

# AMERICAN BUSINESS APPRAISERS

*Valuing U. S. Companies*

Opinion of Fair Value of Intangible Assets  
Acquired by:

**ABC Manufacturing, LLC**

Date of Valuation: May 30, 20XX  
Report Date: October 6, 20XX

*Performed by:*

**Appraiser One, CBA, CMEA, ABAR ASA,**  
*Certified Business Appraiser*  
*Certified Machinery & Equipment Appraiser*  
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# AMERICAN BUSINESS APPRAISERS

*Valuing U. S. Companies*

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## EXECUTIVE SUMMARY

At your request, American Business Appraisers was retained to assist you in the appraisal analysis and pertaining to the fair value of the identified intangible assets of ABC Manufacturing (Target) by ABC Manufacturing, LLC (Acquirer). It is our understanding that our analysis will be used by management of ABC Manufacturing, LLC in their determination of the value of identifiable assets solely to assist in their allocation of the purchase price related to the

**The reader is reminded all useful information has been changed. This is a sample report to give you an idea of our final work product (report). The figures have been distorted, as well as other financial information contained this sample report.**

the Uniform Standards of Professional Appraisal Practice (USPAP) issued by The Appraisal Foundation.

We have estimated the fair values of the intangible assets solely for financial statement reporting purposes. The premise of value is going concern. The intangible assets for which estimates of fair value were developed are summarized in Exhibit 1-1.

Exhibit 1-1

### Identifiable Intangible Assets

<i>Intangible Asset</i>	<i>Fair Value</i>	<i>Remaining Useful Life</i>
Trademark	\$ 884,000	n/a
Non-Compete Agreement	465,000	3.0 Years
Customer Base	1,000,000	7.0 Years
Contracts	600,000	7.0 Years
Total Identified Intangible Assets	\$ 2,949,000	

Our analysis and conclusions, which are to be used only in their entirety, are for the use of ABC Manufacturing, LLC, its attorneys and accountants solely for financial reporting purposes. They are not to be used for any other purpose or by any other party for any purpose, without American Business Appraisers expressed written consent.

The approaches and methodologies used in our work did not comprise of an examination in accordance with generally accepted accounting principles (GAAP), the objective of which is to express an opinion regarding the fair presentation of financial statements or other financial information, whether historical or perspective, presented in accordance with GAAP.

American Business Appraisers express no opinion and accepts no responsibility for the accuracy and completeness of the financial information or other data provided to us by others. We assume that the financial and other information provided to us is accurate and complete and we have relied upon this information in performing our valuation.

## 1 Appraiser's Certification

I certify that:

- The statement of facts, opinions and conclusions expressed are correct to the best of the appraiser's knowledge and belief.
- The report analysis, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and is this appraiser's personal, unbiased analysis, opinions and conclusions.
- The appraiser has no present or prospective interest in the property that is the Subject of this report, and the appraiser has no personal interest or bias with respect to the parties involved.
- The compensation paid is not contingent on an action or event resulting from the analysis, opinions, or conclusions in, or the use of this appraisal report.
- No one provided significant professional assistance to the person signing this report.
- This appraisal has been prepared and this report has been prepared in conformity with Institute of Business Appraisers' *Business Appraisal Standards*, Uniform Standards of Professional Appraisal Practice (USPAP), and American Society of Appraisers' *Business Valuation Standards*.

As indicated above, our report and conclusions are attached hereto and must be attached to this transmittal letter as an integral part of it. Authorized reports will carry the appraiser's original signature in blue ink. Copies, which do not have the appraiser's signature in blue ink, are unauthorized and incomplete.

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Appraiser One, CBA, CMEA, ASA  
*Certified Business Appraiser*  
*Certified Machinery & Equipment Appraiser*  
*Accredited Senior Appraiser, BV*  
Principal, American Business Appraisers

