20 Strategies to
Reduce Fleet Operating Costs

Introduction

Chances are you're paying more than you should to operate your delivery fleet.

But how much more? Based on our thousands of route optimization audits over the last 30 years, we've found that fleets drive anywhere between 10–30% more miles than needed. Using a fully loaded cost per mile of $2.80 **(National Private Fleet Council)**, you can calculate the impact of that savings range on your own operation.

In this guide, we'll share 20 proven strategies to reduce your fleet operating costs. These ideas speak to how you manage routes, vehicles, people and your overall distribution strategy.

Spoiler alert: many of the suggested strategies assume the use of route optimization software. If you continue to plan routes using spreadsheets or rudimentary routing tools, your ability to achieve meaningful cost savings will be limited.

Inefficient delivery fleets cause escalating costs that low-margin distribution companies can't afford. Use these cost-saving ideas to make a material difference in your company's bottom line.

Route Management

Any reduction in fleet operating costs starts at the foundational level of route management. If you execute routes using less time and fewer miles, you can reduce daily fuel and maintenance costs right away. Over time, you could even reduce the size of your fleet and driver force.

1. Change delivery times and frequency to create more efficient routes

Too many fleet operators mistakenly assume customers are locked into a specific delivery cadence. But there are many situations where, for example, a customer receiving six pallets three times a week would be fine with receiving nine pallets twice a week. You don't know unless you ask. The fewer constraints you place on the routing algorithm, the more optimized and efficient the routes will be.

As the fleet manager at one of our food distribution customers recently said, "The routing algorithm has no role to play if you give it the answer."

2. Compare planned vs. actual route performance

A surprising number of distribution companies invest in creating optimal route plans but never check to see if drivers follow them. Routing software with a live planning function allows you to take the data from your existing telematics/electronic logging device (ELD) device and incorporate it into your routing software, making it easy to compare your planned routes with those driven. This planned-versus-actual comparison inevitably leads to economical plan adjustments.

Let's say your current approach to scheduling involves assigning an average stop time per delivery. If you assume a 20-minute stop for each of 18 deliveries but learn that the actual average stop time is 15 minutes, you can adjust the algorithm accordingly. That 90 additional minutes of drive time can add two deliveries per route—or 60 extra deliveries daily across a 30-truck fleet.

These adjustments may look small, but they can lead to six-figure savings.

3. Improve the precision of delivery locations

When drivers struggle to find the exact location for a delivery, they burn additional fuel. They also lose time, putting subsequent deliveries in jeopardy. If you make many urban deliveries, it may be worth investing in street-level maps available through more advanced route planning software. Entry-level maps, which include all residential streets and minor roads, are fine for most routing requirements. But street-level maps use actual address information and geo-fencing to pinpoint exact delivery locations. Once drivers determine the best way to access the delivery point, this information should be entered into the route planning system to optimize future routes.

For any trip, the best time to understand exactly where you're going is before you depart.

4. Centralize route planning for multiple distribution centers

If you've got two or more distribution centers (DCs), you'll still only want one routing plan. It should identify which DC can fulfill customer orders quicker and at the lowest cost. Unfortunately, the logic behind many basic routing software packages requires a separate plan for each location. For companies planning without the benefit of advanced routing software, it means not only producing multiple plans but having at least one transportation planner at each location.

Without centralized planning:

> Your trucks will drive more miles, creating the eventual need for more trucks and drivers.

> You'll pay planners to examine and adapt routes for obvious inefficiencies. (Why is DC 1 delivering to a location within one mile of DC 2?)

Centralized planning doesn't mean removing all local input into the route. The system should be flexible enough to allow final changes to be made by local operations. But creating the most efficient distribution operation must start with a holistic view of route planning across your entire market. One you can't get without advanced route planning software.

