

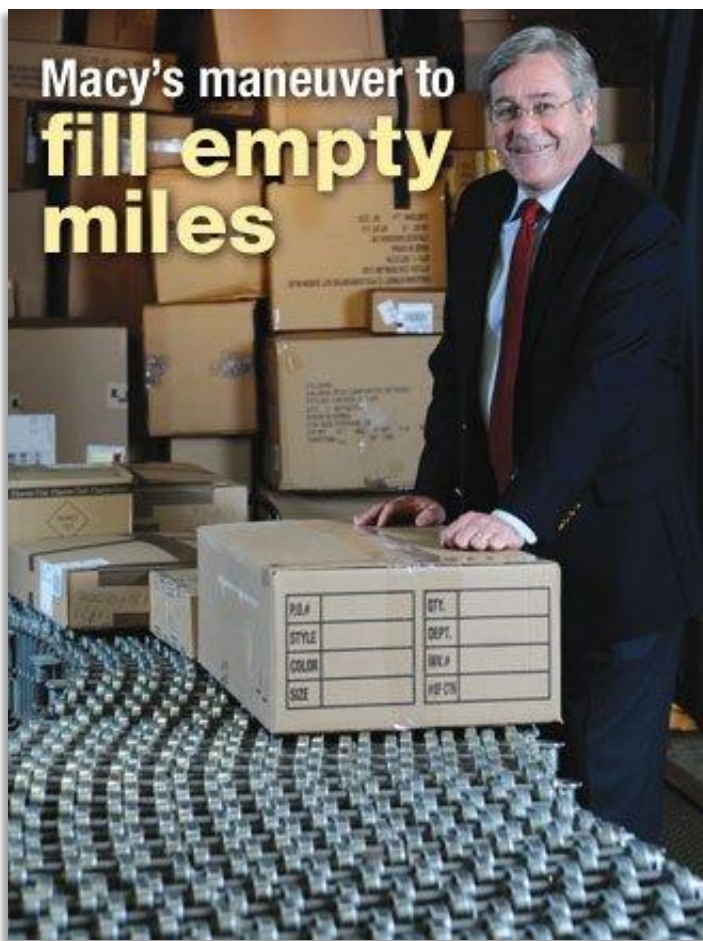
Logistics MANAGEMENT®



Logistics strategy: Macy's maneuver to fill empty miles

For a fee of \$1,600 a year, the retail stalwart is saving tens of thousands of dollars a year and burnishing its environmental credentials by using a simple Web-based load-matching system—and helping its carriers save time and make money on backhauls in the process.

By John Kerry, Contributing Editor -- Logistics Management, March 1, 2010



What a waste. As recently as early 2009, drivers of many of the Schneider National trucks pulling into Macy's distribution centers could expect to return home empty. The cost burden was phenomenal, as it is for every carrier whose rolling trailers contain nothing but air—and for every shipper that has to pay full freight in its trucking lanes.

But a new Internet portal, charging fees as small as \$1,600 a year, is enabling Macy's and Schneider to fill more of those load-less miles—and reap big savings as a result. The service is essentially an electronic bulletin board that allows a carrier with an empty lane to pair up with a shipper that has a load ready for that lane. Importantly, it is also opening up new interactions between carriers and shippers across a growing range of vertical industries—potential partners that may never have had reason to work together before.

For two lanes opened not long after the launch of the portal, Macy's has seen its annual transportation costs drop by an average of \$25,000 and now reports that 30 more backhaul loads leave its distribution centers each week—that's roughly 1,500 more productive hauls per year than just 15 months ago.

At the same time, Schneider reports that it has increased dedicated backhaul revenue by 25 percent on specific accounts using the new "Empty Miles" Web service—the carrier also boasts saving more than 5,500 gallons of diesel a year as a result of its involvement with the program. Through Empty Miles, Schneider says that it has already eliminated 61.65 tons of carbon dioxide emissions, 147-plus tons of particulate matter, and almost 1.5 tons of nitrous oxide.

The program draws high praise from Steve Matheys, Schneider's executive vice president and chief administration officer. "It's simple brilliance," he says. "The beauty of the Empty Miles portal is that it has created a conversation for organizations that are committed and willing to drive out waste."

Macy's is delighted that the Empty Miles Service offers opportunities to limit the environmental impact of its daily operations. "It's important for us to implement business practices that are sensitive to the environment," says Bill Connell, executive vice president of logistics at Macy's. "The Empty Miles Service greatly supports that premise while continuing to drive operational efficiency."

Connell is pleased with the price too. "You find one lane match—convert one 2,500-mile empty lane into a round trip—and you've covered the cost of the service's annual fees," he says.

Teaming up to solve the problem

So what's the basic idea behind Empty Miles and where did it come from? Under the program, a shipper can connect with another company that pays a discounted rate to ship freight on the return trip. The carrier then takes most of the money paid by the second company, keeps a small amount, and passes the remainder along as a refund to the first company. The first shipper gets money that would have been wasted on an empty trip, the second is able to ship at lower rates, and the carrier makes money too. (See sidebar for details.)