## **Table of Contents**

1	Appraiser's Certification .....	3
2	Introduction .....	5
2.1	Scope of the Assignment .....	5
2.2	Scope of Work Limitations .....	5
2.3	Purpose of Engagement.....	5
2.4	Going Concern Value.....	6
2.5	Principal Sources of Information.....	6
2.6	Assumptions & Limiting Conditions.....	7
3	Company Overviews .....	9
3.1	Acquiring Entity .....	9
3.2	Target Entity.....	9
3.3	Structure of the Acquisition Transaction .....	10
4	Economic Overview .....	10
4.1	Overview of the State and Local Economy.....	11
4.1.1	Phoenix – Local.....	12
5	Overview of the Industry .....	13
5.1	Industry Snapshot.....	14
6	Financial Analysis .....	14
6.1	Analysis of Historical Income Statements.....	14
6.2	Analysis of Historical Balance Sheets.....	16
6.3	Adjusted Balance Sheet.....	16
6.4	Prospective Financial Information.....	17
7	Fair-Value Measurement Analysis .....	20
7.1	Approaches to Value .....	20
7.2	Fair Value Measurement of Tangible Assets.....	21
7.3	Valuation of the Acquired Intangible Assets.....	21
7.3.1	Development of WACC.....	21
7.3.2	Amortization of Tax Benefit .....	24
7.3.3	Fair Value Measurement of Assembled Workforce .....	25
7.3.4	Fair Value Measurement of Trade Name .....	28
7.3.5	Fair Value Measurement of Non-Compete Agreement .....	31
7.3.6	Fair Value Measurement of Customer Base / Relationships .....	34
7.3.7	Fair Value Measurement of Contracts.....	37
8	Residual Value Assigned to Goodwill.....	39
8.1	Reconciliation of WACC to Weighted Average Rate of Return .....	40
9	Professional Qualification.....	41
10	Appendix A.....	41

## 2 Introduction

### 2.1 Scope of the Assignment

Scope of work rule<sup>1</sup> states an appraiser must; (i) identify the problem to be solved; (ii) determine and perform the scope of work necessary to develop credible assignment results and (iii) disclose the scope of work in the report. This section of the valuation report discusses in detail the aforementioned.

### 2.2 Scope of Work Limitations

The scope of this appraisal assignment is limited to the development of a good-faith estimate or opinion of value based on the standard of value and assumptions set forth herein. The scope of this appraisal precludes forensic accounting, and is no more than a reasonable inquiry into the quality of management.

This appraiser has relied on management's representations, without independent investigation or corroboration, and has no reason not to believe they fairly and accurately represent the financial status and activities of ABC Manufacturing, LLC Company. Neither this engagement nor this report can be relied upon to disclose any misrepresentation, fraud, deviations from Generally Accepted Accounting Principles (GAAP), or other errors or irregularities. American Business Appraisers assumes no responsibility for legal or tax matters relative to its findings. The opinion of value is stated without reference to applicable legal or tax matters. ABC Manufacturing, LLC Company is considered in full compliance with all applicable local, state and federal laws, unless otherwise stated in this report.

### 2.3 Purpose of Engagement

According to the Financial Accounting Standards Board (FASB) Statement of Financial Accounting Standards (SFAS), *Business Combinations*, all business combinations completed on or after June 30, 20XX, are to be accounted for exclusively by the purchase method. Under purchase accounting, all assets acquired, including goodwill and other intangible assets, should be stated on the financial statements at fair value.

The definition of *fair value* for financial reporting purposes is; *"the price that would be received to sell an asset or paid to transfer a liability into an orderly transaction between market participants at the measurement date"*.

The statement requires that intangible assets be recognized as assets apart from goodwill if they meet one of two criteria; (one) the contractual legal criterion or (two) the separability criterion. The statement also requires the allocation of the purchase price paid for the assets acquired and liabilities assumed by major balance sheet caption.

Intangible assets shall be recognized as assets apart from goodwill if it arises from contractual or other legal rights (regardless of whether those rights are transferable or separable from the

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<sup>1</sup> Source: Uniform Standards of Professional Appraisal Practice (USPAP)

acquired entity or from other rights and obligations). If an intangible asset does not arise from contractual or other legal rights, it shall be recognized as an asset apart from goodwill only if it is separable, that is, it is capable of being separated or divided from the acquiring entity and sold, transferred, licensed, rented, or exchanged. An intangible asset that cannot be sold, transferred, licensed, rented, or exchanged individually is considered separable if it can be sold, transferred, licensed, rented, or exchanged in combination with the related contract, asset, or liability.

The excess of the cost of an acquired entity over the net amounts assigned to assets acquired and liabilities assumed is referred to as goodwill. Acquired intangible assets that do not meet the criterion mentioned shall be included in the amount recognized as goodwill.

## 2.4 Going Concern Value

In valuation assignments, premise of value is either going concern or liquidation. In this case, the premise of value selected is going concern. Going concern value is defined as “the value of a business enterprise that is expected to operate into the future. The intangible elements of going concern value result from factors such as having a trained workforce, and operational plant, and the necessary licenses, systems, and procedures in place”.