5. Deliver on-time within precise windows

On the surface, this sounds more like a customer service benefit than a cost benefit. But staying on schedule can trim costs in subtle yet powerful ways. Drivers who are late often sit idling, burning costly fuel until the customer is ready to receive the delivery. At large retail DCs, the receiving manager might give your delivery slot to someone else and hold you up for hours until a dock door opens up, jeopardizing all subsequent deliveries. If you haven't alerted the customer that you're running late, that will increase customer service call volumes—at a cost to you of **$7 to $13 a call**.

Ultimately, on-time delivery helps you hold on to profitable customers for many years. When you consistently deliver within tight time windows, customers operate more efficiently. They can precisely schedule labor to offload trucks and even decrease inventory by ordering on a more just-in-time basis. These benefits improve their own bottom lines—so they're more likely to stick around for the long term and improve yours.

6. Drop off heavy items first

Let's say you're climbing a mile-long hill carrying a 20-pound, a 10-pound and two 5-pound weights, and you have the option to drop one of those weights at quarter-mile intervals during the climb. The 20-pound weight would be the first to go, right?

A similar scenario plays out every day with each of your delivery vehicles. But unloading heavier items first is not always factored into the route plan.

Lighter trailers use less fuel and CO2. Route optimization software can use product weight data to sequence routes to offload heavy items first, when possible. Our own studies have shown this advanced functionality can reduce fuel consumption by 2.3%. For a 25-truck fleet, this could equate to annual savings of over $70,000.

Not bad for a few extra seconds of planning time.

7. Get rid of old route planning tools

This was one of the recommendations from an Aptean survey that asked 25 super-users of routing software how to get the most value from the software. The transportation manager at a large global distributor of food to quick-serve restaurants summed it up:

"After you implement an advanced routing solution, you need to make a clean break with your old processes. If you have software that previously was used to aid route planning, get it off your server, get it off your computers. People tend to resist change, and you want to eliminate the option to revert to prior processes."

Change is hard. But being tied to inefficient, old-school route planning methods is harder.

Vehicle Management

As a fleet operator, you need to ensure you have the freight capacity to handle customers' order volumes. But in doing so, you also need to think hard about asset utilization. After all, equipment represents one of your biggest cost buckets.

When you successfully maximize the utilization of existing trucks and drivers, you can deliver a significant boost to the bottom line.

8. Put more products in trailers

Just one new tractor/trailer combo costs about **$160,000**. So it pays to maximize utilization of these assets. The more intelligently your trailers are loaded, the fewer trucks you'll need.

With basic routing tools, you can monitor trailer capacity, but you'll likely be limited to a single measure, like weight. If the tool falsely signals that you're maxed out on weight when the trailer is half full, you're running more vehicles than needed. Advanced routing software can examine multiple parameters—like cube, weight, boxes and pallets—and automatically manage the right combination of these measures across the fleet.

When a 50-truck food distribution business in the Southeastern US automated route planning, the company saved $2.5 million a year, primarily because it now delivers the same number of orders with ten fewer trucks. Its routing software helped the company load trailers more efficiently, increasing its pallets per trailer by 25% over the last five years.

Since certain supermarkets began charging for bags, people without their own bags are packing groceries more carefully—to save 10 cents a bag! Shouldn't you be doing the same thing with your $50,000 trailers?

9. Assign the right vehicle

Chances are your delivery fleet consists of a mix of vehicle types—from big rigs to box trucks—covering a range of customers and route profiles. Likewise, drivers are not interchangeable. Some may lack the certification to drive a tractor-trailer, while others may not have enough available hours of service to be assigned longer routes.

The question is: how are you ensuring that deliveries are allocated to the most suitable trucks and drivers? If you use a manual process, you're almost certainly under-utilizing your assets and increasing fleet operating costs.

When assigning vehicles and drivers to routes, you must consider product size, weight, temperature requirements, customer delivery requirements, driver skill sets — plus a host of other variables. It's simply not possible to do this effectively and efficiently in a manual route planning environment. Routing software, on the other hand, has algorithms that parse through these variables in seconds.

To match the right truck and driver to the right route, let the software do the math while you count the savings.

10. Reduce the need for contracted carriers

The use of outside contracted carriers can help deal with unexpected delivery volumes. But poor vehicle utilization can lead to costly overuse of outside freight capacity.

