

10 Ways to Reduce Your Shipping & Warehouse Operational Costs

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CLS provides tier-one multi-carrier shipping software, *InfoShip®/Vx*, and operational solutions to help companies keep shipping costs as low as possible.

We're also pleased to share the handson knowledge we've gained over the past 25 years with our clients to help them achieve a competitive advantage.

Over the past few years, shipping costs have risen rapidly, partly due to increasing carrier delivery costs. Added to that, other factors such as inflation, increased competition for warehouse staff, rising wages, and carrier capacity constraints during peak shipping times that may limit how many packages your primary carrier will pick up – are all making shipping operations a true financial challenge.

With so many factors affecting profitability, companies that do not consistently evaluate their shipping operations may be bleeding money.

This eBook won't solve every shipping problem in the warehouse but is a tool for you and your staff to examine specific areas of your shipping operations to quantify your current level of loss/expense and use the tips included here to reduce these costs.

Costs Hiding in Plain Sight

Carrier provided/negotiated shipping "rates" are essential to the cost equation, but only a part of the total cost of delivery. Following are additional costs that often go overlooked.

Minimum base charge

Price point that a discount starts to apply. A 40% discount with a base charge of \$8.00 only applies to charges above \$8.00, not the entire shipping charge.

Accessorial charges

Fees such as fuel surcharges, COD, dimensional charges, residential or out-of-area deliveries, etc.

Supplies

Boxes, bags, dunnage, tape, bubble wrap, etc.

Labor and staffing

National warehouse average wage is \$20.00 per hour.

Technology

If your warehouse is using older systems, benchmark their performance.

Minimum Base Charge

One big – and costly – misunderstanding surrounds carrier discounts and how they are applied. Many shipping managers say, "We get a 65% discount!" and often think it shaves 65% off the total cost of every shipment.

It doesn't work that way.

The 65% discount only applies to charges over and above your MINIMUM BASE CHARGE, which generally does not include packages within a few pounds and zones.

For example, that means that your discount only applies to shipping charges above your 1 pound/zone 2 rate or your contracted base rate.

So, depending on where your base rate charge begins, your discount may not apply for the first \$5.00 to \$9.00 of a shipment's fee.

Accessorial Charges and Other Additional Fees

In addition to the base freight cost that a carrier is charging you, you're likely getting nailed with accessorial fees, dim weight (vs. physical weight) charges, skyrocketing fuel surcharges, etc.

Here are examples of base accessorial fee charges assessed by FedEx in 2022. UPS and most regional carrier fees are, for the most part, very similar. Your discount may or may not apply to these fees and services.

Surcharge	Applicable services	2022
Address Correction	US Express Package Services, International Express Package Services, International Express Freight Services, US Ground Services, International Ground Service	\$19.50**
Delivery Area Surcharge	US Express Package Services (Residential)	\$5.20*
	US Express Package Services, US Ground Services (Extended Residential)	\$6.50*
	US Express Package Services (Commercial)	\$3.55*
	US Express Package Services (Extended Commercial)	\$4.25*
	FedEx Ground® (Residential)	\$4.80*
	FedEx Ground® (Commercial)	\$3.40*
	FedEx Ground (Extended Commercial)	\$4.10*
	Express Alaska Package Services (Residential, Commercial)	\$34.50*
	Express Hawaii Package Services (Residential, Commercial)	\$11.00*
	Ground Alaska Package Services	\$34.50*
	FedEx Home Delivery® (Residential)	4.80*
Signature Required	US Express Package Services, US Ground Services, International Ground Service	\$7.15*
Adult Signature Required	US Express Package Services, US Ground Services, International Ground Service	\$5.90*
Hazardous Materials	FedEx Ground	\$44.00*
Residential Delivery Charge	US Express Package Services	\$5.30*
	US Ground Services, International Ground Service	\$5.20*
	FedEx Home Delivery	\$4.75*

Source:https://www.fedex.com/content/dam/fedex/us-unitedstates/services/FXE_FXG_Surcharges_and_Fees_2022.pdf

^{*} Per Package ** Per Correction

Labor & Staffing

Free carrier-provided shipping systems require more staffing and are slower and less efficient than a tier-one multi-carrier shipping system, costing your company hundreds to thousands of dollars daily and compounding your staffing problems.