## 2.5 Principal Sources of Information

While the appraiser has been diligent in preparing this valuation, it is important to all concerned that this appraiser has relied heavily upon information given by others. For those persons who may review this valuation now and in the future, this appraiser has endeavored to clearly identify the information sources as follows;

The principal sources and documents used in the appraisal include the following:

- ABC Manufacturing’s Federal tax returns for years ending December 31st 20XX, 20XX & 20XX.
- ABC Custom Fabrication Company’s federal tax returns for years ending March 31<sup>st</sup> 20XX, 20XX, & 20XX
- Internally generated balance sheet ending May 30, 20XX.
- Information provided verbally by management of ABC Manufacturing, LLC Company.
- ABC Manufacturing - Asset Purchase Agreement.
- ABC Manufacturing - Promissory Notes.
- Oneida and WISCO Contracts.
- Business valuation report dated May 16, 20XX.
- Machinery and equipment appraisal report date May 19, 20XX.
- Research conducted with respect to the Subject’s business and industry.
- Economic and industry studies, statistics and forecasts as mentioned in this report.
- Other sources which are footnoted throughout this report.

In all cases, this appraiser has relied upon the referenced information without independent verification. This report is, therefore, dependent upon the information provided. A material change in critical information relied upon in this report would be cause for a reassessment in order to determine the effect, if any, on this appraiser’s conclusion of value.

Information for this report has been obtained from management, public information and other sources considered reliable and is of the type reasonably relied upon by experts in the field of business valuation. This appraiser has relied upon such information and no independent verification has been performed on any of the information received.

## 2.6 Assumptions & Limiting Conditions

The business valuation process requires certain assumptions and limiting conditions, many of which may have significant influence on the valuation conclusion. The following are the assumptions and limiting conditions of this report.

1. The valuation process is not a finding of fact, but is a good faith finding of opinion. The opinion is supported by a reasonable amount of research and analysis, but is ultimately only the appraiser's personal, unbiased professional judgment.
2. The valuation report is based upon facts and conditions existing as of the date of valuation. This appraiser has not considered subsequent events. Unless specifically requested by the client and agreed upon by me, I have no obligation to update this valuation report for such events and conditions.
3. The estimate of value included in this report assumes the existing business will maintain the character and integrity of the business through any sale, reorganization or reduction of any owner's/manager's participation in the existing activities of the business.
4. The various estimates of value presented in this report apply to this valuation only and may not be used out of the context presented. This valuation is valid only for the purpose specified.
5. The appraiser assumes no responsibility for the legal description or matters including legal or title considerations. Titles to Subject's assets, properties, or business interests are assumed to be good and marketable unless otherwise stated.
6. Subject's assets, properties, or business interests are appraised free and clear of any or all liens or encumbrances unless otherwise stated.
7. This report is based on financial information provided by management of ABC Manufacturing, LLC Company and other third parties. This appraiser has not audited the underlying financial data. Accordingly, this appraiser takes no responsibility for the underlying financial data presented in this report and users of this valuation report should be aware that valuations may be based on future earnings potential that may or may not materialize. Therefore, the actual results achieved may vary from the information utilized in this valuation and the variations may be material.
8. This appraiser is not aware of any information that was knowingly withheld. However, this appraiser makes no guarantee that ABC Manufacturing, LLC Company or others have disclosed all relevant information to this appraiser. The information furnished by

others is believed to be reliable. However, American Business Appraisers issues no warranty or other form of assurance regarding its accuracy.

9. This appraiser assumes there are no hidden or unapparent conditions regarding the Subject's assets, properties, or business interests. The Subject is assumed to be in full compliance with all applicable federal, state, and local regulations and laws unless the lack of compliance is stated, defined, and considered in the appraisal report.
10. Possession of this report, or a copy thereof, does not carry with it the right of publication of all or part of it, nor may it be used for any purpose without our previous written consent, and in any event only with proper authorization. Authorized copies of this report will be signed in blue ink by the appraiser of American Business Appraisers. Unsigned copies, or copies not signed in blue ink, should be considered to be incomplete.
11. The terms of this engagement do not require this appraiser to give testimony in court, be in attendance during any hearings or depositions, or appear at any Internal Revenue Service examination, with reference to the Company being valued, unless previous arrangements have been made.
12. Neither all nor any part of the contents of this report shall be disseminated to the public through advertising, public relations, news, sales, or other media without our prior written consent and approval.
13. American Business Appraisers are not licensed attorneys. Any comments, discussions, or analyses of Company documents or any other federal or state law, provision, or regulation are not to be considered legal opinions. The appraiser's focus is to consider all relevant factors that might impact value and estimate the extent of the impact of such factors.
14. The analyses, opinions, and conclusions presented in this report apply to this engagement only and may not be used out of the context presented herein. This report is valid for the effective date specified herein and only for the purpose specified herein.
15. The analyses, conclusions and opinions are based on information and data provided as of the date of valuation and could change, based on obtaining additional information and having additional time to analyze such additional data. This appraiser, therefore, reserves the right to amend this report based on additional analysis and data. Further, in the case of testimony, this appraiser reserves the right to offer rebuttal testimony.
16. To ensure compliance with requirements imposed by the IRS, this appraiser informs you that any U.S. federal tax advice contained in this communication (including any attachments) is not intended or written to be used, and cannot be used, for the purpose of; (i) avoiding penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any transaction or matter addressed herein.