A national temperature-controlled LTL carrier runs a fleet of more than 1,000 trucks, including 150 line-haul trucks that move products between its service centers across the US. Because it had poor visibility into when trucks were departing and returning to service centers, the carrier increasingly found itself subcontracting to other carriers to fill the gap when it did not have trucks positioned correctly. After investing in route planning software to manage this complex, nationwide operation, the carrier reduced its weekly brokered loads by 90%. Together with other benefits of automated route planning, the company saved $400,000 per month.

There's nothing wrong with outsourcing some freight capacity—unless you're wasting the capacity you already have.

11. Downsize your fleet

To a certain extent, fleet downsizing is less a strategy and more a natural result of some of the efficiency-enhancing ideas we've mentioned. But it still requires action, and some fleet operators are hesitant to thin out fleets for fear they won't have the capacity to meet delivery volume surges. This hesitation can cost you big money. Based on NPTC's cost-per-truck-mile data, if one of your trucks drove 60,000 miles last year, you'd have spent $168,000 just to keep that truck on the road.

Route automation allowed a **large produce processer in the Southeastern US** to reduce its truck fleet from 60 to 50 while improving on-time performance for its time-critical, perishable deliveries. The average number of routes driven by one of the company's trucks went from 75 to 110 per week. Ultimately, the company reduced its cost-per-case by 20%, for a yearly savings of $2.5 million—with fleet size reduction being the primary savings driver.

You've got to trust what the data tells you about the optimal fleet size. You can't afford not to.

People Management

For fleet operators, people costs are undoubtedly your biggest expense. To control costs, you need to maximize the utilization of your staff—particularly drivers.

12. Redeploy route planners

Automated route planning replaces manual calculations with smart algorithms, reducing planning time from hours to minutes. Route planners earn an average compensation package, including benefits, of close to **$80,000** — and even higher for long-tenured associates. Why not let computers do the number crunching and leverage the wisdom of these experienced transportation professionals to address more strategic priorities?

One large home improvement retailer was dispatching trucks from 80 stores using part-time route planners at each location. After the company automated and centralized planning, all planning work was handled by two people, and all part-time local planners were redeployed to more strategic tasks.

For a carpet cleaning service in the Midwest with 25 vans doing 200 jobs daily, automated route planning allowed the company to redeploy a planner into another role. That gave the company an ROI of less than a year on its routing software investment.

Let software solve your routing-related math problems. In doing so, utilize your team's other skill sets to turn your distribution operation into a competitive advantage.

13. Create fair and accurate routes to increase driver retention

Replacing an unhappy driver can cost your business up to **$15,000** in recruiting and missed opportunity costs. It pays to invest in technology that creates routes and schedules that are both fair and achievable. Fair means all drivers are equally likely to be assigned the best routes. Achievable means a 9-hour shift doesn't become an 11-hour shift because planners failed to account for rush-hour traffic or other predictable delays.

The right routing software can also automatically incorporate driver preferences—like the need to end a particular driver's shift early on Thursdays for a personal obligation. And it can eliminate driver anxiety over HoS violations by assigning only DOT-compliant routes.

Drivers don't complain, they just leave. Leverage technology to keep them happy with fair, achievable and predictable routes.

14. Do more multi-trip driver shifts

What happens if one of your drivers finishes a delivery route in six hours and has another four hours available in his shift? He returns to the warehouse and does another trip, right?

Well, not necessarily.

Routing software with more simplistic algorithms can't handle this planning nuance. Multi-trip shifts (sometimes called double-or triple-dispatch) make sense when you have lots of deliveries in a very concentrated area or when trailer space and weight limits only allow a partial day's deliveries.

Without multi-trip shifts, drivers can decide if they want to work at a pace that allows the extra trip. Many won't since, as salaried workers earning an average of $70,000 per year (NPTC), they are not incentivized to do so.

With multi-trip shifts, you might be able to schedule eight drivers at 10 hours a day versus 10 drivers at eight hours a day. For some businesses, the strategy could easily produce savings of $100,000 or more.

