazon."

XPO is seeing growing demand for white-glove service from the healthcare, chemical, and retail sectors, among others. "Almost every industry has to deal with high-value, time-sensitive products that will either lose value or cause other costs to spike if not delivered urgently," Cooper says.

Sporting events drive some of the most extreme expediting. For the 2016 Super Bowl, for example, Dick's Sporting Goods teamed up with UberRush to deliver apparel to fans in designated ZIP codes in Chicago and New York immediately after the big game. Fans placed orders online and received their shirts later that night.

"Sports provide a crucial sense of community, particularly for those living far from home, so we wanted to find a way to create—through an extreme expedited delivery process—a 'home-field' celebration for the winning team's fans," explains Ryan Eckel, vice president of brand marketing for Dick's Sporting Goods.

Also on Super Bowl Sunday, one truck driver reports moving 1,000 pounds of dough between two Domino's Pizza warehouses.

Patent Pending

Another example of extreme expediting occurred when a pharmaceutical company wanted to bring a new drug to market on the exact day and time the patent went into effect. XPO developed a plant to mobilize the instant the patent became



Shippers needing expedited services including white-glove, next-flight-out, or same-day turn to providers such as XPO Logistics.



Historically, Super Bowl Sunday is the top day for pizza delivery. To prepare, Domino's relies on expedited delivery of ingredients to its retail stores.

effective, and within hours distributed the drug product to multiple locations across the country. At the same time, XPO also had to meet stringent security and product integrity processes to comply with regulatory requirements, Cooper notes.

For V3, a small—but memorable—extreme expedited shipment involved the late rock star Prince. He wanted to inspect the T-shirt design for his latest concert tour, which ultimately proved to be his last,

before it went into mass production.

"While expedited delivery didn't keep an assembly line going, there was definite time sensitivity involved," Poulos says.

Technology is bridging the gap between shippers, carriers and the owner/operators who make up a large portion of the straighttruck expedite fleet.

Carriers such as FedEx Custom Critical, Progistics, and XPO use apps to communicate with drivers, tracking loads and delivering special instructions, or offering up loads.

From their smartphone, tablet, or computer, drivers for the FedEx Custom Critical fleet can select the shipments they want to transport. "Customers see a benefit in a speedier dispatch process," Frederick says. "Once we take a customer's order, we can place it on the load board, and within just a few minutes it can be dispatched onto a vehicle — all without ever being handled by a dispatcher."

Shippers using FedEx Custom Critical can tap into monitoring and tracking capabilities, such as a SenseAware device that tracks shipment information including location and temperature.

Using satellite technology helps XPO continuously connect to drivers to monitor the two-minute pickup and delivery window. "We can find capacity in seconds rather than minutes, and can react to changing circumstances immediately while a shipment is in transit," Cooper says.

For shippers, inbound optimization solutions such as ArrowStream's *Crossbow* help bridge the gaps between purchasing and transportation functions to reduce costs. While most companies think of their supply chains as highly dynamic, much of the demand fluctuation is self-inflicted.

"If you look only at one SKU and one day's inventory, the decisions you make today may not leave you in a good state one



In 2016, Dick's Sporting Goods and UberRush collaborated to sell and deliver apparel branded with the winning team's logo two hours after the Super Bowl ended.

week later," Michalski says. "We're trying to broaden the perspective of the purchasing team to take into consideration not only what is likely to happen next week or the week after, but what is happening across the entire network of suppliers."

The concern that creating more efficient truckloads will raise inventory levels creates tension between purchasing and transportation departments.

With the right tools, shippers can see

if it makes more sense to order smaller quantities more frequently, or consolidate shipments from multiple suppliers.

"You can manipulate order patterns and timing from different suppliers so that by pairing them you can have a product delivered more frequently on trucks that are utilized to capacity," Michalski says. "With immediate feedback, shippers can understand whether it's better to fit another pallet on the truck or wait because they'll be ordering again in a few days."

The tools help shippers understand the financial implications of each order and shipment, and ultimately manage expedited shipping costs.

"Understanding the relationship between purchasing and transportation can help reduce costs and decrease the need for expedited freight," Michalski says. "You can breed predictability in inbound freight as a means to more efficiently fill trucks."

Military Training Mission Enlists Expedited Shipping

rom the Warfighter Support
Center (WSC) Logistics
Depot in Louisville, Ky.,
Raytheon supports training missions for the U.S. Army around
the world, and expedited shipping
helps ensure that training continues
as planned.

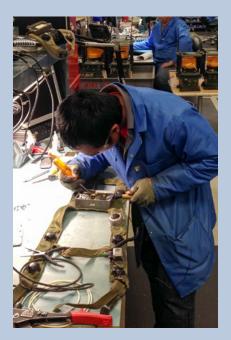
The center supports nearly 250,000 Training Aids Devices Simulators and Simulations, which can range from the laser-tag-like MILES combat simulation gear to tank simulators to an entire town. The center supports a broad range

Raytheon

Raytheon technicians repair equipment for the U.S. Army's training missions. They rely on expedited shipping to move the devices.

of training activities at Fort Irwin, Calif., home to the National Training Center that replicates an entire town in Afghanistan.

The depot, operated by contractor Raytheon, supports more than 500 training sites and engages in about 1,500 shipments per month. The Louisville location, which opened in 2008, was chosen for its logistics connections with the ability to support global shipments within the tight contractor performance factors.



Maintenance technicians are stationed at large bases to provide instant troubleshooting and repair, as in the case of Ft. Stewart in Georgia, says Rob Reyenga, a retired Army colonel and director of program management at Raytheon Intelligence, Information and Services. In other cases, devices may be shipped to the depot for repair and maintenance if there is enough time.

Reyenga estimates that about one-third of the shipments would be classified as expedited.

"We do a lot of expedited shipping domestically and overseas, with worldwide distribution to sites in Germany, other locations in Europe, the Middle East and East Asia, particularly in Korea," Reyenga says. "We're charged with ensuring the devices are ready for soldiers to come and train on them."

Each training device has a readiness requirement. Some critical training gear must be available for use 95 percent of the time. Other gear must be returned to service in a certain period, such as 5 days or 30 days.

Most of the WSC's shipments are tendered to commercial carriers, but in some cases only the military has the muscle to do the job. The center recently supported a major training exercise that required moving an entire Medical Simulation Training Center from Hawaii to Alaska. The center helped deconstruct and pack tons of equipment, which moved from the tropics to the subarctic on about 50 Air Force cargo planes.

Many of the center's employees are former military like Reyenga, or have family members in the service, so they see the job as much more than mere logistics.

"It's a bigger mission to us," Reyenga says. "If soldiers need to be out on the range to shoot their tanks for their training so they can perform their mission, we're going do whatever we can to ensure that range is ready for them to train on."





irfreight forwarders have reason to buckle up. Facing sluggish consumer demand, shippers are increasingly willing to try ocean transport, even though it takes longer. After all, they can turn to sophisticated supply chain software that boosts visibility to goods in transit, helping them balance the lower cost of ocean or over-the-road shipping with longer transit times.

Additionally, changes in the airline industry mean fewer routes for cargo shipments. The long-term impact of Amazon and e-commerce in general remains top of mind for most airfreight forwarders.

Yet not all the news is negative. Supply chains are increasingly global, and some components will always move by air. Companies that need to move goods quickly, such as those operating in the "fast fashion" market or transporting critical components, rely on air transport.

Airfreight forwarders are working hard to manage the obstacles and leverage the opportunities. Many "are increasingly offering integrated solutions, facilitating end-to-end cargo delivery processes, enabling exporters to focus on their core competencies," according to research firm Technavio, in a summary of its 2015 *Global Airfreight Forwarding Market* report. The report forecasts a compound annual growth rate of 3.6 percent between 2014 and 2019.

A BUMPY RIDE

The airfreight forwarding industry, along with the rest of the economy, experienced a severe decline between 2008 and 2014, says Brandon Fried, executive director with the Airforwarders Association, a trade association in Washington, D.C. However, even as the overall economy recovered, the airfreight forwarding market lagged. A lack of consumer demand and overcapacity among ocean carriers contributed to that, Fried says.

Slower growth in international trade likely will continue to dog the airfreight industry. In September 2016, the World Trade Organization predicted trade to grow by between 1.8 and 3.1 percent in 2017, down from its earlier forecast of 3.6-percent growth.

One of the most significant factors impacting the airfreight forwarding market is shippers' growing determination to find the least expensive way to move their goods and still hit deadlines. "Shippers are trying to be creative," says Erez Agmoni, head of airfreight, Americas, with Damco, which provides freight forwarding and supply chain management services.

Continued software advancements make it easier for freight forwarders to let shippers know where their goods are at all points during transit and offer alternatives when trouble—say, poor weather—is imminent, Agmoni says. The solutions can help shippers make delivery commitments, without arriving so early they boost inventory holding costs.

Online freight marketplaces, such as Freightos, allow shippers to easily see how much it will cost to move a shipment from say, Chicago to Hong Kong, says Paul Steiner, vice president of strategic analysis with Spend Management Experts, an Atlanta-based transportation spend management consultancy. Finding out this information used to take multiple phone calls, he adds.

More sophisticated scheduling and tracking software is prompting more shippers to use air freight for emergencies, rather than as the norm, says Paul Gettings, executive vice president, express and service parts operations with Broomfield, Colo.-based Network Global Logistics, a provider of supply chain solutions.