By implementing a fast and efficient multi-carrier shipping system, you'll require fewer people to process your shipments, which lowers your labor costs and reduces the need for replacement staff.

For example, needing 2.5 fewer people than you currently use to run your operations at \$20 per hour with benefits equals an average savings of \$104,000 per year.



Technology

If your warehouse operations are using older, slower systems, make it a priority to review them to benchmark their performance, including data transfer between the WMS, ERP, and shipping system.

Is the shipping system connected in real-time to your host system(s)? If not, you are probably using a "sneaker net" or file transfer process to update shipping data and make order changes.

Managers ask,

"How do I know if I have a slow system?"

The answer is - From the time you scan a barcode or press the SHIP key on your current shipping system, how long does it take to print a shipping label and update your host system?

An excellent total ship time is 3 to 5 seconds and includes printing the shipping label. Every second over 5 seconds costs your company labor money as your staff stands there waiting for a shipping label.

The more shipments you process, the quicker those costs add up. And circling back to the previous point, slow shipping times equals more staff needed to handle your shipping volume.

10 AREAS

to Examine & Potential Solutions

Following are ten areas to examine and potential cost-saving solutions that have proven to save money when implemented in combination with a fast multi-carrier shipping system.

The best part about these savings is that these are all bottom-line dollars, a.k.a. PROFIT. These are dollars you don't have to create from scratch.

While there may be some upfront hardware and software costs to implement these warehouse improvements, they should pay for themselves within the first year, and every year after that is pure profit!



"Free" Shipping for Your Customers Is NOT Free to You

Before Amazon Prime came along, shipping typically was NOT free or speedy. However, to compete with Amazon's shipping programs, many companies began to offer "FREE" shipping.

Unfortunately, most companies never set up a Prime shipping slush fund, and far too many companies have set their free shipping threshold much too low by advertising on their websites that purchases over \$50, \$100, etc., will receive free shipping.

Sending just one box can easily run over \$15, a good example of how setting your threshold for free shipping too low can be a margin killer. Additionally, many companies fail to review the cost of shipping large or irregular items such as coolers, fishing rods, lawn furniture, dog beds, etc. These items often incur high shipping fees or extra surcharges.

A couple of areas to pay attention to:



Stop the tunnel vision on your freight rates and discounts and start focusing on your total average package charge and the 20 to 30% of your total package mix that are costing you big money.



The holy grail of shipping cost savings is item/order consolidation. 95% of companies operate in a "get an order and ship an order" workflow. Most often, if they receive three orders on the same day for the same customer, they ship three separate orders.

If you process B2B orders, ask your customers when they need them. Ship urgent orders immediately and then send consolidated, non-urgent orders out weekly. Rotate the day these orders ship by customer order volume to even out the daily impact on your warehouse operations.



The savings gained from consolidation can be substantial for you and your customers.

#2

Manage All of your Carriers from a Multi-Carrier Shipping System

Multi-carrier shipping software easily allows you to work with your entire range of carriers, such as smaller regional carriers (for example, LaserShip, GLS, LSO, etc.), large carriers (FedEx, UPS, the USPS, etc.), as well as your LTL carriers through one system.

You can then automatically compare all applicable carrier rates and service levels and select the optimal delivery method for each shipment based on many factors, including time in transit, cost, required special handling, customer preference, etc.

For example, packages weighing below 4 or 5 pounds, under one cubic foot, and going to shorter zones should be rate shopped using USPS Priority Mail as an option. If you are an eCommerce shipper and aren't using a postal option, it could cost you far more than you realize.

Select the optimal delivery method for each shipment based on many factors.









Transit Time

Cost

Required Handling

Customer Preference

The USPS shipping rates (commercial or NSA rates) are generally lower for lighter weights and shorter zones because USPS does not charge a fuel surcharge, residential fee, or dimensional rates for packages under one cubic foot.

Most large companies qualify for one of these rates, particularly if they are an eCommerce shipper. The businesses that benefit the most from rate shopping are those that deal with a variety of package sizes and weights daily.