15. Improve resource management to avoid compliance fines

More advanced route planning software includes resource management functionality, which collates up-to-date information on drivers' in-service hours worked—captured through a direct feed from in-cab telematics/ELD devices. With it, you can automatically produce a fully resourced, DOT-compliant schedule.

Keep Truckin reports that the average fine for exceeding the 14-hour limit for consecutive driving is $7,322. Exceeding weekly drive-time HoS limits has triggered penalties as high as $21,780.

Your route plans may already consider customer delivery requirements, average road speeds, stop times per delivery location, and dozens of other factors. Don't ignore what is arguably the most critical component of all—driver availability.

16. Improve driver debriefs

Optimized route plans can reduce fleet operating costs by 10–30%. But if drivers don't follow these plans, they're worthless. That's why it's so important to integrate routing software with your telematics data. It allows you to record a driver's every move, from the moment the truck passes a virtual fence around your DC to the point of return.

In the past, asking a driver why the route took longer than expected might have elicited a vague response like, "there was construction on the highway." It's hard to take action to avoid that the next time around. But now, you can sit together while looking at step-by-step comparisons between the planned and actual routes and ask, *"Why did you make this unscheduled stop at 11:30?"* or, *"Why did you alter the delivery sequence?".*

Good driver debriefs should not only trigger changes to driver behavior, but to route plans as well. For instance, if a customer stop scheduled for 10 minutes now regularly takes 30 minutes, it's time to update the planning system.

17. Publish driver performance metrics

According to **Zendrive**, 5% of your fleet operating costs are influenced by driver behavior:

❯ Harsh acceleration, speeding and idling increase fuel costs—your largest variable expense

❯ Harsh braking and hard cornering increase maintenance costs

❯ Accidents—which can cost your company anywhere from $74,000 to $500,000, according to **DriveSafeOnline**

Once you create a feed from your telematics system to your routing software, you have a single view of the truth for all planned vs. actual route data, including records of all occasions when drivers exhibit poor habits. Suppose you publish driver performance scorecards in break rooms and other common areas. It could create competition among drivers to stay near the top of the rankings—and avoid being on the bottom.

Some cost-saving strategies for delivery fleets rely as much on psychology as technology. This is one of them.

Current

What If?

Distribution Strategy

Your most significant cost-savings will be associated with strategic changes related to your overall distribution operation. But you'll need the right technology to unleash this savings potential.

18. Change the number or locations of distribution centers

What if you quit your job and started a new business? Would it succeed?

What if you bet $10,000 on the long shot to win the Kentucky Derby? Would you win?

For so many "what if" questions, you have to take action to learn the results. But the same isn't true for distribution strategies.

Advanced route planning software has business modeling capabilities that allow you to play out different strategic options without spending a dime. Smart algorithms use your own delivery data to determine, in advance, the precise cost and service implications. You might want to explore adding a DC to reduce delivery times. Or consider swapping out your DC for a new warehouse that just became available in your region.

One Midwest distributor found that it could reduce fleet miles 57% and drive time 38% by adding satellite DCs in Cincinnati and St. Louis. Implementing the change resulted in annual savings of $1.5 million (see before and after diagrams output from route planning software).

The critical but mundane aspects of running an efficient delivery operation will always be there. But distributors seeking breakthrough improvements should use proven technology to explore strategies that yield transformative gains, not just incremental ones.
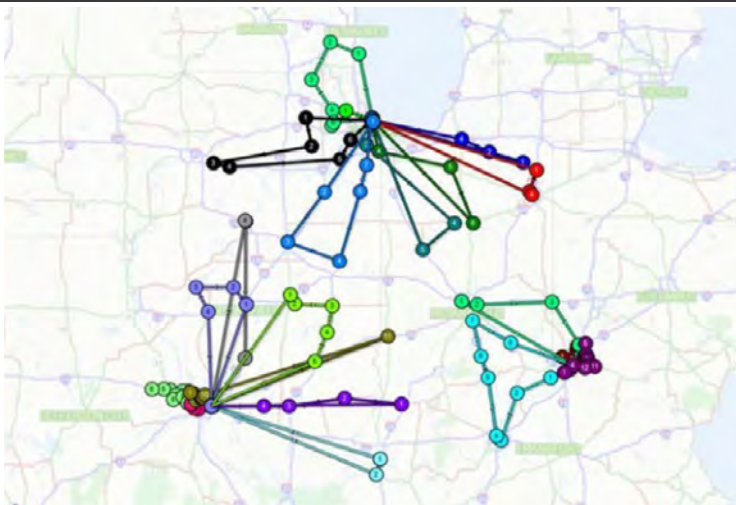
19. Change the make-up of your fleet