### 3 Company Overviews

#### 3.1 Acquiring Entity

ABC Manufacturing, LLC an Arizona limited liability company was formed to purchase the assets of ABC Manufacturing, Inc. an Arizona corporation. ABC Manufacturing, LLC does not own or hold any other business interests as of the valuation date (May 30, 20XX).

#### 3.2 Target Entity

ABC Manufacturing is a commercial fence contractor offering a full range of fencing services throughout Arizona.<sup>2</sup> ABC Manufacturing was organized as a subchapter S corporation in January 19XX. The company has two shareholders, Ed and Sandra Smith who share 100% ownership.

A cursory check on the Arizona Registrar of Contractors website shows ABC Manufacturing holds two different contractor licenses. License number ROCXXXXXX is a class L-XX commercial fencing other than masonry, automated access systems license; and license number ROCXXXXXX is a class C-XXX residential fencing other than masonry license. Both licenses list Alan Weber, Treasurer of ABC Custom Fencing, as *'Qualifying Party Information'* and are renewed through March 31, 20XX. The website also includes a report on complaint information for each contractor license. At the time of the check, there were no complaints listed against either license.

ABC Manufacturing is located at XXX West Street, Phoenix, AZ. This is a leased facility consisting of approximately six thousand square feet of office space and ten thousand square feet of warehouse space. The facility is owned by XYZ Properties, LLC which is also owned by Mr. & Mrs. Smith, sellers of ABC Manufacturing. Lease expenses, as a percentage of revenues, have averaged approximately two percent over the past three years analyzed.

Virtually 100 percent of ABC Manufacturing's revenues come from fencing products the company manufactures and installs. Management states 55% of revenues are generated from the sales of chain link fencing and 45% of revenues are from wrought iron fencing.

The customer base consists of School Districts; Municipalities; General Contractors; Facilities and Custom Home Builders. All of the revenues earned are generated within the state of Arizona.

ABC Manufacturing has three major competitors. The first, American Fence, is a nationwide company and is larger than ABC Manufacturing. The next two, Phoenix Fence and Associated Fence are similar in size. A cursory look in the 20XX Phoenix Metro Dex Yellow Pages found approximately 145 fence companies under the yellow page heading *fence*.

Nearly 100 percent of ABC Manufacturing sales are generated from their inside sales department. Its marketing efforts are primary; (i) yellow pages, (ii) radio advertising two times per week, every-other-week, and (iii) direct mail soliciting which runs approximately \$5,000 annually. The annual advertising budget represents one percent of revenues.

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<sup>2</sup> Source: company website [www.bcfence.com](http://www.bcfence.com)

Presented in the following table is a summary of the 20XX thru 20XX calendar year accounting periods. As gleaned, gross sales and profitability have been on a steady increase.

	Historical		
<i>Source: Tax Returns</i>	12/31/20XX	12/31/20XX	12/31/20XX
<i>Sales Growth Rate</i>		30.8%	6.1%
Gross Revenues	6,828,743	8,931,977	9,472,555
Cost of Goods	(2,303,260)	(2,659,007)	(4,103,222)
Gross Profit	4,525,483	6,272,970	5,369,333
Operating Expenses	(3,673,928)	(4,528,355)	(3,181,169)
Other Income (Loss)	83	174,678	3,089
Operating Income (EBT)	851,638	1,919,293	2,191,253

### 3.3 Structure of the Acquisition Transaction

On May 30, 20XX, ABC Manufacturing entered into an agreement to purchase certain assets from ABC Manufacturing. Essentially all of the tangible assets (including accounts receivable, inventory and fixed assets) were transferred to ABC Manufacturing, LLC.

The acquisition was recognized as an asset purchase. The transaction has several components, for financial reporting purposes. The total purchase price of \$7,725,000 was structured as follows:

- Buyer contribution (cash) \$1,600,000.
- Seller carryback note \$3,500,000 with financing terms.
- Seller carry back note \$625,000 without financing terms.
- Bank note \$2,000,000 with financing terms.

