

Information for Members of the
Warehousing Education and Research Council

Optimizing Inventory Management

Higher service levels with less inventory, plus other savings, benefits gained from inventory optimization.

Inventory management and optimization are top investment priorities for manufacturers this year, according to IDC Manufacturing Insights research. "Although inventory optimization is just one component of a broader inventory management initiative, it is an area where we expect to see quite robust growth over the next two to three years," says Simon D. Ellis, practice director, supply chain strategies, IDC Manufacturing Insights, Framingham, Mass.

"Inventory optimization is driven by a set of values which are typically service level and inventory investment," explains management consultant R. Michael Donovan, R. Michael Donovan & Co., Inc., Framingham, Mass. "Yet, many inventory planning routines are still governed by 'rules-of-thumb,' and as a result, customer service is usually too low and there is too much inventory."

Inventory optimization (IO) is widely known as a way to free-up working capital or cost effectively increase service levels, according to Karin Bursa, vice president, marketing, Logility, Atlanta. "IO implementations are most widespread at the finished goods end of the supply chain," she explains.

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Stuck in Place

The nation's infrastructure is in need of an upgrade, but progress is slow, if at all.

As citizens, everyone feels the need for updated infrastructure in this country; roads are congested, bridges need repairs, and there are potholes out there that can swallow trucks. As logistics professionals, you can feel it too—ports are overcrowded, railroads are slowed because of a lack of tracks and roadways need widening. All of this adds up to slower transit times and more costs.

In spite of the sorry state of the nation's infrastructure, however, few express optimism about the future. Janet Kavinoky, director of transportation infrastructure at the U.S. Chamber of Commerce in Washington, D.C., is among those. "There are a lot of projects going undone," she says. "Congress is hung up on how to pay for it all."

While the potential for infrastructure investment is out there—in the form of SAFETEA-LU reauthorization (the surface transportation bill) and the Water Resources Development Act (WRDA)—the government isn't making the most of that potential. And unless that potential is fulfilled, the supply chain is going to suffer for it.

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“IO implementations often reach into the warehouse/DC environment, especially when postponement strategies are used to retain product flexibility and pool demand from multiple DCs or customers.”

Expectations

Organizations tend to blame inaccurate forecasting for their service level problems. In fact, Bursa maintains, “the demand signal can be used by IO tools to vastly improve both anticipation of and response to changing customer/market demand.” In addition, she notes that IO can:

- Identify all the stages of inventory. Point out exactly which stock is excess inventory and where it is stored in the supply chain
- Show the value of postponing differentiation steps and pooling demand from multiple customers or downstream DCs
- Confidently reduce finished goods inventory and reduce obsolescence
- Position finished goods inventory for better service levels in response to changing markets
- Understand which warehouse space can be freed up (and which shouldn't be)
- Refine Kanbans and Min-Max levels for maximum effectiveness
- Extend inventory management to customer DCs for better demand signal sensing and more control.

There is a distinction between warehouse management systems and inventory optimization.

“Warehouse management systems are, at the heart, inventory management systems, but they are largely limited to the warehouse and are more about inventory flow than optimization,” explains Ellis. “Inventory optimization tools, on the other hand, look at multiple kinds of inventory at multiple points in the supply chain—of which the warehouse is just one point.” A full-breath, multi-echelon inventory optimization tool can help answer questions like:

- How much inventory should I hold of each product, and where is the most cost-efficient point to store that inventory?
- My products are often seasonal or cyclical in terms of demand — how do I most efficiently plan and deploy overall inventory?
- What business policies are driving inventory investment across the entire supply chain?
- If I must improve service, how much incremental inventory investment will I need? Conversely, if I decrease service level, how much inventory can I free up?
- How will a change in a supplier or production location impact my overall inventory cost or customer service levels?
- Can I increase margins and improve service by holding inventory in a different location?
- How can I best deploy a combination push-pull supply chain or an inventory risk-pooling model?

