CONCLUSION OF VALUE

for

Father & Sons Construction Co., Inc.

as of August 31, 2010

prepared by

Patton & Associates, LLC

February 18, 2011

CONTENTS

1. PURPOSE AND APPROACH 3
2. CONCLUSION OF VALUE 6
3. COMPANY DESCRIPTION 7
4. INCOME STATEMENT 8
5. BALANCE SHEET 12
6. HISTORICAL AND PROJECTED CASH FLOW 16
7. RISK ASSESSMENT, COMPARATIVE ANALYSIS 21
8. APPROACHES TO VALUE 28
9. MARKET DATA 29
10. CAPITALIZATION RATES AND MULTIPLIERS 30
11. COMPUTATION OF VALUE 32
12. ADJUSTMENTS TO VALUE 42
13. CASH FLOW COVERAGE 45
14. CERTIFICATION 46
15. APPRAISER'S CREDENTIALS 47
16. SOURCES OF INFORMATION 48
17. CONDITIONS AND ASSUMPTIONS 49
18. REVENUE RULING 59-60 51
19. BUSINESS SALES TRANSACTIONS 52
20. ANALYSIS OF COMBINED MARKET DATA 54
Apdx I ECONOMIC OVERVIEW AND OUTLOOK 55
Apdx II INDUSTRY PROFILE AND OUTLOOK 63

1. PURPOSE AND APPROACH

Father & Sons Construction Co., Inc. (the 'Company) has engaged Patton & Associates, LLC provide business valuation services by expressing an opinion of the fair market value of a 1.0% equity interest in the Company.

Purpose

This study was undertaken at the request of William L. Father, President of Father & Sons Construction, Co., Inc. to Fair Market Value of a 1.0% interest in the equity of the Company as of August 31, 2010. The valuation is to assist the principals in establishing market value in connection with corporate planning and may accompany a buy/sell agreement.

The Company is closely held; the interest considered is not marketable and has no liquidity. The interest has been valued on a non-marketable, non-controlling interest basis.

Standard of Value

The standard of value applied in this case is Fair Market Value. For this purpose, Fair Market Value is defined as:

> *"…the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts."*

This definition is derived from IRS Revenue Ruling 59-60 and is nearly universally accepted as the basic standard by which virtually all IRS-related valuations and most other valuations are conducted. It should be noted that the "willing buyer" and the "willing seller" are generally taken to be "typical" financial investors, with no external synergistic expectations or benefits. Also incorporated into the general definition of Fair Market Value is an assumption that the interest under consideration can be transferred, and the reported value is in terms of cash or cash equivalents.

Premise of Value

In general, a business can be valued under at least four common premises of value:

1. Going Concern
2. Asset Sale, or Assemblage of Assets, or Asset Value
3. Orderly Disposition (Orderly Liquidation)
4. Forced Liquidation

Similar to the preceding discussion concerning the Standard of Value, selection of the premise of value can and often does have a substantial effect on the appraised value. For purposes of this engagement, we have treated the Company as a going concern.

Approach and Scope of Work

Our objective is to determine a value which would provide a fair and reasonable return on investment to an investor/owner, the "willing buyer" as well as the "willing seller," in view of the facts available to us as of the the effective date of the valuation.

Value has been defined as the "present worth of future benefits." Accordingly, we are concerned with the earnings and cash flow that are expected to be realized in the future, as those appear from the vantage point of the "as of" date of the valuation. We are also concerned with the risks facing the business, and their possible effect on those future benefits.

A site visit and management interview and information was provided by Tony Patrick of the firm Patton & Associates, LLC.

We obtained information from the Company, including:

* Federal Tax Returns for 08/31/2006 - 08/31/2010
* Financial Statements for 08/31/2006 - 08/31/2010
* Equipment Appraisal prepared by Equipment Appraisers as of December 29, 2010

Historical earnings and financial condition are considered because they generally are indicative of the expected future income, although that is not always true. Adjustments are usually necessary to recast the historical financials so that they more fairly represent the likely pattern of future income and financial condition. We gave special attention to the current and anticipated cash flow of the Company.

Non-control basis means that the interest under consideration can affect certain discretionary items, including owners and officers compensation.

Both internal and external factors which influence the value of the Company were reviewed, analyzed and interpreted. Internal factors include the Company's financial condition, results of operations and the size and marketability of the interest being valued. External factors include, among other things, the status of the industry and the position of the Company relative to others in the industry.

Having reviewed the Company's condition and situation, we next sought to determine the pricing parameters to be applied. We generally rely on market pricing from business sales transactions, or public stock prices, or both. It should be noted that it is often difficult or impossible to find market transactions or public companies that are strictly comparable to the business under consideration. When this is true, we generally find market data that provides the best available evidence, and use that as a starting point for our analysis of market pricing patterns.

RR 59-60 advocates the use of public companies that are the same as or similar to the subject company; where "similar" has been interpreted to allow wide latitude in guideline company selection. For example, in "Estate of Gallo v Commissioner," there were no good public winemaker comparables, so experts on both sides used brewers, distillers, soft drink bottlers, and brand-name recognition consumer food packagers. The object is to find companies that have similar risk characteristics, similar modes of operation, similar financial structure, and similar size and profitability, to the greatest extent possible. We found no public companies that were sufficiently similar to the Company to be useful in analysis.

Our search for private business sales transactions was more successful. In this case we found several useful market transactions involving sales of businesses similar to the Company. Private market transactions reflect sales of non-marketable, controlling interests.

We generally use as many methods as are meaningful, and then average the results, or take a weighted average based on our opinion as to which methods are the most appropriate. The reason for this is that no single valuation method utilizing a few mathematical variables can possibly capture the value of a complex, operating business. Historical methods assume that the future will be much like the past, although with allowances for anticipated changes. Future earnings and cash flow methods rely on projections that are often speculative and sometimes self-serving. Each method proves a different perspective on value, and it is our opinion that the "true" value of the business is better revealed when it has been considered from as many perspectives as can reasonably be developed.

After the value was determined, we performed a "Cash Flow Coverage" calculation, to see if a leveraged purchase of the business at that price could realistically be supported by the cash flow. This analysis is critical, because most businesses are sold in a leveraged transaction in which the cash flow of the business is used to pay down the debt. Consequently, the cash flow available to the purchaser imposes an upper limit on the value that can be achieved in the marketplace, unless there is some other alternate source of financing available, such as a private placement or IPO.

Representations

Conduct of the Engagement

This report was prepared by Patton & Associates, LLC, under the direction of Troy Patton, CPA / ABV

Significant professional assistance to the person(s) signing this report was provided by Tony Patrick, MBA / AVA

This report was completed on February 18, 2011

Obligation to Update the Report

Under the terms of our engagement letter with the Company, we are not obligated to update this report unless prior arrangements have been made with the analyst regarding such additional engagement.

Subsequent Events

There were no events subsequent to the date of the valuation which affected the analysis of value other than to confirm estimates made based on information available prior to the valuation date.

2. CONCLUSION OF VALUE

Based on our review of the information available to us, it is our opinion that as of August 31, 2010, the Fair Market Value of a 1.0% interest in Father & Sons Construction Co., Inc. was:

FAIR MARKET VALUE of 1.0% of the Equity	$	25,000
Non-marketable, non-controlling interest basis		

The Fair Market Value of 100% of the Equity represents the value when the buyer acquires all of the assets and assumes all of the liabilities of the Company.

It is our opinion that an investor could realize a reasonable return on investment at the value above, commensurate with the risks involved, assuming that the business is operated prudently and that there are no unforeseen adverse changes in the economic conditions affecting the business, the market, or the industry.

This valuation does not guarantee a willing buyer would pay the amount found in this valuation or any amount proposed within this valuation.

Our analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice of The Appraisal Foundation. We have also attempted to comply with the standards of the National Association of Certified Valuation Analysts and the American Institute of Certified Public Accountants' Statement of Standards for Valuation Services.

3. COMPANY DESCRIPTION

The Father & Sons Construction Co., Inc. corporate offices is located at 12345 Center Street in Indianapolis, Indiana. The Company is incorporated in the state of Indiana and has been in business for 32 years.

Shareholder Analysis

Name	Number of Shares	%
William Father	40	65.6
William Father, Jr.	10	16.4
William Father, III	11	18.0
	61	100%

Products and Services

Father & Sons Construction Co., Inc. (the 'Company') is a general contractor principally involved in the construction and maintenance of underground utility services, directional boring and site development.

The Company's activities are best classified in NAICS code:

237110 Water and Sewer Line and Related Structures Construction

At the present time, the Company's products are considered to be of excellent quality, and have moderate differentiation in the market.

Facilities

The Company has two operating locations. For the Company's type of business and the markets served, the quality of the locations would be considered unimportant as the majority of work is completed off-site.

Market

The primary market for the Company's services is Indianapolis and surrounding area however the Company provides services throughout Indiana, Illinois, Kentucky, Ohio and eastern Missouri. As it relates to size, the Company is among the top 20 percent of companies servicing this market and currently holds more than 25 percent of the available market share. The strength of the market for the Company's services is strong and growing.

Industry

The industry is very stable at this time. Refer to *Appendix II* for additional details.

Competition

The Company's products have only moderate proprietary content, which can weaken the Company's competitive position. As it relates to size, the Company is among the top 20 percent of firms servicing this market. The Company currently holds greater than 25 percent of the market share.

For new competitors, entry into this type of business would be considered extremely difficult and, due to the capital-intense nature of this industry, it would also be very expensive to enter the industry. These factors can provide the Company with a degree of security. The intensity of price competition for the Company's services would be considered only moderate.

Employees and Management

Based on volume of business, the Company can employ 25-50 employees at any given time. The employee turnover rate is average by industry standards, which implies a moderate degree of employee satisfaction and typical costs of recruitment and training. Excluding Company ownership, management depth and quality would be considered average.

4. INCOME STATEMENT

Source:	Audited	Audited	Audited	Reviewed	Reviewed
Basis:	Accrual	Accrual	Accrual	Accrual	Accrual
	12 mos	12 mos	12 mos	12 mos	12 mos
($)	Aug-2006	Aug-2007	Aug-2008	Aug-2009	Aug-2010
REVENUE	8,116,420	9,779,110	11,297,052	12,648,615	11,196,688
Cost of Sales (excl depr)	5,198,162	6,577,801	7,299,055	8,111,332	7,409,286
Gross Profit	2,918,258	3,201,309	3,997,997	4,537,283	3,787,402
Gross Margin (% Sales)	36.0%	32.7%	35.4%	35.9%	33.8%
Operating Expenses	2,620,570	2,364,046	2,686,320	2,932,911	2,661,188
% Sales	32.3%	24.2%	23.8%	23.2%	23.8%
Owners' Compensation	248,266	294,291	307,728	320,146	348,673
Operating Income	49,422	542,972	1,003,949	1,284,226	777,541
Depreciation (-)	(460,514)	(407,411)	(384,266)	(367,743)	(397,979)
Amortization (-)	-	-	-	-	-
Interest Expense (-)	(438,287)	(483,643)	(457,920)	(374,377)	(320,460)
Interest Income (+)	-	-	-	-	-
Other Income (Expense)	83,901	28,124	(78,000)	135,811	(50,064)
NET INCOME BEFORE TAX	(765,478)	(319,958)	83,763	677,917	9,038
Adjustments:					
1. Comparable compensation	(220,349)	(227,164)	(234,190)	(241,433)	(248,900)
2. Owners' compensation	248,266	294,291	307,728	320,146	348,673
3. Depreciation/Amortization	460,514	407,411	384,266	367,743	397,979
4. Interest expense	438,287	483,643	457,920	374,377	320,460
5. Sub earnings	-	-	-	(133,210)	47,138
6. Sale of assets	(12,818)	-	120,900	2,899	8,926
Adjusted EBITDA	**148,422**	**638,223**	**1,120,387**	**1,368,439**	**883,314**
Revenue	8,116,420	9,779,110	11,297,052	12,648,615	11,196,688
Revenue Adjustments	-	-	-	-	-
Adjusted Revenue	8,116,420	9,779,110	11,297,052	12,648,615	11,196,688
Adj. Earnings as a % of Revenue	1.83%	6.53%	9.92%	10.82%	7.89%

Adjusted EBT	Aug-2006	Aug-2007	Aug-2008	Aug-2009	Aug-2010
Adjusted EBITDA	148,422	638,223	1,120,387	1,368,439	883,314
Depreciation	(460,514)	(407,411)	(384,266)	(367,743)	(397,979)
Amortization	-	-	-	-	-
Interest expense	(438,287)	(483,643)	(457,920)	(374,377)	(320,460)
Adjusted EBT	(750,379)	(252,831)	278,201	626,319	164,875

NOTES TO INCOME STATEMENT ADJUSTMENTS:

1,2 Executive shareholder compensation is adjusted to reflect the normal economic cost of management. Adjusted compensation is based on data obtained from The Bureau of Labor Statistics (www.bls.gov) which monitors compensation data nationwide. Data is adjusted for type of business, geographic region, size of business, and date of valuation.

Actual officer compensation recap

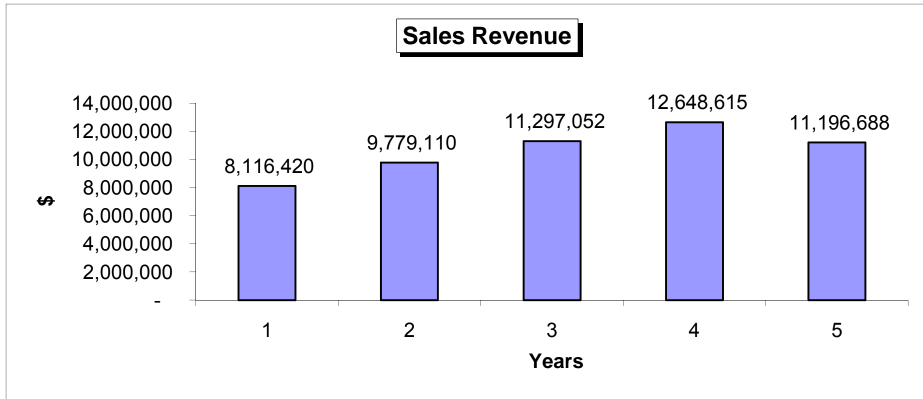
	12 mos Aug-2006	12 mos Aug-2007	12 mos Aug-2008	12 mos Aug-2009	12 mos Aug-2010
William Father	186,919	218,776	217,775	221,600	234,700
William Father, Jr.	61,347	75,515	89,953	98,546	113,973
Total reported on F/S	248,266	294,291	307,728	320,146	348,673

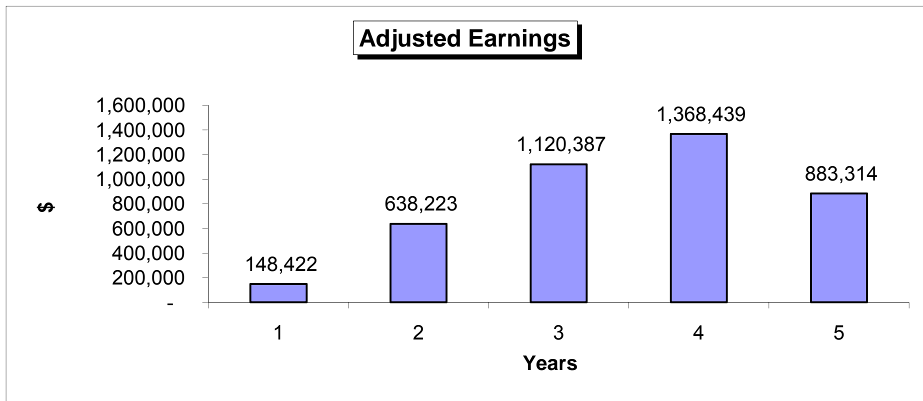
Normalized officer compensation recap

Chief Executive Officer	130,643	134,683	138,849	143,143	147,570
Civil Engineer (or related job desc.)	89,707	92,481	95,341	98,290	101,330
Total Normalized Officer Comp.	220,349	227,164	234,190	241,433	248,900

3 Depreciation expense is added back to arrive at EBITDA.
4 Interest expense is added back to arrive at EBITDA.
5 Non-recurring earnings or losses are removed to normalize income statement.
6 Non-recurring sales revenue is removed to normalize income statement.

No other income statement adjustments were considered necessary.





* **Industry Norms**	LoQtile	Med	HiQtile
Industry EBITDA Return on Sales	-0.2%	2.7%	6.3%
See Section 7, Adj. Return on Sales			

	Aug-2006	Aug-2007	Aug-2008	Aug-2009	Aug-2010
Company Revenue	8,116,420	9,779,110	11,297,052	12,648,615	11,196,688
Company EBITDA	148,422	638,223	1,120,387	1,368,439	883,314
Company Return on Sales	1.83%	6.53%	9.92%	10.82%	7.89%

DISCUSSION

In three of the past four periods, the Company's sales growth has exceed industry levels however, the Company experienced a decrease in revenue of 11.5 percent. Based on industry reports published by

Operating Expenses have been very stable over the four most recent periods at approximately 23 percent of revenue. A significant decrease of over 8 percent occurred from 2006 to 2007.

Additional discussion is provided in Section 7.

WEIGHTED AVERAGES

The results of each year are usually weighted to reflect the expected relevance of each year toward the future sustainable results of the Company. The objective of this exercise is to arrive at reasonable estimates of what level of revenue and earnings the Company is likely to be able to sustain in the near future. A commonly used pattern is to weight the oldest year least, and the most recent year highest, in the belief that the near-term future will most closely resemble the Company's most recent experience. The weights are used to calculate a set of weighted averages of earnings and revenues, shown below, which are used in all of the value calculations which follow.