Our interviews with management and review of relevant documents revealed the primary reason for the acquisition was to obtain key assets of ABC Manufacturing, Inc. including the equipment, accounts receivable, inventory, trade name, customer base, and assembled workforce in place.

## 4 Economic Overview

Due to the continued slowing in the housing market and in private sector investments, the U.S. economy grew at a sluggish pace during the first quarter of 20XX. While it is debatable whether the economy is currently in the midst of a recession, many of the economists in the financial press feel there will be a continued slowdown in the upcoming quarter.

According to Consensus Economics, Inc., publisher of *Consensus Forecasts - USA*, the real GDP is expected to decline by 0.1% in the second quarter, but grow by 2.1% in the third quarter of 20XX (percentage change from previous quarter, seasonally adjusted annual rates). For 20XX and 20XX, the real GDP growth rate is expected to be 1.3% and 2.1%, respectively. In the long term, the real GDP is expected to grow by 2.7% for 20XX-20XX.

According to the survey, consumer prices will increase 3.6% in 20XX and 2.3% in 20XX. In the long term, *Consensus Forecasts - USA* also predicts consumer prices will grow by 2.2% for 20XX-20XX. Producer prices are expected to increase 4.9% in 20XX and 1.4% in 20XX (*see exhibit 4-1*).

EXHIBIT 4-1									
Historical Economic Data and Forecasts									
Gross Domestic Product (GDP)	2.50	3.90	3.20	3.30	2.20	1.30	2.10	2.75	2.70
Industrial Production	1.10	2.90	3.90	4.60	1.70	0.70	2.20	2.75	2.60
Personal Consumption	2.80	3.90	3.50	3.20	2.90	1.30	1.70	2.63	2.50
Government Spending	2.50	1.90	0.90	2.10	2.00	1.90	1.40	n/a	n/a
Consumer Price Index (CPI)	2.30	2.70	3.40	3.20	2.90	3.60	2.30	2.20	2.20
Unemployment Rate	6.00	5.60	5.10	4.70	4.60	5.30	5.70	n/a	n/a
Housing Starts (millions)	1.85	1.95	2.07	1.80	1.34	0.95	1.04	n/a	n/a

In the first quarter of 20XX, the Federal Open Market Committee (FOMC) of the Federal Reserve System decided to decrease the target for the federal funds rate by a total of 200 basis points this quarter to bring the target down to 2.25%. The Board of Governors of the Federal Reserve System also approved the decision to decrease the discount rate by 250 basis points this quarter to 2.25%. At the end of the first quarter, the FOMC stated that, "Recent information indicates that the outlook for economic activity has weakened further. Growth in consumer spending has slowed and labor markets have softened."

Financial markets remain under considerable stress, and the tightening of credit conditions and the deepening of the housing contraction are likely to weigh on economic growth over the next few quarters." The FOMC went on to state that, "Inflation has been elevated, and some indicators of inflation expectations have risen. The Committee expects inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook has increased. It will be necessary to continue to monitor inflation developments carefully."

#### 4.1 Overview of the State and Local Economy

Arizona's seasonally adjusted unemployment rate was four percent in March, unchanged from February. At the national level the seasonally adjusted rate was 5.1 percent, up slightly from 4.8 percent.<sup>3</sup>

Arizona's economy gained a less-than-seasonally expected 9,500 non-farm jobs over-the-month in March for a level of 2,678,800 jobs. The over-the-year change in March 20XX was -0.3 percent (a loss of 7,500 jobs).

Arizona & U.S. Economic Indicators			
Percentage Jobless Rate			
Area			
United States	5.1%	4.8%	4.4%
Arizona	4.0%	4.0%	3.7%
Phoenix - Metro	3.5%	3.5%	3.1%

<sup>3</sup> Source: Arizona Workforce Employment Report issued 4/17/20XX

Six of 11 major industries reported employment gains in March, three had losses and two remained at the same level as the previous month. Jobs declined in goods-producing industries while there were gains in service-providing industries.

Construction had its seventh consecutive month of job losses in March (-800). This decline was the smallest monthly loss during this period; however, from March 20XX to March 20XX, 24,800 jobs have been trimmed. All subsectors within construction – building construction, heavy construction and specialty trades – pared jobs over the month. Specialty trades had the largest loss (-400) of any subsector, followed closely by heavy construction (-300).

Professional and business services gained 3,300 jobs in March. The largest gains were in professional, scientific, and technical services and administrative and support and waste management.

