

## ORION BUS INDUSTRIES: CONTRACT BIDDING STRATEGY

*Paul Royal and Jay Hamilton prepared this case under the supervision of Professor Peter C. Bell solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.*

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### INTRODUCTION

Orion Bus Industries was a Mississauga, Ontario-based manufacturer of urban transit buses that were purchased by transit authorities across North America. The majority of Orion's sales were made through competitive bidding. Rick Solon, Orion's chief executive officer (CEO), was interested in whether analysis of data on past bids could help Orion to either increase the numbers of buses sold, or alternatively, to maintain the same volume of bus sales but increase Orion's margin.

### ORION BUS INDUSTRIES

Orion had long been one of the most trusted names in public transit with buses in service in more than 230 North American cities. The company had managed to efficiently combine many years of tradition with modern engineering. Orion began with a small local base in Ontario in 1975, and grew to develop the widest product line in the transit bus industry, ranging from city transit vehicles and low-floor models to shuttle-style community buses, all customized to customers' specifications.

Production of Orion buses began at the Mississauga factory with the assembly of the integrated chassis/body structure for each bus. The structure was then shipped to the Oriskany, New York plant, where seating, engines, transmissions, axles, electrical, heating and air-conditioning systems, and other final finish components were installed. Final finishing and testing of all buses was completed in Oriskany prior to delivery to the customer.

Innovation had always been a strength of Orion. A milestone of public transportation was Orion's introduction of the low-floor Orion II bus in 1983. This was the forerunner of today's low floor-models and was clearly on the leading edge of transit innovation at the time. Further innovative concepts followed, winning the company numerous accolades for exceptional design. New ideas ensured more space and comfort for passengers and more economy and efficiency for operators. Orion paved the way to the

widespread use of buses fueled by compressed natural gas (CNG), and today there are thousands of CNG-powered Orions serving cities across Canada and the United States.

Orion began development of hybrid electric low-floor buses in the early 1990s, offering improved fuel economy and dramatically lowering tailpipe emissions, to the benefit of operators, passengers and the citizens of the cities that use these clean buses.

The Ontario Government took control of Orion in 1994, following Orion's failure to meet the certain loan covenants. Western Star purchased the assets of Orion in June 1995 from the Ontario Government, and was able to obtain commitments from the Ontario Government to purchase a set number of vehicles in Orion's first few years of operation. This allowed Western Star to achieve sufficient bus production volume while it re-built the sales team.

In September 2000, Freightliner LLC, a DaimlerChrysler AG unit, announced its acquisition of 100 per cent of the outstanding stock of Western Star Trucks Holdings for a purchase price of US\$453 million. Along with the Western Star Truck brand, Freightliner also gained one of the leading heavy-transit bus manufacturers in North America, Orion Bus Industries. The Orion products and brand name were combined into Freightliner's specialized vehicles group, which also included Thomas Built Buses, American LaFrance and Freightliner Custom Chassis Corporation.

Freightliner President Jim Hebe commented:

The Western Star and Orion brands and products are tremendous complements to Freightliner LLC's truck and bus product offering. We offer customers not only the most comprehensive truck and bus product solutions, but also the most extensive distribution and service network throughout North America.

Adding Orion Bus products to Freightliner's bus offering supported Freightliner and its parent company, DaimlerChrysler's strategy to become North America's largest full-line bus manufacturer.

## **CONTRACTING TO SUPPLY BUSES**

Contracts to supply buses were awarded based on competitive bids. Two bidding formats were typical. In the first, "low tender bid," any manufacturer could submit a bid and the lowest bid that met the technical specifications issued by the buyer was awarded the supply contract. The second format was a negotiated bid where exceptions to the technical specifications could be submitted with the bid. The lowest, most technically compliant bid was generally, but not necessarily, the successful bidder.