In this case, the year weights were set as follows:

	12 mos Aug-2006	12 mos Aug-2007	12 mos Aug-2008	12 mos Aug-2009	12 mos Aug-2010
Year Weights:	1	2	3	4	5
WEIGHTED AVERAGE ADJUSTED EBITDA					**978,424**
Earnings basis is control EBITDA, earnings before interest, taxes, depreciation and amortization.					
WEIGHTED AVERAGE ADJUSTED EBT					**193,881**
WEIGHTED AVERAGE REVENUE					**11,209,580**
Weighted Average Adj. Earnings as percent of Avg. Revenue					**8.7%**
Weighted Average Gross Profit Margin					**34.7%**
WEIGHTED AVERAGE SDCF					**1,074,843**

5. BALANCE SHEET

Following is a summary of the assets and liabilities of the Company for the periods shown:

Source: **As Reported** ($)	Audited 12 mos Aug-2006	Audited 12 mos Aug-2007	Audited 12 mos Aug-2008	Reviewed 12 mos Aug-2009	Reviewed 12 mos Aug-2010
ASSETS					
Cash	267,594	190,852	12,272	430,378	47,010
Accounts Receivable	690,804	1,440,752	1,938,786	1,547,334	2,322,151
Inventory	-	-	-	-	-
Other Receivables	194,832	198,215	50,000	50,000	134,104
Other Current Assets	244,688	628,138	858,705	557,439	474,891
Total Current Assets	1,397,918	2,457,957	2,859,763	2,585,151	2,978,156
Land	-	-	-	-	-
Plant and Equipment	6,805,789	7,086,623	6,874,564	6,941,657	6,603,350
Accumulated Depreciation (-)	(4,110,124)	(4,414,358)	(4,222,546)	(4,507,010)	(4,442,444)
Net Plant and Equipment	2,695,665	2,672,265	2,652,018	2,434,647	2,160,906
Other Long Term Assets	1,349,203	1,501,809	1,641,410	1,762,563	1,242,982
Intangibles	107,693	88,364	103,807	63,416	43,024
Total Assets	5,550,479	6,720,395	7,256,998	6,845,777	6,425,068
LIABILITIES					
Accounts Payable	729,758	1,502,338	2,203,187	1,611,406	1,388,360
Short Term Debt	1,237,340	1,465,871	1,564,295	2,068,263	2,618,711
Accrued Expenses	-	-	-	-	-
Taxes Payable	-	-	-	-	-
Other Current Liabilities	121,809	612,115	541,199	411,368	823,789
Total Current Liabilities	2,088,907	3,580,324	4,308,681	4,091,037	4,830,860
Long Term Debt	2,679,174	2,457,553	2,170,818	1,172,099	751,742
Deferred Taxes	808,641	961,247	915,437	871,748	414,335
Other Long Term Liab	120,727	188,199	245,223	291,800	-
Total Liabilities	5,697,449	7,187,323	7,640,159	6,426,684	5,996,937
NET WORTH					
Common Stock	19,000	19,000	19,000	143,337	143,337
Retained Earnings	(550,092)	(870,050)	(786,283)	(108,366)	(99,328)
Other Equity	384,122	384,122	384,122	384,122	384,122
Treasury Stock	-	-	-	-	-
Net Worth	**(146,970)**	**(466,928)**	**(383,161)**	**419,093**	**428,131**
Total Liab & Net Worth	5,550,479	6,720,395	7,256,998	6,845,777	6,425,068

COMMON SIZE BALANCE SHEET

	Aug-2007	Aug-2008	Aug-2009	Aug-2010	RMA
ASSETS					
Cash	2.84%	0.17%	6.29%	0.73%	14.30%
Accounts Receivable	21.44%	26.72%	22.60%	36.14%	34.30%
Inventory	0.00%	0.00%	0.00%	0.00%	4.70%
Other Receivables	2.95%	0.69%	0.73%	2.09%	0.00%
Other Current Assets	9.35%	11.83%	8.14%	7.39%	7.60%
Total Current Assets	36.57%	39.41%	37.76%	46.35%	60.90%
Land	0.00%	0.00%	0.00%	0.00%	n/a
Plant and Equipment	105.45%	94.73%	101.40%	102.77%	n/a
Accumulated Depreciation (-)	-65.69%	-58.19%	-65.84%	-69.14%	n/a
Net Plant and Equipment	39.76%	36.54%	35.56%	33.63%	32.10%
Other Long Term Assets	22.35%	22.62%	25.75%	19.35%	6.00%
Intangibles	1.31%	1.43%	0.93%	0.67%	1.10%
Total Assets	100%	100%	100%	100%	100%
LIABILITIES					
Accounts Payable	22.35%	30.36%	23.54%	21.61%	14.50%
Short Term Debt	21.81%	21.56%	30.21%	40.76%	10.80%
Accrued Expenses	0.00%	0.00%	0.00%	0.00%	n/a
Taxes Payable	0.00%	0.00%	0.00%	0.00%	1.10%
Other Current Liabilities	9.11%	7.46%	6.01%	12.82%	9.60%
Total Current Liabilities	53.28%	59.37%	59.76%	75.19%	36.00%
Long Term Debt	36.57%	29.91%	17.12%	11.70%	13.60%
Deferred Taxes	14.30%	12.61%	12.73%	6.45%	1.00%
Other Long Term Liab	2.80%	3.38%	4.26%	0.00%	2.90%
Total Liabilities	106.95%	105.28%	93.88%	93.34%	53.50%
NET WORTH					
Common Stock	0.28%	0.26%	2.09%	2.23%	n/a
Retained Earnings	-12.95%	-10.83%	-1.58%	-1.55%	n/a
Other Equity	5.72%	5.29%	5.61%	5.98%	n/a
Treasury Stock	0.00%	0.00%	0.00%	0.00%	n/a
Net Worth	**-6.95%**	**-5.28%**	**6.12%**	**6.66%**	**46.50%**
Total Liab & Net Worth	100%	100%	100%	100%	100%

Balance Sheet Adjustments

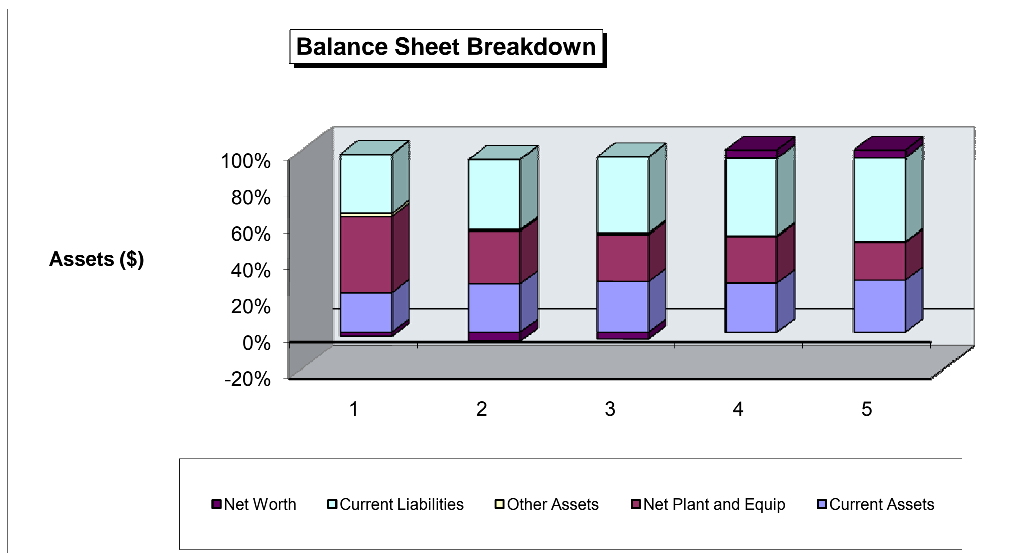
($)	12 mos Aug-2006	12 mos Aug-2007	12 mos Aug-2008	12 mos Aug-2009	12 mos Aug-2010
Net Worth before Adjustments	**(146,970)**	**(466,928)**	**(383,161)**	**419,093**	**428,131**
Adjustments:					
1 Normalization of Accounts Receivable	-	-	-	-	(441,551)
2 Equipment adjustment to FMV	-	-	-	-	375,286
3	-	-	-	-	-
ADJUSTED NET WORTH	**(146,970)**	**(466,928)**	**(383,161)**	**419,093**	**361,866**
Add Back Interest-Bearing Debt					
Short Term Debt	1,237,340	1,465,871	1,564,295	2,068,263	2,618,711
Long Term Debt	2,679,174	2,457,553	2,170,818	1,172,099	751,742
Total Interest-Bearing Debt	3,916,514	3,923,424	3,735,113	3,240,362	3,370,453
INVESTED CAPITAL	3,769,544	3,456,496	3,351,952	3,659,455	3,732,319
Adjusted Return on Investment	3.9%	18.5%	33.4%	37.4%	23.7%

Working Capital	(690,989)	(1,122,367)	(1,448,918)	(1,505,886)	(2,294,255)
Adj Working Capital ex Cash, Debt	278,757	152,652	103,105	131,999	277,446
Est Capital Spending (Chg in NPE + Depr)		(384,011)	(364,019)	(150,372)	(124,238)

NOTES TO BALANCE SHEET ADJUSTMENTS:

1 Accounts Receivable is adjusted by $441,551 to normalize this account. This outstanding receivable with the city of Indianapolis is related to a $1,828,525 contract which was 95% complete as of the valuation date.

2 Adjustment required to reflect the Fair Market Value of company equipment based on appraisal completed by Equipment Appraisers as of December 29, 2010.



DISCUSSION

The Company has lines-of-credit agreements totaling $750,000 and $50,000 with a bank, which are available through November 1, 2010. The Company had $786,062 outstanding as of August 31, 2010. The notes are secured by substantially all of the Company's assets and are guaranteed by the Company's majority share-holder. In addition, the credit agreement contains certain restrictive covenants, including prohibition on making of advances, creation of liens, payment of dividends, and certain affirmative covenants including maintenance of certain financial ratios. At August 31, 2010 the Company was in breach of some of these covenants. The Company expects to use proceeds from the potential equity sale to pay down a portion of this debt and then restructure remaining Company debt.

Additional discussion is provided in Section 7.

Weighted Averages

	12 mos Aug-2006	12 mos Aug-2007	12 mos Aug-2008	12 mos Aug-2009	12 mos Aug-2010
Weights	1	2	3	4	5
Weighted Avg Adjusted Net Worth					**105,781**
Weighted Avg Invested Capital					**3,602,520**
Weighted Average Return on Adjusted Net Worth					**925.0%**
Weighted Average Return on Invested Capital					**27.2%**

6. HISTORICAL AND PROJECTED CASH FLOW

Historical Cash Flow

The following exhibit summarizes the cash flow generated by the Company's operations, after normalizing adjustments:

($)	Aug-2006	Aug-2007	Aug-2008	Aug-2009	Aug-2010
Revenue growth rate	NA	20.5%	15.5%	12.0%	-11.5%
Depreciation (% Sales)	5.7%	4.2%	3.4%	2.9%	3.6%
Working Capital (% Sales)*	3.4%	1.6%	0.9%	1.0%	2.5%
Capital Spending (% Sales)		2.9%	-1.9%	0.5%	-3.0%
New Debt		1.8%	-3.2%	-11.3%	-4.6%
Debt/Equity ratio	(27.47)	(8.81)	(10.39)	8.43	7.87
Net Plant/Sales ratio	0.33	0.27	0.23	0.19	0.19
Net Worth/Sales ratio	(0.02)	(0.05)	(0.03)	0.03	0.04
Net Worth	(146,970)	(466,928)	(383,161)	419,093	428,131
Cash Balance	267,594	190,852	12,272	430,378	47,010
Working Cap, ex Cash, Debt	278,757	152,652	103,105	131,999	277,446
Net Plant and Equip	2,695,665	2,672,265	2,652,018	2,434,647	2,160,906
Interest-Bearing Debt	3,916,514	3,923,424	3,735,113	3,240,362	3,370,453
Interest (% Year End Debt)	10.9%	11.8%	11.5%	10.6%	9.5%
Revenue	8,116,420	9,779,110	11,297,052	12,648,615	11,196,688
Earnings Margin	1.8%	6.5%	9.9%	10.8%	7.9%
Adj EBITDA	148,422	638,223	1,120,387	1,368,439	883,314
Interest	(438,287)	(483,643)	(457,920)	(374,377)	(320,460)
Depreciation	(460,514)	(407,411)	(384,266)	(367,743)	(397,979)
Adj EBT	(750,379)	(252,831)	278,201	626,319	164,875
Tax Rate	0%	0%	37%	37%	37%
Estimated Tax	-	-	(102,934)	(231,738)	(61,004)
Adj Earning after Tax	(750,379)	(252,831)	175,267	394,581	103,871
Depreciation	460,514	407,411	384,266	367,743	397,979
Capital Spending		(384,011)	(364,019)	(150,372)	(124,238)
Working Capital Change*		126,105	49,547	(28,894)	(145,447)
Increase (Decrease) in Debt		6,910	(188,311)	(494,751)	130,091
Adj Equity Cash Flow aft Tax	(289,865)	(96,416)	56,750	88,307	362,256
Effect of Adjustments		-	-	-	-
Actual Change in Cash	(289,865)	(76,742)	(178,580)	418,106	(383,368)
Equity Cash Flow Margin	-3.6%	-1.0%	0.5%	0.7%	3.2%
Ratio of Cash Flow to Earnings	(1.953)	(0.120)	(0.159)	0.306	(0.434)
Net Cash Flow Ret on NW	197.2%	16.4%	46.6%	99.8%	-89.5%

* WC excludes Cash and Short Term Interest-Bearing Debt, which are calculated separately.

Weighted Averages

	12 mos Aug-2006	12 mos Aug-2007	12 mos Aug-2008	12 mos Aug-2009	12 mos Aug-2010
Weights	1	2	3	4	5

Weighted Avg Equity Cash Flow after Tax	**123,471**
Weighted Avg Equity Cash Flow Margin	**1.00%**

PROJECTED CASH FLOW

The cash flow projections given below are used in the discounted future earnings and cash flow methods, and are used in the coverage calculations in a later Section, Cash Flow Coverage. Some of the key parameters used in the projections are calculated on the following pages.

($)	Aug-2011	Aug-2012	Aug-2013	Aug-2014	Aug-2015
Revenue growth rate	20.6%	35.7%	7.0%	7.0%	5.0%
Depreciation (% Sales)	2.50%	2.00%	1.75%	1.50%	1.50%
Working Capital (% Sales)	1.7%	1.7%	1.7%	1.7%	1.7%
Capital Spending (% Sales)	1.5%	1.4%	0.8%	0.7%	0.8%
Debt/Equity ratio	7.87	7.87	7.87	7.87	7.87
Net Plant/Sales ratio	0.19	0.19	0.19	0.19	0.19
Net Worth/Sales ratio	0.04	0.04	0.04	0.04	0.04
Net Worth	498,347	649,071	466,320	317,324	220,435
Cash Balance	49,486	58,637	96,996	139,122	179,674
Working Cap, ex Cash, Debt	232,817	315,991	338,110	361,778	379,867
Net Plant and Equip	2,160,906	2,160,906	2,160,906	2,160,906	2,160,906
Interest-Bearing Debt	3,120,453	2,945,453	2,995,453	3,045,453	3,045,453
Interest (% Year End Debt)	11.1%	7.6%	6.7%	5.7%	4.9%
Projected Revenue	13,505,251	18,330,000	19,613,100	20,986,017	22,035,318
Earnings Margin EBITDA	8.0%	8.0%	8.0%	8.0%	8.0%
Adj EBITDA	1,080,420	1,466,400	1,569,048	1,678,881	1,762,825
Interest	(345,000)	(225,000)	(200,000)	(175,000)	(150,000)
Depreciation	(337,631)	(366,600)	(343,229)	(314,790)	(330,530)
Projected Adj EBT	397,789	874,800	1,025,819	1,189,091	1,282,295
Tax Rate	37%	37%	37%	37%	37%
Estimated Distributions for Tax	(147,182)	(323,676)	(379,553)	(439,964)	(474,449)
Projected Earnings after Tax	250,607	551,124	646,266	749,127	807,846
Depreciation	337,631	366,600	343,229	314,790	330,530
Capital Spending	(200,000)	(250,000)	(150,000)	(150,000)	(175,000)
Working Capital Change *	44,629	(83,174)	(22,119)	(23,668)	(18,089)
Increase (Decrease) in Debt	(250,000)	(175,000)	50,000	50,000	0
Proj Equity Cash Flow aft Tax	182,867	409,550	867,376	940,250	945,287
Projected Cash Flow Margin	1.4%	2.2%	4.4%	4.5%	4.3%
Dividend Capacity	(180,391)	(400,400)	(829,017)	(898,123)	(904,735)
Net Retained Cash Flow	2,476	9,151	38,359	42,127	40,552
Ratio of Cash Flow to Earnings	0.169	0.279	0.553	0.560	0.536
Ratio of Cash Flow to EBT	0.460	0.468	0.846	0.791	0.737
Net Cash Flow Ret on NW	36.7%	63.1%	186.0%	296.3%	428.8%

* WC excludes Cash and Short Term Interest-Bearing Debt, which are calculated separately.

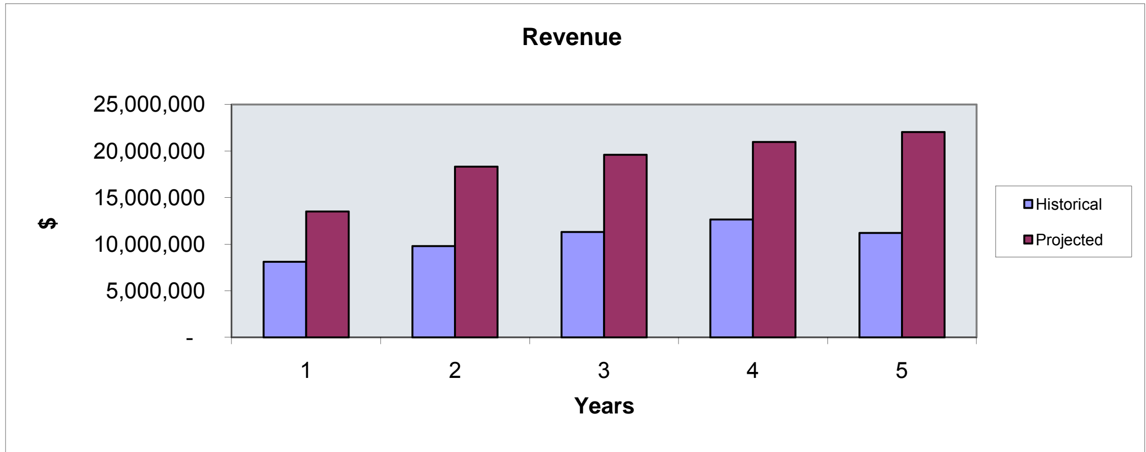
NOTES TO FINANCIAL PROJECTIONS

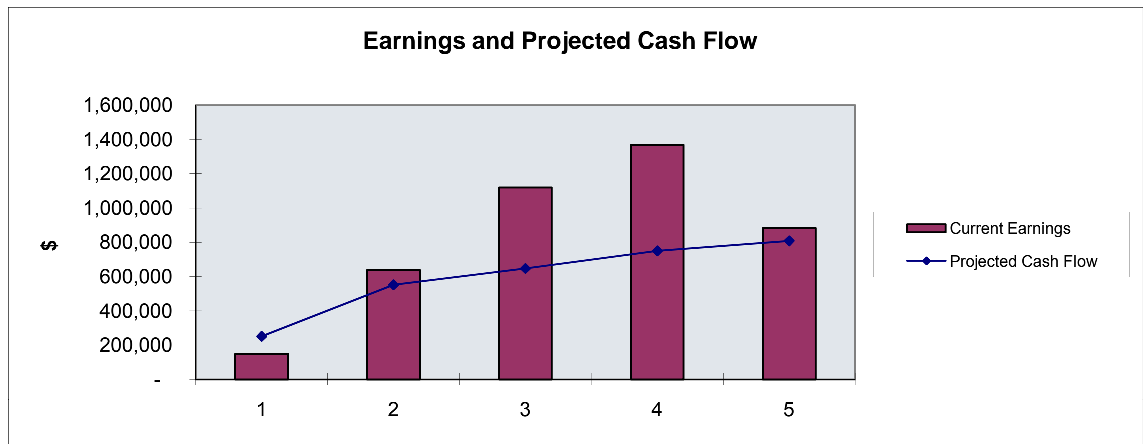
The projections above were prepared by the appraiser based on information provided by the client.

Revenue growth	Company management provided projections to be used for this analysis. Additional industry forecasts were also utilized as published by First Research, Inc.	3.00%
Earnings margin	Set the weighted average of historical earnings	
Tax rate	Estimated distributions to pay taxes on Company income	
Capital spending	Estimated from historical patterns in relation to sales and growth	
Working capital	Assumed to remain at about the current level in relation to sales	
New debt/borrowing	Estimated to maintain the debt/equity ratio within the historical range, to fund working capital and capital spending	
Cash distributions	Calculated to maintain the Net Worth/Sales ratio at:	0.04

The financial projections presented in this report are included solely to assist in the development of the value conclusion presented in this report. These presentations do not include all disclosures required by the guidelines established by the AICPA for the presentation of financial projections. The actual results may vary from the projections, and the variations may be material.

