



COUNCIL OF SUPPLY CHAIN MANAGEMENT PROFESSIONALS



THE DEFINITIVE GUIDE TO TRANSPORTATION

Principles, Strategies, and Decisions
for the Effective Flow of Goods
and Services

Council of Supply Chain Management Professionals and

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Finally, *accessorial fees* refer to charges applied to the use of any special equipment or labor employed in support of a shipment. Many shipping and receiving locations are not equipped with loading docks, for instance. In these circumstances, a carrier might offer liftgate service to support the loading and unloading of freight. Some loads might require additional blocking and bracing to secure the load to prevent movement and damage in-transit. When chemicals are shipped via tank truck or rail tankcar, it might be necessary to clean the tank before the next shipment. Some loads also might require additional packaging, hazardous material handling, or high security provisions. In all these instances, the carrier can charge accessorial fees for the additional service provisions.

Summary

In summary, carriers experience accounting costs and opportunity costs in the provision of transportation services. Whereas some costs are fixed, others are variable in nature. Economies of scale found in shipment distance and volume affect carriers costs and, in turn, customer pricing in different modes. Carriers charge fees not only for point-to-point transportation, but also for a variety of reasons, ranging from supplementary service offerings to penalties for delays and the need to cover inflationary economics.

Key takeaways from this chapter include:

- The cost of service is a primary input to determining the prices charged for services.
- Carriers consider both accounting costs and economic costs in managing their operations and serving customers.
- Fixed and variable costs factor into the profitability of carrier operations.
- Carriers are wise to consider the cost to serve customers when pricing services. Activity-based costing (ABC) is a method for determining the cost to serve distinct customers.
- Transportation rates are expressed in different ways, including fixed rates, variable rates, and class rates.
- Carriers might offer several services aside from the basic transport (linehaul) and apply different charges for those services.

Endnotes

1. All carriers employ a minimum charge for shipments, even for small volumes and short-distance moves, to cover the accounting costs and opportunity costs of the move.
2. Chapter 5, “An Overview of Transportation Management,” has more on consolidation strategies.
3. “Toot-Toot. Germany Wants More Truckers,” *Bloomberg Businessweek* (2 September 2013): 20–21.
4. Truckload Carrier Association, *Dry Van Drivers Survey*, June 1999.

THE TRANSPORTATION SERVICES MARKET

The market for transportation services is characterized by a diverse assortment of providers. They range from the asset-based third-party logistics service provider that is fully responsible for performing the full realm of logistics services, to the non-asset-based broker that maintains relationships with asset-based providers and subcontracts the work. The presence of such a diverse array of service providers in the transportation market asserts that each has a valuable role to fulfill in the marketplace. Furthermore, the introduction of the Internet and other advanced technologies has introduced new forms of providers in the market. This chapter illustrates some of the different forms of service providers found in domestic and international service arenas.

Private Transportation

The first option available for a shipper interested in transporting goods from one place to another is to do it in-house. This is also called *private transportation*. Private transportation employs one's own means to move freight. Technically, it is defined as not-for-hire transportation of a firm's goods, with the firm also owning (or leasing) and operating the transportation equipment for the furtherance of its primary business. This means that, *typically*, private carriers do not provide freight services to the general public (although they are allowed to do so in many nations). Formally speaking, to be considered private, the company cannot be in the business of transportation as a *primary* form of business. Private operations are found in the different modes of transportation.

Private Road Fleets

By far, the most common form of private transportation among shippers is found in road transport. Back in the days of regulation, more companies had private road-based fleets. The reason for this is rather intuitive: When markets offer sufficient options and

competitive prices, private operations are less appealing because shippers can buy flexibility at a lower cost, without the distraction from the primary business. However, because markets were tightly controlled during regulation and prices were rarely (if ever) market driven, private fleets were financially worthwhile. In the modern business world, the value of private fleets has diminished somewhat, with so many carriers competing aggressively for business in the marketplace. Nevertheless, some companies continue to maintain fairly substantial private fleets for internal (and sometimes external) use. It is estimated that there are more than 33,000 private fleets of ten vehicles or more in the U.S. alone. Table 4-1 provides a listing of the largest private fleets in the United States, along with the number of vehicles in each (as of 2013).

Table 4-1 The Largest Private Fleets in the United States

Tractor Fleets			Straight Trucks			Overall—Powered Units		
Rank	Company	Fleet Size	Rank	Company	Fleet Size	Rank	Company	Fleet Size
1	PepsiCo	14,293	1	AT&T	63,592	1	AT&T	63,647
2	Coca-Cola	8,200	2	Verizon	58,768	2	PepsiCo	62,066
3	Sysco	7,309	3	PepsiCo	47,773	3	Verizon	58,818
4	Walmart	6,142	4	Comcast	37,087	4	Comcast	37,087
5	US Foods	5,241	5	Waste Management	27,000	5	Waste Management	28,600
6	Halliburton	4,301	6	Time Warner	18,973	6	Time Warner	18,974
7	Nabors Industries	3,920	7	Republic Services	18,149	7	Republic Services	18,343
8	McLane Co.	3,503	8	Century Link	17,924	8	Century Link	17,926
9	Crop Prodn. Services	3,217	9	Cintas Corp.	13,300	9	Coca-Cola	14,100
10	Schlumberger Ltd.	3,062	10	The Service Master Co.	12,784	10	Cintas Corp.	13,400

Source: <http://fleetowner.com/%5Bprimary-term%5D/2013-fleetowner-500-1-99>.