What's more, tools such as track-and-trace are increasingly available to even small- and mid-sized businesses, says Michelle Halkerston, president and chief executive officer with Hassett Express, a full-service transportation solutions provider based in Oak Brook Terrace, Ill. "Delivering information is as or more important than delivering the product," she says.

To be sure, implementation remains spotty. That creates challenges for freight forwarders, who need to integrate with steamship lines, airlines, and other partners, some of whom continue to work with more manual systems, says Hiram Hartnett, executive vice president of sales with Pegasus Logistics Group, a provider of logistics solutions based in Coppell, Texas. "You can build the tools, but until everything is integrated, there will be some gaps in the process," he notes.

CHANGING PLANES

Trends in the airline industry also impact the airfreight forwarding market. One is the shrinking number of wide-body planes. Large-size wide-body airplanes accounted for 11 percent of the inservice fleet in 2016, down from 36 percent in 1995, according to Boeing's *Current Market Outlook*, 2016-2035.

The result? Many freight forwarders are fighting for space in the same narrow-body planes, Halkerston says. For instance, rolls of carpet that would fit easily on wide-body passenger planes now move via cargo planes. That's a concern, as most airlines' flight routes are determined by passengers, rather than cargo, she adds.

In addition, when shipping a large volume of goods, keeping all units together is preferable, Halkerston says. That becomes more difficult on narrow-body planes.

Airline consolidation also impacts the airfreight forwarding industry, as it usually leads to fewer routes. That cuts cargo space, Gettings says, and has prompted some shippers and airfreight forwarders to rely on multiple carriers and stock inventory in different places.

UP IN THE AIR

The impact of several market shifts remains to be seen. The growth of e-commerce, and particularly free shipping offers, is one such seismic movement. Of course, "free shipping" isn't actually free, yet consumers have come to expect it. Forwarders can help shippers by providing "creative money-saving alternatives," such as combining air and surface transport options to move goods quickly, yet at a reasonable cost, Fried says.

Amazon is another source of uncertainty. In March 2016, Air Transport Services Group announced an agreement with Amazon Fulfillment Services, an affiliate of Amazon.com, to operate an air cargo network serving U.S. customers. As part of the agreement, Amazon is leasing 20 freighter aircraft.

"The next question: Will Amazon start running its own airline?" Steiner notes. If so, Amazon will control more of its supply chain. That could take share from other forwarders, but also could provide forwarders with an opportunity to use Amazon's capacity. "It will depend on the Amazon freight rates and the space Amazon may be able to offer," he says.

Advances in drone and digital printing technology also are prompting concerns, Fried notes. Until recently, if a factory line was down because a widget broke, that widget likely would be airfreighted to the plant. Soon, it may be possible to deliver the widget via drone or print it on site.

LOOKING FOR CLEAR SKIES

While the airfreight forwarding market faces headwinds, it also can look to several more promising trends. Increasingly complicated supply chains, with more materials and components from overseas, means air freight likely will continue to play a role in companies' supply chains.

The growth of "fast fashion," or the rapid turnover of apparel inventory so retailers can feature new styles, may prompt more shippers to move to air freight in order to ensure their goods quickly move to store shelves. "Even five days in transit is no longer fast enough," Agmoni says.

Many mission-critical components and parts, such as those needed to keep data centers humming or medical equipment operational, will continue to move as rapidly as possible. For most, that means air transport, Gettings notes.

Airfreight forwarders also can capitalize when misfortune hits other modes of transport, such as the port strikes in Los Angeles in 2015, or the 2016 bankruptcy of Hanjin Shipping Co. Both shifted some demand to air freight.

"The port issue created doubt and there was a bump in air-freight," Fried says. "It taught shippers they need to have a hedge against adverse transport conditions when they ship on the ocean."

Had the Hanjin bankruptcy occurred one or two weeks later than it did, it likely would have prompted a "massive shift to air" as retailers scrambled to ensure their goods made it to their stores well in time for the holidays, Fried adds.

New phones, watches, tablets, and other devices that generate high consumer excitement and urgent demand also tend to boost the airfreight market, Hartnett says. When consumers are lining up to be first in line for a product, shippers often decide to move it via air.

Given the forces buffeting the industry, it's clear the freight forwarding business isn't for the faint of heart, Fried says. Industry leaders have robust systems that are difficult to duplicate. They're also used to preparing for anything.

As Fried says, "People who ship boxes, always have to think outside the box."



FEBRUARY 8+9, 2017
VANCOUVER CONVENTION CENTRE WEST
CARGOLOGISTICS CANADA.COM

NORTH AMERICA'S ONLY MULTING DAL EXPO+CONFERENCE!

2,500+

100+

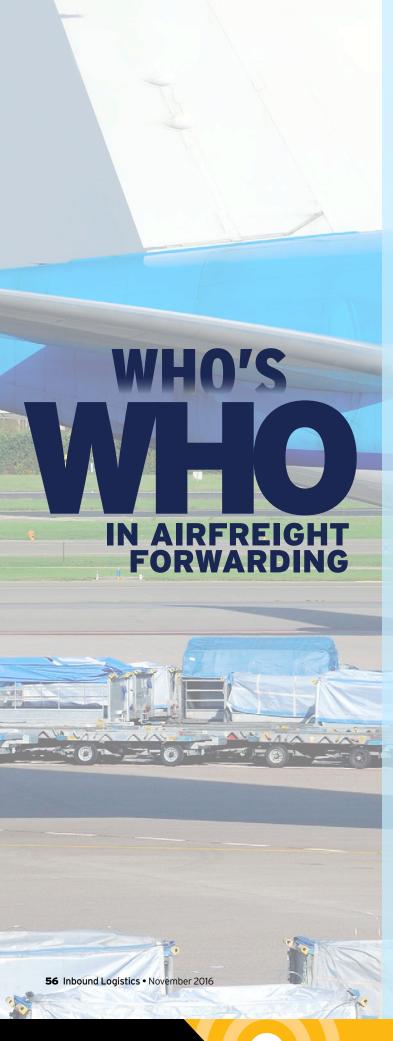
30+

50,000+ 50. FT. OF EXHIBITS





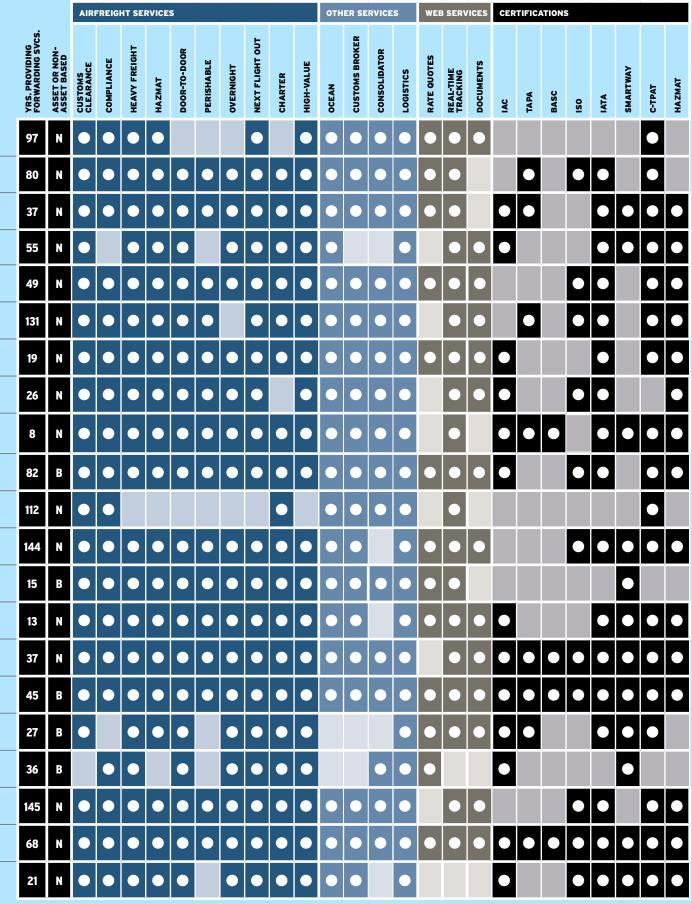
Register with code ILCLC17 by Jan. 12 to get discounted pricing!



KEY: Asset- or Non-Asset-Based:

A=Asset-based; N=Non-assetbased; B=Both Compliance: Shipments comply with government, security, and trade regulations Documents: Shippers can book/ create customs or import/export documents online

A.N. Deringer www.anderinger.com	888-612-6239
Agility Logistics www.agility.com	714-617-6300
AIT Worldwide Logistics www.aitworldwide.com	800-323-6649
Allstates WorldCargo www.allstates-worldcargo.com	407-287-7725
BDP International www.bdpinternational.com	770-639-2225
Bolloré Logistics www.bollore-logistics.com	718-525-8100
BTX Global Logistics www.btxglobal.com	305-468-9794
C.H. Robinson www.chrobinson.com	800-323-7587
Crane Worldwide Logistics www.craneww.com	281-233-2777
Dachser SE www.dachser.us	678-302-9111
Damco USA www.damco.com	305-546-9427
DB Schenker www.dbschenker.com	800-225-5229
DHL Global Forwarding www.dhl-dgf.com	800-426-5962
Estes Forwarding Worldwide www.efwnow.com	855-433-9669
Expeditors www.expeditors.com	206-674-3400
FedEx www.fedex.com	800-463-3339
Freight Solution Providers www.shipfsp.com	800-562-9915
Hassett Express www.hassettexpress.com	630-530-6515
Hellmann Worldwide Logistics www.hellmann.net	305-406-4500
Kuehne + Nagel www.kuehne-nagel.com	201-413-5500
Landstar www.landstar.com	877-696-4507



Information supplied by airfreight forwarders; where they did not provide data, historical and website information was used.