HISTORICAL AND PROJECTED RESULTS





SELECTED HISTORICAL RATIOS

The following table shows the calculation of certain ratios used in the cash flow projections and in the risk analysis in the next section

($)	Aug-2006	Aug-2007	Aug-2008	Aug-2009	Aug-2010
Weights	1	2	3	4	5
Revenue growth rate	NA	20.5%	15.5%	12.0%	-11.5%
Weighted Average revenue growth					5.6%
Industry revenue growth					1.4%
Projected revenue growth next year					20.6%
Adjusted Earnings growth rate	NA	330.0%	75.5%	22.1%	-35.5%
Depreciation	460,514	407,411	384,266	367,743	397,979
Depreciation as % of Sales	5.7%	4.2%	3.4%	2.9%	3.6%
Weighted Average Depreciation, % Sales					3.6%
Projected Depreciation, % Sales					2.5%
Current Ratio	0.7	0.7	0.7	0.6	0.6
Quick Ratio	0.5	0.5	0.5	0.5	0.5
Working Capital	(690,989)	(1,122,367)	(1,448,918)	(1,505,886)	(2,294,255)
Sales/Working Capital	(11.7)	(8.7)	(7.8)	(8.4)	(4.9)
Cash after WC Adjustment	267,594	190,852	12,272	430,378	47,010
Short Term Debt	1,237,340	1,465,871	1,564,295	2,068,263	2,618,711
Adj Working Capital ex Cash, Debt	278,757	152,652	103,105	131,999	277,446
as % of Sales	3.4%	1.6%	0.9%	1.0%	2.5%
Sales/Adjusted Working Capital	29.1	64.1	109.6	95.8	40.4
Weighted Average Adj WC as % of Sales					1.7%
Projected WC as % of Sales					1.7%
Capital Spending, est (Change in NPE+Depr)		(430,811)	(404,513)	(585,114)	(671,720)
as % of Sales		-4.4%	-3.6%	-4.6%	-6.0%
Weighted Average Cap Spending, % Sales					-4.9%
Projected Cap Spending, % Sales					1.5%
Change in Debt		74,382	(131,287)	(448,174)	(161,709)
Interest Bearing Debt	4,037,241	4,111,623	3,980,336	3,532,162	3,370,453
Interest Bearing Debt, % Sales	49.7%	42.0%	35.2%	27.9%	30.1%
Weighted Average IBD as % of Sales					33.4%
Projected Interest Bearing Debt as a % of Sales					22.0%
Interest Bearing Debt/Adj NW	(27.5)	(8.8)	(10.4)	8.4	7.9
Weighted Average D/NW					8.5928
Annualized Interest Expense	438,287	483,643	457,920	374,377	320,460
Sales/Total Assets	1.93	1.87	2.05	2.52	2.18

7. RISK ASSESSMENT, COMPARATIVE ANALYSIS

In order to better understand the risks facing the Company and its owners, it is necessary to consider how the Company's performance and operating characteristics compare to those of similar companies in the same industry.

The Company's activities are best classified in NAICS code:

237110 **Water and Sewer Line and Related Structures Construction**

The following table summarizes the appraiser's assessment of the degree of risk inherent in this business, including consideration of its current financial condition. See also the Company Description.

RISK ASSESSMENT TABLE

Risk factors	Current status	Risk Category	Risk Profile
Years in business	Well established	Low	+
Proprietary content	Moderate	Medium	+++
Industry life cycle	Mature	Medium	+++
Industry stability	Very stable	Low	+
Relative size of the company	Among top 20%	Medium	+++
Customer concentration	> 75% sales to 5 largest	High	+++++
Relative product quality	Excellent	Low	+
Product differentiation	Some	Medium	+++
Strength of the market	Strong, growing	Low	+
Size of the market	Moderate	Medium	+++
Price competition	Moderate	Medium	+++
Employee turnover	Moderate	Medium	+++
Management depth	Average	Medium	+++
Condition of facilities	Not important	Low	+
Ease of market entry	Difficult	Low	+
Ease of market exit	Moderate	Medium	+++

ANALYSIS OF COMPANY COMPARED TO INDUSTRY NORMS
Earnings basis is control Equity Cash Flow After Tax

The following table shows how the Company compares against selected industry financial measures.

(Ratios based on adjusted statements)	Company Wtd Avg	Industry Rates			Risk Level
		LoQtile	Med	HiQtile	
Company ratios historical avg:					
Revenue Growth Rates	4.2%		1.6% → Industry Avg		Medium
EBITDA Return on Sales	8.7%	0.6%	3.1%	6.3%	Low
Return on Invested Capital	27.3%	-14.7%	8.8%	38.2%	Low
EBT Return on Equity	79.4%	-1.3%	12.8%	29.7%	Low
Gross Profit Margin	34.7%	33.4%	21.5%	19.9%	Low
Company ratios based on latest					
period financials:	August 30, 2010				
Current Ratio	0.6	1.0	1.6	2.8	High
Quick Ratio	0.5	0.6	1.4	2.5	High
Debt/Equity Ratio	7.9	3.8	1.4	0.5	High
Sales/Receivables	4.82	5.90	8.70	16.20	Medium
Net Worth/Sales	0.04	0.15	0.15	0.21	Medium
Sales/Total Assets	2.2	1.5	2.4	3.3	Medium
Sales/Working Capital	(4.9)	(315.0)	12.7	7.1	Medium
WC/Sales	-20.5%	7.0%	11.3%	10.9%	Medium
Days Receivable	75.7	40.7	56.8	57.9	Medium

Industry sources: Unless otherwise noted, industry ratios are from RMA (Risk Management Association)

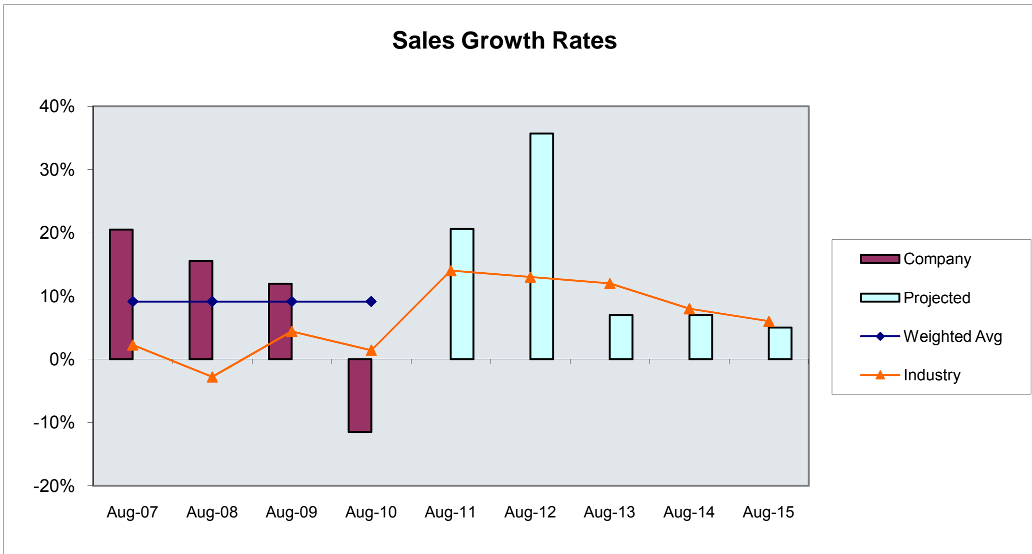
RECAP OF RISK FACTORS:	Low	Med	High
Weights based on risk factors	6	9	1
Weights based on industry norms	4	7	3
Totals	10	16	4

Our analysis suggests that the general risk in this business is moderate compared to the industry. Considering the above, the Company appears to be in average financial condition.

COMPARATIVE ANALYSIS

The following discussion of the Company's financial condition relative to the industry makes reference to the financial ratios presented above and in the preceding sections.

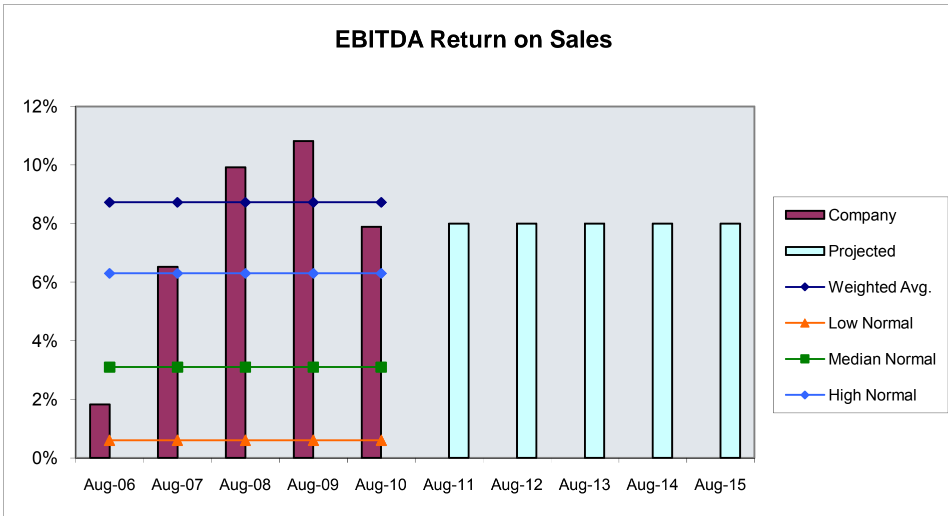
Sales Growth Rate



In three of the past four periods, the Company's sales growth has exceed industry levels however, the Company experienced a decrease in revenue of 11.5 percent. Based on industry reports published by First Research, Inc., the value of US new public and private nonresidential and nonbuilding construction is forecast to grow at an annual compounded rate of 11 percent between 2010 and 2015. The Company anticipates to see significant growth in 2011 (20.6%) and 2012 (35.7%).

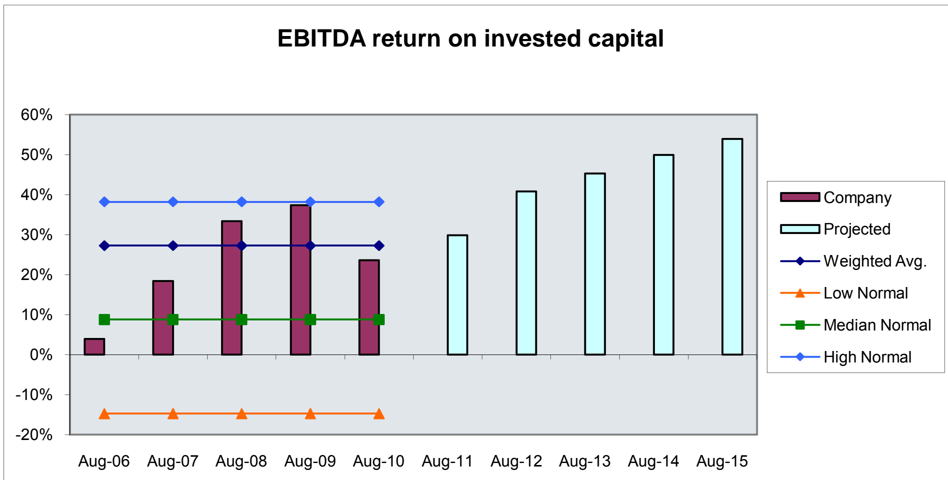
The Company's sales growth rate is a medium risk factor.

Profitability



Overall, EBITDA earnings have been significantly higher than industry averages as published in the in RMA Annual Statement Studies. The Company anticipates the trend to continue, achieving annual earnings of eight percent of sales.

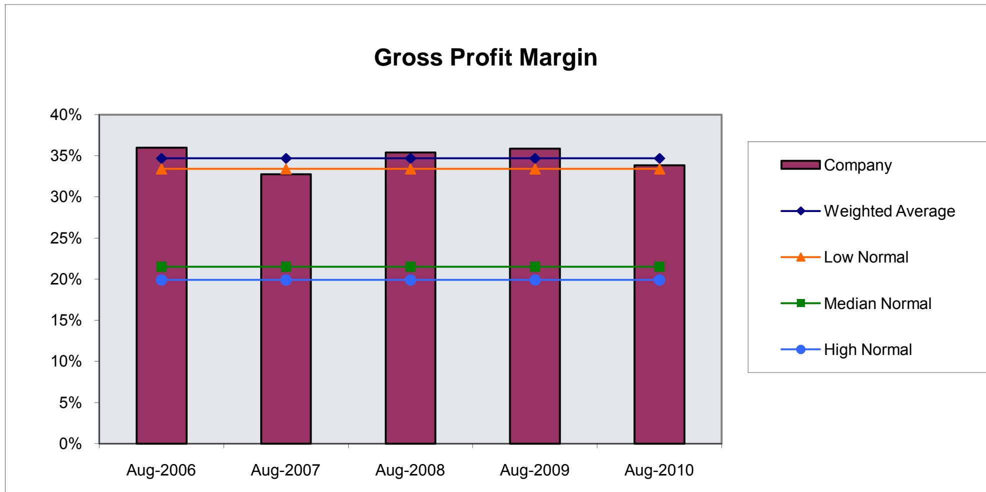
The Company's EBITDA return on sales is a low risk factor.



Long term, the trend of EBITDA return on invested capital has been up, however in the most recent period, EBITDA return on invested capital was moderately down. But, the Company's weighted average EBITDA return on invested capital was considerably above the industry median.

The Company's return on invested capital is a low risk factor.

Gross Profit Margin

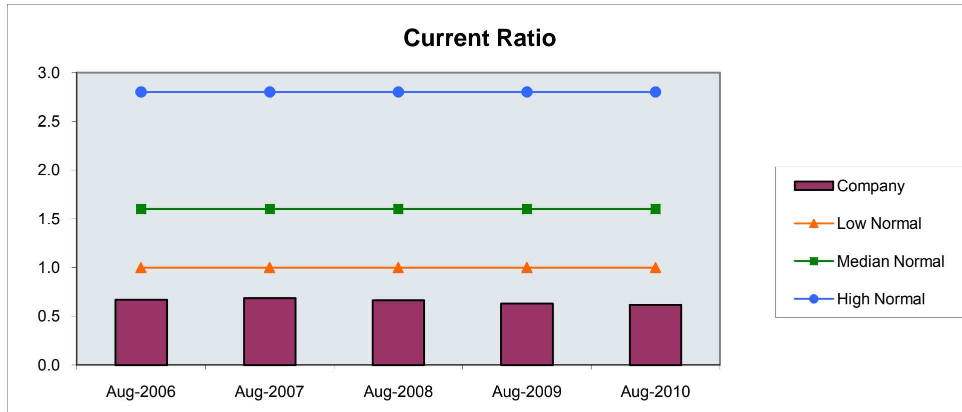


The Company's Gross Profit Margin has been consistently higher than the industry. The trend of Gross Profit Margin has been relatively stable, with a slight drop to 33.8% in the most recent period.

The Company's Gross Profit Margin is a medium risk factor.

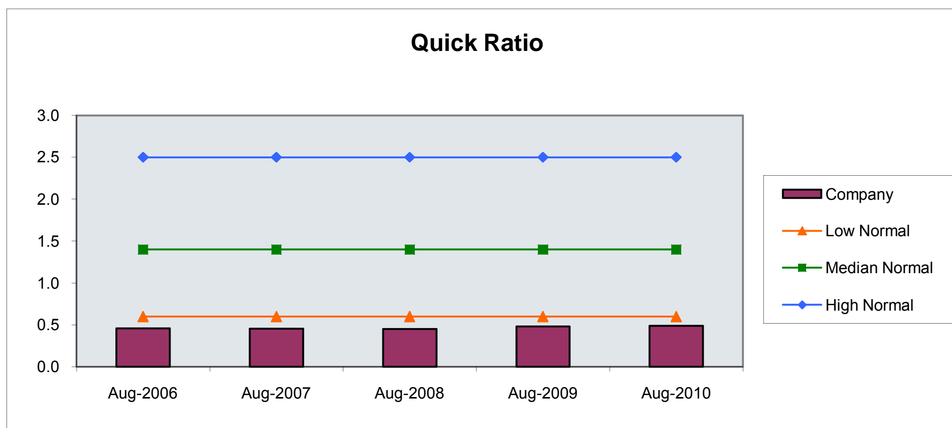
Liquidity

Liquidity ratios measure the adequacy of the Company's current assets to meet current liabilities as they come due.



The current ratio, which measures the ratio of current assets to current liabilities, has been consistently lower than one. Although the trend in the current ratio has been relatively stable, the ratio has been consistently below one which indicates generally weak liquidity.

The Company's current ratio is a high risk factor.

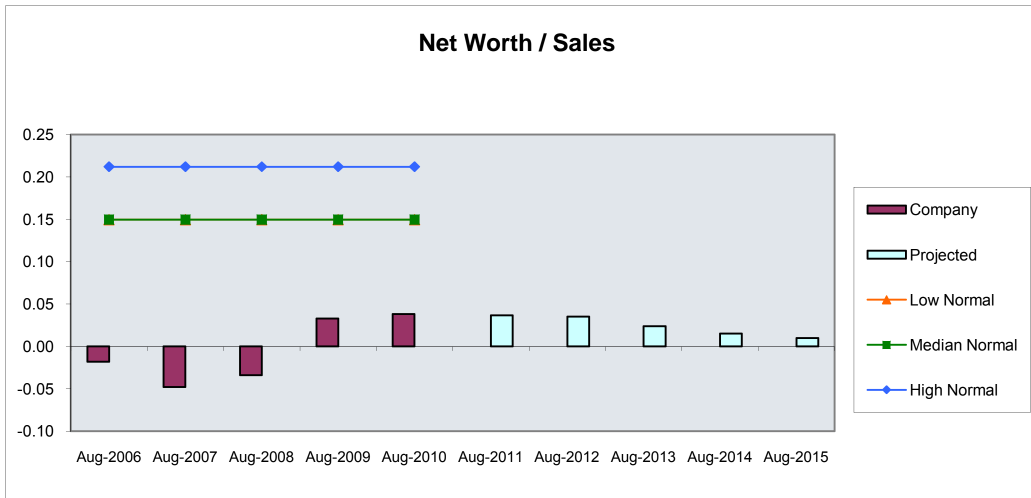


The quick ratio measures cash and near cash (in the form of receivables) relative to current obligations. Although stable, the Company's quick ratio has also been below one, which indicates poor liquidity.

The Company's quick ratio is a high risk factor.

Equity Level

The owner's equity represents how much investment the owner(s) have in the business. Net Worth/Sales is a measure of the adequacy of the owner's equity in relation to the size of the Company as measured by Sales. Inadequate Net Worth increases the risk in the business and limits borrowing capacity. Very high Net Worth limits the owner's return on equity and may represent an inefficient use of capital, although it lowers overall risk. The normal NW/S ratio was calculated using average NW/Total Assets divided by the low median, and high quartiles of Sales/Total Assets from RMA.



The Company's adjusted Net Worth / Sales ratio has been consistently lower than industry levels. The trend of Net Worth / Sales has been up in the two most recent periods, indicating a positive trend.

The Company's Net Worth / Sales is a medium risk factor.

8. APPROACHES TO VALUE

Business appraisers, like real estate appraisers, often think in terms of three basic approaches to valuation - Asset (or Cost) approaches, Income approaches, and Market approaches.

In real estate appraisal, the **Asset Approach** considers the cost to construct a property essentially identical to the one being appraised. Because the essential elements of a business are usually far more complex and far less tangible, it would be very difficult in most cases to determine the cost to create a business that is essentially the same as the one being appraised. Even the equipment used in a business can be difficult to value in this way, with such questions as whether the appropriate measure is the cost of new equipment, the depreciated cost of the existing equipment, the cost of used equipment, what the Company's equipment would sell for in liquidation, and whether to include the cost of delivery and installation. As a practical matter, Asset approaches in business valuation are usually 1) the book values of all the assets and liabilities of the business adjusted to their approximate Fair Market Values or 2) their value in an orderly fashion. The methods within the Asset Approach were rejected for determining the value of Father & Sons Construction Co., Inc. because my review indicates that the value of the enterprise is driven by the ability of the collection of assets in place to generate a benefit stream that is more important in terms of valuation that the value of the underlying assets themselves. In other words, the value of the individual assets and their associated liabilities are less important that the manner in which management has utilized them.