“An inventory optimization tool essentially sets the ‘rules’ for inventory levels across the supply chain, allowing the warehouse management system to then execute order picking and loading based on available stock,” according to Ellis.

Early warning signs

Increasing rates of finished goods obsolescence, stock-outs, expediting or channel stuffing are all indicators of problems stemming from either excess inventory or poor demand signal sensing. Also, poor inventory turns compared to industry averages or your main competitors’ is a sure sign that IO is needed, according to Bursa.

“Warehouse managers who see these issues must strongly consider IO as a means to reverse these trends and improve their supply chain processes,” she advises.

“It is really quite simple: if your business is operating with high inventory levels, or inventory reduction initiatives are getting in the way of service delivery then an inventory optimization tool may be very helpful,” maintains Ellis.

WERCSheet

WERCSheet® (USPS # 014998) is published bi-monthly by the Warehousing Education and Research Council, 1100 Jorie Blvd., Ste. 170, Oak Brook, IL 60523-3016.
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Annual membership dues are \$275, including \$80.00 for an annual subscription to *WERC*Sheet. Periodicals postage rates paid at Oak Brook, IL (Vol. 33, No.5)

POSTMASTER: Send address changes to WERCSheet, 1100 Jorie Blvd., Ste. 170, Oak Brook, IL 60523-3016. WERC assumes no responsibility for unsolicited manuscripts or other materials submitted for review.

Editor: Rita Coleman

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However, before inventory optimization can begin several essential steps must first be taken, advises Donovan. They include:

- Clearly define your customer service strategy and objectives.
- Develop a demand and supply plan to achieve your customer service strategy and objectives.
- Use the appropriate statistical forecasting algorithms to predict demand and its variability.

"It usually advisable to start with simple optimization and then progress to more complex modeling over time," he offers.

Preparation

Over the past decade, IO has become a mature discipline with a portfolio of best practices. "It is based on powerful, widely-applied formulae from the operations research branch of mathematics," explains Bursa. "A best-of-breed multi-echelon inventory optimization solution addresses both strategic inventory policy planning and tactical inventory target setting in one solution."

Similar to most software initiatives, data is the key. "It's essential that a company develop a demand and supply planning process," emphasizes Donovan. "If reasonably good numbers are non-existent, then optimizing is all but impossible. When the process is well-defined, information technology system support is much easier to select and effectively use."

"Proper preparation relies on access to clean, accurate data," Bursa agrees.

Inventory planning and optimization in a single-echelon DC has the objective to deploy the right amount of inventory for each SKU to meet a management defined customer service strategy, says Donovan. In a multi-echelon inventory network the IO objective is to simultaneously optimize customer service and inventory deployment strategies by taking into account inventory requirements in multiple locations throughout an entire supply chain network.

"Multi-echelon inventory optimization (MEIO) incorporates multiple supply chain stages and helps bring the benefits to work-in-process as well as raw materials," says Bursa. While MEIO is common at larger manufacturers in high tech, CPG, food and beverage, and life sciences, companies under \$1-billion in revenue have begun to implement MEIO as well. "As the benefits are achieved in one stage, it is rolled out across the supply chain into other stages," she explains.

Education

Donovan acknowledges that inventory optimization in a multi-echelon inventory network is a very complex task, and that software providers have sophisticated systems to support simultaneous inventory optimization in a supply chain. However, a common problem he's observed is that users of these solutions have difficulty explaining what is "happening behind the screen" and when reviewing the outputs, few can identify whether the optimization process created an optimal solution.

He therefore recommends that "knowledge and process should come first and then be supported with the right information technology." He recommends management implement the sequential steps of: (1) gain knowledge; (2) develop and refine the process; and (3) deploy the appropriate inventory optimization technology.

The growth in utilization of IO tools is all about education, Ellis maintains. "Although manufacturing companies have been increasingly focused on lowering inventory levels, there is still a fair degree of 'education' required for those companies to understand whether those lower inventory levels are productive or not," he explains. "In and of itself, a low inventory level may not be a good thing, particularly if it gets in the way of customer service levels. As we have pointed out, all inventory levels are not created equally. At a particular level, a productive inventory can drive greater service performance," Ellis shares.