The benefits of business modeling also extend to choices about the types of trucks you invest in.

Southeastern Food Merchandisers leveraged its software's strategic analysis capabilities to assess the impact of replacing some of its semi-trailers with lower-cost straight trucks. According to the company's director of operations, "We learned from the software that it was much more economical to introduce some smaller trucks and run multiple shifts."

The most efficient carpenters use the exact right tool for the job. The most efficient distribution operations use the right vehicles for their routes and the mix of products they haul.

20. Know your cost to serve

Margins are thin in the distribution business, particularly for lower-cost commodities like food. Delivery costs must be closely monitored to avoid over-servicing customers. Still, it happens all the time.

Why?

Because distributors lack the technology to accurately account for all the variables that impact delivery costs for a new customer. Things like average delivery size, locations of all new delivery points and how these stops fit with the existing schedule. As a result, the price is based on an educated guess about costs. Meanwhile, margins silently erode without an obvious cause. Routing software can turn this guessing game into a precise and accurate cost assessment.

To compute the cost to serve, you would simply add new stops into your existing route schedule. Say your current operation involves 50 trucks running 20,000 miles a week with 60 driver shifts. The software shows that adding the new business will expand that need to 70 drivers running 25,000 miles a week with 75 driver shifts. The sales team can then share this objective data with the customer to negotiate a fair price. Likewise, if customers request more customized delivery schedules that increase operating costs, salespeople should share with customers the cost implications of these requests.

If you want to improve profit through more efficient delivery operations, you must know your cost to serve.

Are profits hiding in your fleet operation?

Your fleet operation holds the key to enhanced profit. But the source of those savings is not always obvious. You've got to find it.

That's not always easy in a manual route planning environment where chaos is commonplace. Where, every day, transportation planners and dispatchers scramble to manage emergency orders, driver call-outs, truck breakdowns, trailer loading, customer complaints, and driver assignments—all in a race to get dozens, or even hundreds, of drivers and deliveries out the door on time.

The right route planning and scheduling software can help you tame this chaos by parsing through millions of possible route combinations to create the most efficient routes possible. Simply, it shows you how to do more with less. You'll reduce miles, equipment and labor costs.

The results can be transformative, regardless of the size of your fleet. Here are a few cases to show how:

❯ After automating route planning, Toronto-based caterer **Marigolds and Onions** began saving **$3,000–$5,000 in fuel and $15,000 in labor** every month for its 10-van fleet.

❯ Dallas-based food distributor **Nogales Produce** **cut fleet costs 15%** for its 62-truck fleet after it went from manual to software-aided route planning.

❯ **In the United Arab Emirates, the AKI Group** leveraged routing software to increase average deliveries for its 80-vehicle fleet by 164%, helping **save more than $1 million annually**.

❯ **AAH Pharmaceuticals** automated routing of 600 trucks to **reduce fleet operating costs by over $1 million** while improving service levels.

❯ For a fleet of 1,400 trucks, leading global retailer **Tesco** used routing software to **reduce weekly miles by 150,000**.

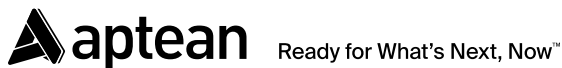What kind of savings potential is hidden in your fleet operation?

Are you Ready to
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