Leisure and hospitality added a slightly less-than-seasonally expected 3,700 jobs in March. Spring training activities, as well as winter visitors, were contributors to the addition of jobs.

Financial activities employment was unchanged in March. An increase of 100 jobs in credit intermediation was offset by a loss of 100 jobs in the insurance carriers and related activities sector.

Educational and health services added an expected 1,900 jobs. Health care and social assistance added the bulk of jobs. Government employment increased by a less-than-seasonally expected 600 jobs and natural resources and mining employment was flat overall.

Manufacturing lost 200 jobs in March. Trade, transportation and utilities employment grew by 600 jobs. The retail sector gained 800 jobs for the month. Motor vehicle and parts dealers and furniture and home furnishing stores each showed a loss of 100 jobs. Building materials and garden equipment dealers gained 200 with the arrival of the spring season.

In conclusion, Arizona's economy added a less-than-expected 9,500 jobs over-the-month of March. A decrease of 7,500 jobs occurred over-the-year, reflecting a -0.3 loss. The state's unemployment rate was unchanged at four percent. Nationally, the unemployment rate was 5.1 percent, up from 4.8 percent in February. Arizona continued with slightly positive overall nonfarm job growth for the month; yet all but two major industries were below their 10-year average growth rate.

Arizona's economy is projected to experience small employment losses in 20XX, primarily driven by the downturn in residential construction, a slower housing market and higher energy costs. Gradual economic improvements are forecast in 20XX, taking into account lower interest rates, greater availability of credit, economic stimulus programs and a leveling of petroleum prices.

#### 4.1.1 Phoenix – Local

Manufacturing and tourism, traditionally the base of the city's economy, continue to be important to Phoenix. Tourism is an especially vital part of the economy, with more than 10 million visitors from the throughout the United States and Canada visiting annually. Major industrial products manufactured by companies located in the metropolitan area include

aircraft parts, electronic equipment, agricultural chemicals, radios, air-conditioning equipment, leather goods, and native American crafts.

The city's estimated population as of 20XX was 1,512,986, making it the fifth largest city in the United States. At 515 square miles, its city proper is the 10th largest land area for a city in the United States, resulting in a lower population density. As of 20XX, the Phoenix Metropolitan Statistical Area (MSA) was the 13th largest in the United States, with an estimated population of 4,179,427.

Phoenix has maintained a massive growth streak in recent years, growing by 24.2% since 20XX. This makes it the second-fastest-growing metropolitan area in the United States following only Las Vegas, whose population has grown by 29.2% since 20XX.<sup>4</sup>

As the result of the population boom, the economy of Phoenix has taken on new dimensions in recent decades by moving into technology and service industries. Tourism and business services in particular now account for nearly 77 percent of the area's total employment and are projected to continue to be the largest source of employment growth for the next few years. Another sector of growth has been financial services and banking as several significant processing and/or regional headquarters operations call Phoenix home: American Express, Chase Bank, Bank of America, Discover Card Services, and Wells Fargo Bank. High technology and aerospace firms hold a considerable share of the manufacturing jobs throughout the state (56 percent).

Phoenix also has a strong health services industry with 20 major hospitals including a premier research hospital owned by the Mayo Clinic. There are several small pharmaceutical companies in Phoenix plus several manufacturers of neutraceutical products. New research centers, such as, the Translational Genomics Research Institute (TGEN) and the Arizona Biodesign Institute (ABI) at ASU are drawing scientists and biotech companies to Phoenix.<sup>5</sup> Population and economic growth have made Phoenix the center of the state's economy. More than a third of the state's entire labor force works in the Phoenix metropolitan area.<sup>6</sup>

## 5 Overview of the Industry

Unfortunately, not every business fits neatly within the Standard Industrial Classification code (SIC) or the new North American Industrial Classification System (NAICS). The appraiser has determined after researching several classification code categories<sup>7</sup>, the Subject reasonably fits into SIC 3446 *Architectural Metal Work* and SIC 1799 *Special Trade Contractors NEC (not elsewhere classified)*.