Benefits

An advantage of IO is its "side-by-side" relationship to enterprise systems such as ERP and APS. As Bursa explains: The IO system is provided readily available data regarding existing business operations and monetized values for the supply chain components. Then, running independently of any enterprise systems, IO maps the supply chain interdependencies and produces an expert analysis of the causes of inventory throughout the supply chain.

The IO tool then creates a series of "what-if" scenarios based on the organization's improvement ideas and alternative configurations. The resulting inventory policies and targets can be implemented within the company's existing business systems.

Other benefits that have been reported from adopting inventory optimization tools and technology, which

"Inventory optimization tools ... look at multiple kinds of inventory at multiple points in the supply chain ..."

Simon Ellis

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Not the right time

When the Obama administration first took office, it jumped right into getting the American Recovery and Reinvestment Act of 2009 passed. Once it was passed—and about \$50 billion of the \$787 billion total was allocated for transportation infrastructure—there was plenty of optimism about where the Recovery Act would lead. Since then, however, the fanfare has died down and reality has set in.

According to Kavinoky, the administration has been fairly absent when it comes to taking the lead on infrastructure. “I can’t really divine what has happened,” she says. “There are definitely folks in the administration who understand the issues surrounding infrastructure, but they may not have a solution to put forward or to embrace.”

Instead of a focus on infrastructure, says Kavinoky, the administration has focused on the neighborhood level with its “livability” initiative. “That’s not a bad thing,” she says. “But they’re not paying attention to the movement of goods on a national level.”

When the AARA money first became available, states had 120 days to obligate it after the bill passed. Of the

\$50 billion, \$27 billion went to highways and most has gone to repair and maintenance of existing highways. While that is, of course, a need, the nation’s infrastructure issues go far beyond regular upkeep.

There’s also a bit of a tug-of-war taking place for the dollars. Urban areas are competing directly with rural and suburban areas for funding of their transportation projects. Many of the big cities are complaining that they are being shortchanged because their state DOTs focus more on state highways than on alternative transportation projects used in urban areas. The state DOTs argue, however, that the urban areas will receive funding through separate streams of the AARA that will bypass the state government level.

A relatively disinterested Congress doesn’t help matters, either. “There’s one big thing standing in the way of passing major legislation, and that’s money,” says Kavinoky. “There are some big supporters of infrastructure on Capitol Hill, but it all comes down to the things that need to move right now and how much money there is to go around.”

There’s also the current political environment. Many members of Congress face tough races this year, so they’re loathe to commit to big issues like infrastructure

All told, there are several key bills that stand in the way of updating America’s infrastructure.

“When you look at Congress and ask who wants to take the lead on a tough vote, there aren’t any takers.”

Janet Kavinoky

right now. "When you look at Congress and ask who wants to take the lead on a tough vote, there aren't any takers," says Kavinoky. "Currently, the environment just isn't right for difficult votes."

What's at stake?

Currently, the biggest issue is reauthorizing SAFETEA-LU, the highway and transit funding bill that expired last Fall. While there's no agreement on how to pay for a new, multi-year bill, current programs have been extended and supplemental funding provided by the HIRE Act, the Hiring Incentives to Restore Employment Act. The bill moved \$19.5 billion from the General Fund into the Highway Trust Fund (HTF).

Additional funds are needed because there is not sufficient revenue coming into the Highway Trust Fund from user fees, primarily gasoline and diesel taxes, to

SIDEBAR 1:

The Chamber's New Vice Chairman

The U.S. Chamber of Commerce is one of the nation's biggest champions for improved infrastructure. Further proving its dedication to improving the state of infrastructure in the United States, the Chamber recently appointed John Ruan III as its new vice chairman. Ruan, chairman and CEO of Iowa-based Ruan Transport Group, will likely succeed Chamber chairman Thomas Bell Jr. when his term expires in June 2011.

