



**Local Line**

CHAPTER 5

# Logistics

# Fulfillment

Let's talk logistics! Logistics doesn't have to be confusing. This chapter outlines how to calculate delivery costs, set a delivery fee, and optimize your delivery routes. We also investigate the logistics models you may use in your business, including 3PLs and 4PLs. Finally, we provide a case for aggregating your fulfillment with your community and what that could look like for you.

## Setting fulfillment expectations

Different buyers will have different requirements and expectations for your fulfillment, whether that's delivery once or twice a week or once or twice a month! When you've decided which buyers you want to work with, the next step is determining whether you can fulfill their expectations. Is your frequency enough? Do you meet their preferences? Do you have the proper certifications or documentation they require?

At the same time, you also need to define what you can offer. What is your current delivery capacity? Do you do your own delivery or work with a third party? When can you offer delivery? How often? If not, what investment is needed? Is this feasible?

## Calculating delivery costs

If you're doing delivery in-house, you must calculate the costs.

### Step 1: Determine time on the road

Calculate how many hours the vehicle is on the road.

For example, on a delivery day, the truck is on the road for **6 hours**, and deliveries are made on *Mondays, Thursdays, and Saturdays* (three times a week).

### Step 2: Cost of driver

This depends on your specific driver's cost, whether you are personally or a third party. For this example, let's say the cost of the driver is **\$30/hour**.

### Step 3: Cost of gas

The best way to determine the cost of gas is to fill up the vehicle fully with gas at the beginning of a delivery day, note the cost, and at the end of the day, calculate the cost of the gas used for that day. For example, the total cost to fill up the vehicle was **\$100**. At the end of the day,  $\frac{3}{4}$  of the tank had been used; therefore, the cost of the fuel used was **\$75** ( $\$100 \times 75\% = \$75$ ). The vehicle was on the road for **6 hours**. Gas per hour would cost **\$12.50** ( $\$75/6 \text{ hours} = \$12.50$ ).

**Note:** this is an approximation of the cost of gas and may vary based on traffic or route changes.

### Step 4: Determine hourly insurance cost

What is your annual insurance cost? Divide that number by **12 months** to determine the monthly cost. To determine the hourly cost, divide the monthly insurance cost by the number of hours driven in a month.

For example, let's say the annual insurance cost is **\$3000**. The monthly insurance cost would be **\$250** ( $\$3000/12 \text{ months} = \$250$ ). The number of hours driven in a month for this vehicle is **72 hours** ( $3 \text{ days/week} \times 4 \text{ weeks} = 12 \text{ days a month}; 12 \text{ days} \times 6 \text{ hours} = 72 \text{ hours/month}$ ).

The hourly rate for insurance would be **\$3.47** ( $\$250/\text{month} / 72 \text{ hours/month} = \$3.47$ ).

### Step 5: Determine the hourly cost of depreciation

Determine the percent of depreciation per year for your vehicle. We recommend applying at least a **15%** depreciation on the value of a vehicle per year; however, it can depend on each case.

To determine *annual* depreciation value, multiply the value of your vehicle if you were to sell it today by the annual depreciation percentage. To determine *monthly* depreciation, divide the annual depreciation by **12 months**. Divide the *monthly* depreciation by the hours driven each month to determine hourly depreciation.

For our example, the value of our vehicle today is **\$50,000**. With an annual depreciation of **15%**, the annual depreciation value would be **\$7500** ( $\$50,000 \times 15\% = \$7500$ ). The hourly depreciation would be on the vehicle **\$8.68** ( $\$7500/12 \text{ months} = \$625; \$625/72 \text{ hours} = \$8.68$ ).

## Step 6: Total all delivery costs

The final step is to sum up every step. The hourly delivery cost for our example would be **\$54.65** (**\$30** for the cost of driver + **\$12.50** for the cost of gas + **\$3.47** for the cost of insurance + **\$8.68** for the cost of depreciation = **\$54.65/hour**).

This is an approximation of the cost of delivery and is only relevant if you are doing your own delivery with a vehicle you own, but can be an effective way to get an idea of how much delivery is costing you.

## Setting a delivery fee

You want your delivery fee to at least cover the delivery cost. Above, you calculated the hourly cost of delivery based on the cost of driver, fuel, and the vehicle. To calculate a delivery fee, you want to calculate how many deliveries you do in an hour OR, how long it takes to complete the delivery.

If you can schedule four deliveries in one hour, the delivery fee at cost would be **\$13.67** ( $\$54.6/4 = \$13.67$ ). For buffer, make the delivery fee a standard **\$15**. We asked Sarah from [Field Sparrow Farms](#) how they calculate their delivery fee.

“We looked at a few things. What is our average order for delivery? How many deliveries are we doing in one trip? What does that cost us?

We then divided that into a delivery fee. We tried to be careful because we didn’t want to set it too high for them to question whether it was worth it, but at the same time, we didn’t want to set it too low where we were not making money.

It’s all about finding a balance. With experience, you figure out exactly what that fee should be.” - **Sarah, Field Sparrow Farms**

## Routing

Another essential part of efficient fulfillment is efficient routing. Before starting your delivery day, the most efficient route should be defined prior so that the driver or yourself.