The subscription-based service is the brainchild of the Voluntary Interindustry Commerce Solutions Association (VICS), a nonprofit group that works with member corporations—chiefly in retail and consumer-focused industries—to improve supply chain efficiency and effectiveness. VICS holds regular conferences for members on key themes such as transportation. At one such summit in 2007, VICS president Joe Andraski was horrified to hear how many millions of empty miles one large member company was incurring each year.

Nationwide, the empty-miles problem is huge. According to the National Private Truck Council, roughly 28 percent of the trailers on U.S. highways are running empty, at incalculable cost to companies, the economy, and the environment. This is the case despite decades of emphasis on supply chain optimization, countless releases of sophisticated software to manage complex transportation algorithms, and ongoing efforts to take costs out of truck transportation.

The problem is particularly acute with private trucking fleets, but it hurts carriers too. Says Schneider's Matheys: "As any carrier would do, we've always looked at ways to engineer costs out of our fleets," he says. "We have percentage targets for backhaul, and collaborative-type bid activities to try to make sure we find ways to take out the empty miles."

Macy's Connell puts his finger on the problem. He explains that with his company's core carriers and its core suppliers, it's standard practice to try to pair up to fill as many of their mutual transportation lanes as possible. "We know to do that," he says. "But we would not naturally have good reason to be in touch with a pharmaceuticals company in New Jersey or a food manufacturer in Seattle." That, he says, is what's different about the Empty Miles program. "It allows partnerships to evolve that would not naturally evolve."

Those themes had been in discussion between VICS and its Canadian e-commerce standards partner GS1 CA since the third quarter of 2007. The GS1 group built a pre-prototype for Empty Miles. By early 2008, the topic—and the potential tool—were under review by VICS industry focus groups.

Macy's and Schneider—both longtime VICS members—saw big benefits in an empty-miles solution and became heavily involved in the discussion. The challenge was not a technical one: "Some of this stuff doesn't sound like it's rocket science, and it's not," says Schneider's Matheys. "It was really about working to solve the problem. At the senior management level, we made a commitment that we were going to get this figured out."

The project work crystallized in the form of a Web-based portal contributed to and shared by subscribers. Any supply chain organization could subscribe—VICS member or not. In fact, the more the merrier because the program's success relies on a critical mass of participants to provide more chances of good matches. The objective: Bring

together retailers, manufacturers, and carriers as trading partners to collaborate and mutually benefit from reducing empty miles.

By January 2009, VICS and its GS1 partners had launched the Empty Miles Service. As VICS members, Macy's and Schneider pay \$1,600 a year in fees (non-VICS members pay \$1,850.) As charter members, the retailer and carrier were quick to load their lane data into the system. "There are certain lanes that have density—Chicago to New York, New York to anywhere in the Northeast, Los Angeles to almost anywhere—and many others that are a lot less frequent," says Connell. The two lanes that his transportation managers, working with Schneider, decided were most suitable were New Jersey to Chicago and Ohio to New Jersey.

Macy's and Schneider saw results very quickly. Filling those first two lanes yielded the \$25,000-a-year savings. "The guys in our transportation office and the folks in Steve Matheys' organization felt very good about realizing those wins, even the first two lanes," says Connell. The wins have encouraged Macy's to expand its use of the program. "We've got literally hundreds of lanes posted," says Connell.

Macy's now runs similar collaborations with J.B. Hunt and is piloting programs with smaller carriers. Connell has bigger ideas: "At some point, you could envision using this with our distribution center-to-stores traffic. We'll likely expand it to all modes. It's really a matter of Empty Miles getting big enough," he says.

Schneider notes that the service has helped it eliminate 11 percent of its empty miles and increase its backhaul freight by 22 percent. "We're using the tool to get visibility into opportunity," says Matheys. "Then the job is to start working with shippers to come up with solutions that can be operationalized. The learnings here are about how you can connect multiple shippers in a string," he says.

The carrier is now working with J.C. Penney and other retailers on similar Empty Miles partnerships.

Encouraging long-term arrangements

Load-matching services that match empty trailers with backhaul loads have been offered before by transportation brokers and online freight exchanges. But the VICS service, targeted at companies that have regular deliveries that produce empty miles, is a big step forward in that it is designed to encourage long-term arrangements between companies rather than one-off lane fills.

"We want people to post their routinely empty lanes. It's the lane that's running empty every Tuesday, not just next Tuesday," says Empty Miles program manager Tony Galli.

The program has another important plus-point for those shippers, like Macy's, that are attracted by the potential to improve their sustainability profiles. Empty Miles has been endorsed by the U.S. government through the Environmental Protection Agency's (EPA) SmartWay program.

It's tempting to wonder why a similarly effective program has not emerged before this. There are at least three solid reasons. First, when the empty-miles problem became a top agenda item a year and a half ago, diesel prices were still at gut-wrenching levels. Second, environmental sustainability has become a much more visible issue for corporations. "For some time now, Macy's has had sustainability very high on our list," says Connell. "We've engaged in many different initiatives for sustainability, but Empty Miles has been in the forefront by providing us with tangible results." The tally to date for Macy's: 722 fewer tons of CO2 emissions.