The appointment signals the Chamber's ongoing commitment to transportation and infrastructure. Ruan joins Chamber president and CEO Thomas Donohue, who came to the association after a stint at the top of the American Trucking Associations.

With two transportation focused leaders, the Chamber stands to make additional impact with its efforts to keep infrastructure issues front and center. The Chamber has some 3 million members.

maintain investment and current levels. This HIRE Act allows the General Fund to reimburse the HTF for interest payments not received since the late 1990s. It also allows the HTF to collect interest on its deposits. The transfer from the General Fund, along with the federal gas tax, will hopefully fully fund existing highway and transit programs through the end of 2012 and into 2013.

Still, these are all stop-gap measures that don't address the long-term issue of a transportation bill that defines the administrations' goals as far as surface transportation and infrastructure goes. "For logistics professionals, there's a lot of uncertainty when it comes to the condition of our infrastructure, which makes it difficult to leverage assets," says Kavinoky. "There are a lot of projects that are going to go undone."

One relatively easy way to raise money for SAFETEA-LU reauthorization is to raise the gas tax. Right now, the tax is only 18.4 cents per gallon and hasn't been raised since 1993. "This amount is no longer sufficient," claims Kavinoky. "Right now we need to spend \$225 billion each year just to maintain what we have. What Congress does with SAFETEA-LU will directly impact your operations. Unfortunately, no one wants to take a vote on raising the gas tax—it's a very unpopular subject."

In fact, the administration is opposed to raising the gas tax, as is just about anyone in Congress who wants to get re-elected. To close the gap between the projected revenue into the Highway Trust Fund and the program needs—which has been estimated to be \$450 billion—would require an extra \$216 billion over the life of the next authorization. Add in a proposed \$50 billion high-speed rail program and the six-year shortfall amounts to over \$200 billion.

SAFETEA-LU, while the biggest issue, isn't the only issue at stake. Also important and potentially in jeopardy is WRDA—the Water Resources Development Act.

Water and air too

WRDA authorizes infrastructure projects from the Army Corps of Engineers, projects like navigation of the nation's rivers. "There is a massive construction backlog here and there is a need for new water transportation support," says Kavinoky. "The administration would like to see a doubling of exports, but that can't happen if we don't have an improved inland waterway system."

Kavinoky points out that the impact of the supply chain from this system is huge. "We can't afford an unreliable inland transportation system," she says. "But if our government can't look forward and stop reacting, we're not going to get where we need to be."

Similar to SAFETEA-LU reauthorization, Kavinoky isn't optimistic that WRDA will make it through this session of Congress. "This year, unfortunately, is all about getting bills written to roll out at the start of a new Congress," she says.

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Green Grapes

Jackson Family Wines has embraced green with its new LEED-certified DC.

California is known for many things, among them its wine industry and its leadership in the nation in all things “green.” Jackson Family Wines has brought both together in the form of a new cutting-edge DC that sets the standard for the environmentally conscious.

Since 2008, the company has followed a formal sustainability program and the DC serves as another cog in the wheel of that effort.

One of the first aspects of Jackson Family Wines’ sustainable efforts was its farming practices. Efforts like soil erosion control, water conservation and eliminating

some pesticides from its crops have all played an important role in creating an environmentally friendly company. When it came time to look at building a new DC, making sure it fit into this approach was imperative.

“Our objective is to reduce our environmental footprint everywhere we operate,” says Robert Boller,

vice president of sustainability. “It was a natural fit to extend our sustainability efforts all the way from our vineyards to where our wines finally leave for our customers.

“The objectives of the project were to consolidate the use of 10 separate DCs over three counties into one location,” says Boller, “as well as increase proximity to major roadways and rail.”

Taking the plunge

The new DC, located in American Canyon, Calif., achieved the objective of replacing 10 existing Jackson Family Wines DCs when it opened in the first quarter of 2010. From the start, the plans were to build a facility that could become LEED (Leadership in Energy and Environmental Design) certified. LEED is a green building certification system with a variety of levels of certification. Companies must demonstrate they meet standards

in areas like sustainable site development, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality.