Here are a few popular apps to leverage:

- [RouteXL](#)
- [Routific](#)
- [Road Warrior](#)

## Staying organized

It's important to stay organized when doing multiple deliveries a week with multiple different buyers. Using Local Line, you can create different fulfillment plans that can be selected when ordering.

### Creating fulfillment plans in Local Line

Fulfillment plans are managed per price list i.e. you can define specific fulfillment plans for different customer segments (Chefs, Grocery). Head to the Fulfillment tab on the left-hand side to create a new fulfillment plan.

Here you can create new pick-up locations and delivery plans.

For delivery plans, you can define a zone by location (i.e., city or state), a zip code, or by a radius. You set the center address and define how many miles you want the radius to be. Next, set your delivery availability. You can choose to define custom dates, repeatable delivery schedules, and order cutoff times for deliveries. You can also select to offer flexible delivery, give your customers an estimate of when their items will be delivered, and provide them with custom instructions for ensuring their delivery is fulfilled correctly.

Next, set your minimum purchase for delivery and delivery fee. You can also set a minimum purchase requirement to qualify for free delivery.

When logging an order, you or the buyer can select which delivery option they would like. The next available delivery dates will be visible based on the order lead time/delivery dates provided when creating the delivery plan.

## Understanding logistics

### Terminology

Depending on the scale of your business, different logistics models might be more advantageous, for example, doing the delivery yourself or working with a

third-party provider. Often within logistics, many terms are thrown around, and can quickly become confusing. Here are a few terms you should know.

### First-party logistics (1PL)

A business that transports goods from their location to a buyer. An example of 1PL is doing delivery in-house. You are transporting the order from the farm directly to the restaurant.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Higher margins for products.</li><li>• More feasible when first starting out wholesale operation i.e. fewer customers, smaller volumes, shorter distances.</li></ul>	<ul style="list-style-type: none"><li>• Needs capital investment i.e. truck.</li><li>• Time consuming.</li><li>• Very expensive if truck is under-utilized.</li></ul>

### Second-party logistics (2PL)

In a 2PL example, the business (aka the farm) hires a secondary party to transport their goods to a buyer. For instance, you hire a local delivery company to do your deliveries. The 2PL is not responsible for packing or storing the goods. They pick up the order and deliver it that day to the buyer.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Do not have to invest in truck or transportation equipment.</li><li>• Saves you time from having to do delivery in-house.</li></ul>	<ul style="list-style-type: none"><li>• Need to have a very stable distribution network.</li><li>• Still have to organize distribution yourself.</li><li>• You have less direct oversight and control. For example, you have less control if there is an issue with quality or timeline.</li></ul>

### Third-party logistics (3PL)

3PL is a supply chain model that consists of three parties: the business, the logistics provider, and the carrier. The business sells to the 3PL (for example, to a foodservice distributor, such as [Sysco](#) or [Buffalo Market](#)). The 3PL organizes the coordination, warehousing, and fulfillment. They have set preferred carriers (i.e. trucking companies) or their own to fulfill the orders to the end buyers, such as restaurants or grocery stores.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Time-saving. You do not have to coordinate delivery routes or organize with carriers.</li> <li>• You can cover a larger geographic area.</li> <li>• They can provide warehousing for your products if you do not have enough storage space on the farm.</li> </ul>	<ul style="list-style-type: none"> <li>• You are very dependent on the success of the 3PL.</li> <li>• You might get a lower cost per product as you add another layer to your supply chain, i.e., instead of farm to grocer; now it's farm to warehouse to grocer.</li> <li>• Capital investment to ensure you are up to date with food safety and documentation requirements.</li> </ul>

When selling to a food service distributor or food hub that does wholesale, you already are working with a 3PL. As the supplier, you provide the desired order, and the distributor re-sells your products to other businesses such as restaurants, hospitals, and grocery stores – you name it! With 3PLs, the distributor may purchase your product and then re-sell or hold your product and pay you out after the product has been sold.

### Fourth-party logistics (4PL)

4PLs are a newer approach to supply chain management. The idea of a 4PL is to provide a detailed overview of the entire supply chain for the customer. Supply chains are about information, i.e., the order details, fulfillment date, routing, warehousing, packaging, and parties. That information is stored and organized inside a 4PL to provide transparency in the supply chain.

Unlike a 3PL, a 4PL often does not have physical assets like a warehouse or trucks, as a 3PL almost always does. A 4PL is focused on optimizing the supply chain by highlighting where suppliers are, how to best coordinate distribution, and how to aggregate distribution in the most efficient, cost-effective manner. They are the single point of contact for the entire supply chain.

Have we lost you yet?

Let's go through an example of a 4PL we are developing.

Local Line has developed a product for large-scale buyers to source more local food: **Sourcing Networks**. Buyers looking for local suppliers can filter by location, product type, food safety certification, and more. Local Line provides real-time visibility on local inventory. Through the platform, buyers can order directly from these suppliers through their online store in one collective order.