SIC Code 3446 covers establishments primarily engaged in providing construction contractors with building and finishing materials, including decorative fences and posts. The *special trade contractors* (SIC 1799) industry is difficult to classify because of its diversified nature. The U.S. Census Bureau defines SIC Code 1799 as: *Other Special Trade Contractors* comprising establishments primarily engaged in specialized construction work, including building

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<sup>4</sup> Source: Wikipedia online, Phoenix, AZ

<sup>5</sup> Source: [www.ci.phoenix.az.us](http://www.ci.phoenix.az.us)

<sup>6</sup> Source: [www.city-data.com](http://www.city-data.com)

<sup>7</sup> Source: [www.osha.gov/pls/imis/sic\\_manual.display?id=396&tab=description](http://www.osha.gov/pls/imis/sic_manual.display?id=396&tab=description)

swimming pools, *fences*, house moving, waterproofing, dewatering and damp proofing, fireproofing, and sandblasting; installing antennas, artificial turf, awnings, countertops, fire escapes, forms for poured concrete, gasoline pumps, lightning conductors, ornamental metal, shoring systems and signs on buildings.

## 5.1 Industry Snapshot<sup>8</sup>

While each sector of the Special Trade Contractors' industry is impacted by different factors, most specialty contractors are heavily dependent on housing starts or new commercial and institutional construction. The construction industry saw strong growth between 19XX and 19XX, and again after 20XX. While the pace of housing starts began to slip in 20XX, commercial construction spending was projected to rise by an average of five percent in 20XX and 20XX. Warehouses, restaurants, and upscale retail were the fastest growing sectors of commercial spending in 20XX and 20XX. All nonresidential building activity edged up three percent to a record annual rate of \$303.5 billion in 20XX and increased further by 12 percent in 20XX, to more than \$343 billion.

The industry is supported by several trade associations. Among them are Associated Specialty Contractors, an umbrella organization of nine national associations of construction specialty contractors with a membership of more than 25,000 firms, and the National Subcontractors ABC, which is comprised of six member organizations and more than 2,000 member firms.

As with the Special Trade Contractors classification, the Architectural and Ornamental Metal Work firms realized market growth during most of the 19XXs and early 19XXs as a result of a fairly active construction market. Products most highly in demand in 19XX were stairways, fences, railings, and gates, which accounted for a combined total of more than 24 percent of the market. Shipments for the architectural and ornamental metal work industry were \$5.7 billion in 20XX, compared to \$5.1 billion in 20XX. The architectural and ornamental metal work industry is served by several trade and professional associations. The National Ornamental and Miscellaneous Metals Association, which our Subject is a member, has 675 member companies; and The National Association of Architectural Metal Manufacturers has 124 member companies.

## 6 Financial Analysis

Analysis of the Company's financial statements is performed to help the appraiser determine the financial condition of the business, identify the assets and liabilities of the business, and perform internal trend and industry comparative ratio analysis.

### 6.1 Analysis of Historical Income Statements

Exhibit 6-1 presents historical information of ABC Manufacturing. High point of the analysis are:

- Sales rose by \$500k in 20XX over 20XX.
- Cost of goods and payroll changed significantly in 20XX. This was due mainly to accounting treatment of these expenses. In the following table we provide an

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<sup>8</sup> Source: Gale Group Publications "Encyclopedia of American Industries" Online

illustration demonstrating nothing major occurred other than moving some payroll expenditures into the cost of goods line item.

	<u>20XX</u>	<u>20XX</u>	<u>20XX</u>
Revenues	6,828,743	8,931,977	9,472,555
Cost of Goods	(2,303,260)	(2,659,007)	(4,103,222)
Payroll	1,838,814	2,443,549	1,139,949
Total COG & Payroll	4,142,074	5,102,556	5,243,171
<i>Total COG &amp; Payroll as % of Sales</i>	<i>60.7%</i>	<i>57.1%</i>	<i>55.4%</i>

- Operating income nearly doubled in 20XX over 20XX figure.
- Officer's compensation rose significantly in 20XX from prior periods.
- Repairs and maintenance line item for 20XX decreased drastically.

Exhibit 6-1			
Historical Income Statement			
	XYZ Fence		
	As of December 31st		
Source: Tax Returns	20XX	20XX	20XX
Gross Revenues	6,828,743	8,931,977	9,472,555
Cost of Goods	(2,303,260)	(2,659,007)	(4,103,222)
Gross Profit	4,525,483	6,272,970	5,369,333
Operating Expenses	(3,673,928)	(4,528,355)	(3,181,169)
Other Income (Loss)	83	174,678	3,089
Operating Income (EBT)	851,638	1,919,293	2,191,253
Selected Line Items			
Advertising	61,194	86,197	110,790
Officer's Compensation	477,158	565,508	801,098
Pension, Profit Sharing, Annuity	184,000	194,000	198,000
Rent	208,087	201,237	195,175
Repairs/Maintenance	155,796	123,180	7,261
Depreciation	33,250	35,005	29,089
Amortization	-	-	-
Interest Expenses	7,025	10,787	2,339
Payroll	1,838,814	2,443,549	1,139,949
Travel/Meals/Entertainment	37,026	49,193	49,506
Insurance	89,263	120,909	84,641
Utilities	15,391	17,047	15,778
Telephone	29,454	27,522	28,833
Taxes and License	30,203	50,078	12,053
Office Expenses	101,262	103,050	78,921
Legal & Professional Fees	9,662	31,116	14,757
Vehicle Expense/Mileage	56,014	36,921	19,555
Misc	340,329	433,056	393,424
Total Operating Expenses	3,673,928	4,528,355	3,181,169