KEY:

Asset- or Non-Asset-Based: A=Asset-based;

N=Non-assetbased; B=Both

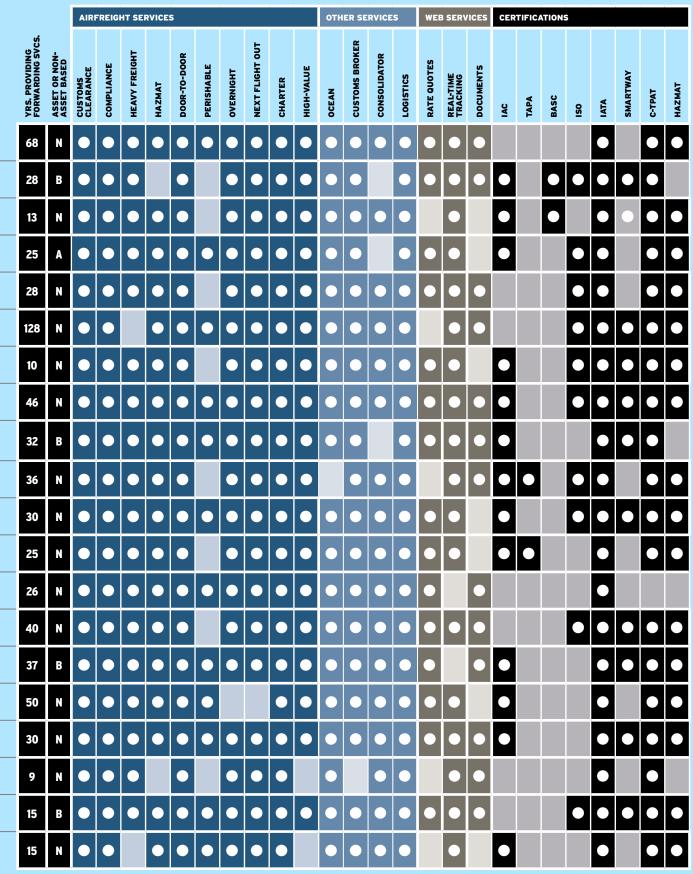
Compliance:

Shipments comply with government, security, and trade regulations

Documents:

Shippers can book/ create customs or import/export documents online

Lynden www.lynden.com	800-926-5703
Mach 1 Global Services www.mach1global.com	800-553-7774
MIQ Logistics www.miq.com	866-972-9272
National Air Cargo www.nationalaircargo.com	800-635-0022
OIA Global www.oiaglobal.com	503-415-3571
Panalpina www.panalpina.com	973-683-9000
Panther Premium Logistics www.pantherpremium.com	800-685-0657
Pilot Freight Services www.pilotdelivers.com	610-891-8160
Priority Worldwide Services www.priorityworldwide.com	410-766-7470
Quick International Courier www.quick.aero	800-488-4400
Radiant Logistics www.radiantdelivers.com	800-843-4784
RCS Logistics www.rcslogistics.com	201-867-1222
Sea & Air International www.sea-air.org	122-211-6421
SEKO Logistics www.sekologistics.com	630-919-4966
Team Worldwide www.teamww.com	800-527-1168
Tigers (USA) Global Logistics www.go2tigers.com	847-258-3580
TransGroup Global Logistics www.transgroup.com	206-244-0330
Trinity Logistics USA www.trinityworld.com	516-426-2038
UPS www.ups.com	800-742-5877
Vizion Logistics www.vizionlogistics.com	516-341-0250



Information supplied by airfreight forwarders; where they did not provide data, historical and website information was used.



January 23 – 25, 2017 Atlanta, GA | Loews Hotel REGISTRATION NOW OPEN smc3jumpstart.com

An SMC³ Event



Need to know the best way to Choose a Single-Source Logistics Provider or Optimize Demand Chain Management?



Need more know-how? Go online for these other informative H.O.W. articles:

How to Implement a Successful Retail Omni-Channel Logistics Operation in Asia Pacific bit.ly/RetailLogisticsAsia

How to Use Real-Time Ground Conditions bit.ly/RealGroundConditions

How to Prepare for the Food Safety Modernization Act bit.ly/PrepFoodSafetyAct

Matching supply to demand in today's volatile global environment requires tactical collaboration and strategic partnership to execute efficiently and cost effectively. *Inbound Logistics* is here to help guide you in the right direction. Over the past several years, we have solicited reader input and industry expertise to provide practical and instructive how-to guides that address fundamental transportation and logistics challenges. We are incrementally building a library of industry best practices to help readers turn interrogatives into imperatives.

The next 2 installments in the H.O.W. library appear on the following pages:



How to Choose a Single-Source Logistics Provider



How to Optimize Demand Chain Management

You'll find even more H.O.W. articles on our website: bit.ly/ILsponsoredHOW



How to Choose a Single-Source Logistics Provider

HE MORE SERVICE PROVIDERS you work with, the more likely you are to suffer gaps in your supply chain. That's why companies looking for maximum efficiency often decide to partner with a single-source logistics provider.

A single-source provider is a third-party logistics (3PL) company that manages your whole supply chain, or a discrete portion of that operation. Rather than contract individually with motor carriers, ocean carriers, drayage companies, warehouse operators or other service providers, you rely on one partner to oversee all your logistics needs.

That arrangement puts one

highly capable company in charge of the myriad moving parts that make up a supply chain. You don't need to worry about slippages that might occur, for example, if a trucking company and a warehouse operator don't communicate clearly about pickups. Your partner ensures smooth operations throughout.



If something does go wrong—a shipment runs late or a product gets damaged—the lines of responsibility are clear, and you know exactly who to call to get the problem solved.

Working with a single source also gives you better visibility into your supply chain: one technology platform,

or one contact person, provides all the information you need. With fewer middlemen touching your freight, you save money. And because a single-source supplier has a bird's eye view of your complete supply chain, its experts can spot opportunities to cut waste and gain efficiencies. For example, your partner might pair you with another of its customers to create dedicated round trips.

FOUR QUESTIONS TO HELP YOU CHOOSE A SINGLE-SOURCE LOGISTICS PROVIDER

When selecting a single-source logistics provider, it's important to find a partner with capabilities that fit your company's individual needs. Answering these four questions can help you make the right match:

- 1. DO YOU WANT AN ASSET-BASED PROVIDER? When your 3PL owns its own trucks, warehouses or other assets, your freight stays in one company's hands, giving you an extra level of security and reliability. But you might pay a bit more for this advantage. A non-asset-based or asset-light provider might offer greater flexibility, allowing you to take advantage of different transportation modes as needed. Decide which values are most important before you ink a deal.
- 2. WHAT ARE YOUR REQUIREMENTS FOR VISIBILITY AND REPORTING? Do you need to track your freight in real time, or will daily updates suffice? Which key performance indicators (KPIs) do you want your

provider to track and report, and at what level of detail? Can this partner measure performance across every link in your supply chain?

- 3. WHAT VALUE-ADDED SERVICES ARE YOU LOOKING FOR? Stripping containers, cross-docking, kitting, sub-assembly—whatever you need, both now and in the future, make sure your provider can deliver.
- 4. HOW CAN YOUR LOGISTICS PARTNER HELP YOU IMPROVE AND GROW? Not only can an experienced single-source provider manage your supply chain as it runs right now, but based on your company's initiatives, it can also recommend strategies for strengthening your operation and becoming more efficient. Your partner should review your processes periodically—your packaging, warehouse activities, transportation routing, and modal choices—and recommend ways to re-engineer your operation, making it even leaner and more effective than it is today.



MUCH MORE THAN A TRUCKING COMPANY.

Celadon Logistics is a full-service 3PL, providing a broad range of value-added, customized solutions in supply chain management, warehousing and distribution. Celadon Logistics is relentless in finding solutions for customers' complex needs and leveraging all of Celadon's capabilities to make them more efficient.



■ Sales@CeladonLogistics.com



How to Optimize Demand Chain Management

In a perfect world, distribution centers (DCs) would disappear. Retailers and manufacturers would match incoming orders to customer demand so precisely that all products would stay in motion all the time. At most, an importer would operate a crossdock to process incoming goods for the outbound trip.

This super-lean scenario poses major opportunities to reduce expenses. When you're not storing product in a warehouse, you don't carry the cost of that product on your books. You don't have to buy or lease a building to store that product, or hire employees to put product away and then, later, pick and ship it. It also reduces risk and future costs because there is less chance of being stuck holding unsellable goods.

Entirely eliminating DCs is difficult, of course, and for some companies it may prove impossible. Still, the opportunity to drastically reduce a DC footprint and the associated costs is significant, and some companies may even be able to eliminate DCs completely. Under the demand chain



model, the shipper replaces safety stock with information. That means not only a more accurate forecast, but also end-to-end visibility into the progress of every line item on every purchase order you issue. This visibility isolates issues and the events that caused them every time a problem occurs. It then enables you to make

alternative plans and implement corrective actions to prevent that issue from occurring again.

For example, if you learn that a vendor is late in producing one of your items, you can change your shipping plans for that item, moving it to a different container, due to ship two weeks from now. Instead of delaying an entire shipment, the vendor's problem will affect just one line item.

Or if you need that item quickly, you might schedule it to travel as air cargo. Either way, because you detect the problem early, you have time to prevent numerous consequences downstream. Visibility—and the time it buys you—eliminates waste and can save you a great deal of money.



