

## Trinity University Digital Commons @ Trinity

---

School of Business Faculty Research

School of Business

---

2017

# Mantras Ambulance Services, Inc. Case 2: A Buyer-Side Business Valuation Case

J. R. Jones

P. D. Hutchison

Amy Foshee Holmes

Trinity University, [aholmes3@trinity.edu](mailto:aholmes3@trinity.edu)

Follow this and additional works at: [https://digitalcommons.trinity.edu/busadmin\\_faculty](https://digitalcommons.trinity.edu/busadmin_faculty)

 Part of the [Business Administration, Management, and Operations Commons](#)

---

### Repository Citation

Jones, J.R., Hutchison, P.D., & Holmes, A.F. (2017). Mantras ambulance services, inc. case 2: A buyer-side business valuation case. *Journal of Case Studies*, 35(2), 56-66.

This Article is brought to you for free and open access by the School of Business at Digital Commons @ Trinity. It has been accepted for inclusion in School of Business Faculty Research by an authorized administrator of Digital Commons @ Trinity. For more information, please contact [jcostanz@trinity.edu](mailto:jcostanz@trinity.edu).

## Mantras Ambulance Services, Inc. Case 2: A Buyer-Side Business Valuation Case

*Janet R. Jones, University of Minnesota – Duluth*  
*Paul D. Hutchison, University of North Texas*  
*Amy F. Holmes, Trinity University*

*This case was prepared by the authors and is intended to be used as a basis for class discussion. The views represented here are those of the authors and do not necessarily reflect the views of the Society for Case Research. The views are based on professional judgment. Copyright© 2017 by the Society for Case Research and the authors. No part of this work may be reproduced or used in any form or by any means without the written permission of the Society for Case Research.*

### Introduction

“2017 is going to be an exciting year for your company, Daniel! I just received the requested information from that company that you are interested in buying. I’ll forward the information to you by email attachment, and I will get started on the analysis.” Penny knew that her boss, Daniel, would be anxious to review and discuss the new information on a potential acquisition, so she cleared her desk off to focus on the analysis.

Daniel Gustafson started his company, QRT Ambulance Services, Inc. in 2010. He wanted to quickly expand operations, so his business strategy was to buy existing companies in locations he wished to operate. To facilitate this process, Daniel hired Kim Wilson, a business broker. Kim was responsible for identifying and soliciting interested companies to evaluate preliminary financial information. She would then send the most promising companies to Daniel for further consideration. Mantras Ambulance Services, Inc. had been identified as a company that would meet the objectives that Daniel had previously identified to Kim.

### Background Information

Daniel Gustafson began college as a pre-med student. His first job was working part-time in the emergency room (ER) at a local hospital. Although he enjoyed the up and down pace of the work and assisting patients, he came to realize that operations management in healthcare was what he wanted to pursue as a career. Thereafter, the hospital employed Daniel to manage the workflow in their ER. He had a knack for understanding the flow of business operations and could effectively communicate his ideas and suggestions with staff to improve the operational organization of the ER. From this experience, Daniel changed his major to Business Administration, and later completed an MBA degree with a focus on Leadership and Management from Boston College. Upon graduation, Daniel accepted a management position with a national, for-profit ambulance services company.

After working for the same company for almost 10 years, Daniel knew every aspect of the ambulance service business. He had been transferred to Vermont with the company and successfully transformed their Burlington division into an efficient and profitable operation. Daniel wanted more opportunities, challenges, rewards, and advancement opportunities than his employer was offering, so he decided to start his own company. Thus, Daniel founded QRT

Ambulance Services, Inc. in Burlington, VT in 2010. QRT stood for Quick and Reliable Transport—a goal that Daniel envisioned for his company. To quickly increase his company’s market presence, Daniel’s strategy was to buy existing “mom-and-pop” type ambulance companies. At the outset, Daniel had successfully negotiated the purchase of a small struggling ambulance company in Burlington, VT and turned it into a thriving business. In late 2015, he purchased a second business, Capital Ambulance Company in Montpelier, VT, for \$2,000,000. He also hired Penny Nicholson to be the company’s Chief Financial Officer (CFO) to oversee the financial operations for his growing company.