Jackson Family set out for silver level certification but actually exceeded its plans and obtained a gold certification. “We engineered the building with energy conservation as a high priority due to the ongoing greenhouse gases associated with electricity production for decades to come,” says Boller. “Investments in high-efficiency cooling systems, a cool roof, and heavily insulated walls and ceiling resulted in 38 percent less energy use than a traditional design.”

Getting to that level began with the site selection for the new DC. By virtue of moving into one facility, the company has significantly cut down on extra handling and transportation, reducing emissions. The new, 30-acre site is also close to its Santa Rosa production plant, so the company can backhaul, further cutting down on road time.

Jackson Family Wines selected Indianapolis-based Scannell Properties for the design of the building and Sierra View General Contractors for the construction, a company experienced in LEED development.

In order to be green from the start, Sierra View sought out local vendors for construction materials whenever possible and worked hard to reduce the amount of waste produced by the construction. After a big push to closely monitor the construction materials, including wood, metals and concrete, some 85 percent of the materials were recycled. Sierra View also kept the use of volatile organic compounds (VOC) in things like paint, glues and sealants, to a minimum wherever possible. All of these efforts fed into the LEED requirements.

Jackson Family Wines stayed closely involved in the design and construction of the new DC, and built the new 650,000 sq. ft. facility to take advantage of existing rail lines. The building incorporated a railroad spur and 14 loading doors for direct rail distribution. A single rail car holds the goods of three tractor trailers, which make a significant dent in carbon emissions.

“It was a natural fit to extend our sustainability efforts all the way from our vineyards to where our wines finally leave for our customers.”

Robert Boller

Green to go

Just about everywhere you turn in the facility, you can find energy efficient design elements. To begin with, the company included an automated motion detecting lighting system throughout the DC. This keeps lights off in areas that are not being used, reducing energy consumption. The lights themselves are the newest T8 efficient fluorescent lighting and are big energy savers.

Because of this system, Jackson Family Wines was awarded a \$200,000 rebate from local utility provider Pacific Gas and Electric. In all, the building's energy savings are equivalent to the energy needed to power 290 homes annually. "Our energy conservation translates to more than \$250,000 a year in savings and electricity inflation has been six percent over the last 20 years," says Boller.

The LEED construction requirements meant that the site needed a storm water detention pond also. The system filters through a bio-swale and into a holding pond system. Overall, the site requires 40 percent less water than a traditional DC.

Other features involving water usage include a non-chemical waste water treatment system. Instead of chemicals, the system treats water with ultraviolet light and electrical impulses, which eliminate bacterial growth.

As to the building itself, the roof is made of a reflective white membrane that is designed to reduce heat absorption. This keeps the building temperature down, making employees more comfortable and productive, as well as helping the company maintain its product integrity. It also saves energy and keeps the company's energy bills lower.

The company also constructed the facility with the future in mind. The roof was upgraded to support the load of a one megawatt solar array. While not in use yet, should the company expand operations it is an option it can consider.


Good to go

While the project went smoothly, Boller says that obtaining LEED certification isn't always straightforward for this type of operation. "LEED is geared towards office buildings, not refrigerated warehouses," he says, "so we missed out on a lot of points focused around employee's work environment in an office setting."

Like many companies, Jackson Family Wines has learned that, while upfront costs might run higher to construct to LEED certification standards, the long-term savings make it all worthwhile. Operating expenses are much lower with such a green building and the ROI will come through those savings. In all, the construction bill came to about \$28 million, which probably ran about 2 percent higher than what a traditional build of the same size might have run. "We expect to have an ROI in less than two years," Boller explains.

Beyond the green benefits, the new DC has afforded Jackson Family Wines operational benefits too. "We have faster order-to-ship times, decreased costs, and increased product quality through reduced handling," Boller says.

Customers and employees are thrilled with the results, says Boller. "It's one of the nicest work spaces you could hope for, whether you're in the DC or the offices."