The **Income Approach** traditionally refers to several methods that use one or more types of historical or projected income or cash flow as indicators of value. Value is estimated by applying a capitalization rate or discount rate that is derived from Ibbotson's rates of return, which are themselves derived from returns in the public stock and bond markets. Public stock market prices are sometimes used to calculate the capitalization rates and discount rates. The main problem with this approach is that both Ibbotson's data and the public stock market returns are derived from the performance of public companies that are usually far larger and substantially different than smaller, closely held, private companies such as the one considered here. However, after careful consideration, it was determined that the methods within the Income Approach provides for a reliable determination of value for Father & Sons Construction Co., Inc.

The **Market Approach** develops a value using the principle of substitution. This simply means that if one thing is similar to another and could be used (or in this case invested in) for the other, then they must be equal. Furthermore, the price of two like and similar items should approximate the value of one another. For the market approach to be used, there must be a sufficient number of comparable companies to make comparisons, or alternatively, the industry composition must be such that meaningful comparisons can be made. Our search of the transaction databases under the enterprise's SIC code (1623) uncovered several private transactions with which to compare the enterprise.

9. MARKET DATA

Based on the preceding analysis of risks, we have chosen multipliers and capitalization rates to be applied in this case. We have derived value multipliers and cap rates from an analysis of transactions involving sales of closely held companies or public stock prices, or both.

Transactions were chosen for this purpose using the most closely comparable data available, based on size, NAICS and SIC codes, and profitability. In general, it should be noted that it is often difficult or impossible to find market transactions or public companies that are strictly comparable to the business under consideration. When this is true, we try to find market data that provides the best available evidence, and use that as a starting point for our analysis of market pricing patterns.

In this case, because the Company is profitable, we have eliminated from consideration those guideline companies that were not profitable, or which had negative net worth. Further, we have eliminated those for which the market pricing multipliers or earnings margins were "outliers" in that they were greatly different than the others, or very far from the median.

The transactions that remained after this preliminary screening were reviewed for general similarity in business activities, and those that were judged to be too dissimilar were removed from further consideration.

Some of the available transactions go back as far as 11 years. An analysis of the data usually shows that there was nearly zero correlation between transaction dates and the Price/Revenue multipliers, and therefore we concluded that older transactions were valued in the marketplace on about the same basis as more recent transactions.

Some of the transactions used reflect "asset sales", while other reflect "stock sales". In the former case, selected assets were sold, usually including fixed assets, the business operations, and often some other current assets and occasionally some current liabilities. In a stock sale, shares of the equity were sold, which carry with them the net market value of all assets and liabilities. Some practitioners do not use both asset transactions and stock transactions at the same time, but we do. After having done hundreds of both asset and equity valuations, our experience is that the difference between the asset value and the equity value of a business is usually minimal. Furthermore, asset values are sometimes greater and sometimes less than the corresponding equity values, due to variations in asset and liability structure and in the selection of assets and liabilities transferred in an asset sale. The net effect is that any bias introduced by using asset sales in an equity valuation, or vice versa, is generally undeterminable, and almost certainly minimal. Finally, these transactions provide merely a starting point in the determination of value; the final value is the result of many other, more important factors than the type of sale represented in the transaction data set.

It should be noted that the market transactions used here are limited both in number of transactions available to us, and in the quality and extent of data provided. The transaction databases provide only a very small amount of data regarding companies that, while they may be in the same general type of business as the Company, are undoubtedly substantially different from the Company in many ways, with different cultures, management, histories, and prospects. Details of the transaction deal are generally unknown, and are subject to differing interpretations by the people who provided the initial information to the database providers. Some important information, such as growth rates and whether the deal represented a financial or a strategic acquisition or a forced sale, is never provided. Accordingly, the market transactions used here provide merely a starting point for the determination of capitalization rates and multipliers for the Company.

10. CAPITALIZATION RATES AND MULTIPLIERS

Revenue Ruling 59-60 says in Sec 6 In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation. That there is no ready or simple solution will become apparent by a cursory check of the rates of return and dividend yields in terms of the selling prices of corporate shares listed on the major exchanges of the country. Wide variations will be found even for companies in the same industry. Moreover, the ratio will fluctuate from year to year depending upon economic conditions. Thus, no standard tables of capitalization rates applicable to closely held corporations can be formulated. Among the important factors to be taken into consideration in deciding upon a capitalization rate in a particular case are: (1) the nature of the business; (2) the risk involved; and (3) the stability or irregularity of earnings.

The discount rate represents the risk an investor is willing to accept for the potential reward an investment in the subject company will return. Different rates apply to types of businesses. It can also be considered the rate of return an investor requires on an ongoing basis. This risk is not calculated in a vacuum or sterile environment but rather it is calculated based on the factors that can be contrasted against the investment in other vehicles that are available and in the specific environment as of the valuation date.

The buildup method layers different risk estimates to build up a discount rate. The appropriate discount rate components for the Company are the risk free rate, equity risk premium, size premium and company specific premium. Subtracting sustainable growth from the discount rate develops the capitalization rate.

Capitalization Rates

The discount rate represents the risk an investor is willing to accept for the potential reward an investment in the subject company will return. Different rates apply to types of businesses. It can also be considered the rate of return that an investor requires on an ongoing basis. This risk is not calculated in a vacuum or a sterile environment but rather it is calculated based on the factors that can be contrasted against the investment in other vehicles that are available and in the specific environment as of the valuation date.

The buildup method layers different risk estimates to build up the discount rate. The appropriate discount rate components for the Company are the risk free rate, equity risk premium, size premium and company specific premium. Subtracting sustainable growth from the discount rate develops the capitalization rate.

Risk Free Rate

The risk free rate measures the rate of return an investor can earn without taking any additional risk. Examples of risk free returns are United States Treasury bonds. As of the valuation date, the yield was 3.52%.

Equity Risk Premium

The equity risk premium represents the risk an investor accepts for investing in large public companies. This risk is measured by taking the returns of public companies over the last 80 years and subtracting the risk free return over the last 80 years (average annual returns for large capitalization stocks minus average annual returns for long term government bonds). This information is published by Morningstar. As of the valuation date, the equity risk premium was 5.20%.

Size Risk Premium

Empirical evidence shows that the risk reward principle (the greater the risk the greater the reward) holds true in the size or capitalization of the company. The size premium represents average annual return for small capitalization stocks minus average annual returns for large capitalization stocks. Based on *Stocks, Bonds, Bills, and Inflation Yearbook*, a publication of Morningstar, the small stock risk premium averaged 6.28% from 1926 to 2009.

Industry Risk Premium

Based upon the industry of the subject company as reported in *Stocks, Bonds, Bills, and Inflation Yearbook*, a publication of Morningstar, the industry risk premium was calculated as 3.05%.

Specific Company Risk Premium

Based upon Company specific factors below, an additional investment risk is placed on the subject company. Each area is given careful consideration based on information obtained from the client, employees, company financial data, and observations made by the analyst. (+) increased risk, (-) decreased risk, and ( ) balanced risk. The summation requires an additional risk premium of 3.65%.

Factor	Risk
Proprietary Content	<+>
Industry Life Cycle	<->
Relative Size of Company	< >
Financial Condition	<+>
Concentration	<+>
Size of Market	< >
Strength of Market	<->
Number of Highly Skilled Employees	<+>
Employee Turnover	<+>
Unionization of Employees	< >
Management Depth & Quality	< >
Ease of Entry Into Business	<->
Ease of Exit	< >
Covenants Not to Compete	< >
Employee Agreements	< >

Expected Sustainable Growth Rate

We estimate 3.00% long term compound annual growth. This cash flow growth estimate is based upon my assessment of the Company's prospects for sustained growth in relationship of ongoing cash flow developed above.

Rate to Factor Conversion

The capitalization rate that was developed using the buildup method was:	18.7%
The reciprocal of this measure provides a capitalization multiple of:	5.348

BUILDUP CAPITALIZATION RATE

Risk-Free Rate of Return	3.52%	
Equity Risk Premium	5.20%	
Small Stock Risk Premium	6.28%	
Industry Risk Premium	3.05%	
Company Specific Premium	3.65%	
Discount Rate	**21.70%**	
		21.70%
Sustainable Growth		3.00%
Capitalization Rate		**18.70%**
Adjustment to current year (1 plus growth rate)		1.0300
Capitalization Rate (After-tax net cash flow cap rate for current year)		**18.16%**

11. COMPUTATION OF VALUE

SUMMARY OF VALUATION METHOD RESULTS

The values determined below are based upon private market transactions which reflect the sale of marketable, controlling interests. As a consequence, these are marketable, controlling interest values, which must be adjusted for additional lack of marketability.

These results are for a going concern, and so earnings and cash flow are the most meaningful.

The following table summarizes the results of the methods considered in this valuation. Details describing each method are presented in the following pages.

VALUATION METHOD RESULTS	Approach	Weight	Weight %	Result
1. Adjusted Net Worth	Assets	0	0.0%	803,417
2. Liquidation Value	Assets	0	0.0%	(126,278)
3. Capitalization of Earnings	Income	0	0.0%	680,079
4. Capitalization of Excess Earnings	Income/Asset	1	25.0%	764,302
5. Discounted Future Earnings	Income	1	25.0%	3,100,579
6. Discounted Cash Flow	Income	1	25.0%	3,219,765
7. Price to Discretionary Earnings	Market	0	0.0%	2,407,647
8. Price to Revenue	Market	1	25.0%	5,044,311
Weighted Avg Value of Operations [Note 1] *Marketable, Controlling Interest Basis*		4	100.0%	3,032,239
Non-Operating Assets [Note 2]				-
Value of Operations and Other Assets				3,032,239
Percentage of Ownership Valued				1.0%
				30,322
Adjustment for Minority Discount [Note 3]			15.00%	(4,548)
				25,774
Additional Adjustment for Lack of Marketability [Note 3]			3.00%	(773)
Net Value of Ownership Interest Non-marketable, non-controlling interest basis				**$ 25,001**

NOTES TO THE SUMMARY OF VALUATION METHODS

1 We generally use as many methods as are meaningful, and then average the results, or take a weighted average based on our opinion as to which methods are the most appropriate. The reason for this is that no single valuation method utilizing a few mathematical variables can possibly capture the value of a complex, operating business. Historical methods assume that the future will be much like the past, even with allowances for anticipated changes. Future earnings and cash flow methods rely on projections that are often speculative and sometimes self-serving. Each method provides a different perspective on the value, and it is our opinion that the "true" value of the business is better revealed when it has been considered from as many perspectives as can be reasonably developed.

   A discussion of the methods and the weights applied to each is included in the description of each method, on the following pages.

2 Non-operating assets consist of assets held in the Company that are not used in the course of doing business, i.e., the business would operate exactly the same without these assets. However, because they are held in the Company, they must be included in the determination of its value.

3 The adjustment for lack of marketability transforms the value from a marketable basis to a non-marketable basis (converted to cash in months or years).

   The undiscounted value is based on actual sales of small businesses similar to this one, and therefore represents a "marketable" value, but it is not "freely marketable" in the same sense as most public stock. While the undiscounted value represents the amount the owner would likely eventually receive in a sale of this business, it would still take some time to prepare for, arrange and complete a sale. Further, for a minority interest, the time to reach liquidity could be much longer, if ever, because the minority interest can not force a sale of the business in most circumstances. This adjustment brings that potential future liquidity value to its present value.

11.1 ADJUSTED NET WORTH

Net Worth as adjusted simply summarizes the net assets and liabilities of the Company. It is generally of interest mostly as an indicator of the financial reserves available to the owners and as an indicator of how much the owners have invested in the Company. This method ignores the value of revenue, earnings, and cash flow, and is usually considered as an indicator of value only when the earnings methods indicate values lower than Net Worth.

A controlling interest could choose to sell the assets, but would not in this case. The Adjusted Net Worth method cannot be relied upon under these circumstances.

	($)
Book Value of Net Worth	428,131
Net Adjustments	375,286
Adjusted Net Worth	803,417

11.2 LIQUIDATION VALUE

Liquidation Value estimates the value that might be expected if the assets of the Company were subjected to an orderly liquidation, usually over several months. This situation usually only arises when the Company is no longer viable as a going concern and the owners want to (or must) close up, sell all the assets, and pay off liabilities. In this situation, there are usually costs associated with the liquidation process, and often there are tax effects.

A controlling interest could choose to sell the assets, but would not rely on them in this case. The Liquidation Value method is not a reasonable indicator under these circumstances.

The following table shows the value which could be expected if the Company were subjected to an orderly liquidation:

	Basis	Adjusted Book Value	Percent Realized	Liquidation Value	Gain (Loss) Liquidation
ASSETS					
Cash		47,010	100.0%	47,010	-
Accounts Receivable		2,322,151	90.0%	2,089,936	(232,215)
Inventory		-	0.0%	-	-
Other Receivables		134,104	50.0%	67,052	(67,052)
Land	-	-	0.0%	-	-
Land, Plant and Equipment	2,160,906	2,536,192	100.0%	2,536,192	-
Other Long Term Assets		1,242,982	80.0%	994,386	(248,596)
Intangibles		43,024	0.0%	-	(43,024)
Total Assets		6,325,463		5,734,575	
LIABILITIES					
Accounts Payable		1,388,360	90.0%	1,249,524	(138,836)
Short Term Debt		2,618,711	85.0%	2,225,904	(392,807)
Taxes Payable		-	0.0%	-	-
Other Current Liabilities		823,789	90.0%	741,410	(82,379)
Long Term Debt		751,742	90.0%	676,568	(75,174)
Deferred Taxes		414,335	100.0%	414,335	-
Total Liabilities		5,996,937		5,307,741	
NET WORTH		328,526		426,834	
Net Gain (Loss)					(203,455)
Tax effect	10.0%	x Net Gain (Loss)		20,346	
Estimated Costs of Liquidation	10.0%	x Liq value of assets		(573,458)	
Net Liquidation Value				(126,278)	

11.3 CAPITALIZATION OF EARNINGS

This method relies on a single estimate of sustainable earnings, and a single capitalization rate chosen to reflect an investor's required rate of return. Because of the superficial simplicity of this method, it is widely used in the valuation of closely held companies. The basic theory is that the ultimate value of a firm and its assets is determined by the earnings that the firm generates. The capitalization rate represents the rate of return required to compensate for the risk inherent in the business. Both of these variables are subject to a large degree of subjectivity, and rely on the assertion that the value of a complex business can be encompassed in just two variables.

The Capitalization of Earnings method would be considered by a willing buyer.
Historical earnings are an important indicator of the Company's value. A controlling interest owner can reasonably rely on the historical earnings.

		($)
Average Adjusted Earnings		123,471
Earnings basis is control Equity Cash Flow After Tax		
Capitalization Rate	Buildup Method	18.16%
Gross Valuation		680,079
Adjustments		0
Net Valuation	(Freely-marketable, controlling interest basis)	680,079

11.4 CAPITALIZATION OF EXCESS EARNINGS (Reasonable Rate)

This method is an income-and-asset oriented approach and is based on the theory that the total value of a business is the sum of the adjusted net assets and the value of the intangibles, as determined by capitalizing the "excess" earnings of the business. The amount of earnings capitalized is those earnings which exceed a reasonable rate of return on the adjusted net assets of the business. This method acquired its name from the fact it applies a reasonable rate of return to the adjusted net assets rate than an industry rate of return.

Average Adjusted Earnings			123,471
less earnings attributable to tangible assets:			
	Adjusted net assets	385,107	
	Reasonable rate of return	10%	(38,511)
Excess earnings attributable to intangible assets			84,960
	Capitalization Rate		22.41%
	Estimated Value of Intangibles		379,195
	Adjusted net assets		385,107
Net Valuation	(Freely-marketable, controlling interest basis)		764,302

11.5 DISCOUNTED FUTURE EARNINGS

This method is frequently used, especially when the future earnings and other financial factors are expected to significantly different than the historical conditions. This method is more sophisticated than the simplistic capitalization of historical earnings in that it reflects expectations for the amounts and the timing of future earnings. Financial projections are an essential element, of course, which introduces the possibility of overly optimistic or pessimistic projections, and other subjective or speculative elements.

In this method, earnings at the end of the projection period are capitalized using the rates developed in the cap rates section. The result is then discounted along with the projected earnings using a discount rate which provides for normal industry growth and the additional risk inherent in the projections.

The Discounted Future Earnings method is useful to consider for this Company. The flow of projected earnings is considered reasonably reliable. A controlling interest owner can reasonably rely on the projected earnings.

DISCOUNT RATE				
	Capitalization rate	Equity Cash Flow		18.70%
	Cash to Earnings Factor			41.95%
	Capitalization rate	EBITDA	(Equity Cash Flow CR / Cash to Earnings Factor)	44.57%
	Discount rate			47.57%
Long Term Sustainable Growth				3.00%

CALCULATION OF VALUE

Following are the projected earnings for the company

Year Ending	Revenue Growth	Projected Revenue	Margin	EBITDA Projected Earnings	Present Value
Aug-11	20.6%	13,505,251	8.0%	1,080,420	732,120
Aug-12	35.7%	18,330,000	8.0%	1,466,400	673,336
Aug-13	7.0%	19,613,100	8.0%	1,569,048	488,209
Aug-14	7.0%	20,986,017	8.0%	1,678,881	353,980
Aug-15	5.0%	22,035,318	8.0%	1,762,825	251,859
Aug-16	3.0%	22,696,378	8.7%	1,981,044	191,793
Aug-17	3.0%	23,377,269	8.7%	2,040,475	133,863
Aug-18	3.0%	24,078,587	8.7%	2,101,690	93,430
Aug-19	3.0%	24,800,945	8.7%	2,164,740	65,210
Aug-20	3.0%	25,544,973	8.7%	2,229,683	45,514
Terminal Value = last period x (1+growth) / cap rate				5,152,254	71,266
Present value of future earnings					3,100,579
Adjustments					0
Net valuation		(Freely-marketable, controlling interest basis)			3,100,579

11.6 DISCOUNTED CASH FLOW

This method is frequently used, especially when the future cash flow and other financial factors are expected to be significantly different than the historical conditions. This method reflects expectations for both the amounts and the timing of future earnings, as well as changes on the balance sheet which can have a major impact on cash flow. Financial projections for both the income statement and the balance sheet are an essential element, of course, which introduces the possibility of overly optimistic or pessimistic projections.

In this method, cash flows at the end of the projection period are capitalized using the rates developed. The result is then discounted along with the projected cash flows using a discount rate which provides for normal industry growth and the risk inherent in the projections themselves.

The Discounted Cash Flow method is a reasonable indicator under the circumstances. The flow of projected cash flows is considered reasonably reliable and is given appropriate weight. A controlling interest owner can reasonably rely on the projected cash flows.