These orders are aggregated to be fulfilled to the buyer's own distribution center or warehouse. The 4PL optimizes the route and distribution using different carriers. The suppliers are paid directly via the platform. In this scenario, Local Line acts as a 4PL to this system. They provide visibility across the supply chain and optimize distribution to ensure products are fulfilled from supplier to buyer.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Highly optimized system that reduces inefficiencies.</li><li>• Offers buyers and suppliers visibility on local availability i.e., farmers know what buyers want, and buyers know what's available where.</li></ul>	<ul style="list-style-type: none"><li>• Depending on the buyer, you may have an initial investment to ensure you are up to date with food safety and documentation requirements.</li></ul>

Sourcing Networks are relatively new to Local Line; however, they offer the chance to 1) help large buyers source more local products and 2) create introductions and contracts for more local farms with large buyers.

Currently, Sourcing Networks are by invitation only; however, if you want to learn more, [you can email Local Line here.](#)

## Aggregating fulfillment

Beyond getting new customers, fulfillment can be one of the hardest aspects of your business to coordinate. Buying a new truck or working with a large 2PL (i.e. UPS, FedEx, Doordash) can get expensive quickly. They also don't always offer frozen or fresh products the best conditions.

Consider aggregating your fulfillment strategy to increase efficiency, decrease cost, and be more environmentally friendly. Here are a few examples:

### Co-loading

Co-loading is the coordination of distribution routes from different suppliers to bring products to their buyers. Essentially, it connects two farms that must distribute their products to the same location but can't do it alone.



Here's an example:

*Farm A has a refrigerated truck and delivers produce to three restaurants in town twice a week. Farm B sells to two of the same restaurants, plus a grocery store near the third restaurant. Farm B drops off the order the night before delivery day. Farm A fulfills the orders for Farm A and B. Farm B pays Farm A an agreed-upon fee to cover vehicle costs and fuel.*

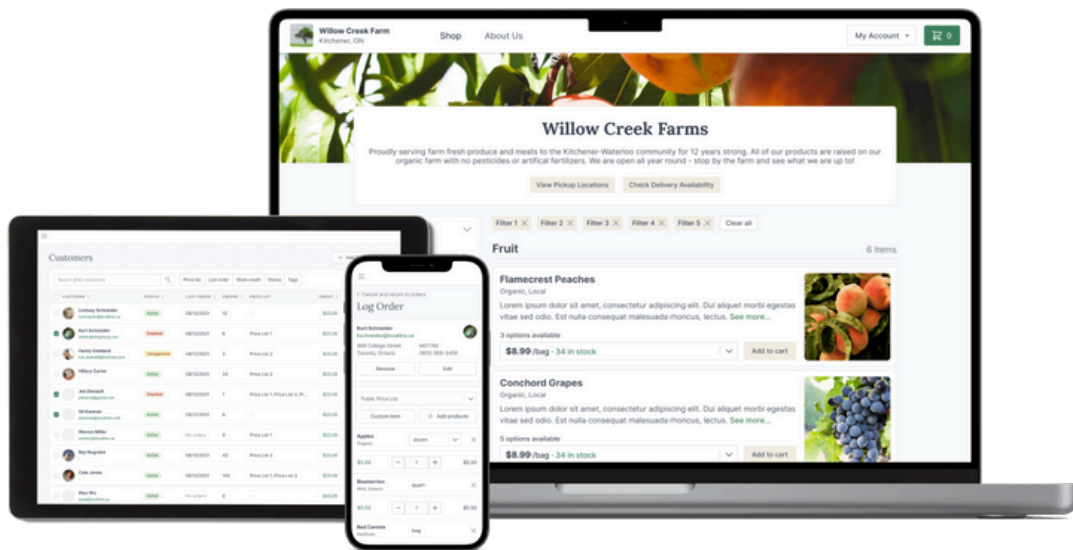
Here are a few benefits:

- **Saves money:** When working with one or multiple farms, fuel efficiency is optimized. If you are the deliverer, you share the vehicle costs and fuel with other farms. If you work with another farm that does delivery, you will probably have substantially lower delivery costs than if you are working with a 2PL. You don't have to invest in a truck or other equipment.
- **Increases shipping area:** If you currently do not have enough delivery locations in one city to make fulfillment feasible, when working with other farms, you increase your capacity and delivery locations. It may also allow you to broaden your customer base - as the product is now available in a larger shipping area, and you may be able to get contact information for buyers the other farms are working with.
- **Fills capacity:** This one is pretty self-explanatory. A full truck is always better than a half-full truck. It's more efficient and more sustainable! Fewer trucks are making the same route.

Leveraging your community to share fulfillment is an excellent way for everyone to succeed.

# Start Selling with Local Line Today!

To support you in your wholesale selling journey, consider [Local Line's all-in-one farm e-commerce platform](#). Local Line is an easy-to-use software tool for farmers to connect with local buyers, such as restaurants, schools, hospitals, and businesses looking to buy wholesale from local farms in their area.



Try selling online with Local Line today. We can get you up and selling online within an hour.

[Sign up here today!](#)

Happy selling!  
The Local Line team

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