For other companies contemplating changes for the greener, Boller offers this advice: "Start early and be persistent," he says. "There's a steep learning curve and once you get the hang of it, you have to keep pushing performance for each measure." 

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Robert Boller

are shared by Bursa and based on the experiences of Logility customers include:

- Freeing millions of dollars of working capital trapped in excess inventory
- Meeting required service levels during business cycle upswings without creating excess inventory
- Managing better during difficult economic conditions, having the ability to bring down inventory more quickly to a normalized level and able to more quickly respond to increases in demand during a recovery
- Understanding the true cost required to increase service levels Improve inventory turns (which increases competitiveness, noticed by analysts)
- Reducing costly obsolescence, stock-outs, and expediting
- Handling changing demand without creating unnecessarily large inventory buffers
- Anticipating time-phased demand changes caused by seasonality and business cycles
- Creating more confident inventory decisions based on facts rather than opinions
- Developing more successful S&OP processes with parties mutually agreeing on best practices
- Having a common view/understanding of the supply chain (literally everyone has the same “map”)
- Extending smart inventory policies to stock held at customer locations and/or supplier DCs (better demand sensing, better lead time control)

“An IO solution should offer opportunities for supply chain professionals to understand the causes of inventory, accept or reject recommendations, and build trust in fact-based decision-making,” explains Bursa. “As this trust is built/earned, we will see further expansion of IO into DCs.”

Ellis and IDC Manufacturing Insights believe that IO technology will eventually morph into a broader category consisting of supply chain related business analytics and decision-support applications. In addition to IO, these applications would include: strategic supply chain network design and simulation; sourcing and procurement spend management analytics; and analytics that integrate supply demand sensing, real-time execution information, and global transportation and logistics landed cost information. 

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Justifying the IO technology solution

Inventory optimization (IO) is a tool that is managed centrally by a company’s inventory planning department, rather than the warehouse, maintains Simon D. Ellis, practice director, supply chain strategies, IDC Manufacturing Insights, Framingham, Mass. “From a warehousing perspective, the operation of the inventory optimization tool will be transparent,” he explains.

The cost of an IO implementation is quite variable, says Ellis, “with vendors in the space pricing quite differently.” Although the cost of software has been coming down, a typical implementation should be expected to be in the \$300,000 to \$600,000 range for software, with a project timeline of typically six to nine months, he offers. Implementation costs also will be variable, and are dependent upon the use of outsourced consulting resources and the size/duration of any internal resources. “But these should be in the same range as software costs,” according to Ellis.

The benefits of an IO implementation can be significant. “The magnitude of actual savings will depend upon the pre-implementation level of inventory control and the magnitude of supply network complexity,” notes Ellis, “but it is not unusual for a global supply chain to see inventory levels reduced by as much as 15 to 25 percent.” While actual costs and savings for specific implementations are proprietary, he reports that the manufacturing companies surveyed indicated that a one- to two-year payback is not unusual, with a discounted cash flow ROI above the 50 percent range.

“In the current economic climate,” he concludes, “the investment in inventory optimization is compelling.”

Meanwhile, when launching a search for an IO tool, Karin Bursa, vice president, marketing, Logility, Atlanta, recommends gathering answers to the following:

- Is this solution truly capable of multi-echelon IO (MEIO)? Does it provide the ability to optimize more than one location or stage (the MEIO of IO) of the supply chain produces significantly greater savings and service level improvements?
- Does the IO software assign monetary as well as volumetric values to all aspects of the supply chain so that economic impacts of different scenarios at various stages are accurately predicted?
- Does the solution include time-phased capabilities to optimize inventory with a cyclical demand signal (such as seasonality)?
- With the complex mathematical calculations involved, not all IO tools operate as well (or at all) above a certain number of SKUs. Can this solution handle growing complexity as we roll it out?
- Does the IO tool monitor targets on an exception basis, so planners can spend more time on problem solving and high-value activities?

Like the waterways and highways, the FAA also has a bill in the works to modernize the airway system. "This would update the air traffic control system," says Kavinoky, "as well as help build new runways. This is needed to keep up with the increases in air traffic."