Unless you work for one of the world's largest shippers, you'll probably rely on a third-party logistics (3PL) company, freight forwarder, software developer or other partner to help you obtain the information you need to manage your demand chain. The events that your partner should help you monitor—and, ideally, feed into your enterprise resource planning (ERP) system—fall into four categories:

- Pre-production events: Approval of samples; fit log/testing; PO issuance, PO confirmation, PO changes, raw material availability, bill of materials on site, lab dips and/or pre-processing, production scheduling.
- Production events: Start of production; first batch inspection; testing; final inspection; packaging; documentary and regulatory compliance; ex factory date (on time); quantity tolerances (in full).
- Shipping events: Shipment booking; approval to ship; service selection; cargo receipt; scan pack; palletization; container load planning; export customs clearance; container loading; deliver to terminal; export customs inspection; vessel departure; carrier documentation; export documentation.
- Destination events: ETA exception
 management; Pre-arrival customs clearance; vessel
 arrival; import customs inspection; container release;
 delivery to DC or crossdock; unloading of container,
 POD



That's why you've chosen SEKO as a Top 10 3PL for the third year running.

Thank you.

sekologistics.com





66 Inbound Logistics • November 2016

The Best of the Best: Site Selection Assistance From Coast to Coast

From Nevada to New Jersey, these seven U.S. locations attract site selectors looking for long-term logistics efficiency and economic success.

By Chris Lewis

eography. Cost of living. Taxes. Utilities. Managing the many facets involved in site selection can be challenging, if not overwhelming at times, whether companies are expanding business and logistics operations to a nearby city or moving their headquarters to a different state. To help simplify the process and manage the uncertainties, economic development organizations around the United States are working alongside realtors, utility providers, government officials, and other professionals to offer assistance to site selectors during every step. As a result of their offerings—from workforce training programs to incentives information to construction cost data—the following cities and states are becoming popular destinations for site selectors from all regions of the country.

COLUMBUS, OHIO: FIRSTHAND CONNECTIVITY

Since its founding in 2010, Columbus 2020, an economic development organization for the 11-county Columbus region, has worked with local and state-based partners to help improve and diversify the area's economy, which is currently one of the nation's fastest growing. Featuring 20 economic development professionals, the organization collaborates with realtors, utility providers, and state economic development partner JobsOhio to help site selectors develop new businesses, expand existing businesses, and survey land for future opportunities.

Columbus 2020 works with companies from the beginning of the site selection process to ensure they understand their project requirements and receive all the key information they need to make intelligent decisions that will result in longstanding success.

"For logistics companies, we commonly address topics such as access to markets, unique infrastructure and transportation modes, available real estate, and major cost factors including wages, tax environment, and incentive programming," says Matt McCollister, senior vice president of economic development, Columbus 2020. "We also work with our existing logistics companies and partners to help site selectors better understand the market."

To accomplish that goal, Columbus 2020 team members connect prospective clients with existing



Columbus, Ohio, is home to many major logistics companies, including DHL Supply Chain (formerly Exel). The third-party logistics provider's Columbus campus consists of 11 facilities.

logistics company developers who can share their firsthand experiences in the region. As potential clients consider their next options, they also receive documents such as wage and benefit surveys that supplement their personal conversations with raw data.

This connectivity continues until the prospective clients decide where to purchase or lease property and build their businesses.

"As a project progresses, the information becomes more granular and localized," McCollister explains. "Our team works with clients throughout the entire site selection process to ensure they have the information they need to make an informed decision."

The team's site selection process seems to be working so far. Since initiating a Regional Growth Strategy in 2010—to add 150,000 net new jobs and generate \$8 billion of capital investment—the organization is achieving its goals ahead of schedule and preparing for continued economic growth.

INDIANAPOLIS: THE CROSSROADS OF AMERICA

More than 250,000 Indiana residents are currently employed in the state's \$9.8-billion logistics sector, according to Indy Partnership, the Indy Chamber's regional economic development marketing organization. More than 89,000 of those employees are based in Indianapolis, home to an estimated 1,500 logistics-focused companies.

These figures will likely continue to rise as the "Crossroads of America" can reach nearly 80 percent of the U.S. population within a two-day drive. Indiana features a renowned highway infrastructure (I-65, I-69, I-70, I-74, and I-465), five major railroads, and one of the nation's largest airports. Because of accessibility to these transportation modes, the Indy Chamber receives a variety of requests from site selectors through Indy Partnership.

"Through project management and research, Indy Partnership is able to tailor the most pertinent information a site selector needs," says Joe Pellman, director, marketing and communications, Indy Chamber. "This includes, but is not limited to, information on geography, taxes, cost of living, education, workforce, and commuting patterns."

Indy Partnership works closely with local economic development organizations throughout the region to help clients determine the most suitable location, whether they are seeking rural, suburban, or urban communities. The organization often provides full-service overviews of the region when serving as hosts to current or prospective site selection clients.

"From driving to property visits and regional amenities, to meetings with state and local officials, as well as corporate and community leaders, Indy Partnership serves as the catalyst for meaningful conversations with decision makers," Pellman says.

Renowned for employing more logistics professionals per capita than any other metro area, Indianapolis—and its streamlined air, highway, and railway infrastructure; industrial parks; and wide selection of universities that offer logistics degree programs—will continue to attract site selectors from around the world.



Indianapolis International Airport is home to a FedEx Express hub, the carrier's second-largest after the SuperHub at Memphis International Airport. FedEx has expanded the hub several times since it opened in 1988.

KANSAS CITY: A NATURAL CHOICE FOR LOGISTICS

Thanks to its intermodal parks, central location, and highway, rail, and waterway infrastructure, Kansas City has been a transportation hub for decades. In recent years, it has also become a hot spot for site selectors interested in developing distribution centers. In fact, within the past five years alone, an average of 4 million square feet of speculative space has been added in the area, according to KC SmartPort, a nonprofit economic development organization.

"More than 5.8 million square feet of speculative industrial space hit the market in 2015," says Morgan Bell, manager, business development, KC SmartPort. "The demand of retailers, e-commerce companies, and industrial parts supply companies is meeting this supply."

Kansas City market size totals approximately 225 million square feet, and its current vacancy rate is about 7.5 percent. The area also has 2.5 million square feet of net absorption, as roughly 4.6 million square feet is under construction. In response to steadily rising demand for land, KC Smartport represents the 18-county region's logistics sector. In particular, it helps freight-based clients, including companies that specialize in distribution and warehousing, understand the region's supply chain and how it compares to competing cities, so that they will consider the area for future developments.

"What differentiates KC Smartport is that it is a logistics group, so



Located at the intersection of four major interstate highways and at the center of a rail corridor spanning coast-to-coast across the United States and from Canada to Mexico, KC Smartport is a prime location for site selectors.

it is a natural choice for logistics companies," says Chris Gutierrez, president, KC Smartport. "It works for investors, and was created by, funded by, and is focused on the supply chain sector."

To streamline the site selection process, KC Smartport packages and submits clients' real estate needs as one proposal, while typically acting as the lead for each site selection project. Kansasand Missouri-based real estate and utility partners, among other professionals, work directly with KC Smartport throughout the entire process.

"Although we work as the lead for most projects, from time to time we also follow the direction of the organization that brought us the project," Gutierrez says. "When this occurs, they lead the project during the entire process, while we provide assistance until it is completed."

NEBRASKA: LOGISTICAL INCENTIVES

More than 10 years ago, the Nebraska Department of Economic Development decided to conduct an experiment: Assign a business development professional to work with the logistics sector to identify the benefits of locating distribution, logistics, and warehousing projects in Nebraska. Shortly after, the Nebraska Logistics Council was developed as a means to unite logistics professionals, government officials and agencies, and economic developers to share their expertise and determine how to attract new logistics projects to Nebraska.

The council has focused on four primary advantages—competitive labor wages, affordable land for development, low trucking and rail costs, and electricity (Nebraska is the only state where every electric utility is publicly owned)—that illustrate why logistics professionals should consider conducting business in the state.

"As a result, we have been able to assemble some of the best people in banking, law, logistics, real estate, and transportation to help our economic developers find real-time answers for prospects' projects," says Sheila O'Connor, vice president, Nebraska Trucking Association. "Economic developers on a state, county, or city level, as well as chambers of commerce statewide, can access one of these partners with just a phone call or an email."

In addition, the Nebraska Trucking Association, as well as the Nebraska Logistics Council, which was developed under the umbrella of the Nebraska Trucking Association, has established partnerships with other state agencies to help improve the supply chain sector. For example, to attract young people to logistics, the association works with partners within the state's public and private universities, community colleges, and K-12 school systems to provide career education and job training, including a transportation, distribution, warehousing, and logistics curriculum.

"From the regulatory side, we work closely with the Nebraska State Patrol, as well as the Department of Motor Vehicles and the Department of Roads," says O'Connor. "Nebraska was recently one of the first states to raise its motor vehicle fuel tax and create an infrastructure bank to ensure it has one of the nation's safest, most efficient, and least congested road systems."

Site selectors also are attracted to the incentives the Nebraska Advantage Act offers, such as a research and development advantage and a customized job training advantage.

"Nebraska also offers additional development assistance programs, including tax increment financing, community development block grants, customized job training programs, and industrial revenue bonds," adds Mark C. Becker, supervisor, corporate media and media services, Nebraska Public Power District.