Companies ranging from small retailers to global corporations often own a fleet of private road vehicles. For example, Walmart has a captive private fleet of more than 6,000 tractors and 55,000 trailers, which together drive more than 750 million miles annually. Similarly, companies such as PepsiCo and Comcast operate substantial private fleets to service their stores, distribution centers, and customer locations. In the recent past, the trend has been to move away from having a private fleet, but there are still some advantages to operating a private road fleet.

Advantages of Private Road Fleets

Arguably, the advantages of owning and operating a private fleet have diminished substantially following the deregulation of the freight business, but some advantages still make it worthwhile for companies to operate their own fleets. This is especially true when the volume of transport required is high. The first advantage relates to potential cost benefits. Rarely do private-fleet operators claim cost savings as the primary reason for running a private fleet, but in some cases, private fleets can provide the shipper with substantial cost benefits over shipping purely through public carriers. This is because such shippers get a credible in-house shipping solution, and potential transporters and trucking companies then need to compete with this in-house option to gain the shipper's business. The shipper is guaranteed the best rates in the open market. In addition, large carriers often return empty from a delivery run (also called *deadheading*), and this cost is baked into the price quote provided to the shipper. Owning a private fleet allows the shipper to pick up shipments from suppliers on the way in, thus providing a cost-effective and environmentally friendly transportation solution for inbound shipping.

Another cost advantage that private fleets provide is that they allow companies to keep their landed costs of goods lower than that of the competition. Walmart, for example, uses its extensive private fleet to collect shipments from suppliers on the way back from the retail store to the distribution center. Because most shippers use *volume of product* in freight lanes as leverage when negotiating freight rates with carriers, Walmart is “pulling” freight volume away from these shippers’ freight lanes (by taking over inbound shipping), which lowers the shipper’s volume discounts and thereby increases their shipping rates on the remaining shipments. These cost increases then get passed on to other retailers, thereby giving Walmart a substantial cost advantage over the competition.¹

In addition, in some cases, private fleets are worthwhile simply because of the nature of the cargo or the business. Some shippers have cargo that does not fit neatly into a single category; in such cases, common carriers often end up filing incorrect claims reports. Having a private fleet eliminates this problem. Similarly, when a shipper operates a private fleet, drivers are not merely people who move goods from place to place anymore, but they also act as representatives of the company and, in some cases, even salespeople. Given how much face-to-face contact drivers end up having with downstream channel partners, drivers often become a shipper’s best customer service representative. In addition, some shippers feel that highly visible branding on their private fleets rolling down interstate highways provides them with a free billboard, reminding customers of their products and services. In fact, the average truck in an urban area generates an estimated 12,000,000 “viewer impressions” per year.²

Some shippers use private fleets because of the comfort they provide in terms of control and guaranteed capacity. (This is especially true in the market of perishable goods.) During peak shipping seasons, it might be hard for a shipper to obtain the necessary capacity

in the common carrier market. Controlling a private fleet provides the comfort and convenience of knowing that freight can get to its intended destination in time.³

Finally, private fleets afford a level of security that for-hire carriers find difficult to match. Because private fleets are dedicated to serving the company, they are fully aligned with the interests of the company. This includes the safety and security of the loads. Shippers of highly valuable or dangerous cargo often elect to handle transportation through private means. This is true of most companies active in “cash logistics,” such as Brinks, Dunbar Armored, and Garda, which specialize in the transportation of money and other valuables.

A middle-ground approach that is gaining much credence is the *dedicated fleet service*. For-hire carriers offer dedicated fleets that look and act as if they were the shipper’s private fleet. In some cases, a for-hire carrier acquires the trucking assets and even the labor force once it is employed by the shipper, assuming operations and charging the shipper for the services. Such an arrangement enables the company to combine the benefits of private fleet ownership with the freedom to focus on the company’s core (nontransportation) business. Many dedicated fleets maintain the appearances of the shipper, including having the company’s logo emblazoned on the trucks and trailers, and even having drivers appear and act as if they are employed directly by the shipper. For example, Exel Logistics provides home and office delivery for different retailers. In the eyes of customers, Exel delivery people appear to be employees of the retailer—they are knowledgeable about the products and can install household appliances on behalf of the retailer. In sum, dedicated services offer an alternative to private fleets and traditional for-hire services to shippers that are large enough to garner the interest of carriers that can provide the service.

Other (Nonroad) Private Fleets

As discussed, private transportation almost exclusively refers to private road fleets because most other forms of transportation are almost exclusively on a for-hire/common carrier basis. Exceptions do exist, however, including the quasi-private ownership of privatized railroad. As such, there are no private railroads in the United States, in the true sense of the term. However, the industry does follow the practice of having private railcars hooked onto and moving by way of common-carrier railroads. In fact, as of 2008, more than 50 percent of the freight-tons shipped on the North American railroads were moved in cars owned by nonrailroad leasing companies and shippers (private railcars).⁴ A similar idea is used in water-based transport, where private ownership is typically restricted to barges rather than actual powered vessels. Large companies in the agricultural and energy sectors often maintain their own ports, particularly on rivers and lakes, for dispatching and receiving cargo.