An advantage of the CLS *InfoShip®/Vx* multi-carrier shipping system is that if you receive complaints about a particular carrier's service level in a specific area, you can easily exclude that delivery area from the specific rate shop group you may be using.

Every carrier has problem areas, but not all carriers suffer poor service in the same places. By eliminating these problem zip codes from your selection process, you achieve better overall service at a lower cost.

Combine Your Packing and Shipping Stations

Over 50% of high-volume shippers use separate packing and shipping stations in their warehouses. Much of this is due to a common misconception that free shipping systems provided by the carriers or those third-party shipping systems that are older, slower, and offer fewer multi-carrier shipping options are "paid-off" and have no cost.

The reality is that these systems require far more employees to operate them and may have reduced functionality and/or fewer money-saving features.

The shipping business is a race, and speed wins.

Old, legacy, and carrier-provided systems often incur additional labor costs because they force warehouse operations into using a two-step packing and shipping process. Here's how:

- First, a worker packs an order at a packing station, where packing lists may print, and a license plate label is attached to each box.
- Then, the box must move to a shipping station where the user either manually enters the order/address information or scans a barcode on a license plate label to bring the order into the shipping software, the shipment is processed, and the shipping label(s) are applied.

Old, legacy, and carrier-provided systems often incur additional labor costs because they force warehouse operations into using a two-step packing and shipping process.

Worker #1 produces a license plate label to track a box from the packstation to a ship station so that another worker can print and apply a shipping label. This process is inefficient in so many ways and wastes time, labor, space, hardware, and even consumable resources like label stock. This configuration makes little sense in terms of efficiency. Worker #2 is redundant.

This same redundancy problem also arises in cases where a warehouse's enterprise resource planning (ERP) or warehouse management system (WMS) solution doesn't interface directly with the shipping system in real-time.

When you integrate a multi-carrier shipping system like *InfoShip/Vx* with your ERP or WMS, you can print and apply the shipping labels right at the packing station. This seamless communication between systems will run in the background and populate shipping details into the ERP or WMS screens already used by the staff and eliminates the need for the package to be moved and handled a second time at a separate shipping station.

This method saves additional time and labor because workers aren't spending time switching between ERP, WMS, or shipping screens to do their work to complete each order.

If you were to ask someone working with *InfoShip/Vx* integrated to their WMS or ERP, they would probably tell you shipping happens within the ERP or WMS system they are packing in (it is so seamless).

The most significant savings to be gained by combining your packing and shipping stations into one workstation are:

- Faster shipment processing
- A substantial reduction in labor and labor costs.

As order volume grows, you add additional combined pack/ship stations, which require less space, hardware, and staff to accomplish the same tasks than if they were completed at separate stations.

Rate Shop Between Carriers

Rate Shopping between carriers is one of the top ways to reduce shipping costs. I'm always surprised by the number of companies that don't take advantage of this cost saving tool. Instead, the vast majority leverage one primary carrier, such as UPS or FedEx, and send most packages through that preferred carrier.

This approach is based on the mistaken belief, "The more we ship with an individual carrier, the higher our discount will be." Sadly, this isn't always the case. Often, lightweight or local-zone packages, i.e., those with delivery addresses close to the shipping origin, can negatively affect your overall discount.

The carriers heavily base your discount structure on your average revenue per package. Lighter, shorter zone packages can negatively impact that average number because they aren't as profitable to the carriers.

Shifting these lighter-weight packages to the USPS could improve your primary carrier discounts and increase overall savings. It reduces the burden of lightweight or low-zone packages to your primary carrier, and you'll also receive a better rate for them from the USPS.

Using a carrier-provided shipping system limits you to the services and delivery commitments they offer. This single carrier system puts all your eggs in one basket. As a result, you may be limiting your options related to delivery areas, service choices, and



Don't put all of your eggs in one basket by using a single carrier system. Instead, use a multi-carrier system to automatically divert additional volume to other carriers.





extended delivery commitment times – all of which can negatively impact meeting the overall needs of your customers.

One great example that has significantly affected eCommerce shippers over the past few years is the seasonal pick-up limits imposed by UPS and FedEx.