The Nebraska Trucking Association helps shippers looking to hire Nebraska-based carriers by providing a carrier list based on equipment needs, including dry van, reefer, flatbed, and tanker.

NEW JERSEY: COMPLIMENTARY SERVICES FOR SITE SELECTORS

As a public-private economic development partnership, the New Jersey Partnership for Action (PFA) connects companies with resources such as incentives information and workforce training as they prepare to develop their businesses in the state. The partnership features four members: the New Jersey Business Action Center, which applies a customer-oriented approach to interaction with state government officials; the New Jersey Economic Development Authority, known as the state's financing arm; the Office of the Secretary of Higher Education; and Choose New Jersey.

Choose New Jersey is privately funded and supported by business, association, higher education, labor, and public utilities leaders. Consequently, it is able to offer site selectors a wide range of services, whether they are interested in relocating or expanding, including legal and regulatory assistance, specialized labor, and utilities information.



The Port of New York and New Jersey's ideal location provides access to North America's largest consumer market. Truckers can reach 100 million consumers within one day's departure from the port.

While overseeing marketing and business attraction initiatives, Choose New Jersey also serves as a conduit to the complimentary services provided by its public and private partners to ensure a smooth process—from planning to move in. Complimentary services vary from research and planning to customized request-for-proposal responses, including detailed market assessments.

New Jersey-based companies may also qualify for tax credits as a result of the Grow New Jersey Assistance Program. By creating at least 25 full-time jobs, or retaining 35 full-time employees, companies based in the logistics sector may qualify for tax credits, which range from \$500 to \$5,000 per job annually for 10 years.

"The Grow New Jersey Assistance Program is among the most powerful incentive programs in the country, as it helps high-cost New Jersey become more competitive for coveted industrial projects, including large fulfillment centers," explains John Boyd, principal, Boyd Co. Inc. "In terms of state economic development, Choose New Jersey is the apparatus, and does a superb job in supplying site-seeking companies with data—particularly construction, labor, and real estate costs."

RENO, NEVADA: A CENTRAL HUB FOR DISTRIBUTION

For years, the greater Reno, Nev., area has been considered a hot spot for distribution centers. Not only is it strategically located among the 11 western states—and within 500 miles of 18 percent of the U.S. population—it also features two major highway corridors (I-80 and U.S. Route 395), two of the nation's largest railroads (Union Pacific and Burlington Northern Santa Fe), and the Reno-Tahoe International Airport, which provides daily UPS, FedEx, and DHL servivce, according to the Bender Group.

"Reno is the most ideally located central hub for distribution in the western United States," says Mike Kazmierski, president and CEO, Economic Development Authority of Western Nevada (EDAWN). "Aside from offering one-day truck transit to seven states—reaching more than 50 million customers—the area also provides one-day truck transit to five major ports serving the Pacific Rim."

Site selectors are also attracted to the Reno-Tahoe International Airport's cargo traffic, which was measured at 138 million pounds in 2015, according to the EDAWN. They are also attracted to the state's tax advantages, including no franchise, income, or inventory taxes, among other benefits.

"Moreover, in 2015, Nevada's average industrial electric rates were 7 percent lower than the U.S. average, and nearly 43 percent lower than California," Kazmierski adds. "And they have dropped even lower since then."

Due to each of these advantages, the area is also home to one of the United States' largest industrial parks: the 107,000-acre Tahoe Reno Industrial Center. Located about 15 minutes from the Reno Tahoe International Airport, the Industrial Center has roughly 15,000 acres in Phase I, Phase II, and Phase III zoned for industrial use, as well as future plans for expansion. Approximately 130 companies currently use the park.

Furthermore, the Reno-Sparks metro area now has more than 500,000 residents, as Washoe County's annual growth rate is currently estimated to be 3 percent. And a steadily rising number of students are pursuing degrees at Reno-based University of Nevada, where attendance has recently increased to 21,000.



Two freight railroads-Union Pacific and BNSF-provide rail and intermodal service covering 1,192 miles across Nevada.

ST. LOUIS: THE GATEWAY TO THE WORLD

St. Louis is often referred to as the "Gateway to the West." But perhaps that description no longer applies, especially as the city's central location—within 500 miles of 30 percent of the U.S. population, according to the St. Louis Regional Chamber—continues to attract logistics site selectors from all over the country and around the world.

"The confluence of the Mississippi, Missouri, and Illinois rivers in one metropolitan area in the middle of the United States, combined with a temperate climate, are gifts that St. Louis residents have leveraged," says Jim Alexander, vice president, economic development, St. Louis Regional Chamber. "It makes perfect sense to have built six major inland ports, six Class I railroads, four U.S. interstates, and two international airports with two foreign trade zones. After all, St. Louis is not only the Gateway to the West; it is also the Gateway to the World."

Aside from its wide selection of transportation modes, the St. Louis region also provides logistics site selectors a variety of economic benefits, including a lower-than-average cost of

living, when compared to the U.S. median, and a favorably ranked Business Tax Climate Index (for the state of Missouri). It also offers the ninth-lowest business location cost of large U.S. metro areas, according to the St. Louis Regional Chamber.

At the same time, the area also offers a substantial logistics labor force—more than 90,000 professionals are employed by 6,800 firms in the wholesale trade, transportation, and warehousing fields—as well as a reputable educational system that features four-year institutions such as Washington University and Saint Louis University, each of which offers undergraduate and graduate degrees in supply chain management.

In response to each of these site selection assets, the St. Louis Regional Freightway, an organization that works closely with private industry and state, regional, and local economic development agencies and government officials to increase economic growth throughout the region, was developed. Since its founding, the organization has served three primary purposes: To foster and lead economic growth in the region's freight industry sector; to further develop the region's freight industry through public and private infrastructure projects and freight-related investments; and to market the region's wide array of transportation modes.

"These efforts will help bridge the gap between public infrastructure investment and private logistics capacity and manufacturing,"



The Stan Musial Veterans Memorial Bridge crosses the Mississippi River between St. Clair County, Ill., and St. Louis. The city built the bridge to relieve traffic on nearby bridges, and to expand with anticipated growing traffic in the future.

says Mary Lamie, executive director, St. Louis Regional Freightway. "In addition, we are leading activities to enhance the area's freight network, while also providing a point of contact for site selectors, real estate brokers, developers, and logistics businesses considering the St. Louis region for industrial expansion."





WWW.STLREGIONALCHAMBER.COM

ST. LOUIS REGIONAL CHAMBER
WELCOMES AMAZON TO SOUTHWESTERN ILLINOIS

CONGRATULATIONS TO THE STATE OF ILLINOIS, MADISON COUNTY & THE CITY OF EDWARDSVILLE

3PL



Echo Global Logistics • www.echo.com

Echo Global Logistics, Inc. (Nasdaq: ECHO) is a provider of technology-enabled transportation and supply chain management services. Echo maintains a proprietary, Web-based technology platform that compiles and analyzes data from its network of more than 30,000 transportation providers to serve its clients' needs. Offering freight brokerage and managed transportation services across all major modes, Echo works to simplify the critical tasks involved in transportation management.

Penske Logistics • www.penskelogistics.com

Penske Logistics is an award-winning logistics services provider with operations in North America, South America, Europe, and Asia. Our products and services range from dedicated contract carriage and distribution center management to transportation management and fully customized solutions. No matter what your needs or industry, Penske Logistics engineers supply chain solutions that deliver business results like boosting productivity, improving service, and shrinking carbon footprints. Call us today at 1-800-529-6531 to learn more.



AIR CARGO



Alaska Air Cargo • www.alaskacargo.com

Alaska Air Cargo provides reliable air cargo services to meet your shipping needs. Whether it be small packages, full ULD shipments, or chartered freighter service, Alaska Air Cargo offers a variety of options, including GoldStreak® Package Express, a next-available-flight service for items up to 100 pounds; Priority Air Freight for time-sensitive shipments that are larger than GoldStreak and need to be at a destination by a specific time; and Animal Express, a priority express service that ensures animals a safe and comfortable journey.

American Airlines Cargo • www.aacargo.com

American Airlines Cargo is your shipping solution, providing more than 100 million pounds of weekly cargo lift to major cities in the United States, Europe, Canada, Mexico, the Caribbean, Latin America, and Asia. For almost 80 years, American Airlines Cargo has consistently pushed the edge of cargo technology and expanded its network around the world. American Airlines Cargo locations are worldwide; visit the website to search for one near you.



IN THIS SECTION:





DB Schenker • www.dbschenker.com

DB Schenker strives to be the leading global provider of integrated logistics services. We provide solutions without complicated strategies. We utilize a structured methodology that is tested and proven to increase efficiencies, reduce costs, and protect our customers' supply chains. Yet this methodology is completely adaptable to each unique business situation. It's a balanced approach to realigning the customers' supply chain into the most productive unit possible.

GEODIS • GEODIS.com/OHLisNowGEODIS

Even More Ways to Get Your Product to Market-OHL is Now GEODIS. As GEODIS, our ability to offer even more innovative and efficient transportation solutions-close to home and across 120 countries-ensures you can keep the satisfaction of your customers up and your costs down. Learn how we can make a big difference for your business at GEODIS.com/OHLisNowGEODIS.





Lynden • www.lynden.com

Over land, on the water, in the air-or in any combination-Lynden has been helping customers solve transportation problems for almost a century. Operating in such challenging areas as Alaska, Western Canada and Russia, as well as other areas around the globe, Lynden has built a reputation of superior service to diverse industries.