Daniel’s business strategy was to focus on acquisitions of ambulance companies located in the northeast region of the United States. He was especially interested in acquiring companies in New York State so that he could expand his operations into that potentially fruitful market. To protect citizens from unqualified and unscrupulous ambulance providers, New York law required that a new ambulance company obtain a *Certificate of Need* from the state before starting operations (NYS Department of Health, 2009). This certificate showed that the company was reputable, met the standards required by the state, and the service was needed in a specific geographic region. New applicants of a new *Certificate of Need* had to demonstrate “an absence, reduced availability or an inadequate level of care in ambulance or emergency medical service to a geographic area which is not readily correctable through the reallocation or improvement of existing resources” (NYS Department of Health, 2009) making successful new applications difficult. Thus, if Daniel wanted to enter the New York State market in the near future, he would need to buy an existing company that was currently certified by the state.

Daniel hired Kim Wilson, a business broker, to help him identify potential companies for acquisition. Kim acted as the first stage in the screening process for Daniel and Penny. First, she contacted all privately-held ambulance companies in New York State to assess an interest in selling the business. Then, she obtained financial information and performed some initial analysis. Finally, Kim sent Daniel the most promising companies for consideration. Mantras Ambulance Services, Inc. was among three companies that she identified.

### Company Comparison

“It looks like Mantras has about the same revenues as Capital Ambulance Company did when we bought it two years ago, so we could probably just make the same offer, right?” Daniel asked Penny. Penny explained that business valuation was not quite that simple, and there were many factors that went into determining the value of each company, as well as methods used to evaluate a company (American Society of Appraisers, 2009; Easton et al., 2015; Gabehart & Brinkley, 2002). Capital had been a struggling company with operational problems. The process to turn the company around had taken a significant amount of Daniel’s time. She reminded him of the challenges required to get that business running at the efficient level it is today. “Daniel, you need to be thinking about your strategic objectives and time commitments. If you want to use your talents wisely to turn a company around, it takes some time. Yes, you could buy another struggling company at a deep discount, but it would require a lot of your time to make it operate efficiently. If, on the other hand, you want to expand market share quickly, then you may have to pay more for a company that is already operating efficiently.” Daniel was excited about the possibility of buying another company and growing his business, but Penny

was right, the type of growth was something that he was still pondering. Buying a struggling company at a discount meant slow growth or buying a successful, thriving company meant faster growth which allowed opportunities in other areas. He appreciated Penny's frankness and valued her expertise and advice.

"I will gather the information we need and prepare an analysis to determine a reasonable offer for Mantras," Penney added. She found that Mantras reported \$302,237 in net income for 2016 (see Table 1) and had reported net profits in the prior two years. Mantras also reported a strong balance sheet (see Table 2). Penny gathered data from QRT's purchase of Capital Ambulance Company (see Tables 3 and 4) to assist her in preparing an analysis for the possible purchase of Mantras. Finally, she pulled some industry information from BizMiner to see how Mantras compared to the industry. This application provided Penny average data for over 375 small ambulance companies (ranging in revenues of \$2.5M - \$5M) across the United States for 2013 through 2015 (see Tables 5 and 6 for selected information).

**Table 1: Mantras Ambulance Services, Inc. Income Statement**

	2016	2015	2014
<b>Income</b>			
Sales Revenue	\$4,300,578	\$4,074,979	\$4,059,430
Interest Income	1,656	1,879	1,752
Investment Income	63,145	46,586	36,472
<b>Total Income</b>	<b>\$4,365,379</b>	<b>\$4,123,444</b>	<b>\$4,097,654</b>
<b>Expenses</b>			
Wages & Benefits	2,626,005	2,530,015	2,488,838
Vehicles Expense	846,791	720,452	775,115
Rent	195,000	195,000	195,000
Selling, General, & Administrative	278,585	310,444	256,108
Depreciation	60,165	57,632	55,555
Interest	3,260	4,120	375
<b>Total Expenses</b>	<b>\$4,009,806</b>	<b>\$3,817,663</b>	<b>\$3,770,991</b>
<b>Income Before Taxes</b>	<b>355,573</b>	<b>305,781</b>	<b>326,663</b>
Provision for Income Tax	53,336	45,867	48,999
<b>Net Income</b>	<b>\$ 302,237</b>	<b>\$ 259,914</b>	<b>\$ 277,664</b>