DISCOUNT RATE DETERMINATION			
EBT Capitalization Rate	EBT/Mkt Cap		29.7%
Net Cash Return on Equity	NCF/NW	134.4%	
EBT Return on Equity	EBT/NW	195.3%	
Ratio of Projected Cash Flow to EBT in 5th Year			0.03
Equity Cash Flow after Tax capitalization rate			18.70%
Company long term growth rate			3.00%
Discount rate			21.70%

CALCULATION OF VALUE

Following are the projected earnings for the company

Year Ending	Revenue Growth	Projected Revenue	Margin	Projected Net Cash Flow a/Tax	Present Value
Aug-11	20.6%	13,505,251	1.4%	182,867	150,261
Aug-12	35.7%	18,330,000	2.2%	409,550	276,520
Aug-13	7.0%	19,613,100	4.4%	867,376	481,211
Aug-14	7.0%	20,986,017	4.5%	940,250	428,628
Aug-15	5.0%	22,035,318	4.3%	945,287	354,088
Aug-16	3.0%	22,696,378	4.3%	973,645	299,680
Aug-17	3.0%	23,377,269	4.3%	1,002,855	253,632
Aug-18	3.0%	24,078,587	4.3%	1,032,940	214,660
Aug-19	3.0%	24,800,945	4.3%	1,063,929	181,676
Aug-20	3.0%	25,544,973	4.3%	1,095,847	153,760
Terminal Value = last period x (1+growth) / cap rate				3,691,890	425,650
Present value of future cash flow (based on after-tax cash flow)					3,219,765
Adjustments					0
Net valuation		(Freely-marketable, controlling interest basis)			3,219,765

11.7 PRICE TO DISCRETIONARY EARNINGS

The principle behind this method is the idea that the Company would be sold for a multiple of earnings to similar companies. This would in fact place a potential amount on the goodwill of the Company.

This method relies on data from sales of closely held companies as reported by merger and acquisition consultants and business brokers, but can also be based on data from public stock prices. This ratio is generally higher for companies that are more profitable than average (as a percentage of sales), and lower for those that are less profitable.

Applying the multiplier to the Company's Discretionary Cash Flow gives an estimate of the Company's Goodwill, and then the Tangible Net Worth is added to the result to arrive at the total value of Equity, including Goodwill.

The goodwill of the Company is somewhat dependent on its SDCF and it is given a weight to the total value. A controlling interest could choose to sell the assets, and might put some weight on that possibility.

Weighted Average Earnings			a	1,074,843
Price to Earnings Multiplier		Combined Market Data	b	2.24
				2,407,647
Current Adjusted Net Worth				428,131
Value of Goodwill		(Marketable, controlling interest basis)		1,979,516
Adjustments				
	Adjust to median working capital levels			-
Net valuation		(Marketable, controlling interest basis)		2,407,647

11.8 PRICE TO REVENUE

The principle behind this method is the idea that the Company would be sold for a multiple of revenues generated by similar companies. This would in fact place a potential amount on the goodwill of the Company.

This method relies on data from sales of closely held companies as reported by merger and acquisition consultants and business brokers, but can also be based on data from public stock prices. Generally speaking, the theory underlying the Price to Revenue method is that a given level of revenue should generate an expected level of earnings more or less in line with those of similar characteristics.

Weighted Average gross revenues	a		11,209,580
Price/Revenue multiplier	b	Combined Market Data	0.45
Value of Equity (a*b)	(Marketable, controlling interest basis)		5,044,311
Adjustments			
Adjust to median working capital levels			-
Net valuation	(Marketable, controlling interest basis)		5,044,311

12. ADJUSTMENTS TO VALUE

ADJUSTMENT FOR LACK OF MARKETABILITY

Marketability considers the liquidity of the interest, that is, how quickly and certainly it can be converted to cash at the owner's discretion. The market pays a premium for liquidity or, conversely, exacts a discount for lack of it.

There are almost always differences in the marketability of public company stocks and interest in closely held companies. When public stocks have provided the market basis for valuing a closely held company, a discount for lack of marketability is usually necessary due to the difference in liquidity between actively traded public securities and closely held stock. Further, there may be reason to discount a value derived from analysis of market transactions involving sales of closely held companies, even though the transaction usually represents the sale of a closely held interest.

The undiscounted value is based on actual sales of small businesses similar to this one, and therefore represents a "marketable" value, but it is not "freely marketable" in the same sense as most public stock. While the undiscounted value represents the amount the owner would be likely to eventually receive in a sale of this business, it would still take some time to prepare for, arrange and complete a sale. Further, for a minority interest, the time to reach liquidity could be much longer, if ever, because the minority interest can not force a sale of the business in most circumstances. This adjustment brings that potential future liquidity value to its present value.

To complicate things, discounts for lack of marketability for controlling interests are different than discounts for lack of marketability for minority interests. Unlike in minority interest transactions, there is no empirical transaction database from which to draw guidance for quantifying discounts for lack of marketability for controlling interests.

Marketability of Controlling Interests

The rationale for a lack of marketability discount for a controlling interest of a closely held company is that the owner of a closely held business who wishes to liquidate a controlling interest generally faces several issues:

1. Uncertain time horizon to complete the offering or sale, usually many months or even several years
2. Costs to prepare for and execute the offering or sale
3. Risk concerning the eventual sale price
4. Noncash and deferred transaction proceeds, eg. Stock swaps, seller financing, contingent payments
5. Inability to hypothecate (i.e. the inability to borrow against the estimated value of the stock)

The most logical base from which to take the discount is the anticipated buyout price (i.e. the price the owner expects to receive prior to all transaction costs). In order to complete a sale and receive the proceeds, the Company and owner generally will have to complete several tasks:

1. Create accounting records satisfactory to buyers.
2. Incur legal expenses to document Company attributes, often including representations and warranties regarding the state of various aspects of the Company (contingent liabilities).
3. Utilize substantial management time to facilitate the above and cure negative factors that would be undesirable to the typical buyer (i.e. take nonperforming relatives off the payroll).
4. Find a buyer or buyers (easier for some kinds of companies than others).
5. Engage in negotiations with one or more buyers over an extended time.

The value must reflect both the potential risks, and the accomplishment of the above listed tasks.

The Company is being valued as of a certain date. Generally, the Company's stockholders have not completed any of the above items as of the valuation date. Were the Company's management to have offered the Company for sale at the valuation date it would still have to complete the above tasks and it would be exposed to the stated risks during the sale process. The costs of accomplishing these tasks and the transaction costs of sale, must be reflected in the discount for lack of marketability when comparing value at the valuation date to any expected future proceeds.

Accomplishing these necessary steps takes time. Therefore, eventual expected proceeds need to be discounted to allow for the time value of money. Also, there is no guarantee that the time value of money will be offset by the expected positive cash flows during the holding period. Accordingly, the owner would be expected to accept a discount from the eventual selling price, if the business could be sold for cash within a few days, rather than the probable months or years required for the typical selling cycle.

Furthermore, all the bases of value for the controlling interest are estimates. Risk-averse investors could not reasonably be expected to pay 100% of the estimated future proceeds, so the expected proceeds need to be discounted to reflect the uncertainty of the amount and timing of proceeds to be realized.

FMV Restricted Stock Study

In 2001, FMV Opinions, Inc. published the FMV Restricted Stock Study, which contains data on 243 restricted stock transactions that took place between 1980 and April 1997, the date of the most recent amendment to Rule 144 of the Securities Act of 1933. The 1997 amendment sought to improve the marketability of restricted stock by reducing the initial holding period from two years to one year.

The overall average discount for all 243 transactions in the FMV Restricted Stock Study is 22.1 percent and the median discount is 20.1 percent. An analysis of the underlying data in the FMV Restricted Stock Study shows that the average and median discounts do not vary significantly across industry lines based on Standard Industrial Classification (SIC) codes, except for the 5000 to 6999 range which showed lower than average discounts. The authors of this study that the lower discounts may be attributed to the many banks and financial institutions in that category.

As a general rule, the magnitude of the discount is greater for smaller ownership interests, and minority ownership interests command a larger discount than controlling interests. In addition, the discount is larger when there is a control position as opposed to those situations where ownership is held by a group of minority interest owners.

After reviewing the findings of the FMV Restricted Stock Study, relevant Tax Court decisions, and various traits of the subject company, the appropriate discount for lack of marketability is 5.00%

ADJUSTMENT FOR MINORITY DISCOUNT

A minority interest in a closely held corporation is generally held to be worth less than its proportiate share of the value of all the outstanding shares, because minority shareholders generally cannot affect control of the company. Further, any other individual interested in the purchase of a minority interest would be limited to the same extent.

In practice, the minority interest discount can be quantified by reference to prices paid in the public market for a control position in a corporation whose stocks had previously traded as minority interests.

To determine the magnitude of the minority discount, I reviewed the following sources:

- Tax Court decisions to further our understanding of those factors that influence the magnitude of the discount.
- Control premium studies that computed the average and median premiums paid for publicly traded stock by reference to the "unaffected" trading prices for the shares.

Tax Court Decisions

There is a well-established body of case law supporting appropriateness of a minority discount in arriving at the fair market value of a closely held stock. Although specific court cases do not constitute authority in any specific valuation, they do provide insight into those factors that influence the magnitude of the minority discount.

As articulated by the Court in Estate of Woodbury G. Andrews v. Commissioner, 79 T.C. 938 (1982), *"The minority shareholder discount is designed to reflect the decreased value of shares that do not convey control of a closely held corporation."*

Citing Ward v. Commissioner, 87 T.C. 78, 103 (1986), the Court adopted a similar position in Snyder v. Commissioner, 93 T.C. 529 finding, *"A conceptually distinct discount is allowed for stock which conveys a minority interest in a closely held corporation because the buyer will not be able to control the corporation, compel the payment of dividends, or liquidate it and distribute the assets."*

Premium Studies

Several firms follow acquisition transactions and publish studies on control premiums, from which an implied minority discount can be computed. One well regarded study is the Mergerstat Control Premium Study published by FactSet Mergerstat, LLC of Los Angeles, California. This study tracks acquisition transactions in a broad cross section of industries and computes the premiums paid for controlling interests in publicly traded companies over the market prices at which the stocks of such companies had previously traded as minority interests.

After reviewing the finding of the Control Premium Study and relevant Tax Court decisions, and based upon relevant factors and facts and circumstances of the subject company, I determined that the appropriate minority discount was 15 percent.

13. CASH FLOW COVERAGE

The following calculations confirm whether a sale of the business at the net value can be justified by the cash flow of the business, assuming that the business was sold on realistic terms. This analysis considers whether the value is realistic from the point of view of a willing buyer.

Value of Operations Before Marketability Adjustment		[Section 11]	3,032,239
Adjustment for Marketability	5.00%		(151,612)
Market Value of Operations			2,880,627
Down Payment on Purchase	20.00%		576,125
Balance to Pay, above existing debt			2,304,502

Interest Rate on new Purchase Debt	7.5%
Years to Pay	10

Annual Debt Service on Balance to Pay (Interest and Principal, one annual payment)	$335,733

AMORTIZATION OF PURCHASE DEBT

	Aug-11	Aug-12	Aug-13	Aug-14	Aug-15
Beginning Balance	2,304,502	2,141,606	1,966,493	1,778,246	1,575,881
Interest	172,838	160,620	147,487	133,368	118,191
Principal	162,896	175,113	188,247	202,365	217,542
Ending Balance	2,141,606	1,966,493	1,778,246	1,575,881	1,358,339

CASH ON CASH RETURN ON DOWN PAYMENT

Projected Cash Flow after Tax	933,238	1,142,724	1,189,495	1,238,917	1,288,376
Tax Benefit, Purchase Interest	63,950	59,430	54,570	49,346	43,731
Purchase Payments	(335,733)	(335,733)	(335,733)	(335,733)	(335,733)
Cash Flow after Purchase	661,455	866,420	908,332	952,530	996,373
Debt/Equity including purchase debt	4.30	3.03	3.81	4.97	6.16
Coverage Ratio	2.97	3.58	3.71	3.84	3.97

Generally, a Cash Return on Down Payment in the range of 20-30% is considered satisfactory, although under some circumstances a higher or lower return might be appropriate. At the same time, the Debt/ Equity ratio should be within a realistic range for bank financing, usually less than 2 to 2.5. Finally, the ratio Loan to Coverage Ratio should be higher than 1.25. Conditions outside these ranges will generally require seller financing.

14. CERTIFICATION

We certify that, to the best of our knowledge and belief.

-The statements of fact contained in this report are true and correct.

-The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, unbiased professional analyses, opinions, and conclusions.

-We have no present or prospective interest in or bias with respect to the property that is the subject of this report, and we have no personal interest or bias with respect to the parties involved.

-Our compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or the use of, this report.

-Our analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice of The Appraisal Foundation. We have also attempted to comply with the standards of the American Society of Appraisers, the National Association of Certified Valuation Analysts, the Institute of Business Appraisers, and the American Institute of Certified Public Accountants' Statement of Standards for Valuation Services

-No one provided significant professional assistance to the person signing this report, except as may be noted elsewhere in this report.

This report was prepared under the direction of Troy Patton, CPA / ABV.

Patton & Associates, LLC
February 18, 2011

15. APPRAISER'S CREDENTIALS

Troy Patton, CPA / ABV

- 1992-1995 Ernst & Young
- 1995-1996 Correlated Products – CFO/Treasurer
- 1996-2004 Frontier Financial Holdings – President
- Frontier was a diversified CPA and Financial Services firm with nearly 70 employees and $6.7 million in revenues, including Frontier CPA Group with nearly $3 million in revenues. Troy Patton, CPA, served as managing partner prior to the firm's sale in 2004.
- 2004-Current Patton & Associates/Archer Investment Corporation
- Currently consult with CPA’s all over the country for business valuations, litigation support, and succession planning. Given over 30 presentations to CPA Societies and private CPA/Accounting groups in the past three years. Currently prepares an average of 6 engagements per month.
- Archer Investment Corporation – manage a portfolio of investments for a no-load mutual fund by valuing public companies and seeking undervalued companies.

Named 2005 Outstanding CPA in Indiana by the INCPAS
Named 2003 Top Five CPA’s under 35.
Editorial Board - Accounting Technology Magazine
Wrestled in 1990 for Team USA and traveled to communist block to scout other countries
B.S. Accountancy from Miami University in Oxford, OH 1992

16. SOURCES OF INFORMATION

In the course of this study, the following documents and materials were considered:

Federal Tax Returns for 08/31/2006 - 08/31/2010

Financial Statements for 08/31/2006 - 08/31/2010

A site visit and management interviews were conducted by Patton & Associates, LLC

Owner's statements

Statement Studies, Risk Management Associates - summary statistics on more than 600 industries, based on approximately 80,000 financial statements submitted by commercial banks.

First Research, Inc. - Industry Profiles and Outlooks

Key Value Data

Bureau of Labor Statistics salary and compensation database

Federal Reserve Bank, Monthly Summary of Economic Activity

Bizcomps Database of Closely Held Company Sales, describing sales of closely held companies with sales prices typically in the range of $50,000 to $5 million.

Pratts Stats Database, describing sales of closely held companies of all sizes.

17. CONDITIONS AND ASSUMPTIONS

Conditions

The historical financial information presented in this report in included solely to assist in the development of the value conclusion presented in this report, and it should not be used to obtain credit or for any other purpose. Because of the limited purpose of this presentation, it may be incomplete and contain departures from generally accepted accounting principles. We have not audited, reviewed, or compiled the historical accounting statements and express no assurance on them. The financial information presented in this report includes normalization adjustments made solely to assist in the development of the value conclusion presented in this report. Normalization adjustments are hypothetical in nature and are not intended to present restated historical results or forecasts of the future in accordance with AICPA guidelines.

Readers of this business valuation report should be aware that business valuations are based on future earnings potential that may or may not materialize. Any financial projections presented in this report are included solely to assist in the development of the value conclusion presented in this report. These presentations do not include all disclosures required by the guidelines established by the AICPA for the presentation of financial projections. The actual results may vary from the projections, and the variations may be material.

This report should not be used to obtain credit or for any purposes other than those listed in this valuation. This report is only to be used in its entirety, and for the purpose for which it was prepared. No third parties should rely on the information contained in this report without the advice of their attorney or accountant, and without confirming for themselves the information contained herein.

The value of a business changes over time in response to changes in its markets, the economy, its internal operations, and a myriad of other factors both within and outside the control of its owners and managers. The value discussed in this report was developed using data pertinent to a specific point in time. The value conclusions in this report therefore can not be assumed to be meaningful at any other point in time.

We have no responsibility to update this report for events and circumstances occurring subsequent to the date of this report. We do not purport to be guarantor of value. Valuations of closely-held companies is an imprecise science, with value being a question of fact, and reasonable people can differ in their estimates of value. We have, however, used conceptually sound and commonly accepted methods and procedures of valuation in determining the estimate of value in this report.

The valuation analyst, by reason of performing this valuation and preparing this report, is not to be required to give expert testimony nor be in attendance in court or at any government hearing with reference to the matters contained herein.

General Assumptions

The opinion of value given in this report is based on information provided in part by management of the Company and other sources contained herein. This information is assumed to be accurate and complete; we have not audited or attempted to confirm this information for accuracy or completeness.

We have relied upon the representations contained in the public and other documents in our possession concerning the value and useful condition of all investments in securities or partnership interests, and any other assets or liabilities except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances, or that the owner has good title to all the assets.

We have also assumed that the business will be operated prudently and that there are no unforeseen adverse changes in the economic conditions affecting the business, the market, or the industry. This report presumes that the management of the Company will maintain the character and integrity of the Company through any sale, reorganization or reduction of any owner's/manager's participation in the existing activities of the Company.

We have been informed by management that there are no environmental or toxic contamination problems, and no significant lawsuits, or any other undisclosed contingent liabilities which may potentially affect the business, except as may be disclosed elsewhere in this report. We have assumed that no costs or expenses will be incurred in connection with such liabilities, except as explicitly stated in this report

It is implicit in the value calculations that in the event of a sale of the business to a willing buyer, the current management would remain in place at least long enough to effect an orderly transition with no loss of essential management skills and productivity.

In the event of a sale, it is also implicit in the calculation of value that the current owners would be willing to commit to a non-competition agreement. Such agreements are an element of almost all business sales, and the absence of such an agreement would generally reduce the value of the business as a going concern.

18. REVENUE RULING 59-60

This valuation was conducted under guidelines established by Treasury Department and the Internal Revenue Service in its determination of fair market values of closely held business enterprises for income tax, estate tax, gift tax, and other related purposes. The Internal Revenue Code, Section 2031(b), specifies that the value of stocks and securities of corporations not listed on an exchange or freely traded "…shall be determined by taking into consideration, in addition to all other factors, the value of stock or securities, of corporations engaged in similar line of business which are listed on an exchange."

The basic rules for tax-related valuations were laid down in Revenue Ruling 59-60 issued by the Internal Revenue Service in March 1959. In Revenue Ruling 65-193 the Treasury Department extended the use of Revenue Ruling 59-60 to include the determination of fair market value of closely held businesses for income and other tax purposes. These rulings have been widely adopted as the primary authority for determination of fair market value of a business enterprise in virtually all valuation situations.

The rulings define "fair market value" as follows:

> *"…the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts."*

Court decisions frequently state, in addition, that the hypothetical buyer and seller are assumed to be able and willing to trade and be well informed about the property and concerning the market for such property.

This definition is widely accepted and used in courts of law and in tax literature and is the most widely used approach in valuing closely held securities. It is the basic definition upon which we rely in determining the fair market value of a Company's stock.

Revenue Ruling 59-60 requires that the following factors be considered:

1 The history of the Company and the nature of the business.
    See Section 3. COMPANY DESCRIPTION

2 General economic outlook and the outlook of the particular industry.
    See Section 3. COMPANY DESCRIPTION
    See Appendix I ECONOMIC CONDITIONS AND OUTLOOK
    See Appendix II INDUSTRY PROFILE

3 Book value of the stock and the financial condition of the business.
    See Section 5. BALANCE SHEET
    See Section 7. RISK ASSESSMENT, COMPARATIVE ANALYSIS

4 Earnings capacity of the Company.
    See Section 4. INCOME STATEMENT

5 Dividend paying capacity.
    See Section 11. COMPUTATION OF VALUE
    See Section 6. HISTORICAL AND PROJECTED CASH FLOW

6 Whether the enterprise has goodwill or other intangible value.
    See Section 2. CONCLUSION OF VALUE
    See Section 11. COMPUTATION OF VALUE

7 Sales of stock and the size of the block to be valued.
    See Section 11. COMPUTATION OF VALUE

8 Market prices of stock other comparable companies traded on exchanges.
    See Section 19. BUSINESS SALES TRANSACTIONS
    See Section 20. ANALYSIS OF COMBINED MARKET DATA

These eight factors are fundamental to any appraisal of closely held securities. They are not, however, all-inclusive. All other factors relevant to the subject valuation must also be considered. Specifically, an Appraiser must consider comparability of accounting methods and discounts for fair market value determinants.