SEKO Logistics • www.sekologistics.com

SEKO prides itself on a commitment to customer service, whether it's a 2 a.m. pickup for a critical industrial part for a plant that is 4,000 miles away, or the cost savings achieved from proactive communication with your vendors overseas. SEKO offices have the knowledge and expertise to expedite or to consolidate, depending on your need. From Hong Kong to Amsterdam, SEKO knows how to serve its clients. As a non-asset-based third-party logistics provider, SEKO has the flexibility to meet your supply chain needs using a variety of modes and carriers.



EXPEDITED AIR



GEODIS • GEODIS.com/OHLisNowGEODIS

Even More Ways to Get Your Product to Market-OHL is Now GEODIS. As GEODIS, our ability to offer even more innovative and efficient transportation solutions—close to home and across 120 countries—ensures you can keep the satisfaction of your customers up and your costs down. Learn how we can make a big difference for your business at GEODIS.com/OHLisNowGEODIS.

RR Donnelley • www.rrdonnelley.com/logistics

Experience the benefits that only come from working with a major, global shipper that is also a top-ranked 3PL. We offer multiple transportation modes, an established multi-carrier network, volume-leveraged rates and service levels, along with technology-enabled systems and processes. Visit our website and contact us today to see why customers have relied on us for nearly 150 years.



COLUMN TO VALUE TO VA

UTXL • www.utxl.com

Whether you need a core transportation service provider or a resourceful backup relief valve, turn to UTXL. UTXL handles truckload and multiple stop shipments (consolidated LTL) between any points in North America, and can arrange service to or from any state with satellite and/or cellular equipped teams and single drivers for your van, reefer, flatbed, or oversized shipments. Shippers nationwide rely on UTXL for reliable service and economical prices; you can, too. Check out the website for all the details.

INTERMODAL

CSXT Intermodal • www.intermodal.com

CSX Transportation (CSXT) Intermodal combines the superior economics of rail transportation with the short-haul flexibility of trucks in order to provide customers with a competitive capacity alternative over mid to long-haul trucking when transporting goods in containers moving over 500 miles. As one of North America's largest intermodal rail service providers, CSXT Intermodal's core rail network serves all major markets east of the Mississippi River through a network of over 50 terminals. CSXT Intermodal also connects to all major Class I rail carriers, to provide transconshipments from coast-to-coast.



Printing Solutions - Trucking



PRINTING SOLUTIONS



SATO America • www.satoamerica.com

SATO is a pioneer in the Automatic Identification and Data Collection (AIDC) industry, and the inventor of the world's first electronic thermal transfer barcode printer. It revolutionized the barcoding industry by introducing the Data Collection System (DCS) & Labeling concept—a total barcode and labeling solution providing high-quality barcode printers, scanners/handheld terminals, label design software, and consumables. SATO is one of the first in the industry to introduce a complete, multi-protocol EPC-compliant, UHF RFID solution. Turn to SATO for all your barcode and RFID printing needs.

RAIL

Canadian Pacific • www.cpr.ca

Canadian Pacific is a transcontinental railway in North America with direct links to eight major ports, including Vancouver and Montreal, providing customers a competitive rail service with access to key markets in every corner of the globe. CP is growing with its customers, offering a suite of freight transportation services, logistics solutions, and supply chain expertise. Visit cpr.ca to see the rail advantages of CP.



TRUCKING



Celadon Logistics • www.celadonlogistics.com

For all your transportation and logistics needs, count on Celadon, one of the largest and most progressive transportation and logistics companies in North America. Celadon offers a range of truckload transportation services including long-haul, regional, local and dedicated. Celadon Logistics provides freight management services, less-than-truckload consolidation, and freight brokerage services, while Celadon Dedicated Services offers supply chain management solutions, such as warehousing and dedicated fleet services. More information is available on the Celadon website.

Saia LTL Freight • www.saia.com

For nearly 90 years, Saia LTL Freight has been providing customers with fast, reliable regional and interregional shipping. With 147 terminals located in 34 states, Saia LTL Freight offers a range of products and services that are backed up by a guarantee like no other in the industry. Our Customer Service Indicators, or CSIs, allow us to measure our performance each month against a set of six indices that our shippers said are the most important to them.



INBRIEF

NEW SERVICES & SOLUTIONS



//Services//

Air cargo carriers **Lufthansa Cargo** and **Cathay Pacific Cargo** will begin operating a joint freight handling terminal in Hong Kong, with the first shipment under the agreement expected to occur in February 2017. The location will provide a single site for export drop-off and import delivery arrangements.

Logistics solutions firm **Sonwil Distribution Center** opened a new facility in Arlington, Texas. The location features a 229,400-square-foot warehouse, crossdock facility, secure drop trailer lot, 30 overhead dock doors, seven rail doors, and is BRC and FDA Food Grade certified.



DHL Global Forwarding expanded its cold chain storage capacity in Puerto Rico with three new temperature-controlled chambers at its San Juan facility. The new chambers operate at 59 to 77 degrees Fahrenheit, feature 100-percent redundant refrigeration systems, and have a combined capacity of 324 pallets using single-pallet racks, or 486 pallets on double-deep racks.

Logistics company and terminal operator **GT USA** added a 40,000-square-foot facility at Port Canaveral, Fla. The warehouse provides a full range of logistics services, including general warehousing, trucking, crossdocking, storage, inventory control, and last-mile distribution.

Logistics provider **DB Schenker** opened a warehouse in Laredo, Texas. The new facility includes 30,960 square feet of logistics management space, and supports cross-border shipment and compliance services for shippers moving freight between Mexico and the United States. The new location is a certified

Foreign Trade Zone and features an on-site customs broker.

//Transportation//

The U.S. Department of Agriculture approved Miami International Airport (MIA) to receive perishable freight imports by sea. The permit allows ocean shipments of perishable products from Latin America to PortMiami or Port Everglades to then be transported to MIA, where they will move by air to destinations in Europe and Asia. Customized Brokers, a logistics company and subsidiary of Crowley Maritime Corp., coordinates the shipments.

CSX Transportation added a new series of cross-border services between the United States and eastern Canada. The services include secondmorning availability from Chicago and third-morning availability to Chicago, fourth-morning availability to and from Atlanta, and sixth-morning availability into Florida.

Ocean carrier Hyundai Merchant
Marine launched a new service—named
Hyundai New Start—between Asia and
the U.S. West Coast. The route offers
coverage from Shanghai, China; and
Gwangyang and Pusan, South Korea; to
Los Angeles. The service offers a nineday transit time between Pusan and Los
Angeles, is served by five vessels, and
operates weekly.



//Technology//

Supply chain technology developer **ArrowStream** released the *Inbound Freight Program Insights* module for its *Crossbow* optimization software. The new module aligns the logistics operations of transportation and purchasing departments, reducing freight costs and minimizing inventory levels.

//Products//

After acquiring European packager Kalibox, packaging manufacturer **CSafe** began offering the previously unavailable Kalibox pallet shipper to the U.S. market. The front-loading pallet protector insulates and protects pharmaceutical cargo from harm for as long as five days, and is available in a range of sizes.

FedEx Freight released a new box to make LTL shipments easier for shippers, and to make freight shipping more accessible for smaller businesses that



The Raymond Corporation, a

warehouse solutions provider, offers the *iWAREHOUSE Evolution* system to help warehouse managers monitor compliance, risk management, and metrics for industrial vehicle fleets. The scalable solution offers a number of enterprise-level functions, including load sensing, task selection, cellular communications, multi-site hosting, and labor management system integration.

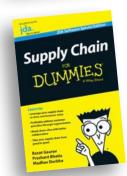
need to move lesser amounts of cargo. The flat-rate box comes in two sizes. The first is a standard-size freight box that requires a pallet, and the second is a smaller freight box with an integrated pallet.

Reusable plastic pallets from pallet manufacturer **CTC Plastics** are lightweight, easy to handle, and feature a strong one-piece design. The pallets are designed to offer a sustainable alternative to wooden pallets, are 100-percent recyclable, and can be used in a range of applications, including agricultural, industrial, retail, automotive, and grocery.



Industry experts amass supply chain management best practices and skill sets, and invest in new research and evaluation tools. Now you can benefit. *Inbound Logistics* has selected this collection of whitepapers that will give you a jump on important supply chain issues. For more information on any of these whitepapers, visit the websites listed below.





Demand Solutions

TITLE: Five Things You Can Do This Week to Reduce Inventory

DOWNLOAD: bit.ly/DemandSolutions

SUMMARY: Eliminate guesswork from your safety stock strategy. Optimize stock levels in all your warehouses. Achieve major savings without running

levels in all your warehouses. Achieve major savings without running out of "A" items. You'll learn how to accomplish all this, and jump start your inventory reduction initiatives, by downloading this new

whitepaper now.

JDA

TITLE: Supply Chain for Dummies

DOWNLOAD: bit.ly/JDASupplyChain

SUMMARY: Supply chains of the 21st century are more complex and dynamic

than ever before. How efficiently and profitably companies can plan, source, make, and deliver products to their customers is what separates industry leaders from laggards. To drive real business value and results in today's competitive global economy, a best-in-class supply chain is critical to business success. Download a free copy of this e-book now, and learn how you can take your supply chain to the next level.

Unyson

TITLE: Examination of On-Time Delivery Service in a JIT Environment

DOWNLOAD: bit.ly/UnysonJIT

OWNEDAD. Dit.iy/Olly301131

SUMMARY: Adopting just-in-time (JIT) inventory principles has enhanced production operational efficiency, cost effectiveness, and customer responsiveness for many organizations. But as you'll discover in this new whitepaper, the real key to success is providing a solution that applies JIT principles to the specifics of each client's industry and accurately tracks and delivers on-time performance, regardless of industry conditions, leading to the greatest competitive advantage.