VICS' Galli adds that Empty Miles arguably has more potential to have an impact on companies' sustainability programs than many of their conventional efforts, such as materials recycling. Using EPA-approved data, he has calculated that if you could match one 500-mile lane once a week it would eliminate more than 40 tons of carbon dioxide emissions per year.

The third factor that makes Empty Miles so viable today is that there is far more collaboration among supply chain companies—notably between shippers and carriers. Connell notes that many organizations have seen the huge value of supply chain collaboration. Matheys of Schneider agrees: “In recent years, shippers and carriers alike have become more willing to work together on solutions,” he says. “Today they’re looking for reasons why collaborate should work as opposed to reasons why it won’t.”

To date, Empty Miles has 40 corporations on board—roughly half carrier, half shippers—with household-name participants such as Best Buy, Nestlé, and Johnson & Johnson. But the program has the potential to pull in hundreds, if not thousands more across North America. For all its evident advantages, Empty Miles is no certainty. Critical to its long-term success is wider acceptance—particularly among transportation managers—and a deeper commitment to commit to make Empty Miles work.

According to Galli, the need to commit time and effort to load and maintain yet another logistics system may be a deterrent for some. “Frankly, that’s probably where it’s falling short,” he says. “Who’s that guy in your transportation department who’s got all the time to work on it?” He points out that one early member—Wal-Mart—has dropped out. He believes that Wal-Mart’s move toward more pre-paid shipments is a key reason for its withdrawal.

Galli points out that when promoting Empty Miles, he often gets the most traction with executives in charge of corporate sustainability. That’s a point that resonates with Connell: “One of the things you should be doing when considering Empty Miles is looking at the problem holistically—as more than just about freight miles. You need to be sure you’re driving out waste wherever you see it,” he says.

Connell is optimistic that the Empty Miles program will gather momentum. “It’s one of those things that needs to get some buzz around it,” he says. He reiterates the point about the critical mass that will generate what he describes as a “success spiral.” And he notes that over time, he expects that Macy’s will develop trend-line data for reductions in empty miles that he and the logistics team can use to set new targets for sustainability and cost reductions.

And those factors are good for business—by any measure.

What’s the business impact?

Increased Sustainability: *Macy’s is confident the Empty Miles Service has helped it limit its impact on the environment. The company will establish 2010 targets for reducing carbon emissions.*

Schneider has eliminated 61.65 tons of carbon dioxide, 147.24 tons of particulate matter, and 1.47 tons of nitrous oxide while saving 5,554 gallons of diesel fuel.

Increased Revenue: *Schneider National has increased dedicated backhaul revenue by 25 percent on specific accounts using the Empty Miles Service.*

Decreased Costs: *Schneider has decreased its operating costs by eliminating 11 percent of its empty miles and moving 22 percent more backhaul freight with member shippers.*

Macy's has experienced an increase of 30 backhaul loads per week, or a projected 1,500 loads per year, at competitive rates.

For each initial lane opened, Macy's has reduced annualized transportation costs, on average, by \$25,000.

New Business: *Schneider has been able to increase business with existing customers and develop new customers through the services it offers.*

Greater Customer Satisfaction: *Based on improved capacity optimization, Schneider is able to offer more competitive rates and still offer the service that shippers expect.*

It sounds simple because it is...

If the Empty Miles Service sounds remarkably simple, that's because it is. Here's how it works.

Traditionally, carriers and retailers try to fill backhaul opportunities by manually searching within their own company and through their external network—a process that may take hours and produces limited or no results. With the Empty Miles Service, subscribing carriers or private fleets (called “lane publishers”) log on to the portal to post their empty trucks/trailers and routes, while shippers (“lane subscribers”) can post their transportation needs.

A carrier wishing to post an available lane would log on with a user name and password to the VICS Empty Miles Collaboration Zone portal. Under a “My Power Lanes” tab, the carrier opens up a new page and completes a prescribed template with data ranging from available start and end dates to the zip codes of start and destination locations.

Clicking on tabs such as Vehicle and Driver Profile will invite the user to enter data ranging from trailer length to hazmat status and earliest and latest loading times. When complete, the user clicks “Submit” and the lane is posted, with an easy-to-see color box denoting its status—green for “Open,” yellow for “Under Negotiation,” and red for “Closed.” Status updates—when a lane is being negotiated, for example—must be edited in at that time by the user.

Other sections of the portal allow subscribers to search Power Lanes and create watch lists, and enable them to use alerts when there are lane updates they may be interested in. (Detailed video demonstrations are available at: www.emptymiles.org.)

Entering the lane data does take time and effort. Lanes posted individually must be removed individually; groups of lanes can be mass-edited. “It takes a little bit of sweat equity,” says Empty Miles program manager Tony Galli. The Empty Miles team has also developed a simple way of uploading spreadsheet figures to ease the burden of manually entering data.