Currently, Orion determined its bid on a particular contract based on a number of subjective and objective factors, such as expected cost to build the buses, capacity, sales data from the field, backlog and lead-time considerations, and estimates of competitors' bids based on past practices. Orion management wondered whether there was a more effective bidding strategy to maximize financial returns.

The bidding process was usually public and the first step undertaken was to gather data on past contracts. Data was collected for 69 recent contracts put out to bid. Included in this data were Orion's expected cost per bus, the number of units to be purchased, the winning bid price per bus and the price per bus submitted by each bidder. This data is summarized in Exhibit 1.



### MANAGEMENT'S OBJECTIVES FROM THE ANALYSIS

Once the data had been assembled, management set some specific objectives for the analysis. These included the following questions:

- Had Orion been bidding rationally in the past? Had the company lost contracts unnecessarily or had it won contracts where it could have bid a higher price?
- Given the past industry bid data, could a model be developed to predict winning bids based on Orion's unit costs? If so, could this model help Orion address some key issues:
  - Could the model help the company to maximize contribution margins?
  - Could the model be used to provide a reference point on what could reasonably be expected to be the winning bid? With knowledge of such a reference price, Orion could increase or decrease the bid price to reflect subjective factors such as knowledge of competitor trends, customer bias, plant capacity, delivery requirements and so on.
  - Could the model be utilized to replace Orion's existing subjective margin forecasts and more accurately predict expected margins to drive Orion's 24-to 36-month forecasts for budgeting purposes?
  - Could Orion utilize the model to assist sales and marketing resources in identifying and maximizing sales in segments or clusters that would result in above average contribution margins?
  - Orion considered some contracts to be strategic. Orion wanted to ensure that it won a contract to avoid a competitor from gaining access into a certain market. While it was obvious that any contract could be won by simply dropping margins, could the model provide a tool for increasing the probability of success without losing margin unnecessarily?
  - Primary constraints in Orion's business were its limited engineering resources and expertise. The heavy-duty transit market required a high degree of customization from one customer to another, and the process of designing new specialized options to Orion products, releasing new designs to suppliers, and receiving and installing options on the production line was complex, requiring a great deal of engineering resources. Could the model take into consideration the scarcity of engineering resources so that bidding activity could be focused on projects that would help manage this critical function?
  - Finally, at this time, Orion had approximately 500 open production slots remaining for the 2004 production year. Could the model assist in determining where sales effort should be focused to complete order entry for 2004?