MD Logistics

TITLE: How Leadership Training Can Improve Company Culture

DOWNLOAD: bit.ly/MDLogisticsLeadershipWP

SUMMARY: Organizations are scarcely making investments in training, particularly

at the leadership level. This whitepaper details how implementing a training and development program that focuses on developing and empowering an organization of leaders reinforces a positive company

culture that will pay dividends for years to come.

Zebra Technologies

TITLE: Building the Smarter Warehouse: Warehousing 2020

DOWNLOAD: bit.ly/ZebraBuild

SUMMARY: How do today's warehousing managers plan to capitalize on tomorrow's

unprecedented e-commerce opportunities? A recent global survey of more than 1,300 IT and operations warehouse professionals explores just that. Respondents divulge current practices as well as plans for 2020, offering unique insight and perspective into the trends that will shape the landscape of warehousing as we know it. Download this whitepaper

for a detailed analysis of the survey's findings.

Enterprise Florida

TITLE: 3PLs Empower Companies of All Sizes

DOWNLOAD: bit.ly/EnterpriseFlorida

SUMMARY: The market for third-party logistics providers continues to grow, driven

by the myriad of services they offer that can help companies of all sizes manage increasingly complex and global supply chains. Here's a look at the benefits of outsourcing, including insight from several 3PL

organizations with significant operations in Florida.

Ryder

TITLE: Ryder and FRAM: Filtering Waste From the Supply Chain

DOWNLOAD: bit.ly/RyderCaseStudyFRAM

SUMMARY: As the number-one oil filter brand in America, FRAM knows having waste

in your engine leads to poor performance. As a supply chain logistics leader, Ryder knows having waste in your supply chain can also lead to poor performance. By collaborating with Ryder, FRAM was able to filter out waste from its supply chain, leading to more efficient processes and cost savings. The results include a 100-percent productivity increase, 99.8-percent pick accuracy, and a seven-figure reduction in annual

distribution costs.

Share your whitepaper with IL readers!

WhitePaper Digest is designed to bring readers up-to-date information on all aspects of supply chain management. We're building a database of SCM whitepapers, and you can help. E-mail us with whitepaper recommendations:

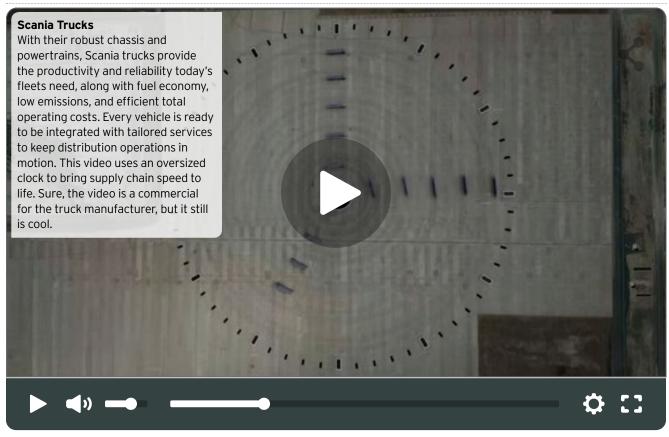
editorial@inboundlogistics.com



Inbound Logistics selects the best logistics and supply chain videos available anywhere and serves them up on www.YouTube.com/InboundLogistics

Time for a New Truck?

bit.ly/ScaniaClock





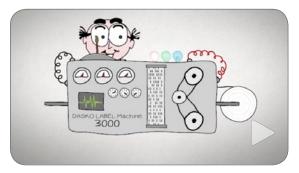
80 Inbound Logistics • November 2016

Explaining a SCON in 60 Seconds

bit.ly/ElemicaSCON

Elemica

Supply chain performance is directly related to your company's success. When it comes to staying ahead, supply chain operating networks (SCONs) are leading the way. But what is a SCON? The answer is simple and complex at the same time. Watch as this supply chain expert attempts to describe the complexity of a supply chain operating network in 60 seconds or less. Will he make it?



Paging Dr. Dasko

bit.ly/DrDasko

Dasko Label

Dasko Label provides labels, tags, and signs for identification and tracking applications, from printing traditional and 2D barcodes to voice check digits to RFID. Check out this cute video, hosted by Dr. Dasko, for an animated view of what Dasko Label can do for you.

Crown Jewels

bit.ly/CrownEquipment

Crown Equipment

In this video, customers relate three things that set Crown Equipment, one of the world's largest lift truck manufacturers, apart: the quality of its lift trucks, its unique customer service, and its product and services innovation. Crown Equipment is focused on solving real material handling challenges and creating lasting value for customers.



A World View of Fulfillment

bit.ly/OneWorldDirectFulfillment

One World Direct

You have heard the term, but have you ever wondered what order fulfillment really is? Then this video is for you. Thomas Unterseher, co-founder and CEO of One World Direct, describes how a simple definition of fulfillment fails to take into account so many other factors such as logistics, returns, quality control, and more.

Build a Sweet Fleet

bit.ly/CJKFleet

CJK Services

Ready to maximize your forklift fleet? This video describes how CJK Services employs a combination of experienced analysts, dedicated client team specialists, and a state-of-the-art database that generates winning results. By scrutinizing repairs, repair occurrences, and component failure rates, CJK Services ensures clients receive the best value for each maintenance dollar spent.





Smooth Operator

bit.ly/AxiumSmooth1

Axium

It's fascinating to watch Axium's materials handling equipment solutions – palletizing, depalletizing, case packing, and peripheral equipment – in action in this video. Axium specializes in robotic materials handling and assembly, and designs, manufactures, and installs a complete range of automated solutions for robotic materials handling and transformation of plastic products.

CALENDAR YOUR LOGISTICS DATEBOOK

Retail Industry Leaders Association (RILA)

Retail Supply Chain **Conference 201**

bit.ly/rila2017 | Orlando, Fla. | FEB 12-15, 2017

AUDIENCE: Stakeholders in the retail supply chain; logistics, supply chain, and distribution professionals Focus: How "Ubertrends" are reshaping the innovation landscape; retaining supply chain talent; launching and operating a multi-channel operation; best practices for supply chain control

MAR 20-22, 2017 Henderson, Nev. Transportation & Logistics Council

Education for Transportation Professionals

bit.ly/TLC2017conference

AUDIENCE: Supply chain, logistics, and transportation professionals Focus: Critical issues facing the transportation and logistics industry; supply chain security best practices; avoiding transit loss and damage; crossborder trade with Canada and Mexico

APR 3-6, 2017 Chicago, III.

ProMat 2017

www.promatshow.com

AUDIENCE: Manufacturing and supply chain professionals

Focus: Manufacturing and supply chain trends; building supply chain sustainability for competitive advantage; how intelligent machines are transforming supply chains

DEC 12-13, 2016 Philadelphia, Pa. Worldwide Business Research

LogiChem

www.logichemus.wbresearch.com

AUDIENCE: Chemical supply chain and logistics professionals

Focus: Achieving logistics optimization; exploring tools and strategies to reduce cost, mitigate risk, and keep capacity available; breaking down siloes for an integrated and optimized network

JAN 23-25, 2017 Atlanta, Ga. SMC³

Jump Start 2017

www.smc3jumpstart.com

AUDIENCE: Supply chain, logistics, and transportation professionals Focus: Changing role of intermodal in railroad's portfolio; biggest challenges facing retailers, including the last mile, visibility, and omni-channel growth; embedding business intelligence into transportation management systems

JAN 23-27, 2017 Orlando, Fla. PEX Network

OPEX Week: Business Transformation World Summit

www.opexweek.com

AUDIENCE: Operational excellence and business transformation executives Focus: Case studies in operational excellence, strategic business transformation, BPM, and continuous improvement; aligning strategy with operational excellence to drive enterprisewide transformation

FEB 5-7, 2017 Sea Island, Ga. Georgia Ports Authority

49th Annual Georgia Foreign Trade Conference

www.gaforeigntrade.com

AUDIENCE: Logistics professionals engaged in container, RoRo, breakbulk, and agri-bulk cargo transport, as well as warehousing and site selection Focus: Challenges facing shippers, carriers, ports, terminals, and the maritime community; changing legislation and technologies impacting global trade

MAR 7-9, 2017 Austin, Texas Worldwide Business Research

LogiMed 2017

www.logimedusa.wbresearch.com

AUDIENCE: Medical device supply chain stakeholders; IL readers get a 25-percent discount to attend with code LM17INLO Focus: Achieving end-to-end visibility and driving growth in the healthcare industry; collaborating to drive value in the supply chain

MAR 14-15, 2017 Atlanta, Ga. Terrapinn

Home Delivery World 2017 bit.ly/homedelivery2017

AUDIENCE: Supply chain, transportation, fulfillment, logistics, e-commerce, information technology, and warehousing professionals

Focus: How direct fulfillment centers can support an interconnected retail strategy; the advantages of consumer-facing supply chains; expansion strategies for omnichannel retailers; utilizing transportation/ technology partners to transform your delivery model

FEB 16, 2017 Chicago, III. APICS

Principles of Distribution and Logistics

bit.ly/APICSlogistics

AUDIENCE: Operations management professionals

Focus: Using "push" and "pull" inventory replenishment in a multiechelon environment; integrating new technologies into distribution channels; building a sustainable supply chain; supporting customer service objectives using warehousing

MAR 21-22, 2017 Cambridge, Mass.