19. BUSINESS SALES TRANSACTIONS

Bizcomps

In this analysis, we have drawn upon data describing actual sales of closely held businesses, as reported in the Bizcomps database of business sale statistics. The information in the database has been collected from business brokers over a period of many years. It reports certain basic financial data for each business sold, along with the sales price and the terms of sale. For our purposes, the key factors in the data are:

* Sales Revenue
* Sellers Discretionary Cash Flow (SDCF) = defined as earnings before interest, depreciation, and taxes, plus one owner's normal compensation. This represents the entire cash flow which would be available to to a single owner, assuming no interest-bearing debt.
* Plant & Equipment = the value of "hard assets" used in the business.
* Sales Price = the total amount paid for the goodwill of the business and the plant and equipment. The sales price does not include any additional amounts paid for inventory, accounts receivable, or other assets, or an allowance for any liabilities assumed.

From data provided by the Economic Research Institute, we have estimated the normal owner's compensation for each business shown, and calculated the estimated earnings before interest, depreciation, and taxes (EBITDA) for each business.

Using industry ratios from RMA, we also estimated the normal level of Debt and Net Worth for each business, as follows:

	RMA % Total Assets		
Notes Payable	5.4%		
Curr Maturities	5.4%		
Long Term Debt	13.6%		
Net Worth	46.5%		46.5%
Total Invested Capital % of Total Assets	70.9%	70.9%	
div by Sales/Total Assets		2.699	2.699
Invested Capital/Sales		26.3%	
Net Worth/Sales			17.2%

Then, we can estimate normal invested capital and net worth as:

Invested Capital = Invested Capital/Sales x Sales
Net Worth = Net Worth/Sales x Sales

From this information, we have then calculated several factors for each relevant transaction in the database:

* MVIC = Market Value of Invested Capital = Net Worth + Debt + Goodwill
* Goodwill = this is the Sales Price minus the amounts paid for the Plant and Equipment
* Goodwill/Revenue = the relationship of Goodwill to Revenue
* Goodwill/SDCF = the relationship of Goodwill to Sellers Discretionary Cash Flow
* EBITDA Cap Rate = EBITDA divided by MVIC
* EBITDA/Revenue
* Equity Value/Revenue = (Goodwill + NW)/Revenue
* EBITDA/NW = return on Net Worth
* Equity Value/NW = (Goodwill +NW)/NW

Pratt's Stats

We have used data from the Pratt's Stats database, which contains records of sales of businesses similar to the subject of this valuation.

For our purposes, the key factors in the data are:

* Sales Revenue
* Earnings before Tax (EBT)
* Earnings before Interest, Tax and Depreciation (EBITDA)
* Equity Sales Price

From this data, we have concluded the following ratios:

* MVIC = Market Value of Invested Capital = Equity Price + Debt
* Return on sales = EBITDA/Revenue
* Price/Sales
* EBT Capitalization Rate
* EBITDA Capitalization Rate (MVIC / EBITDA)
* Goodwill/SDCF (SDCF = EBITDA plus estimated normal owner's comp)
* Goodwill/Revenue
* SDCF/Revenue

These factors were then compiled for each business in the database which is potentially relevant to this analysis.

20. ANALYSIS OF COMBINED MARKET DATA

Market data from a single source frequently represents a fraction of the market data which is available from all sources taken together. Further, transaction data from one source may describe companies that are considerably larger, or more profitable than the Company under consideration. At the same time, data from another source may describe companies that are smaller and more or less profitable. Ideally, all of the available data from all sources could be combined into a coherent, unified analysis that takes all of the data into consideration. Showing the Company's position in this "big picture" frequently provides a very useful perspective on the market forces that affect the value of the Company.

Part of the difficulty of combining market data from multiple sources is a result of the rather different types of data that each source provides. The five main market data sources which we draw upon may be characterized as follows:

Bizcomps	Generally smaller companies, primary data elements reported are market price of goodwill plus plant and equipment, sales, and sellers discretionary cash flow, also called, SDCF.
Done Deals	Larger transactions in the range of $1-100 million, but reports sales, net income after tax, net worth, total sales price.
Pratts Stats	Wide range of transactions, reports sales, various levels of income, sales price, and many other factors, but not net worth.
Compustat	Public companies, wide range of company sizes, complete financial statement reporting, market pricing of common stocks at month end.
Mergerstat	Public company acquisitions, most larger transactions.

In order to combine the data from these disparate sources, we have made certain assumptions and in some cases estimated unreported data using industry ratios. For example, for Bizcomps, we estimate the normal net worth required to support the reported level of sales using data from RMA.

Similarly, we convert Done Deals after tax income to pretax income by applying an estimated normal tax rate However, since depreciation and interest are not reported by Done Deals, it is much more difficult to estimate EBITDA for that source. Because of the number of assumptions required, we do not include Done Deals data in analyses that call for EBITDA multipliers, cap rates, or earnings ratios.

The following analysis combines the available data to test six different measures of value against several different hypothesized drivers of market value. The market value drivers used were:

Revenue	a basic measure of the size of the company
EBT Return on Sales	a measure of profitability after interest and depreciation
EBITDA Return on Sales	a measure of operating profitability

The measures of value considered were:

Price/Revenue	Price/Net Worth
EBT Capitalization Rate	Goodwill/Revenue
EBITDA Capitalization Rate	Goodwill/SDCF

One objective of the exercise is to understand such relationships as, within this industry, how the Price/Revenue multiplier is affected by the size of the company, and by its profitability. Similarly, we want to know how the earnings capitalization rates are affected by size and profitability. After examining a wide variety of industries in over 1,000 cases, we have learned that these relationships vary considerably from industry to industry.

APPENDIX I
NATIONAL ECONOMIC REPORT – August 2010

The economic recovery that was supposed to lift the United States from the deep recession of 2007-2009 isn't going according to plan. In fact, the "recovery" is on life support. The U.S. Department of Commerce reported on June 25 that the U.S. economy grew by just 3.7% during the first quarter of 2010, down substantially from the revised growth rate of 5.6% recorded for the fourth quarter of 2009. Disappointing as this rate was, it slipped again during the second quarter, with the economy growing by a less-than-expected 2.4%. And then, in August, the second-quarter GDP growth rate was downgraded further, to an anemic 1.4%. Most analysts, including the U.S. Federal Reserve, have lowered their growth forecasts for 2010, and numerous economists are openly wondering if the U.S. economy will slip back into recession.

One of the most troubling factors in this mix is the burgeoning Federal budget deficit, which reached nearly $1.3 trillion for the second year in a row. As a result of accumulating budget deficits, Federal debt will consume 62% of the nation's economic output this year, and is on pace to account for more than 100% of economic output by 2015. Other areas of concern include steep but still-uncertain potential jumps in tax rates, the still-fragile housing and auto markets, and continuing sluggishness in consumer confidence. But it is the job market that remains most worrisome. The U.S. unemployment rate dipped from 9.9% to 9.5% over the three months ending in July, then edged back up to 9.6% in August, where it stayed in September. But private-sector job gains have been less than hoped, and the economy is adding jobs at a pace that is too low to keep up with population growth, much less replace jobs lost during the recession. In fact, the number of employed persons now has declined for four straight months.

1. THE ECONOMY

1.1 Economic growth

U.S. economic growth dips. In another of a growing series of signs that the nascent U.S. economic recovery is in peril, the U.S. Bureau of Economic Analysis announced in its "advance report" on June 30 that real U.S. gross domestic product (GDP) rose by an annual rate of 2.4% quarter-over-quarter. That rate was down sharply from the revised rate of 3.7% for the first quarter of 2010. And, as the Associated Press reported on August 27, the U.S. economic picture was "about to get a lot bleaker," as the Commerce Department revised the second-quarter growth figure downward by almost half, to 1.4%. AP's conclusion: the U.S. economy now "barely has a pulse."

Recession ended last June. It may be scant comfort to the millions enduring or facing the loss of their jobs and income, but the National Bureau of Economic Research—the official arbiter of the start and end dates of recessions—has declared that the most recent U.S. recession began in December 2007 and ended in June 2009. The group explained: "In determining that a trough occurred in June 2009, the committee did not conclude that economic conditions since that month have been favorable or that the economy has returned to operating at normal capacity. Rather, the committee determined only that the recession ended and a recovery began in that month."

1.2 Behind the numbers

Business is pessimistic. The Washington Post reported on June 23 that "the chairman of the Business Roundtable, an association of top corporate executives that has been President Obama's closest ally in the business community, accused the president and Democratic lawmakers… of creating an 'increasingly hostile environment for investment and job creation… [by] pursing tax increases, policy changes, and regulatory actions that together threaten to dampen'" economic growth and U.S. job creation. Jack Welch, former chairman of General Electric, recently concurred, declaring the Obama Administration to have an "anti-business" bias that "manifests itself through intimidation, trade, taxes, and regulation." And with friends like these? Legendary investor Warren Buffet, who frequently counsels Mr. Obama, told CNBC on September 23 that, by his own "common sense" definition, the United States is "still in a recession."

Americans are pessimistic. According to a new Wall Street Journal/NBC News poll, "Americans are more pessimistic about the state of the country and less confident in President Barack Obama's leadership than at any point since Mr. Obama entered the White House." Indeed, a new Rasmussen survey shows that nearly half of American adults see government as more of a threat to their rights than as a protector of those rights. Separately, a CNN/Opinion Research Corporation national survey released on September 14 revealed that only 25% of Americans trust the government to do what is right most of the time. And in an ABC News/Yahoo! News poll, released September 21, only about half of Americans said that the American Dream still held true.

Economy "still in a recession." According to a CNN/Opinion Research Poll published September 26, 74 percent of Americans believe that the U.S. economy still is in a recession, while only 25 percent think that the downturn is over. Fully one-third of Americans say that the recession is serious, while another 29 percent characterize it as moderate. One small bright side: the percentage of Americans saying that the country is in a recession has dropped by 13 percentage points since August.

Americans negative on Obama stimulus. U.S. News & World Report editor Mortimer Zuckerman summarized an emerging consensus when he wrote on August 26 that: "There is an instinctive conclusion among the American public that President Obama's stimulus package has failed to create a sustained recovery. Unemployment has increased, not declined; consumers have retrenched; housing starts have crashed along with mortgage applications; and there is a fear that a double-dip recession may very well be in the pipeline. The public perception, reflected in Pew Research/National Journal polls, is that the measures to combat the Great Recession have mostly helped large banks and financial institutions, and that's a view common to Republicans (75%) and Democrats (73%)."

U.S. "on the wrong track." In related findings, in a Wall Street Journal/NBC News poll, 62% of surveyed adults said that the United States was now on the wrong track—the highest level since before the 2008 election. Perhaps worse, just one-third thought that the U.S. economy would improve over the next year, a 7-point drop from the previous month's level. Then, on August 11, in a separate Wall

Street Journal/NBC News poll, nearly two-thirds of Americans said that they believed that he economy had yet to hit bottom, a sharply higher percentage than had felt the same way in January.

Poverty hits new record. One consequence of the deep recession and subsequently sluggish job growth: the number of people in the United States who are in poverty has reached a new record, with the ranks of the working-age poor approaching the levels of the 1960s that sparked the original "war on poverty." Altogether, the U.S. poverty rate has increased over the previous year from 13.2% to 14.3% of the U.S. population—or one in seven Americans—representing a total of 43.6 million people. In a related report, the U.S. Department of Agriculture reported on October 5 that the number of U.S. food stamps recipients rose to an all-time record high of 41.8 million in July.

1.3 Complications

Obama's approval ratings remain at historic low. President Barack Obama's approval rating for his handling of the U.S. economy has plunged and remained at all-time low, according to two recent polls. In a CBS News/Opinion Research survey, released on September 4, only 40% of voters approved of Mr. Obama's performance, the same as in July's survey and down 4 points from June's, with 59% or respondents disapproving of his performance. Separately, an ABC News/Washington Post survey revealed that just 43% of voters approved of Mr. Obama's handling of the economy, down 7 points from June, with 54% saying that they disapproved.

White House exodus continues. After the departures of key officials like Christina Romer, chair of the White House Council of Economic Advisers, and Peter Orszag, director of the Office of Management & Budget, National Economic Council chair Lawrence Summers is now rumored to depart the White House after the November elections. White House Chief of Staff Rahm Emmanuel also left in September to run for Mayor of Chicago. Other rumors suggest that U.S. Treasury Secretary Timothy Geithner may leave before the end of the year as well.

Fear undermining the recovery. In an October 6 article entitled "Fear undermines America's recovery," the Financial Times of London explains that, "although rising moderately this year, U.S. fixed capital investment has fallen far short of the level that history suggests should have occurred given the recent dramatic surge in corporate profitability. Combined with a collapse of long-term illiquid investments by households, they have frustrated economic recovery…" Indeed, "the instinctive reaction of businessmen and householders to uncertainty is to disengage from those activities that require confident predictions of how the future will unfold."

1.4 What lies ahead

Growth rates may slip further. A U.S. Commerce Department report on August 11 noted that June's U.S. trade deficit swelled by 18.8%—the highest rate since October 2008 and much worse than Wall Street had predicted. The new report, along with recent inventory data, suggests that the Commerce Department soon may revise its Q2 economic growth rate from the already-sluggish 2.4% annual rate to about 1.0%, according to Action Economics, an economics research group. Added Paul Ashworth, an economist at Capital Economics, another research group: The "news on the economy has been nothing but awful. The recovery is clearly slowing."

Consensus expects no turnaround soon. Yahoo! Finance summarized the prevailing opinion on the U.S. economic future when it reported on June 25 that "the economic recovery won't be catching fire any time soon. Businesses and governments are likely to reduce spending in the second half of the year. Consumers, who drive most economic growth, aren't expected to take up the slack."

Fed cuts projected growth rate. In July, the U.S. Federal Reserve cut its projected growth rate for the U.S. economy for all of 2010, reducing the likely range from between 3.2% and 3.7% to between 3.0% and 3.5%. The Fed also lowered its forecast growth rate for 2011 from between 3.8% to 4.5% to between 3.5% and 4.2%. However, Fed Chairman Ben Bernanke, on August 27, continued to predict a modest economic expansion for the second half of 2010, with the pace accelerating in 2011.

Fed's prognosis grim. In a recent gathering of Federal Reserve policy makers in Jackson Hole, Wyo., economic opinion was sharply divided over the odds of a renewed downtown, or "double-dip recession." There's still a "significant risk, maybe one chance in three, that there will be a double dip," said Harvard University Professor Martin Feldstein, chairman of the President Council of Economic Advisers under President Reagan. Fellow economy-watcher Mark Watson of Princeton disagreed, saying those odds are "way too high" and putting them instead at "one in 10 or maybe one in 20."

Fed considering new action. After spending the first half of 2010 saying that no additional economic actions were necessary, Federal Reserve officials in August decided to reinvest principal payments on mortgage loans into long-term Treasury securities, marking the Fed's first attempt to bolster growth since March 2009 in order to keep the slowing U.S. economy from slipping back into recession. Even with the Fed's decision, the Federal Reserve's August policy meeting was described as the most contentious in Bernanke's four-and-one-half-year reign, with many participants insisting upon much stronger action. Subsequently, in a September meeting, while maintaining overnight interest rates at near zero, the Fed "opened the door wider to pumping more money into the economy," according to a report on CNBC. And a separate report, in The Wall Street Journal, suggested that some Fed officials were considering a controversial move to intentionally raise inflation (and hence temporarily lower real interest rates) as a way of getting people to save less and spend more.

A rising chorus of concern. Speaking on July 8, former Federal Reserve chairman Alan Greenspan said that the U.S. economy might be undergoing a "pause," and said that he couldn't rule out the possibility of a so-called double-dip recession. Robert Reich, Secretary of Labor in the Clinton Administration, likewise opined that the U.S. economy was "still in the gravitational pull of the Great Recession. All of the booster rockets for getting us beyond it are failing." The U.S. Congressional Budget Office (CBO) joined the rising chorus of concern on August 19, declaring that the U.S. economy would face difficult times ahead, with chronic unemployment and slow manufacturing continuing to restrain the pace of recovery.

Two scenarios: "fairly bad" and "very bad." Goldman Sachs Group Inc. declared on October 5 that it foresaw two economic scenarios for the next six to nine months: "fairly bad" and "very bad." Said the company's analyst team: "A fairly bad [scenario] is one in which the economy grows at a 1-1/2 percent to 2 percent rate through the middle of next year and the unemployment rate rises moderately to 10 percent, and a very bad one [is one] in which the economy returns to an outright recession."

A third depression coming? Perhaps the darkest statement in recent months came from economist Paul Krugman, writing in The New York Times on June 27: "We are now, I fear, in the early stages of a third depression. It will probably look more like the Long Depression [of the 1870s] than the much more severe Great Depression [of the 1930s]. But the cost—to the world economy and… to the millions of lives blighted by the absence of jobs—will… be immense."

Depression already may be here. David Rosenberg, an economist with Wall Street analyst firm Gluskin Sheff, wrote in a daily briefing to investors on August 24 that recent signs of economic recovery mask an ugly truth: that the U.S. economy is in a 1930s-style Depression, not "just some garden-variety recession." He points out that the 1929-1933 downturn nevertheless registered six quarterly bounces in GDP, with an average gain of 8%. "We may well be reliving history here. If you're keeping score, [the U.S. has] recorded four quarterly advances in real GDP, and the average is only 3%."

President says economy nevertheless improving. According to a Yahoo! News report on June 29, "President Barack Obama insisted that the U.S. economy was 'strengthening'…, despite foreboding data and a fresh stock market slump… 'The economy is strengthening, we are into recovery,' Obama said. Although he acknowledged two and one-half months later, on September 10, that the U.S. economic recovery has been "painfully slow," and then again on September 20 that times were "still tough" for many Americans, he repeated his insistence that the economy was continuing to grow even as he called for an added package of stimulus measures.

Government running out of options. As the U.S. Commerce Department downgraded Q2 economic growth figures, The Los Angeles Times summarized a growing theme in economic analysis: "…just as there is widespread agreement that the economy is faltering, there is also a sense that the Federal government is running out of options to rebuild momentum.

Obama calls for more infrastructure spending. The one option that always has seemed available has been more government spending, and President Obama chose that course on September 6, when he proposed new long-term investments in the nation's transportation infrastructure that would cost at least $50 billion over the next six years. The administration also called for the creation of a permanent infrastructure bank that would focus on funding national and regional infrastructure projects.

New small business bill approved. During September, the U.S. Congress passed and President Obama signed into law a new "Small Business Jobs Act" that is designed to encourage community banks to increase their lending to small businesses. The bill authorizes the creation of a $30 billion fund operated by the U.S. Treasury Department that would deliver ultra-cheap capital to banks with less than $10 billion in assets. The administration claims that the measure would create 500,000 new jobs. However, an Associated Press report a few days later indicated that the bill's intended beneficiaries may not even want the help: "Bank executives say their customers don't want the loans, even at low interested rates, because the sluggish economy has chilled expansion plans," the report noted, while others "say the Federal money isn't worth it because they fear it will come with too much regulatory oversight."