A multi-carrier system such as *InfoShip/Vx* can be configured to automatically tally the total packages being processed for shipment via a specific carrier. Once a particular carrier's pick-up limit is reached, it can automatically divert additional volume to other carriers or your own trucks for local deliveries.

#5

Increase Your Standardized Packaging Options

Packaging material costs represent another overlooked line item of overall shipping costs. It's more important than ever to consider the impact of packaging decisions on your shipping budget. However, in many shipping operations, box size options are rarely audited or analyzed in terms of space utilization.

The smallest box (or bag) and dunnage adequate to protect the contents should always be used. Too often, companies are paying extra to ship empty space. Shipping orders in larger-than-necessary boxes was a non-issue in the past when the larger carriers calculated freight rates based on weight only.

However, as more carriers now consider both a shipment's physical and dimensional weight and select the higher of the two rates, using the wrong size box has become very expensive.

For example, suppose you force a packer to use a larger container than the items necessitate. In that case, the carrier may assess a higher rate due to the increased dimensions, and you will likely incur additional costs for the extra dunnage needed to protect the box's contents.

If the items are loose in the box, they could shift and move while in transit, resulting in damaged deliveries and the cost of returns/reshipment.

When CLS performs an operation and shipping system audit for clients as part of our ROI analysis, we find that many shippers are packing over one-third of their orders into larger-than-necessary boxes.

Choose the right size package, don't pay extra to ship empty space.

Consider Cartonization Software

If your fulfillment operations ships orders in various package sizes, consider adding cartonization software to evaluate the order contents and select the optimal package size for each order.

Cartonization software eliminates the need for staff to guess which box is best each time, ensuring the smallest packaging and lowest rate for every shipment.

For example, consider a 12" x 12" x 12" box. A one-square foot box is 1,728 cubic inches which dimensionally weighs out to a 13-pound package. Using a standard dim factor, if you fill a 13-pound DIM-rated box with only 7 pounds of product, you're potentially paying approximately \$5 more to ship that box than you need to.

Cartonization and dimensional weight calculators on many WMS systems also provide insight into the best standards for your needs. Otherwise, third-party cartonization software packages are also available.

Why It's Important to Expand Packaging Sizes

Shippers may need to work with their box vendors to provide a more extensive selection of box sizes than was necessary with weight-based shipping alone. Look at your average order size and order a range of boxes to match.

Include three to five box sizes larger and three to five packaging sizes smaller than your average order size to handle outlier packages. Also, paying a bit more for the packaging needed to fit your "outlier" items properly could equate to several times that amount in shipping cost savings.

Two under-used packaging types to help further reduce shipping costs are cardboard/padded envelopes and polybags. A little-known fact is that the US Postal Service provides free boxes, envelopes, and polybags for orders shipped via many of its services, saving you an additional 25 to 75 cents per package.

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Address Accuracy

Address corrections can be costly. In 2022, UPS raised its address correction charge to \$18.00 per package for domestic and international shipments, with a maximum of \$126.00 per shipment for domestic UPS Ground with freight pricing.

Many warehouses ship packages without validating addresses and end up with 20, 30, or more address correction charges per week. Those 20+ incorrect addresses per week result in an additional and unnecessary expense of more than \$18,000 per year!

Minimize Errors with Member Numbers

By assigning your customers a member number, or username, along with an associated address book as part of your website, you can reduce the percentage of address corrections you'll have each year. By fixing and controlling these addresses at the order level, you will significantly reduce your address correction percentage and costs in this area.

If you are an eCommerce shipper and haven't already, consider creating an accessible signin page with perks for your members. When the member signs in with a member login or number, their address is automatically pulled from your system's address book.

This eliminates the risk of the customer potentially entering an incorrect address each time they place an order. The system can also update previous invalid addresses to reduce address correction costs moving forward.

Address Validation Software

Even if a customer provides their shipping address, it may still be in an incorrect format according to the carrier address databases, which may result in address correction fees. Many companies offer address validation software.

We recommend that address validation software be implemented at the point of order entry and not at the time of shipment processing. It is far more efficient to have the address validation software prompt the user for correct address data when the order is placed rather than detecting an incorrect address downstream during shipping and possibly resulting in spending hours or even days on getting the corrected address from your customer.