All told, there are several key bills that stand in the way of updating America's infrastructure. Without their passage, the supply chain won't be able to reach its full potential and may even take steps backward.

Just-in-time, for instance, may become a thing of the past if the infrastructure isn't updated. "Inventories will have to get bigger," says Kavinoky. "When there are choke points on the waterways and highways, you have to plan around it."

Fuel costs will also rise with the lack of infrastructure updates, contends Kavinoky. "We'll be in a situation where it will be hard to minimize costs," she says. "You're going to be spending more time figuring out how to 'go around' all the choke points, and that will cost money."

She gives as an example the ports of L.A./Long Beach. "Why use this congested port when you can go up to Canada and have your goods move smoothly?" she asks. "Companies are going to have to look for alternative and those alternatives will be costly."

What to do about it

Over the next few years, Kavinoky expects to see more regulatory issues coming up that will affect the state of the nation's infrastructure and the supply chain. "We need to move from acting in crisis mode to the point where we get things done," she explains. "If we don't have the infrastructure we need, we can't compete."

As logistics professionals, your actions can go a long way towards getting the nation's infrastructure updated. "The longer people are in Washington, the less in touch they become with the users of these systems."

To keep Congress in the loop, Kavinoky encourages people to seek out their representatives and their staff. "Take the time during recesses to give tours of your facilities' and explain how the industry works," she says. "Demonstrate how connected your business is to the infrastructure system. There's nothing like showing your representatives in person how important this is."

Also, connect with the U.S. Chamber. The agency works as your advocate to get the nation's infrastructure where it needs to be, doing things like collecting statistics and presenting them to Congress. "We're always looking for businesses to interview and figure out the best ways to present this to Congress," Kavinoky says. "Your challenge is to make sure you are at the table."

SIDEBAR 2:

AARA Scams

The much touted American Recover and Reinvestment Act (AARA) of 2009 has funded many projects to date. However, it has also attracted some scam artists hoping to capitalize on its name recognition and the fact that many Americans fail to learn what exactly the Act entails.


One scam in West Virginia, for instance, involved a mass mailing to low-income residents offering the first 50 recipients guaranteed rental assistance. People showed up at the offices of a fake company and filled out paperwork revealing social security numbers and other important identifying information.

In another scam, a website offered Americans access to a compact disc or another website that would explain how they could gain access to a \$12,000 government grant, all under the AARA. Some took the bait and were charged a monthly fee of almost \$70. Other scams have required people to give up important personal data in order to receive supposed payouts from the AARA.

In all, scammers have milked thousands of dollars from the American public under the guise of the AARA and many who fell for the scams have also had to clear up identity theft issues.

It regularly sends out updates to members to keep them in the loop on these issues and show you how to help influence Congress. "It's so important that the industry takes an interest in our infrastructure," says Kavinoky. "Congress can't hear enough from the business community on this issue."

Bringing up issues like port congestion and spelling out for Congress examples like L.A./Long Beach, where a solution is to go to Canada, is what can make a difference. "That information can move mountains," says Kavinoky.

The bottom line is that the industry needs to have a bigger presence in Washington to help push bills like SAFETEA-LU reauthorization and WRDA to the forefront. "The time is right now," says Kavinoky. "It's the voices from outside of Washington that count." 

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U.S. Chamber of Commerce, www.uschamber.com*



Reading Between the Lines

Numbers can be deceiving in this year's State of Logistics report.

There was a time, not so long ago, when a steep drop in the total logistics costs would have been hailed as great news. So while it would seem that the 18.2 percent drop in U.S. business logistics in 2009—the largest since the State of Logistics report began—would be good news, it's quite the opposite.

The report, sponsored by CSCMP and Penske Logistics, is in its 21st year. Logistics costs fell to \$1.1 trillion, a decrease of \$244 billion from 2008. When you combine that with the drop in 2008, total logistics costs have declined almost \$300 billion during the recession.