2. EMPLOYMENT

2.1 Unemployment rates

Employment picture worsens. In confirmation of assessments that economic growth was stagnating, U.S. employment levels fell for a fourth straight month in September. Nonfarm payrolls dropped by 95,000 during the month, the U.S. Labor Department reported on October 8. While private sector hiring rose by 64,000, that was far less than the 93,000 increase in August. The government also revised employment levels for the past 12 months downward by 366,000, adjusting for a substantial over-count of employed persons.

Unemployment rate remains stable. After edging up from 9.5% to 9.6% in August, the U.S. unemployment rate remained unchanged in September. The jobless rate had fallen to 9.5% in June and July after having ranged between 9.7% and 9.9% for the first five months of the year. The Gallup Poll assessment of unemployment, however, paints a much darker picture: according to Gallup, the actual U.S. unemployment rate increased to 10.1% in September, up sharply from 9.3% in August and from 8.9% in July. Much of Gallup's reported increase in unemployment came during the second half of the month, and therefore was not picked up by the official Labor Department survey.

Job slump the steepest in recent decades. According to an analysis by Investor's Business Daily, the current jobs slump is the deepest of any in the postwar era, with payrolls down by as much as 6.1%. They are still 5.6% below their December 2007 level.

2.2 Behind the numbers

Youth unemployment hits record highs. Global youth unemployment has hit a record high following the recent financial crises and is likely to grow even worse later this year, the International Labor Organization (ILO) said on August 12. Overall, the ILO reported, 81 million out of 630 million 15- to 24-year-olds were unemployed at the end of 2009, some 7.8 million more than at the end of 2007. In the United States, the share of young people aged 16 to 24 who were employed during the summer fell to 48.9%—the lowest rate on record since 1948.

Underemployment rate jumps. Although less widely reported than the overall unemployment rate, the "underemployment rate"—which includes people out of work as well those who would like more hours than they currently are able—rose by 0.4 percentage points in September to 17.1%, matching the high for 2010.

Jobless claims dip. In the one bright spot on the employment horizon, the U.S. Labor Department reported on October 7 that initial filings for unemployment insurance fell to 445,000 for the last week of September—the lowest level in nearly three months.

2.3 Complications

Job gains less than population growth. According to the U.S. Labor Department, the U.S. economy has added an average of only 90,000 jobs per month so far this year, well below the 125,000 jobs needed each month just to keep up with population growth, much less to recover the 8 million jobs lost during the recent economic recession. Even worse, economists project that the U.S. economy would have to add an average of 300,000 more jobs each month between now and 2013 in order to meet the Administration's 2013 unemployment-rate target of 6.8%.

Temporary hiring's influence wanes. During the summer months, companies cut back on temporary hires, normally considered a harbinger of future employment. Temporary hiring did stage a turnaround as autumn began, and job levels in the temporary services industry are now up 22.1 percent year-over-year. But according to a CNNMoney.com report, "the overall job market expanded only 0.2% during the same period. And the outlook is still pretty grim." The problem, the report says, "is that businesses are still too scared to hire. Mixed economic data, sweeping financial and health care reforms, and uncertainty about the expiring Bush tax cuts have all left employers feeling jittery about their future business prospects…"

Hiring prospects dim. According to Jack Welch, former chairman of General Electric, most businesses in the United States are now operating with 20 to 25 percent excess capacity, and so can increase their production as the market demands "without adding any new people." More tellingly still, in the third quarter Business Roundtable survey, U.S. CEOs indicated that they were less willing to hire new workers because they felt that their sales growth would slow in the future. Nor do the holidays offer much hope. A report in The New York Times noted that, "as the economy sputters, prospects are dimming for unemployed workers who were banking on a seasonal retail job to carry them through the holidays." Indeed, "after a disappointing back-to-school season, many retailers say they intend to barely increase their seasonal jobs from last year, when hiring was among the lowest in the 14 years tracked by the National Retail Federation."

A psychological let-down. The slowdown in job growth may wreak havoc with Americans' psychological perception of their well-being. As a report on Yahoo! Finance explains, "Without more jobs, consumers will not feel secure enough to spend more money, further slowing the economy." One ironic sign: even in Camden, N.J., the poorest city in American, "The economy is now so bad… that even the criminals are struggling and going short. 'Even the guys who get money from illegal means really don't want to spend it,'" said one local businessman. New clinical evidence supports this thesis: according to a study by the U.S. Centers for Disease Control, due largely to economic distress, nearly one in ten Americans is clinically depressed—a figure that was calculated between 2006 and 2008, even before the worst of the current recession.

2.4 What lies ahead

Fed more pessimistic on job market outlook. The U.S. Federal Reserve forecast on July 14 that the U.S. unemployment rate would range between 9.2% and 9.5% for all of 2010, one-tenth of a percent higher than its previous forecast. However, the Fed raised its estimates for the unemployment rate in succeeding years by even more—for 2011, predicting a rate of between 8.3% to 8.7% (versus an earlier forecast of 8.1% to 8.5%), and for 2012, expecting a rate of between 7.1% and 7.5% (versus an earlier forecast of 6.6% to 7.1%).

White House even more pessimistic. The White House, on July 23, offered an even more pessimistic assessment of the U.S. employment picture, saying that it expected that the U.S. unemployment rate would remain at or above 9.0% until 2012. Indeed, U.S. Treasury Secretary Timothy Geithner conceded on August 3 that the U.S. economy was still a "tough economy" for most Americans, and warned that it was possible that the unemployment rate even could go back up for a couple of months before it comes down again as more people enter the labor force.

Overall assessment bleak. The European Organization for Economic Cooperation and Development (OECD), of which the United States is a member, predicted in its September 2010 U.S. Economic Survey that U.S. unemployment rates were likely to remain above pre-crisis levels until at least 2013, with long-term unemployment persisting as an ongoing concern. The International Labor Organization, a unit of the United Nations, placed the global employment recovery even later—in 2015. Separately, an analysis by Investor's Business Daily determined that the United States would not recover the jobs lost in the recent recession until March 2020 at the current pace of job gains—a 147-month "recovery period" that would "obliterate the old post-World War II record of 47 months set in the wake of the 2001 recession."

A "recovery summer" without a recovery. National Public Radio put the recent summer's economic picture into a grim context when it asked on September 3: "Whatever happened to 'recovery summer'? This was supposed to be the season the economy heated up, thanks to a wave of public works projects, funded by the government's stimulus program. But summer is coming to an end, and the recovery has not taken root… And before long, stimulus dollars will be fading like autumn leaves."

3. FEDERAL BUDGET & TAXES

3.1 Spending and deficits

White House revises deficit estimates. On July 23, the White House released revised 10-year budget deficit estimates, projecting a 10-year shortfall of $8.474 trillion, down marginally from the $8.532 trillion forecast in February. The administration also announced that it expected the Fiscal 2010 deficit to come in at $1.47 trillion—slightly lower than originally forecast, but somewhat higher than last year's deficit of $1.41 trillion. Over the 10-year time frame, Federal spending will average 23.3% of GDP, well above the 20.7% historical average.

CBO projections only slightly brighter. The U.S. Congressional Budget Office (CBO) has issued new budget-deficit projections that are only slightly more optimistic than those of the White House. According to the new CBO projections, released on August 19, the U.S. budget deficit should hit $1.342 trillion in Fiscal 2010, down only slightly from the agency's March forecast of $1.368 trillion.

Deficits continue to set records. The United States now has posted 23 consecutive monthly budget deficits, the longest series of shortfalls on record. Overall, according to the U.S. Congressional Budget Office, basic government spending rose by 9% in fiscal 2010, driving the country to a $1.29 trillion deficit. That's down $125 million from the same point in fiscal 2009, but still the second-largest deficit on record. In fact, despite Washington's supposed concern over government spending, the 9% pace of increase in Federal outlays for defense, social programs, entitlements, and interest on the debt actually was somewhat faster than last year's spending climb.

Debt levels also in record territory. As for overall debt levels, the U.S. Treasury Department projected on June 2 that they would reach $13.6 trillion this year. At this level, the deficit would consume some 62% of the nation's economic output, according to the U.S. Congressional Budget Office (CBO)—the highest level since World War II. Worse, the debt level is projected to climb to some $19.6 trillion by 2015—a figure that would represent more than 100% of the value of the U.S. gross domestic product. In fact, according to the CBO, the Obama Administration has added more to the U.S. national debt—some $2.5 3 trillion—in its first 19 months in office than all presidents from Washington through Reagan combined.

Debt may be much higher. Despite these hard-to-fathom numbers, the actual U.S. debt may be considerably higher because the official figures do not count off-budget obligations, such as required spending for Social Security and Medicare. For instance, Boston University economist Laurence Kotlikoff, co-author of "The Coming Generational Storm: What You Need to Know about America's Economic Future," says that the U.S. national debt is actually around $200 trillion, or about 15 times the officially reported level of $14.3 trillion. Andrew Moylan, director of government affairs for the National Taxpayers Union, places the actual figure at around $60 trillion, as does David Walker, who served as U.S. Comptroller General from 1998 to 2008.

Public deeply worried. U.S. News & World Report editor Mortimer Zuckerman captured prevailing opinion when he wrote on August 26 that: "There is another instinctive conclusion among the American people. It is that the national deficit, and the debts that we have accumulated, are of critical political importance. On the national debt, the money the government has spent without the tax revenues to pay for it has produced mind-numbing numbers so large as to be disconnected from reality. Zeros from here to infinity… The public knows that, shuffle the numbers as you may, the level of debt is unsustainable."

3.2 Taxation

Huge tax hikes on the horizon. Huge, growth-depressing tax hikes are on the horizon. The advocacy group Americans for Tax Relief released an analysis on July 1, noting that there were "six months to go until the largest tax hikes in history. Due to the expiration of the Bush tax rate reductions: (1) personal tax rates will rise by between 10% and 50%; (2) the "marriage penalty" will return; (3) the inheritance tax will return; (4) the capital gains tax will jump from 15% to a rate of 20%; (5) the dividends tax will more than double from 15% to a rate of 39.6%; (6) more than 20 new taxes will be imposed through the Obama Administration's health-care plan; (7) tax credits for education and other activities will be limited; (8) the alternative minimum tax will ensnare 4 million more families; (9) small-business expensing limits will be slashed by 90%; and (10) scores of new taxes will be imposed on businesses of all types.

Tax hikes in dollars and cents. According to a new analysis by Deloitte Tax LLP, a tax-consulting firm, with the expiration of the Bush-era tax cuts, a typical family of four with an annual household income of $50,000 would have to pay $2,900 more in taxes in 2011; the same family making $100,000 a year would see its tax bill rise by $4,5000. Wealthier families would face even bigger tax hikes: $10,800 more in taxes for a family earning $500,000 per year, and $52,300 for a family earning $1 million a year. CNN contributor David Frum adds this business perspective: "If the Bush tax cuts do lapse,… the tax rates on capital gains and corporate dividends, now at 15 percent, revert to 20 percent and 40 percent, respectively. Most elected officials, Republican and Democratic, agree that such a big tax increase would fall like a hammer blow on an economy that is only weakly recovering from the worst recession since World War II."

3.3 What lies ahead

End of Bush tax cuts uncertain. President Obama has repeatedly said that he intends to let the Bush tax cuts for families earning more than $250,000 expire next year, yet nearly four dozen Congressional lawmakers from his own party have said that they will vote to extend the tax cuts for all Americans. But at this point, the issue is moot, as Congress adjourned on September 24 without even holding a vote on the issue.

The threat to investment. Former White House economic advisor Lawrence Kudlow noted in a CNBC column entitled "The Washington War on Investment" that "the coming tax bomb," with its steep increases on investment taxes, would further threaten the economic recovery and imperil its primary engine—investment. U.S. Treasury Secretary Timothy Geithner had earlier tried to make the opposite argument—namely, that keeping investment-tax rates lower for investment-class taxpayers would actually *hurt* the economy because these wealthier individuals tend to save (and invest) their income rather than spend it on consumer goods. Kudlow commented, in polite terms, that such an assertion was nonsense, and that it flew in the face of decades of U.S. investment experience.

4. FINANCIAL MARKETS

4.1 Banks and finance

Banking sector healing. According to an analysis by the financial web site Seeking Alpha, "over the past 18 months, there has been a gradual healing in the banking sector,… most pronounced in the largest U.S. banks…" For instance, "the banking sector recorded earnings of $21.6 billion in the second quarter of 2010, the highest quarterly profit since 2007, reversing a $4 billion loss in the

corresponding quarter of 2009." Additionally, "over the past two years, the 19 largest U.S. banks raised approximately $205 billion of private capital…"

But bank problems remain. Both Standard & Poor's (S&P) and Moody's have cautioned against overestimating the banking system's recovery. S&P, for instance, points out that U.S. banks have recognized approximately $475 billion in loan losses, but still have some $365 billion to write down. In addition, the number of banks on the FDIC "problem institutions" list continues to rise, currently standing at 825 of the nation's approximately 7,800 banks. And, despite the record liquidity that the Federal Reserve has injected into the banking system, Seeking Alpha reports, "banks are tending to hoard these funds rather than lend to households, with a view to repairing eroded balance sheets."

Bank failures continue to increase. During 2009, 140 banks around the country failed, as compared with just 25 failures in 2008—the most bank failures in a single year since 1992. And the numbers keep growing. As of September 24, Federal regulators had closed 127 banks in 2010, significantly higher than the closure rate of 2009.

4.2 Federal financial intervention

Financial rescue costs swell. The cost of the Federal financial rescue program, originally pegged at around $700 billion, now totals nearly $3.7 trillion—or more than five times the initial estimates—according to a July 21 report from the Special Inspector General for the Troubled Assets Relief Program (TARP). The price tag has grown by $700 billion in the last year alone—"largely without Congressional action—even as the banking crisis has, by most measures, abated from its most acute phases," TARP inspector general Neil Barofsky wrote in the report.

Fannie Mae seeks more aid. Fannie Mae, the mortgage-finance company operating under Federal conservatorship, announced in early August that it would seek $1.5 billion in additional aid from the U.S. Treasury Department after a 12th straight quarterly loss. Over the last three years, Fannie Mae has drawn some $86.1 billion in Federal aid. Altogether, taxpayer losses from the government seizures of Fannie Mae and Freddie Mac could reach $40 billion by year's end, according to regulators.

4.3 Stock markets

Stocks gain some steam as September ends. After suffering their worst August since 2001, U.S. stocks rebounded as September ended and October opened. The Dow Jones industrial average closed on Friday, October 8, above 11,000 for the first time since early May. Ironically, this uptick came as markets digested news of another weak report on unemployment that fueled expectations that the Federal Reserve again would step in to boost the economy.

5. INDUSTRIAL PERFORMANCE

5.1 Industrial production

Industrial sector shows resilience. Other disturbing economic signs notwithstanding, the U.S. industrial sector has shown some resilience. According to a September 15 report from the Federal Reserve, output from U.S. factories, mines, and utilities edged up by 0.2% in August after having risen by a revised 0.6% in July, representing improvements for 14 straight months. The August rise in industrial production was especially encouraging because it contained a healthy gain in manufacturing output of 0.5% (excluding volatile auto manufacturing).

Inventories rise. In a more positive vein, the U.S. Commerce Department reported on September 10 that inventories held by wholesalers surged in July by the largest amount in two years—a jump of 1.3%—which also was triple the increase that economists had expected. Sales at the wholesale level rose by 0.6%, double what had been expected and the best showing since April. Both measures typically are early signs of increases in hiring, as manufacturers continue to rev up production to boost previously depleted inventories and to meet demand.

5.2 Productivity

Productivity declines. After initially reporting a gain in U.S. productivity for the second quarter, the U.S. Bureau of Labor Statistics revised its estimates downward, and indicated that productivity actually fell by 0.9%, representing the first decline in five quarters. Then, on September 2, the agency revised the figure downward again, to a decline of 1.8%, or the biggest productivity drop in four years. While real output expanded by 1.6% in the second quarter (down from an originally estimated 2.6% gain), hours worked rose at a 3.5% annualized rate—the fastest pace in four years.

U.S. position in world slips. The World Economic Forum, in its annual review of national productivity, reported on September 9 that the U.S. economy—weakened by growing Federal deficits and a flagging financial system—had weakened over the last year, slipping from second place to fourth place after falling from first the year before.

6. KEY SECTORS

6.1 Automotive

Auto sales rebound. According to an October 4 reported by Zacks Investment Research, automobile sales in the United States during September rose by 25.5% to a seasonally adjusted rate of 11.8 million units, signaling a slow recovery in the industry. Stable gasoline prices and strong sales at Ford Motor Company and Chrysler were among the most important factors behind the sales growth. For example, sales at Ford, including its Lincoln and Mercury brands, surged by 46%, while sales at Chrysler, including, Jeep, Dodge, and Ram brands, leapt by 61%. Gains at General Motors, at 10.5%, were less robust, though still positive (GM recently announced that

it was discontinuing its Pontiac, Saturn, Saab, and Hummer lines, whose sales fell by 99% last year). Among Japanese automakers, Toyota's sales grew by 16.8%, Honda's sales rose by 26.1%, and Nissan's sales jumped by 34.0%.

6.2 Health Care

Putative effects of health care law debated. In campaigning for the new national health care reform measure, signed into law earlier this year, President Obama and his congressional allies claimed that the bill would sharply reduce health care costs. Now, those claims have been called into doubt. According to Medicare's chief actuary, health care costs actually will rise under the new plan. Private insurance premiums are also already increasing—and are expected to rise by as much as 25 percent—as insurers adjust to the requirement to cover clients' children until age 26. And while proponents claimed that no one would have to switch insurance plans under the new law, according to the Obama Administration's own estimates, as many as 69 percent of employees, 80 percent of small businesses, and 64 percent of large businesses will be forced to change coverage, most likely to more expensive health plans.

Americans want health law repealed. A growing number of Americans want the recently passed national health care reform law repealed. In a survey reported in the Capitol Hill publication "The Hill," 56 percent of voters in battleground Congressional districts wanted the bill repealed—including 49 percent of independents and even 23 percent of Democrats.

6.2 Housing

New home sales remain near record lows. After several months of improvement, new home sales plummeted by a record 32.7% in May to the lowest level in at least four decades, as the boost from the expired Federal homebuying tax credit disappeared. In a turnabout in housing's fortunes, the U.S. Commerce Department noted that new home sales leapt by a revised 12.4% in June over the previous month, but the good news didn't last. The Commerce Department reported that new home sales lost all of this advance, tumbling by 12.4% in July. Then, in August, new home sales remained essentially unchanged, registering their second lowest level since the Commerce Department began tracking such data in 1963.

Existing home sales turn around. Existing home sales, which had been strong in recent months, began declining in May and continued their downward slide into August. The National Association of Realtors reported on August 24 that July existing home sales were down by a record 27.2% from June's level, dipping to their lowest mark since May 1995. June's sales pace also was revised downward to an annualized 5.26 million units. These numbers reversed themselves in August, with sales of existing homes increasing by 7.6 percent to an annual rate of 4.13 million units. Still, while sales rose, the pace remained the second lowest during the past 13 years.

Foreclosure picture turns negative. After several months of improvement, the foreclosure picture darkened in July. RealtyTrac, a leading foreclosure-market analyst, reported on August 12 that the number of homes lost to foreclosure surged by 9% in July over June levels, and by 6% over the levels of a year earlier. The foreclosure rate continued to climb in August, rising by 4.0% month-over-month, but declining by 5.0% from year-earlier levels. The Mortgage Bankers Association added that, as of June 30, at least 9.9% of homeowners had missed one or more mortgage payments, placing them at risk of foreclosure. Conditions worsened in August, with foreclosure filings jumping by 4.2% over July levels and by 5.5% from a year earlier.