Performing address validation at shipment processing slows down shipping and often requires setting aside the shipment until the customer service staff verifies the address with the customer.

Most address validation software offer address choices if the current address can't be validated. Rarely does your shipping person know the correct address and instead takes a guess to move the package along, creating a new address correction or worse, a delivery error.

Keep a close eye on your carrier invoices, and you will be able to identify how costly address corrections can be and then take the needed steps to correct them.

#7

Invest in a Quality Warehouse Management System (WMS)

A robust warehouse management system (WMS) has become a requirement in most large and complex warehouse operations. Companies operating without a WMS system are probably spending more time and money responding to and correcting warehouse-related problems that would be eliminated with good WMS software.

It is crucial to have any software vendor you're considering provide an ROI analysis based on your operations to determine the actual savings you can realistically derive from such process changes or investments.



Ongoing staff training is also necessary to promote a cost-effective and efficient warehouse. Ensuring that all workers know their jobs, are regularly trained on new rules and requirements, and follow box-utilization rules can significantly impact your bottom line.

Effective Management Practices

The management team responsible for the overall operation of the warehouse is an essential piece of the efficiency puzzle. Often those in upper management are not closely involved with the warehouse staff or can't spend much time on the floor. It's challenging to ensure you're running an efficient operation when management is not directly involved in day-to-day activities.

Too often, if only by default, the floor employees end up running the warehouse. Yet, in most efficient warehouse operations, you'll find that the management staff regularly engages with the floor employees to provide training, set goals, and offer helpful guidance and feedback.

As carrier rules like dimensional rating, rate increases, new surcharges occur, and your business practices change, you must retrain employees on the new changes in procedures.

Have you heard your warehouse operations staff say, "We've always done it that way," or "No one told me!" These are two of the costliest statements in any discussion of warehouse procedures and should alert you to additional underlying warehouse issues.

Measure and Improve

You cannot improve shipping efficiency without data. The key performance indicators (KPIs) to measure are specific to how you ship.

Keep in mind that there are 15 to 20 ways to ship a package, ranging from the older and previously mentioned separate packing and shipping stations, Blackbox shipping, pre-manifesting, pre-labeling, pack-and-hold, print-and-apply, and many others.

Once you have selected the proper methodology for your operations, you can set up and track the metrics associated with that option. Your go-to shipping expert should guide you in your methodology selection.

Reduce Warehouse Turnover

The average warehouse worker in the US makes roughly \$20 per hour. During a period of average labor availability, every time an employee leaves, a company can expect to incur an additional cost equal to 25% of that person's annual wages to hire, train and replace them. That percentage can be even higher in today's tight labor market, as companies are pressed to pay higher wages, sign-on bonuses, and increased benefits.

Is your company's compensation package commensurate with current market rates? If not, you could be experiencing a higher-than-average turnover, costing your company more money over the long term than if you had chosen to provide competitive offerings to your workers.

Some companies not offering reasonable pay will ultimately find that turnover, retraining, and rookie mistakes will cost more than providing a reasonable pay package to retain quality seasoned employees.

In most companies, unexpected absenteeism averages about 2% per year. Having 20 warehouse employees means 104 days missed (20 employees x 260 days/year x 2%). In that case, it's hard to run a warehouse if your essential staff is unexpectedly out more than 100 times a year. This obstacle is just another reason for hiring good people, and paying them well. Doing so, along with upper management's encouragement and support for your warehouse team, can have a big payoff.

#8

Organize Your Warehouse Efficiently

Many warehouse managers add staff to keep up with growing order volumes because the design and organization of the building prevent the team from working in the most efficient workflows possible. When was the last time you audited your warehouse to assess the efficiency of the travel paths followed by workers picking, packing, and shipping orders?

If it has been a while since your business implemented any process improvements, consider working with a warehouse industrial engineer to analyze your processes and the layout of your warehouse.

This analysis may take a couple of weeks to several months and typically develops a plan that can save you as much as ten times their fee. The most important expertise to look for when engaging a consultant is their ability to understand workflows in warehouse operations.

For most companies, it is not unusual for 70% of order items to come from 30% of its products or SKU mix. Picking efficiency can significantly improve when highmoving items are kept in a relatively concentrated area, close to your pack-and-ship stations. Pick times will accelerate, reducing labor costs.