**Table 2: Mantras Ambulance Services, Inc. Balance Sheet**

	2016	2015	2014
<b>Assets</b>			
Current Assets			
Cash	\$ 271,000	\$ 459,605	\$ 383,537
Accounts Receivable, net	86,590	53,245	31,525
Short-Term Investments	350,000	296,000	311,000
Prepaid Income Taxes	25,942	55,638	75,693
Total Current Assets	<u>733,532</u>	<u>864,488</u>	<u>801,755</u>
Property, Plant, and Equipment, net	340,000	265,000	208,000
Long-Term Investments	450,000	250,000	150,000
<b>Total Assets</b>	<u><u>\$1,523,532</u></u>	<u><u>\$1,379,488</u></u>	<u><u>\$1,159,755</u></u>
<b>Liabilities</b>			
Current Liabilities			
Accounts Payable	\$ 85,317	\$ 105,964	\$ 92,560
Salaries and Bonus Payable	36,472	28,033	20,155
Current Portion of Long Term Debt	30,025	29,140	28,280
Total Current Liabilities	<u>151,814</u>	<u>163,137</u>	<u>140,995</u>
Long Term Debt			
Note Payable - Car Loan	62,816	92,841	121,981
<b>Total Liabilities</b>	<u>214,630</u>	<u>255,978</u>	<u>262,976</u>
<b>Stockholders' equity</b>			
Common Stock and Paid-In Capital	45,000	45,000	45,000
Retained Earnings	1,263,902	1,078,510	851,779
<b>Total Stockholders' Equity</b>	<u>1,308,902</u>	<u>1,123,510</u>	<u>896,779</u>
<b>Total Liabilities and Stockholders' Equity</b>	<u><u>\$1,523,532</u></u>	<u><u>\$1,379,488</u></u>	<u><u>\$1,159,755</u></u>

**Table 3: Capital Ambulance Company Income Statement**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Income</b>			
Sales Revenue	\$ 3,992,025	\$ 3,990,691	\$ 3,895,764
<b>Expenses</b>			
Wages & Benefits	2,287,832	2,267,092	2,234,496
Vehicle Expenses	552,121	602,828	598,723
Rent	155,281	150,540	146,940
Selling, General, & Administrative	729,133	840,522	797,234
Interest Expense	34,802	22,140	22,434
Depreciation	81,437	63,851	63,851
<b>Total Expenses</b>	<b>3,840,606</b>	<b>3,946,973</b>	<b>3,863,678</b>
<b>Income Before Taxes</b>	<b>151,419</b>	<b>43,718</b>	<b>32,086</b>
Provision for Income Taxes	82,405	6,556	4,813
<b>Net Income</b>	<b>\$ 69,014</b>	<b>\$ 37,162</b>	<b>\$ 27,273</b>

**Table 4: Capital Ambulance Company Balance Sheet**

	2015	2014	2013
<b>Assets</b>			
Current Assets			
Cash	\$ 186,188	\$ 187,940	\$ 182,360
Accounts Receivable, net	57,827	67,800	62,598
Inventory	43,120	31,323	38,753
Other Current Assets	65,431	60,626	58,392
Total Current Assets	<u>\$ 352,566</u>	<u>\$ 347,689</u>	<u>\$ 342,103</u>
Property, Plant, and Equipment, net	435,980	290,692	354,543
Other Non-Current Assets	405,091	408,115	406,983
<b>Total Assets</b>	<u><u>\$ 1,193,637</u></u>	<u><u>\$ 1,046,496</u></u>	<u><u>\$ 1,103,629</u></u>
<b>Liabilities</b>			
Current Liabilities			
Accounts Payable	\$ 81,338	\$ 78,612	\$ 80,965
Other Current Liabilities	295,672	275,545	263,812
Total Current Liabilities	<u>377,010</u>	<u>354,157</u>	<u>344,777</u>
Long-Term Liabilities	435,031	276,757	280,432
<b>Total Liabilities</b>	<u><u>\$ 812,041</u></u>	<u><u>\$ 630,914</u></u>	<u><u>\$ 625,209</u></u>
<b>Stockholders' Equity</b>			
<b>Total Stockholders' Equity</b>	<u>\$ 381,596</u>	<u>\$ 415,582</u>	<u>\$ 478,420</u>
<b>Total Liabilities and Stockholders' Equity</b>	<u><u>\$ 1,193,637</u></u>	<u><u>\$ 1,046,496</u></u>	<u><u>\$ 1,103,629</u></u>