Foreclosure sales frozen. Citing irregularities in legal documents, several major mortgage financiers—including Bank of America, JP Morgan, GMAC, and PNC Financial Services—have halted sales of foreclosure properties. The effect on homebuying could be significant. Foreclosure sales accounted for 24 percent of all home sales nationwide in the second quarter of 2010, but about twice that in states hardest hit by the housing crisis, including 56 percent of purchases in Nevada, 47 percent of purchases in Arizona, and 43 percent of purchases in California.

Repossessions reach record levels. A total of more than 2.3 million homes have been repossessed by lenders since the recession began in December 2007, RealtyTrac says, with the numbers climbing further, by 3%, to 95,364 in August—an historical record. The ongoing rise in foreclosures and repossessions has had one lasting effect: the U.S. Census Bureau reported on July 27 that the U.S. home ownership rate now stands at 66.9%, the lowest since 1999.

7. CONSUMERS

7.1 Consumer confidence

Consumer confidence falls again. Facing so much dire economic news, it should come as no surprise that The Conference Board's Consumer Confidence Index, which had been rising for three consecutive months, declined sharply in June. It fell again in July, to its lowest point since February, but then bounced back moderately in August. But then it fell back again in September, dropping from a revised 53.2 to 48.5—sharply below the level of 52.5 that analysts had expected. The September figure represented the index's lowest reading since February's 46.4. As the Associated Press summarized, "the downbeat report… raised more fears about the tenuous U.S. economic recovery. It also further underscored the disconnect between Wall Street and Main Street" as "consumers' confidence fell further even as stocks rebounded in September."

7.2 Consumer spending

Consumer spending falls sharply. According to the U.S. Department of Labor report released on October 6, middle-class Americans made their deepest spending cuts in more than two decades, slashing spending on such discretionary items as restaurant meals and alcohol. Overall, households in the middle fifth of the population sliced their average annual spending to $41,150, the Labor Department said in its annual spending breakdown, a level that was down by 3.1 percent from 2007 and by 3.5 percent from 2008.

These declines came even as those households' after-tax income remained relatively stable over the two years, indicating that fear about the future was likely the main driver in the spending cuts.

7.3 Income and net worth

U.S. household net worth plummets. U.S. household net worth (wealth) fell by $1.5 trillion in the second quarter of 2010, according to data released by the U.S. Federal Research on September 17, underscoring "the strain a slow-paced recovery and high unemployment are putting on Americans." Overall, household net worth plunged to $53.5 trillion, well below the $64.2 trillion that it had reached at the end of 2007, when the recent recession officially began. In one illustrative example, residents of New York state saw their personal incomes fall by 3.1 percent in 2009—the first full-year decline in New Yorkers' incomes in more than 70 years.

8. INFLATION

8.1 Consumer prices

Consumer prices increase slightly. On a seasonally adjusted basis, the Consumer Price Index (CPI) for all items increased by 0.3% in August—just as it had in July—after falling by 0.1% in June, by 0.2% in May, and by 0.1% in April. When the volatile food and energy prices were excluded from the calculations, consumer prices were unchanged in August after increasing by 0.1% in July.

8.2 Producer prices

Producer prices increase sharply. The Producer Price Index (PPI) for finished goods—often, a harbinger of future consumer price movements—increased by 0.4% in August following an increase of 0.2% in July and declines of 0.5% in June and 0.3% in May. With food and energy prices excluded, the Producer Price Index was up by only 0.1% in August after rising by between 0.1% and 0.3% monthly since December.

APPENDIX II
INDUSTRY OVERVIEW (NAICS 237990)

The US commercial construction industry includes about 80,000 firms with combined annual revenue around $550 billion. Large companies include Fluor, Bechtel, Jacobs Engineering, Turner Construction, and Peter Kiewit Sons'. The industry is highly fragmented, with many small companies working as subcontractors on larger projects.

Commercial construction includes apartments, office and retail buildings, hotels, schools, public buildings, industrial and manufacturing buildings, highways and bridges, sewers, pipelines, power lines, power plants, and other civil engineering projects.

COMPETITIVE LANDSCAPE
Demand depends heavily on the health of the US economy, including corporate profits and local government budgets. The profitability of individual companies depends on accurate project bids and efficient operations. Large companies have advantages in their ability to engage in multiple projects simultaneously and in many types of construction. Small companies can compete effectively by specializing, working in a limited geography, or serving as subcontractors on larger projects. Average annual revenue per industry worker is $350,000.

PRODUCTS, OPERATIONS & TECHNOLOGY
Major industry services are constructing nonresidential buildings, including for industrial, commercial, and institutional use, and heavy and civil engineering projects. Commercial and institutional building construction accounts for 50 percent of industry revenue; heavy and civil engineering construction, for 45 percent; and industrial building construction, less than 5 percent.

Operations focus on bidding for projects and managing project plans, labor, equipment, and construction materials. Larger companies may own much of their equipment and retain full-time construction crews, while smaller firms typically lease equipment for a particular project and hire much of their labor on a project basis. Industry metrics include proposal accuracy and project performance-to-plan, including planned labor, time, and budget.

Larger companies typically negotiate an overall contract with a project owner and function as the prime contractor, acquiring equipment and materials, managing the construction schedule, and hiring specialist subcontractors for much of the actual construction work. Any one project can have from a dozen to hundreds of subcontractors who specialize in "ground up" work (foundation, floors, walls, roof) or in more profitable "finish out" work (interior walls, electrical, painting, plumbing, HVAC). Prime contractors and many subcontractors have general contractor licenses. General contractors need special managerial skills or staff to interact with project owners, architects, engineers, consultants, suppliers, accountants, the government, attorneys, insurance carriers, and unions.

Contractors typically obtain work by submitting bids in response to requests for proposals (RFPs). For private-sector projects, bidding is generally by invitation; for government projects, RFPs generally are publicized so that any qualified contractor may bid. Three types of contracts are common: guaranteed maximum cost, fixed-price, and cost-plus-fee. Guaranteed maximum price contracts require the project owner to pay for costs, materials, and other incidentals up to a maximum amount, after which the contractor is responsible for additional costs. If the total project cost is less than the estimate, the owner and contractor often split the savings. With fixed-price contracts, the contractor keeps any cost savings and is responsible for cost overruns. In cost-plus-fee contracts, the owner pays all costs, including the contractor's negotiated fee. Most contracts contain penalties for late completion.

Because construction projects are increasingly complex, many project owners prefer to use the same firm to design and build the project, so that accountability lies with one company. The growing popularity of design-build contracts has encouraged many construction companies to develop a design capability or acquire a design firm. In addition to exterior facade and interior layout, the design plan specifies materials, which contractors buy from building supply distributors. Building material prices and availability can fluctuate greatly, making supply contracts an important way to manage costs. Steel prices can be volatile and copper is particularly costly, leading to increased job-site theft.

Commercial construction contractors use technology throughout operations. Industry-specific software supports proposal development, project plans, labor and material allocation, and project performance monitoring. Computerized management reports enable firms, especially large ones, to monitor performance-to-plan daily. Construction machinery and equipment have computerized controls that enable precise functions, such as where to dig or lift and place material. Large firms have extensive, interconnected computer systems that enable employees to collaborate and communicate on projects; in-field handheld devices also communicate with in-office systems. Small firms generally have a PC-based or small, multi-user system.

SALES & MARKETING
Typical customers are property developers, other corporations, institutions, and government. Major sales channels are senior executives and sales forces. Contacts with business leaders, architects, engineers, developers, and other construction companies are important sources of leads and upcoming projects.

Major types of marketing include customer visits, ads in magazines and trade publications, and attendance at customer industries' trade shows. Property developers often mention their major contractors in sales and marketing materials for specific developments. Commercial construction firms use websites for marketing and promotion and supplier portals, but not for sales. Responses to RFPs, however, can be submitted online, as long as both parties use compatible software.

Typical prices for commercial construction projects run in the upper thousands to multi-millions, depending on the scale and scope of the contract. Contractors determine prices based on the type of contract, inherent risks, and costs, including labor, materials, fees, permits, and licenses. The going rates in a locale depend highly on the local economy and the presence of competition.

FINANCE & REGULATION
Cash flow generally is uneven, because construction work is seasonal in most geographies and payables and receivables can be high. Cash flow management can be difficult, because revenue generally comes through many periodic payments, each tied to completion of different project milestones. Weather, supply issues, and project problems can cause delays, affecting receivables and the ability to pay for labor and materials. Cash flow can remain tight for construction contracts that require "retainage," which allows clients to withhold a percentage of payment until after project completion.

With relatively thin profit margins, contractors have little room for error in cost estimation or project management. Project estimators work closely with financial management to price risk factors into client contracts. Specialized software helps with cost estimates and accounting. The more cost risk a contractor is willing to assume, the greater the opportunity for profit. Because equity capitalization of most construction companies is fairly low, a losing project can sharply affect a contractor's financial health.

Over the life of a given project, a construction firm may be exposed to changing material or labor costs, depending on the type of contract signed. To help manage costs, construction firms sign contracts with suppliers to lock in material quantities and costs for a set period. Supply contracts are important for building materials subject to price hikes, such as steel, copper, aluminum, asphalt, roofing, and PVC. Because clients also have cost concerns, some commercial construction firms provide per-project financing. Liability insurance is an important expense; contracts typically specify insurance levels contractors must carry. Prime contractors often take insurance to cover potential subcontractor default. Many projects require contractors to post surety bonds in an amount sufficient to complete the project, if the contractor is unable to do so.

Although construction companies aren't directly regulated by the government, they must comply with numerous federal, state, and local building codes, safety and environmental regulations, and hiring practices. Immigration laws require firms to document the legal status of workers. Public projects often entail more detailed regulations than private sector. To protect against contract or payment disputes, contractors generally maintain detailed records of activities associated with a project.

REGIONAL & INTERNATIONAL ISSUES
Overall construction is highest in states with the largest populations and that host major business centers. California accounts for almost 15 percent of the US commercial construction industry's revenue, followed by Texas, New York, Florida, and Illinois. Office, industrial, and other commercial construction can vary greatly from year to year in a given state or city, due to high dependence on the local and regional economy.

Most companies work locally, but large firms work nationally and some, internationally. The largest firms establish offices in countries where demand or regulations require a business presence.

HUMAN RESOURCES
Nonresidential construction jobs often require special training or experience and, accordingly, pay relatively high wages. Architects and engineers need special degrees and an understanding of steel, concrete, and other commercial building materials. Field workers need to operate large machines like cranes, backhoes, graders, and concrete pumpers. Average hourly industry wages are moderately higher than the national average. Unions are active in many regions.

Field work in the industry is relatively dangerous: injury rates are about slightly higher than the national average. Fatalities numbered over 200 in a recent year, with about two thirds of fatalities in heavy and civil engineering construction and a third in building construction.

Construction work is mostly seasonal, so many companies keep a core of full-time employees and hire extra workers for each project. Turnover in the construction industry is about twice as high as the national average, due to the seasonal nature of the industry and high injury rates.

Industry Employment Growth
Bureau of Labor Statistics

Average Hourly Earnings & Annual Wage Increase
Bureau of Labor Statistics

RECENT DEVELOPMENTS

INDUSTRY INDICATORS
US corporate profits, an indicator for commercial construction growth, jumped 27.8 percent in the third quarter of 2010 compared to the same period in 2009.

The value of US nonresidential construction spending, a driver for commercial construction contractor demand, fell 14.5 percent in the first eleven months of 2010 compared to the same period in 2009.

US steel mill product prices, an indicator of commodity steel product costs used in commercial construction, rose 12.5 percent in December 2010 compared to the same month in 2009.

QUARTERLY INDUSTRY UPDATE
ABC Forecasts Slow Recovery in Construction - Nonresidential construction is expected to experience flat growth this year and will not likely rebound until 2012, according to Associated Builders and Contractors. Nonresidential construction activity, a demand indicator for commercial construction contractors, has been affected by constrained access to capital despite federal measures to stimulate lending. Commercial contractors can look toward recovery now that severe spending declines are over, but demand for work may be weak for a while.

LEED Gold Required for Public Construction - The US General Services Administration raised the sustainability standard for new construction involving government buildings to LEED Gold from LEED Silver, according to *Commercial Property Executive* magazine. LEED Gold is the second highest level of certification after LEED Platinum, based on a point system that takes into account factors such as site sustainability, water efficiency, and use of materials. Contractors for government projects may increasingly be called to construct intricate design features so that the building can meet LEED Gold standards.

Construction Job Losses Across Nation - Construction employment, an indicator of demand for commercial construction contractors, declined in 236 out of 337 metropolitan areas between September 2009 and September 2010, according to the Associated General Contractors of America. Chicago experienced the steepest decline, with over 20,000 jobs lost, followed by Las Vegas and Los Angeles, suggesting that recovery may take longer in these markets. Although stimulus funding and government projects have helped to offset downward trends, more government intervention may be needed to boost construction demand over a sustainable period.

BUSINESS CHALLENGES

CRITICAL ISSUES
Slowdown in Commercial Sector - A tight financing environment for construction loans has made a once booming industry slow significantly. Bad construction loans and commercial mortgages could amount to more than $200 billion in losses. The slowdown in commercial construction activity has made work for contractors scarce in certain sectors. Many companies try to protect against slowdowns by working on different types of construction projects or in both the public and private sectors.

Uneven Revenue, Expenses - Although commercial contractors incur a steady stream of expenses, payments from customers are periodic, including amounts retained until after a project is complete. Bad weather can significantly delay construction schedules, creating uneven cash flow. Prices and availability of major raw materials like lumber, structural steel, and concrete can change rapidly. On large projects, prime contractors handle more complicated cash flows, including progress payments to subcontractors.

OTHER BUSINESS CHALLENGES
Dependence on Skilled Personnel - Companies often have difficulty hiring enough skilled workers for projects. The complexity of many commercial construction projects requires contractors to use skilled personnel for job cost estimation, project design and management, and actual implementation. Due to the cyclical nature of demand, many companies can't afford to keep a complete full-time workforce and must hire additional workers for each project. Even large construction companies have a relatively small management staff, so the loss of a few individuals can significantly affect projects.

Dependence on Few Projects, Customers - Customer consolidation and concentration lead to greater risk for many contractors. As many construction customers merge, projects become larger, but fewer. As a result, construction companies depend on fewer contracts, which increases financial risk. Customer concentration also increases risk, especially for small construction companies that depend on a few customers for the majority of revenue.

Safety Liability - The construction industry continues to have the largest share of fatalities in the US. Commercial construction workers suffer nearly 5 percent of all work-related deaths, but make up less than 2 percent of the workforce. Contractors carry liability insurance to protect against lawsuits brought from injuries to employees or job site visitors.

High Insurance Costs - Most construction contractors pay relatively high premiums for various types of insurance, including worker compensation, general liability, and surety. Construction delays and defects, accidents by inexperienced or overworked employees, and poor bookkeeping are major insurance issues.

Toxic Buildings - Numerous lawsuits occur against contractors accused of using toxic materials or poorly chosen building techniques that contribute to "sick buildings." Mold within walls and ventilation systems is a major contributor to sick buildings. Mold, often called "the new asbestos" due to the number of lawsuits, has given rise to law firm specialization in mold litigation and to the mold-removal industry. A growing concern about green materials and processes contributes to toxic-building lawsuits.

Required Investment in Technology - High-tech tools for construction sites and offices require a high degree of technological knowledge. Field employees need to use construction equipment with computer screens and control panels, including laser scanners that measure raw materials, and transmitters that position steel beams. GPS enables project managers to track heavy equipment, and onsite digital cameras transmit images to supervisor offices. Managers use websites to display construction progress and plot worker and materials logistics. Contractor firms that don't invest in technology or effectively use it have a competitive disadvantage.

TRENDS AND OPPORTUNITIES

BUSINESS TRENDS
Specialization - With the scale and cost of many construction projects rising, contracts and subcontracts are more likely to be awarded to companies with expertise in a particular specialty. Construction specialties are many, including framing, mechanical, demolition, roofing, electrical, public works, and roads. For many companies, a majority of new contracts comes from existing customers who hire them to do projects similar to those they've completed in the past.

Joint Ventures - As projects get bigger, on-time completion becomes more important to owners of construction firms. Costs for late completion, including penalties, rise disproportionately to actual construction costs. The larger scale and complexity of projects lead to more joint ventures among construction companies, which can pool their expertise and financial resources in bidding for contracts and in implementation.

Design-Build - The technological sophistication of many projects and the increasing use of design-build contracts encourage the integration of engineering and construction companies. While large companies like Bechtel and Fluor have long combined engineering and construction expertise, the combination of skills is becoming more important for small and midsized companies.

Repeat Business - Satisfied customers tend to hire the same firms for subsequent projects. Owners award contracts to builders who've done successful work for them, without going through the bidding process. While containing costs is still important in awarding a contract, project owners are often as concerned about a contractor firm's reliability and financial stability.

Guaranteed Maximum Price Contracts - Guaranteed maximum price contracts are increasingly popular. Such guarantees limit the owner's exposure and put a premium on a construction company's ability to accurately estimate and manage project costs. For these types of contracts, project management skills become more important relative to actual implementation, even of fairly routine building activities.

Per-Project Staffing, Equipment Leases - Rising costs and uncertain markets lead construction firms to acquire many resources on a per-project basis. Many companies have their own project managers on staff, but hire other workers as needed. Cost controls and changing project needs make leasing equipment on a per-project basis more economically feasible.

Security in Building Design - Security concerns are affecting building designs in the post-911 world. High-rise designs often lose favor to low-level buildings. Stronger walls and windows and exits and evacuation routes are being emphasized. Protecting air-circulation systems has become important to prevent gas or biological attacks.

INDUSTRY OPPORTUNITIES
Buildings for High-Growth Population Segments - Growth in certain population segments will present opportunities for the commercial construction industry. The US Census estimates that the number of people over age 65 will grow about 40 percent from 2010 to 2020, creating the need for retirement, assisted living, and hospital facilities. The need for schools will increase as the population of children five through 19 rises an estimated 7 percent during the same decade.

Generally Resilient Market Segments - Nonresidential construction spending can be positive, even when residential construction spending is negative. For example, during the recent real estate and mortgage crisis, private residential construction spending fell 12 percent between 2008 and 2009, while highway construction spending rose steadily over the same time period. Other projects like lodging, power plants, and public safety can also do well when other construction spending declines.

Infrastructure Projects - The nation's roads, bridges, tunnels, ports, levies, and other infrastructure need periodic maintenance, upgrades, and expansion. US bridges needed $180 billion in repairs and rail infrastructure required $185 billion for maintenance as of late 2008, according to the American Society of Civil Engineers. Container volumes at US ports grew 7 percent annually for 20 years, according to the American Association of Port Authorities, creating a need for expansion.

Green Construction - Demand is growing for environmentally friendly (green) building and construction materials, practices, and certification. Increased use of steel helps qualify a structure as green, due to recycled content; for example, light gauge steel framing contains at least 25 percent recycled steel. Compared to wood, steel products last longer and have more uniform quality, reducing job site waste. New "cool" metal roofing is more energy-efficient than traditional materials. The US Green Building Council and the Green Building Initiative certify green buildings.

Computer, Construction Technology - Computer technology and new building techniques enable companies to improve project implementation. Computer technology has reduced costs and mistakes in an industry that relies heavily on correct scheduling, coordination, and technical specifications. Newer building methods, such as tilt-up construction and greater use of pre-fabricated structural parts, simplify commercial projects and reduce time-to-completion and costs.

INDUSTRY FORECAST

The value of US new public and private nonresidential and nonbuilding construction spending is forecast to grow at an annual compounded rate of 11 percent between 2010 and 2015. Data Published: September 2010

Commercial Construction Spending Growth Recovers Then Slows