CASE 4-2

Hardee Transportation

One of Jim O'Brien's customers has presented him with an opportunity for a significant amount of freight moving into a new market for Hardee. Hardee is a truckload carrier primarily moving freight in the East/West market in the United States. Although it has some movements in and out of Canada and Mexico, Hardee has focused on moving freight in eastward and westward directions. Hardee has dispatch centers located throughout the United States, which have some dock capacity.

The new move would be between Pittsburgh and Miami. Hardee has avoided this market because of the lack of backhaul opportunities that exist outbound from Florida. However, this new move offers a significant increase in volume for Hardee. A complicating factor in this move is the request that Hardee perform sorting and segregation at its dispatch centers. Each shipment will consist of straight (one product) pallet loads of various types of consumer goods freight destined for a retailer's distribution center in Miami. Sorting and segregation at Hardee's locations would consist of breaking the pallets and sorting the freight by the retailer's store locations, then repalletizing into rainbow (mixed products) pallets for each store.

Hardee has never experienced this type of request before. Jim knows that he needs to put some type of costs to this move to make sure that the moves are profitable. Because of the large volume involved, not covering Hardee's costs in pricing could result in large losses for Hardee. The relevant information for costing this move is as follows:

Equipment Cost Data

Equipment Purchase Price

1. Line-haul tractors = $120,000
2. Line-haul trailers = $40,000

Depreciation

1. Tractors = 5-year straight line
2. Trailers = 8-year straight line

Interest

1. Tractors = 6 percent APR for 5 years
2. Trailers = 6 percent APR for 8 years

Fuel

1. $3.83 per gallon for diesel
2. Line-haul tractors = 6.0 miles per gallon

Labor

1. Line-haul drivers = $0.45 per mile
2. Pickup and delivery (PUD) drivers = $30 (fully loaded) per hour
3. Dock workers = $25 (fully loaded) per hour

Miscellaneous

1. Insurance cost = $0.067 per mile
2. Maintenance cost = $0.152 per mile
3. Billing cost = $1.95 per freight bill
4. Tractors and trailers are available for use 24 hours per day, 365 days per year
5. Administrative overhead cost = 10 percent of total cost of move
6. Dock facility cost = $15 per hour
7. Line-haul vehicle averages 45 mph between origin and destination

Route and Time of Move

The shipment (45,000 pounds) originates at a customer location in Pittsburgh, located 20 miles from Hardee's dispatch center. A PUD driver is dispatched from the Hardee location at 8:30 a.m. on January 12, 2015, and arrives at the destination at 9:00 a.m. the same day. The shipment is loaded from 9:00 a.m. to 12:00 p.m. The PUD driver departs the customer location at 12:00 p.m. and arrives back at the Hardee dispatch center at 12:30 p.m.

The sort process starts at 12:30 p.m. and ends at 8:30 p.m. on January 12. It requires unloading the trailer, sorting, and repalletizing the load. This operation requires two dock workers, each working the same trailer for 8 hours in the dispatch center.

The line-haul portion begins with the vehicle being dispatched from the Pittsburgh location at 8:30 p.m. on January 12 and traveling to Charlotte, North Carolina, a distance of 481 miles, and arriving at Charlotte at 7:12 a.m. on January 13. The driver rests from 7:12 a.m. until 3:12 p.m. The trip continues with the vehicle departing Charlotte at 3:12 p.m. on January 13 and traveling to Jacksonville, Florida, a distance of 399 miles, arriving at Jacksonville at 12:06 a.m. on January 14. The driver rests from 12:06 a.m. until 10:06 a.m. The line-haul portion concludes with the vehicle departing Jacksonville at 10:06 a.m. and traveling to the customer's location in Miami, a distance of 369 miles, and arriving at the distribution center at 6:18 p.m. on January 14.

The line-haul driver stays with the vehicle while it is being unloaded (2 hours unload time). The driver then deadheads at 8:18 p.m. from the customer's distribution center and arrives at a Hardee dispatch center located in Miami at 8:48 p.m., a distance of 15 miles from the distribution center.

CASE QUESTIONS

1. What are the pickup, sort, line-haul, and delivery costs to Hardee for this move?
2. What is the total cost of this move? Cost per cwt? Cost per revenue mile?
3. If Hardee would put two drivers in the tractor for the line-haul move, there would be no rest required for drivers during the line-haul move. What would happen to total costs?
4. Assume that Hardee has no loaded backhaul to return the vehicle and driver to Pittsburgh. How would you account for the empty backhaul costs associated with this move? Would you include those in the headhaul move? How would this impact your pricing strategy?