MIT Sloan Executive Education

Supply Chain Strategy and Management

executive.mit.edu

AUDIENCE: Logistics and supply chain professionals

Focus: Trends in supply chain strategy; guidelines for making strategic sourcing and make-buy decisions; integrating e-business thinking into supply chain strategy and management

NOW ACCEPTING NOMINATIONS FOR

THE 3RD ANNUAL 30 UNDER 30 RISING SUPPLY CHAIN STARS

>>> RECOGNITION PROGRAM

Nominate a young purchasing/supply chain management professional who deserves to be recognized for their contributions and making a difference for their organizations.

For more information visit 30under30.thomasnet.com







The Institute for Supply Management (ISM) and THOMASNET.com are proud founders of the 30 Under 30 Rising Supply Chain Stars Recognition Program created to further advance the future of the supply chain profession.





HOW MANY freight claims do you file per month?

If it's more than 10, MyEZClaim Freight Claim Software can reduce your filing costs:

- Mine claim data to identify problem carriers or products
- ▶ Lower administrative costs by reducing filing time to just 15 minutes per claim
- ▶ Cloud-based software as a Service (SaaS)

Get even more out of your system with our one-on-one freight claim training program.

TranSolutions

480.473.2453 • sales@myezclaim.com www.TranSolutionsInc.com

3PL Staffing

Specializing in direct and contract hiring including:

- CEO's, COO's, CFO's, CIO's, CMO's, CLO's
- Vice Presidents / Directors
- Sales Managers
- **Directors Of Business Development**
- Solutions Engineers
- TMS/WMS/LMS Systems Implementation Managers
- Carrier Sourcing Managers
- Freight Brokerage / Branch Managers
- Facility Managers
- Pricing Managers
- IT Managers
- Trade Compliance Managers



847-382-3877



Logistics Planning Software

- Continuous Move Planning
- **Backhaul Matching**
- Fleet Deployment
- Network Design
- · Routing and Scheduling
- Fleet Sizing
- Supply Demand Matching
- Paratransit Routing



1.855.472.7236

sales@paradoxsci.com www.paradoxsci.com

FIND JOBS - FIND CANDIDATES

The #1 Logistics and Transportation Job Boards

JobsInLogistics

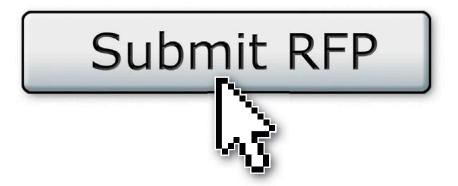
Supply Chain • Freight Forwarding Warehousing • Logistics • Transportation www.jobsinlogistics.com





Company Drivers • Owners Operators Driver Trainees • Lease Purchase www.jobsintrucks.com

Choosing a 3PL Partner Just Got Easier.



Create a database of prospective partners...prepare your Request for Proposal list...build your knowledge base... with *Inbound Logistics'* FREE online RFP service.

The 3PL RFP is your opportunity to have third-party logistics experts look at your specific outsourcing challenges and needs, and give you free, no-obligation advice, solutions, and information specific to your request.

Whether you need to outsource your entire logistics operation, or just one segment of it, choosing the right third-party logistics partner can be a complex challenge. In response to reader requests, *Inbound Logistics* offers an online 3PL RFP tool to help simplify your selection process.

Get started now at inboundlogistics.com/rfp



11.16

RESOURCE CENTER

INBOUND LOGISTICS WORKS FOR YOU!

3PLs

Air Cargo

Alaska Air Cargo

www.aacargo.com

www.alaskaair.com/cargo

American Airlines Cargo

SPLS	
Celadon	pg. 63
www.celadonlogistics.com	800-235-2366
DB Schenker	pg. 30
www.dbschenkerusa.com	800-225-5229
Echo	Cover 4
www.echo.com	800-354-7993
Geodis	pg. 9
www.geodis.com	732-362-0600
Geodis	pg. 21
www.GEODIS.com/OHLisNowGEODIS	615-401-6400
Kinexo	pg. 5
www.gokinexo.com	252-407-2000
Lynden	pg. 22
www.lynden.com	888-596-3361
RR Donnelley's DLS Worldwig	de pg. 18
www.dls-ww.com	877-744-3818
SEKO Logistics	pg. 65
•	201-744-1611

Career Development/Education Search Resources, Inc.

Search Resources,	Inc.	pg. 84
www.srimatch.com		847-382-3877

Events

Cargo Logistics Canada	pg. 55
www.cargologisticscanada.com	877-739-2112
	ext. 62058
Georgia Foreign Trade 2017	pg. 33
www.gaforeigntrade.com	912-964-3996
Logichem	pg. 25
www.logichemus.com	646-200-7542
PROMAT 2017	pg. 26
www.promatshow.com	704-676-1190
SMC ³ Jump Start 2017	pg. 60
www.smc3jumpstart.com	800-845-8090
	ext. 5802

Financial Services

UPS Capital	pg. 7
www.upscapital.com	877-263-8772

Industrial Supplies

Zoro	pg. 37
www.zoro.com	855-BUY-ZORO

them you saw their ad in Inbound Logistics.

For a specific response, contact these advertisers directly. Please tell

For faster service, go online:

inboundlogistics.com/rfp

86 Inbound Logistics • November 2016

pg. 3

pg. 31

800-225-2752

800-CARGO-AA

Use our Resource Center and let the information you need find you.

Logistics IT

Paradox Software	pg. 84
www.paradoxsci.com	855-472-7236
Transolutions	pg. 84
www.transolutionsinc.com	480-473-2453

Printing Solutions

Sato	pg. 35
www.satoamerica.com	704-644-1650

Rail

Canadian Pacific Railway	pg. 11
www.cpr.ca/merchandise	888-333-6370

Real Estate Logistics/Site Selection

St. Louis Regional Chamber	pg. 71
www.stlregionalchamber.com	314-231-5555

Sustainability

SmartWay	Transport	Partnership	Cover 3
www.epa.gov	//smartway	734-	-214-4767

Trucking

Saia	Cover 2
www.saia.com	800-765-7242
UTXL	pg. 13
www.utxl.com	800-351-2821

INDEX

ADVERTISER	PAGE
Alaska Air Cargo	3
American Airlines Cargo	31
Canadian Pacific Railway	11
Cargo Logistics Canada	55
Celadon	63
DB Schenker	30
Echo	Cover 4
Geodis	9
Geodis	21
Georgia Foreign Trade	33
Kinexo	5
Logichem	25
Lynden	22
Paradox Software	84
PROMAT	26
RR Donnelley	18
Saia	Cover 2
Sato	35
Search Resources, Inc.	84
SEKO Logistics	65
SmartWay Transport Partnership	Cover 3
SMC ³	60
St. Louis Regional Chamber	71
Transolutions	84
UPS Capital	7
UTXL	13
Zoro	37

For a specific response, contact these advertisers directly. Please tell

directly. Please tell them you saw their ad in Inbound Logistics.

For faster service,

go online: inboundlogistics.com/rfp



Take the Electric Route!

The Freight Shuttle System can move 70,000 pounds of freight via elevated guideways over distances of up to 500 miles.

hink loaded trailers without the tractors. Imagine "people movers" at major airports and cities but for freight. That's the Freight Shuttle System or FSS. Developed by Texas A&M University's Texas Transportation Institute, the electric elevated network shuttles freight over distances of up to 500 miles-the point at which using railroads is less economical for shippers-while taking heavyduty diesel truck traffic off highways.

In fact, the system can be built on highway medians. Equipped with electric-powered, autonomous transporters, the FSS moves 53- and 54-foot truck trailers and up to 45-foot ocean containers that would normally get to their destination by truck.

Expected benefits include reduced pollution, less infrastructure damage, reduced highway congestion, and improved traffic safety.

After nearly a decade of research and 17 patents, the system is now making moves toward reality. A prototype was unveiled in September 2016.

In addition, Freight Shuttle International, a company created by private investors to transform the concept design into commercial reality, and the Port of Houston Authority are looking into a feasibility study to support potential deployment of FSS in the Port of Houston area.

Houston, we might have a solution.



An FSS transporter carries a 53-foot trailer on its cargo bay.



Undergoing testing, the shuttle system features autonomous, electric shuttle vehicles.



AND SAVE THIS ...



Partner with SmartWay®

SmartWay Transport Partnership is the smarter way to ship goods. SmartWay can help your company put its best foot forward to reduce its carbon footprint, improve its bottom line, and better manage its global freight supply chain. This innovative public-private collaboration helps your company increase operational efficiency, incorporate sustainability, and gain a competitive edge. It's no wonder over 3,000 companies have joined SmartWay. Since 2004, they have eliminated over 72.8 million metric tons of $\rm CO_2$ and saved over \$24.9 billion in fuel costs. To learn more about becoming a SmartWay Shipper Partner, drive over to www.epa.gov/smartway/become-smartway-shipper-partner

Any way you ship it, move it the SmartWay.



With the completed integration of COMMAND TRANSPORTATION,

ECHO)

does more to simplify transportation management.

Greater capacity. A broader network.
Best-in-class proprietary technology.
And of course, a commitment to excellence and innovation delivered by the industry's most talented transportation professionals.
Echo Global Logistics has taken the next step in our evolution as a leading 3PL built to meet the needs of our shippers and carriers.

Transportation Simplified™



Transportation Simplified™
echo.com
800.354.7993