Pallet racking, conveyor systems, and other warehouse automation equipment can also increase overall efficiency and reduce your warehouse operating costs. It's easier to store your products and maximize your vertical space usage. Racking is sturdy, strong, and improves safety.

If your products are not suitable for pallet racks, wire containers may be another alternative and offer many of the same advantages. Well-designed conveyor systems are worth their weight in gold. They reduce labor time by quickly moving products through the warehouse.

#9

Automate and Integrate for Real-Time Communication

A number of warehouse systems in use today still rely on file transfers, first introduced in the 1980s, to communicate with other systems. This method can be slow, less effective, less robust, and require more overhead than solutions that communicate in real-time.

In contrast, a fully integrated solution communicates in real-time between its systems. The information flows back and forth, sending package/order updates as needed. Suppose a client needs a package updated to an expedited option, and the service is updated in the host system.

In that case, it will seamlessly transmit to the shipping system when the order is shipped, and the workers don't even know any changes occurred. Integrating your shipping system directly with your host WMS, ERP, and other host systems will maximize your ROI.

#10

Bring in a Shipping Expert

If you are not a shipping expert, hire one or consult with your shipping system vendor to help you better understand what's going on in the shipping and logistics marketplace.

Higher-volume shippers are companies that spend over \$5 million a year in transportation and logistics costs. It may be easy to assume they benefit most from these best practices, but the savings can quickly add up to substantial amounts for smaller shippers as well.

Even if your company spends half that much, a 5% savings gained by implementing these practices equates to an annual bottom-line cost savings of \$100,000 or more.

At Creative Logistics Solutions (CLS), our typical warehouse analysis projects and shipping automation recommendations save our clients between \$250,000 and \$1,000,000 in savings over five years.

Our clients view CLS as their third-party logistics IT group that works alongside them. Some of the technical and operational questions we receive are:

- What are better domestic shipping methods than the ones we're currently utilizing?
- Which smaller/regional carriers or carrier consolidation services (ex., UPS Trade Direct, FedEx IPD, etc.) should we work with, based on our customer profiles?
- Would zone skipping be effective for us?

And many more. Any shipping expert you hire should keep you updated on changes in the industry, so you can continually update your operations.

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Conclusion

Opportunities for savings abound in the warehouse when you know where to look. An ample opportunity to find these is to ensure that you have a shipping solution that solves your specific shipping needs.

CLS doesn't charge a penny to go anywhere in the US to review warehouse and shipping operations for any company shipping 2,500 packages or more daily. If we can't find enough ROI through improving shipping efficiency to make you want to work with us, it costs you nothing. When you consider the money you could be losing from inefficient shipping practices and other logistics-centered problems, it could be well worth your time for a two-hour visit.

Want to learn additional ways to decrease your organization's shipping and warehouse operation costs? Contact CLS to discuss more methods to transform your logistics and supply chain processes with multi-carrier shipping software. Together, let's make shipping your organization's strategic advantage.

CLS is happy to provide over 100 client references attesting to our success at improving warehouse/logistics operations.

About the Author

Rick Williams, President and Chief Executive Officer of Creative Logistics Solutions (CLS), has more than 40 years of experience in B2B, B2C, and eCommerce shipping and supply chain operations. He held positions of responsibility at UPS and RPS (now integrated into FedEx Ground), TanData Corporation (now ConnectShip – a UPS Company), and founded CLS in 1995. He has had the pleasure of working with many of the top 50 shippers in the U.S. These include Avnet Electronics, Deckers Outdoor, Dollar Shave Club, Lands' End, Luxottica (parent company of brands such as Oakley and RayBan), Guitar Center/Musician's Friend, and Volvo of North America, just to name a few.

Rick and the CLS team develop, install, and support *InfoShip/Vx*, a high-volume multi-carrier shipping software package. With that in mind, typically, Rick's first task with any potential client is to find the ROI necessary to justify the purchase of *InfoShip/Vx*. Without giving away all his money-saving secrets, we asked him what areas every shipping operation can look at to help them save time and money in these highly competitive times. This eBook was his response to our questions.

Together, let's make shipping your organization's strategic advantage.



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