## Exhibit 1

## BID DATA FOR RECENT BUS AUCTIONS

Bid Open	Customer	Quan.	Model	Orion Cost per Bus	Bid Type	Winning Bid Price	Orion Bid	New Flyer	NOVA	Gillig	Nabi	Neoplan	Chance	Thomas	Eldorado	Blue Bird	National
29-Jan-02	Port of Seattle	16	40' CNG LF	\$280,206	EVALUATED	\$300,399	\$319,900	\$300,399			\$275,651	\$329,519	\$255,351	\$268,142		\$315,618	
05-Feb-02	Savannah	25	35' LF D	\$215,747	NEG	\$259,836	\$249,000	\$271,544		\$259,836				\$250,700			
12-Feb-02	State of New Hampshire	3	35' D LF	\$246,205			\$284,900	\$284,900									
19-Feb-02	City of Ames	7	40' D HF	\$235,816			\$261,500	\$261,500									
19-Feb-02	Charlotte	15	40' LF D	\$270,633	BID		\$297,898	\$305,900	\$347,735	\$297,898							
19-Feb-02	Charlotte	15	30' LF D	\$265,333			\$273,658	\$299,900	\$319,034	\$273,658					\$319,383		
19-Feb-02	Charlotte	15	40' HF D	\$280,017			\$311,582	\$317,000		\$311,582							\$279,952
09-Mar-02	Santa Cruz	11	40' HF D	\$286,937	NEG		\$319,900	\$319,900									
13-Mar-02	Rochester	4	40' LF D	\$277,460	NEG	\$273,231	\$302,500	\$279,388		\$273,231							
01-Apr-02	Green Bay	3	30' LF D	\$232,105	BID	\$239,614	\$249,500	\$239,614		\$239,636							
28-Feb-02	Knoxville	10	30' LF D	\$233,121	NEG	\$244,786	\$264,900				\$244,786			\$220,883			
22-Feb-02	Les Autobus																
22-Feb-02	Richard Auger	10	40' HF D	\$188,688	QUOTE	\$226,170	\$359,000										
04-Apr-02	Town of Vail	5	35' HF	\$265,355		\$293,000	\$293,000		\$295,000								
04-Apr-02	Town of Vail	5	40' HF	\$268,055		\$305,000	\$305,000										
18-Mar-02	Livemore	7	35' HF D	\$265,333	NEG	\$289,751	\$296,400			\$289,751							
18-Mar-02	Livemore	7	40' HF D	\$267,047	NEG	\$303,425	\$299,900			\$303,425							
18-Mar-02	Livemore	6	40' HF Sub D	\$285,391	NEG	\$322,527	\$315,522			\$322,527							
18-Mar-02	Livemore	7	30' LF D	\$263,036	NEG	\$279,710	\$301,600			\$279,710							
18-Mar-02	Livemore	7	35' LF D	\$267,248	NEG	\$302,753	\$305,100			\$302,753							
18-Mar-02	Livemore	7	40' LF D	\$270,407	NEG	\$310,908	\$308,600			\$310,908							
11-Apr-02	Niagara Falls	5	40' LF D	\$212,146	QUOTE	\$245,637	\$245,637										
11-Apr-02	Niagara Falls	5	40' LF D	\$233,760	QUOTE	\$267,687	\$267,687										
24-Apr-02	Kingston	3	40' LF D	\$244,921	NEG	\$256,678	\$277,137	\$256,678	\$457,502								
03-May-02	Hamilton	2	40' LF CNG VI	\$286,498	NEG	\$304,815	\$337,050	\$304,815									
03-May-02	Hamilton	2	40' LF D VI	\$239,109	NEG	\$259,190	\$280,350	\$259,190									
24-May-02	Glen Falls	3	30' HF D	\$215,693	BID	\$245,000	\$246,000										
21-May-02	Ajax	2	40' HF D	\$121,925	QUOTE	\$262,368	\$262,368										
03-Jun-02	Stanislaus County	7	40' HF CNG	\$295,331	QUOTE	\$315,884	\$315,884										
07-Aug-02	Norwalk	16	35' LF D	\$236,995	EVALUATED	\$259,000	\$259,000	\$263,309			\$268,309			\$253,031			
14-Jun-02	Groupe Viens	5	40' HF	\$184,877	QUOTE	\$217,882	\$245,845										
30-Aug-02	Windor	6	40' LF D	\$225,171	NEG	\$264,457	\$254,457										
05-Aug-02	Sioux City	4	35' LF D	\$244,137	QUOTE	\$277,242	\$285,242			\$277,242							
26-Sep-02	Duluth	10	35' LF D	\$254,524	BID	\$264,053	\$275,900	\$264,053		\$264,421							
26-Sep-02	Davenport	6	35' LF D	\$242,316	BID	\$248,825	\$268,000	\$249,662		\$248,825							
26-Sep-02	Racine	8	35' LF D	\$238,465	BID	\$248,866	\$267,000	\$249,665		\$248,866							
03-Oct-02	San Diego	39	30' LF CNG	\$275,225	BID	\$268,564	\$302,500	\$258,271							\$268,564		
03-Oct-02	San Diego	39	35' LF CNG	\$288,680	BID	\$290,731	\$307,060	\$287,208			\$290,731						
03-Oct-02	San Diego	39	40' LF CNG	\$293,051	BID	\$298,405	\$311,500	\$297,053			\$298,405						