**Table 5: Industry Average Income Statement**

	2015	2014	2013
<b>Income</b>			
Sales	\$ 3,397,456	\$ 3,362,680	\$ 3,867,081
Interest Income	3,737	5,717	2,320
Other Income	25,821	37,998	13,148
<b>Total Income</b>	<b>3,427,014</b>	<b>3,406,395</b>	<b>3,882,549</b>
<b>Expenses</b>			
Wages & Benefits	1,229,282	1,196,051	1,410,433
Vehicle Expense	560,838	483,271	511,505
Rent	132,161	126,100	148,109
Selling, General, & Administrative	1,075,294	1,074,040	1,195,702
Depreciation	69,308	132,153	111,372
Interest Expense	15,968	17,486	14,308
<b>Total Expenses</b>	<b>3,082,851</b>	<b>3,029,101</b>	<b>3,391,429</b>
<b>Income Before Taxes</b>	<b>344,163</b>	<b>377,294</b>	<b>491,120</b>
Provision for Income Tax	117,015	128,280	166,981
<b>Net Income</b>	<b>\$ 227,148</b>	<b>\$ 249,014</b>	<b>\$ 324,139</b>

(BizMiner, 2016)



**Table 6: Industry Average Balance Sheet**

	2015	2014	2013
<b>Assets</b>			
Current Assets			
Cash	\$ 178,468	\$ 148,379	\$ 185,850
Accounts Receivable, net	55,831	54,398	63,320
Inventory	41,681	28,911	27,920
Other Current Assets	63,244	57,185	85,550
<b>Total Current Assets</b>	<b>\$ 339,224</b>	<b>\$ 288,873</b>	<b>\$ 362,640</b>
Property, Plant, and Equipment, net	232,741	193,284	248,541
Other Non-Current Assets	390,647	314,293	442,392
<b>Total Assets</b>	<b>\$ 962,612</b>	<b>\$ 796,450</b>	<b>\$ 1,053,573</b>
<b>Liabilities</b>			
Current Liabilities			
Accounts Payable	\$ 78,453	\$ 69,689	\$ 87,025
Other Current Liabilities	156,232	122,653	154,559
<b>Total Current Liabilities</b>	<b>234,685</b>	<b>192,342</b>	<b>241,584</b>
Long -Term Liabilities	394,093	327,659	450,508
<b>Total Liabilities</b>	<b>\$ 628,778</b>	<b>\$ 520,001</b>	<b>\$ 692,092</b>
<b>Stockholders' equity</b>			
<b>Total stockholders' equity</b>	<b>333,834</b>	<b>276,449</b>	<b>361,481</b>
<b>Total liabilities and equity</b>	<b>\$ 962,612</b>	<b>\$ 796,450</b>	<b>\$ 1,053,573</b>

(BizMiner, 2016)

Daniel used a normalized EBITDA method to determine his offer price for the company. He utilized traditional EBITDA as a starting point, and then added back any non-recurring expenses that he could eliminate going forward. For example, if the owners were taking a salary of \$100,000, this expense would not continue once Daniel took over the business. Thus, he could add back the salary to the traditional EBITDA figure. Once he determined the normalized EBITDA figure, he used a multiplier to determine the offer price. This multiplier was based on factors such as management strength (Lehn, Patro, & Zhao, 2005), location, asset age and values, financial strength of the company, customer base, and other individual factors of the business. Based upon his industry experience and conversations with investment bankers, Daniel knew that multipliers for small businesses were generally somewhere between 3 and 5 (Hadley Capital, 2015), but varied drastically from industry to industry. For example, researchers have found that the average multiplier for the health care industry is 11.85, whereas the average multiplier in the automotive parts and equipment industry is 7.0 (Baker & Ruback, 1999). A higher valuation

multiplier indicated the company was more valuable than a company utilizing a lower multiplier (Suoizzo et. al., 2001).

In 2015, Daniel had completed the purchase of Capital Ambulance Company by using a multiplier of 6 times normalized EBITDA. The adjustments to EBITDA came from adding back owner and related party salaries, benefits, other owner discretionary expenses, and any one time expenses which were not expected to continue in future years under new ownership. In 2010, Daniel had purchased his first company using a multiplier of only 3 due to the distressed nature of the small struggling business. Mantras appeared to be a stronger company, but an owner highly motivated to sell might be willing to settle for a discounted price. Penny wanted to help Daniel achieve his goals for business expansion in the northeast U.S., yet wanted to provide him with sound counsel so that he could make wise decisions.

