The following article was presented as a session during the 2006 VendorNet User's conference.

With fuel prices and interest rates on the rise, multichannel merchants are taking a closer look at how to cut total costs of goods by driving down per unit transportation costs. According to Jose Li, retail and e-commerce industry manager for Memphis, TN-based expedited shipper FedEx, there is a growing trend toward retailer-controlled freight and leveraging freight consolidation both domestically and internationally to drive down per unit transportation costs. From an inbound flow, consolidating shipments from multiple vendors can make sense for some retailers, Li said during the session, "Supply Chain Strategies for 2006 and Beyond" during the Delray Beach, FL-based VendorNet's 2006 Users conference. It can definitely lower per unit transportation costs, but on the down side, it requires careful planning and coordination. Before retailers jump on the freight consolidation bandwagon, they need to analyze the pros and cons and the net financial gain. In the end, they may find it is a mixture of both retailer and vendor-controlled freight that offer the highest payback.

In a vendor-controlled scenario, vendors control how the goods are shipped, as well as the per-unit transportation cost. The transportation bill back to the retailer can take two flavors – it is included in the per-unit cost of goods or billed as a separate line item charge. Retailers looking to take control of inbound freight will want to see the latter. This provides them the leverage to negotiate the per-unit transportation cost with the vendor should it make the most financial sense for the vendor to continue to control shipping. It also gives retailers the visibility to make intelligent decisions regarding alternative shipping methods such as freight consolidation.

Freight consolidation could save 15% in transportation costs, but this savings must be weighed against using staff resources to handle all of the coordination or hiring a transportation company to do the job. Inhouse freight management means planning and coordination at every touch point - the trucking company, the vendors in the supply chain, the distribution center, stores and/or customers so that all parties know exactly what merchandise is being shipped, when it will be picked up, and when it will be delivered to the DC.

It can be worth sacrificing a percentage of the savings to let a third-party company handle the coordination headaches, Li says, particularly for multichannel merchants bringing in a lot of merchandise from overseas. While importing brings greater savings in the cost of goods, there's also a complex and sometimes lengthy (45 to 60 days) import process.

The formal customs process when importing from China and shipping to multiple US locations requires each parcel to clear customs separately. Transportation companies provide an advantage by clearing customs as one shipment regardless of how many separate parcels are in the shipment and the ultimate destinations for the merchandise. For example, FedEx’s Ocean Ground Distribution (OGD) service ships merchandise in ocean containers, and then injects it into its U.S. ground transportation network. Another option is to bring merchandise in by air and then express it to the stores. Merchandise shipped via either method clears customs as one shipment and can be in stores in less than 20 days for ground and two to three days by air. For merchants that want to increase inventory turns, decrease merchandise overhead, and reduce the time-to-market, these transportation services offer a tremendous advantage.

Multichannel merchants are also looking at outbound transportation costs and in particular zone skipping - a concept whereby multiple shipments from a DC are consolidated to create a full truck load (FTL) and then shipped to a single origin that is geographically closer to the ultimate destination. From that point, individual shipments are dispersed via smaller parcel carriers to their final locations.

Consider a merchant whose distribution center is in California because 75% of its merchandise is imported from China. But all of the merchant's stores are on the east coast, mainly concentrated in Florida. To move merchandise to stores in Florida, the merchant is shipping direct to each store and paying per unit transportation costs on each parcel.

To determine if zone skipping is a viable alternative, the merchant evaluates the following:

Density – Is there sufficient volume to support a full truckload?
Timing/service – Can service levels be maintained despite the fact that the shipments may be less frequent?
Technology – Do the shipping carriers have the technology to provide adequate visibility?
Cost - Will FTL pricing lower per unit transportation costs by at least 10%?

If the answer to the above questions is yes, the merchant contracts with Joe’s Trucking Co. to transport a full truckload of merchandise twice per week to Orlando. From Orlando, the merchandise will be shipped via smaller parcel carriers and delivered to stores in Miami, Fort Lauderdale, Tampa, and Naples. From a cost standpoint, a midsize retailer shipping Zone 8 on average to its 60 stores spends approximately $600,000 with an origin-direct (non zone-skipping) transportation method. By zone skipping, it can reduce its average zone to 3.8, and in the process save approximately $65,000, or 11% on transportation costs.

Of course, there are some drawbacks to zone skipping. Many of the trucking companies that zone skip aren’t necessarily sophisticated from a technology standpoint so merchants run the risk of losing visibility to the first leg of the shipment. It is important to communicate any changes with shipping practices both internally among stores, merchants, and customer service and externally well in advance to ensure the stores and/or customers are prepared and have the correct expectations, particularly if visibility is going to be an issue. They will be much more amenable to a change if they know why it is being done especially if it can lower the overall cost of goods. And like freight consolidation, it will likely be a mixture of zone skipping and traditional parcel shipping that yields the lowest cost and highest service.