

Transportation		Company A		Company B		Company C	
Transfer freight	4.2	9.9	3.2	8.3	2.8	8.5	2.8
Customer freight	14.1	11.5	11.3	11.3	11.3	11.3	11.3
Total transportation costs	18.3	22.4	24.7	24.7	24.7	24.7	24.7
Warehousing	6.2	6.2	4.4	4.4	4.4	4.4	4.4
Storage & handling	2.3	2.3	1.6	1.6	1.6	1.6	1.6
Fixed	8.5	8.5	6	6	6	6	6
Total warehousing costs	22.6	22.6	17.5	17.5	17.5	17.5	17.5
Average number of days' transit time (DC to customer)	2.8	2.8	2.9	2.9	2.9	2.9	2.9

patterns for consumer products follow major population centers and are generally consistent across the country for all three companies.

Table 5 lists the current system's transportation and warehousing costs for each of the three companies. Freight rate classification for product shipments is different for each of the three companies. Company A freight has a rating of class 60; Company B freight has a rating of class 70; and Company C freight has a rating of class 150. In general, these ratings reflect the relative expense of moving products based on density and value. Transfer freight costs are based on truckload rates from the manufacturing plants to the distribution centers. Customer freight costs are based on less-than-truckload shipments from distribution centers to retail and wholesale customers. Average number of days' transit time from the distribution center to the customer is the shipment time from the point an order leaves the distribution center's loading dock until it reaches a customer. Any potential systems redesign must consider the effect of labor costs.

Questions

1. What impact would the three new alternatives have on transfer and customer freight costs? Why?
2. What impact would warehouse consolidation have on inventory carrying costs, customer service levels, and order fill rate?
3. How are warehousing costs affected by the decision to use third party or private warehouse facilities? What effect would this have on handling, storage, and fixed facility costs?
4. What effect would shipping mixed shipments from consolidated distribution centers have on individual company cost and performance?
5. Evaluate the eight supply chain processes in terms of customer classification and degree of centralization/decentralization of required functionality (use the matrix below).
6. Given all available information briefly describe the logistical system design you would recommend for Westminister's integrated consumer products.

Eight Supply Chain Processes—Classify as "Centralized or Decentralized"							
Retail Segment	DPR	CRC	OF/SD	P/SDL	MC	SRC	LCS
Grocery							
Drug							
Mass Merchant							
RL							

TABLE 5
Westminister 2003
Distribution Costs
(\$000,000)