Another key indicator, logistics costs measured as a percentage of U.S. gross domestic product (GDP), also took a plunge. From 2008 to 2009, those costs dropped to 7.7 percent, another low not seen in all the years the report has been in existence.

So why, with all the new lows, is this news not good news? Because the numbers indicate another trend beyond lowered cost: lowered business. The recession forced companies to slash expenses and demand

for logistics services went down drastically. Shipment levels declined and freight rates plunged. So while logistics companies may have found they didn't have to spend as much, they most definitely weren't taking in as much either.

Rosalyn Wilson, a transportation consultant for Delcan Corporation, continued this year as the report's author. "The recession, which began in December of 2007 and continued through more than half of 2009, had a negative impact on all segments of the logistics system," she reported. "The logistics industry felt the negative effects of the recession more than most other industries because the downturn in each individual sector translated into a loss in shipment volume.

"In mid-2008, bloated inventories began to be drawn down until they reached pre-recession levels in late 2009. Throughout the period, orders for new goods dropped off substantially and carriers competed for a dwindling

volume of shipments. Spot rates for some modes fell below costs, further adding to the financial decline."

Breaking it down

Taking a closer look at the numbers, it's apparent that just about every sector of logistics costs went down. Transportation costs, for instance, dropped 20.2 percent. Trucking, which is the largest component of the transportation sector, has been one of the hardest hit modes in the recession. It dropped 20.3 percent in 2009 and on a volume basis, truck tonnage was down 8.7 percent over already depressed levels in 2008. Truckload capacity continues to drop, according to the report.

As far as warehousing goes, the cost fell 2 percent in 2009. "Warehouses were still full in early 2009 because retailers could not move their goods," said Wilson. "By midyear, inventories had been liquidated or consolidated, freeing up warehouse space. Vacancy rates rose as inventories fell in 2009."

Inventory carrying costs declined 14.1 percent in 2009 and now account for 2.5 percent of nominal GDP. The drop in interest rates contributed to this fall, along with the overall drop in inventory levels.

The cost of rail transportation was down 20.6 percent in 2009. Wilson reported that the Association of American Railroads estimated that the industry now has approximately \$43 billion in idle assets. "The big difference between the loss of capacity in the trucking sector and the loss in the rail sector is that the rail equipment has been merely sidelined and is readily available to return to service when demand rises," said Wilson.

Positive outlook

While 2009 did not bring good news, Wilson says that there is reason for optimism. "The best thing we can say for 2009 is that it is good that it is behind us," she said. "Let's look to the future, which is improving as each month passes."

Wilson said that the first half of 2010 provided strong signs that the economy is recovering, and that most economists believe the United States has passed the

...the numbers indicate another trend beyond lowered cost: lowered business.




point where another drop in growth would cause a double-dip recession.

One positive indicator was that industrial production has been steadily climbing since bottoming out in mid-2009. Manufacturing output climbed 1.0 percent in April for a second consecutive month and was 6.0 percent above its year-earlier level. New orders for manufactured goods were up for 12 out of 13 recent months.

Another positive is that freight volumes have been generally on the rise in 2010. Truck tonnage is up and shipments are picking up in most market segments. Railroads are experiencing enough growth in business to begin rehiring workers and taking freight cars out of storage.

Wilson does not feel confident that unemployment will turn around much in 2010. "Although jobs are being created, they are not increasing fast enough to absorb those seeking jobs," she said. "New jobs are also attracting discouraged workers to return to the labor market to seek employment, inflating the unemployment rolls."

For those that have survived the recession, Wilson said, the future looks bright. "For those that have emerged in a seriously weakened state, your future will depend on your ability to capitalize on growing market opportunities to bolster your position," she said. "Capacity is going to tighten and rates are going to rise. Shippers would be wise to be first at the table negotiating rates and capacity."

She added this advice: "Consider offering assistance to weaker links in your supply chain to ensure their survival. We are on our way up, but far from breaking the surface. We need to continue to mind the bottom line and keep costs in check." 

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