

CHAPTER 1: Introduction to Truckload Transportation

Introduction

On the surface, full-truckload transportation appears to be a fairly simple business. For a predetermined charge, a truck picks up a full truckload for a customer at Point A and delivers the load to Point B. Next, the truck picks up a load for a different customer at Point C and delivers the load to Point D. Basically, this cycle continues constantly for every truck and every driver in a carrier's network. As this cycle continues, well-managed trucking companies have many challenges. In the short run, carrier management must answer such questions as:

1. How much should we charge customers moving loads from Point A to Point B?
2. How much should we charge customers moving loads from Point B to Point A?
3. Is the company making a profit while moving loads between Points A and B?
4. Are some customers and some loads more profitable than others? If so, why?
5. Should some customers be charged more than others for the same trip?
6. Should we increase rates with certain customers to improve profitability? Should we decrease rates with certain customers to attract additional business?
7. Within our network, should we increase business with certain customers? Should we decrease or eliminate business with certain customers?

In the long run, the carrier's management team must determine profitable growth strategies for the company. Strategic considerations for the carrier include:

1. What services should be offered to our customers?
2. Should our services be expanded into new types of truckload transportation?
3. Should our current services be expanded into new geographic areas?
4. Should our fleet of tractors and trailers be expanded? Should we expand with new types of equipment or new services?
5. How will the charges and prices for these new services be determined? How will profits be measured for these new services?

The overall goal of this book is to provide trucking managers with the tools and techniques to successfully answer these and other tactical and strategic questions. The book provides a general overview of trucking companies, including the organizational structure, cost structure, and basic profitability strategies ideal for anyone wishing to better understand the truckload transportation industry. In addition, the book provides an excellent resource that will allow shippers to better understand how their expectations, requirements, and restrictions impact the costs, profitability, and revenue needs of their carriers. By having a greater understanding of the needs of their carriers, shippers can become better partners and potentially enjoy improved service and lower transportation costs as a result.

In some circumstances, there will be real-world exceptions to the general concepts in this book. However, a thorough understanding of the concepts in this book will provide the ability to identify and interpret any exceptions to the general rule. While this book cannot possibly address every unique situation a carrier or shipper will face, it does provide a solid foundation of general theory and specific analytical techniques to properly approach almost any pricing and analysis challenge.

Truckload pricing, especially on a one-way basis, is as much of an art as it is a science. For example, if several experienced pricing managers from different carriers were asked to provide a truckload rate per mile from Columbus, OH to Dallas, TX, the rates provided by those experts would likely vary significantly. However, the internal and external factors that are considered by those pricing managers to determine the rate per mile are the same. This book provides a detailed explanation of these factors and how the factors interact to influence the pricing decision. After learning these basic concepts, readers will understand why the rate per mile in the Columbus to Dallas example could vary noticeably among different carriers.

Throughout this book, readers will see operating cost information and specific rates and prices. While most costs and rates are historically accurate for the time this book was written, this information is shown for illustration purposes only. Truckload rates and operating costs change over time based on market conditions, fuel prices, driver wage expectations, equipment costs, and many other factors. Unless otherwise indicated, consider all cost and price figures shown in this book as only examples and not specific facts or pricing recommendations.

The Trucking Business Cycle

The core business model of a trucking company is similar to most common businesses. Each truck serves as a moving “factory” and the miles driven by the truck represent the product that is produced by the factory. The table below compares the trucking business model to the models of General Motors and McDonald’s.

Business Model Comparison

Company	Facility	Unit of Output
General Motors	Plant	Cars
McDonald’s	Restaurant	Hamburgers
Truckload Carrier	Truck	Miles

Trucking companies produce miles in much the same way that General Motors produces cars or McDonald’s produces hamburgers. Keep this relationship in mind throughout the discussion of fixed and variable costs and the various economic models that follow.

Each truck moves continuously throughout the carrier’s network in a semi-random pattern from load to load and customer to customer. The timeline in the table below illustrates the work flows for a truck and driver over a three day period.

Three Day Driver Work Cycle

Day and Time	Activity / Event
Sunday 5:00 pm	Home awaiting dispatch. The driver is at home in West Memphis, AR waiting to receive his next load assignment from his dispatcher. At 5 pm, the driver receives his dispatch. He must pick up his next load at ABC Express in Memphis, TN at 7 am on Monday. He must deliver the load to Houston, TX by 2 pm on Tuesday.
Monday 6:45 am	Arrival at Origin for Pick-up. The driver arrives at ABC Express in Memphis. After hooking to the pre-loaded trailer and receiving the paperwork for the load, the driver is ready to depart for Houston, TX.
Monday 7:22 am	Departure from Origin. The driver departs ABC Express in Memphis, TN and begins the 650 mile trip to Houston, TX.
Monday 6:05 pm	Rest Break. After approximately 11 hours of driving, the driver stops at a truck stop about 120 miles from Houston, TX to take a legally required rest break for 10 hours.
Tuesday 5:10 am	Drive to Destination. After the mandatory rest break required by U.S. Department of Transportation safety regulations, the driver continues on the final portion of the trip to Houston, TX.
Tuesday 7:14 am	Final Delivery. The driver arrives at the destination in Houston, TX. After dropping the trailer and completing the paperwork, the driver is ready for his next load.
Tuesday 7:53 am	Meal and fuel awaiting dispatch. The driver goes to a nearby truck stop to eat breakfast, fill the truck with fuel, and wait for his headquarters to assign him to a new load.
Tuesday 8:55 am	Dispatch. The driver receives his next load assignment from his dispatcher. He must drive 22 empty miles to Sugar Land, TX to pick up his next load going to Dallas, TX.
Tuesday 10:15 am	Load Pick-up. The driver arrives in Sugar Land, TX for his next load. After receiving the paperwork for the load, the driver is ready to depart on the 260 mile trip to Dallas, TX.
Tuesday 3:37 pm	Load Delivery. The driver arrives at the destination in Dallas, TX. After dropping the trailer and completing the paperwork, the driver is ready for his next load.
Tuesday 4:45 pm	Awaiting Dispatch. After delivering his load, the driver goes to his carrier's terminal and maintenance facility in nearby Garland, TX. While at the terminal, the driver takes a required rest break and again waits for his dispatcher to assign him to his next load.

Truck drivers operate in a cycle very similar to the above example at all times. Since most drivers are paid by the mile, time management is critical to the driver’s income. In most cases, drivers prefer to be assigned to a new load as soon as possible after completing the previous load. The carrier’s revenues are also usually earned on a mileage basis, so time management and driver productivity is critically important to the carrier’s goals as well.

The driver work cycle shown above is typical of most over-the-road carriers. Carriers and drivers must work together to maximize the efficiency of the work cycle and the carrier’s customer network. This book will discuss and analyze each of the primary operating variables and how those variables affect the carrier’s productivity and profitability. The book will also discuss how each operating variable impacts the carrier’s pricing, rate structure, and operating strategy.

These pages are a sample from the 464-page book:

Truckload Transportation: Economics, Pricing and Analysis
By Leo J. Lazarus

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www.TruckloadTransportation.com

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