In addition to the financial statements, Kim forwarded answers to some basic questions that she asked when first talking with the owner, Marie Wade, of Mantras (see Table 7). It was important for her to know amounts spent on owner and related party salaries, benefits, other owner discretionary expenses, and any one time charges. After Kim and Daniel signed a proprietary nondisclosure agreement with Mantras, she received the financial information shown in Tables 1 and 2, as well as the following responses to her questions.

**Table 7: Common Questions and Responses for Possible Mantras Acquisition**

Questions	Marie's Responses
1. How much was distributed to the owner (Marie) through gross salary and dividends for the past three years?	\$270,000 & \$148,756 in 2016. \$228,000 & \$64,965 in 2015. \$200,000 & \$132,761 in 2014.
2. Does the company employ any family members that will not continue employment if the company was purchased? If so, please provide their name, position, and gross salary for the last three years?	Yes, Henry Johnson, Transportation and Maintenance Coordinator. (This position would not require replacement due to improvements in technology that have automated this function.) \$44,758 in 2016. \$41,170 in 2015. \$39,968 in 2014.
3. How much were expenses and any related party benefits (e.g., payroll taxes, healthcare or life insurance, entertainment expenses, company use of vehicles, etc.) for the owner and any employed, non-continuing family members during the past three years?	\$56,226 in 2016. \$54,267 in 2015. \$52,122 in 2014.
4. Were there any one-time expenses or charges in the last three years, amounts that you would not expect to continue into the future?	\$0 in 2016. \$45,000 in 2015 (legal settlement included in SGA).

	\$0 in 2014.
--	--------------

### Conclusion

Penny started computations on a projected value for Mantras and also started a list of follow-up questions that could impact negotiations for the purchase of that company. There was rarely one value for a company, but rather a range of acceptable values, based on the underlying assumptions and various approaches taken in business valuation.

Daniel was excited about the opportunity to purchase a strong company. Mantras seemed like a perfect fit for his strategic plan and expansion in New York State. He anxiously awaited information from Penny to make his decision. He trusted her to provide a reasonable estimate for the value of Mantras and knew that she would be looking out for his best interests. There were always other factors to consider, and she always helped him to evaluate both the financial and non-financial data in his business decisions. He poured himself another cup of coffee and went back to the task of sorting and responding to emails.

## References

- American Society of Appraisers. (2009). *ASA business valuation standards*. Reston, VA: American Society of Appraisers.
- Baker, M., & Ruback, R. (1999). *Estimating industry multiples*. Harvard University.
- BizMiner. (2016). Industry Financial Analysis Report: Industry Sector 621910.02-Ground Ambulance Service, Sales Class \$2.5M-\$5M. Retrieved from: <http://www.bizminer.com>.
- Easton, P. D., McAnally, M. L., Sommers, G. A., & Zhang, X. J. (2015). *Financial statement analysis & valuation* (4<sup>th</sup> ed.). Wesmont, IL: Cambridge Business Publishers, LLC.
- Gabehart, S., & Brinkley, R. (2002). *The business valuation book: proven strategies for measuring a company's value*. New York, NY: American Management Association.
- Hadley Capital. (2015). Valuation Guide: What is your business worth? Retrieved from: <http://www.hadleycapital.com/working-with-us/valuation-guide/>.
- Lehn, K., Patro, S., & Zhao, M. (2005). *Governance indices and valuation multiples: which causes which*. Unpublished working paper, University of Pittsburgh, Pittsburgh, PA.
- New York State Department of Health. (2009). Municipal certificate of need (Muni-CON): An overview. Retrieved from: [http://www.health.ny.gov/professionals/ems/operational\\_authority/municipal\\_certificate\\_of\\_need.htm](http://www.health.ny.gov/professionals/ems/operational_authority/municipal_certificate_of_need.htm).
- Suozzo, P., S. Cooper, G. Sutherland, and Z. Deng. 2001. *Valuation multiples: a primer*. USB Warburg Valuation Primer Series, Issue 1. (November). Available at: <http://pages.stern.nyu.edu/~ekerschn/pdfs/readingsemk/EMK%20NYU%20S07%20Global%20Tech%20Strategy%20Valuation%20Multiples%20Primer.pdf>