## 6.2 Analysis of Historical Balance Sheets

Unlike with the income statement data, the appraiser was provided with an internal balance sheet as of the acquisition date. The carrying value as of May 30, 20XX is not necessarily the fair value for each line item. This will be discussed further in the report. High point of the analysis are:

- Receivables have shown a 30% increase in 20XX from the prior period.
- Carrying value of total asset increase substantially in 20XX.
- Total liabilities have been on a steady decrease until the acquisition date.
- Total liabilities are shown to be 83% of total assets carried as of May 30, 20XX.

EXHIBIT 6-2								
Historical (unadjusted) Balance Sheet Data								
	December 31st			May 30, 20XX	Common-size as a % of Total Assets			
	20XX	20XX	20XX	20XX	20XX	20XX	20XX	20XX
<b>Assets</b>								
Cash & Cash Equivalent	61,255	336,561	440,354	-	4.5	16.9	18.3	-
Receivables	766,935	1,020,961	1,314,979	1,352,162	56.3	51.3	54.7	17.3
Inventory	295,289	370,386	385,900	745,253	21.7	18.6	16.1	9.5
Other	3,750	2,325	16,546	130,344	0.3	0.1	0.7	1.7
Total Current Assets	1,127,229	1,730,233	2,157,779	2,227,759	82.7	87.0	89.8	28.5
Total FF&E Assets	951,499	1,089,775	1,022,370	812,365	69.8	54.8	42.6	10.4
Total Accum Depreciation	(715,409)	(835,062)	(780,588)	-	(52.5)	(42.0)	(32.5)	-
Net FF&E Assets	236,090	254,713	241,782	812,365	17.3	12.8	10.1	10.4
Intangible Assets (net)	-	-	-	4,773,603	-	-	-	61.1
Other	-	4,300	2,300	-	-	0.2	0.1	-
Total Assets	1,363,319	1,989,246	2,401,861	7,813,727	100.0	100.0	100.0	100.0
<b>Liabilities</b>								
Short Term Debt	21,666	21,397	-	86,721	1.6	1.1	-	1.1
Payables	493,506	312,597	255,121	-	36.2	15.7	10.6	-
Other	100,508	55,823	60,349	-	7.4	2.8	2.5	-
Total Current Liabilities	615,680	389,817	315,470	86,721	45.2	19.6	13.1	1.1
Long Term Debt	39,777	34,329	-	-	2.9	1.7	-	-
Other	-	-	-	-	-	-	-	-
Total Long Term Liabilities	39,777	34,329	-	5,727,316	2.9	1.7	-	73.3
Total Liabilities	655,457	424,146	315,470	5,814,037	48.1	21.3	13.1	74.4
<b>Stockholder's Equity</b>								
Capital Stock	17,000	17,000	17,000	-	1.2	0.9	0.7	-
Retained Earnings	690,862	1,548,100	2,069,391	-	50.7	77.8	86.2	-
Other	-	-	-	-	-	-	-	-
Total Equity/Capital (Net Worth)	707,862	1,565,100	2,086,391	1,999,690	51.9	78.7	86.9	25.6
Liabilities & Shareholder's Equity	1,363,319	1,989,246	2,401,861	7,813,727	100.0	100.0	100.0	100.0

## 6.3 Adjusted Balance Sheet

Recorded carrying values or booked values are not the same as fair value. In reality, separate valuations may be undertaken of any material tangible assets. Similarly, receivables and other current asst may not be reflected by the carrying value.



In this case, we used information obtained from a machinery & equipment appraisal performed for ABC Bank (lender) on May 19, 20XX as being a proxy for the fair value of the fixed assets. The table below provides an illustration followed by a discussion for each adjustment.

Total Current and Tangible Assets			
	Carrying Value	Adjustments	Fair Value
Cash & Cash Equivalent	-	-	-
Receivables	1,352,162 [1]	(556)	1,351,606
Inventory	745,253 [2]	-	745,253
Other	130,344 [3]	(130,344)	-
Total Current Assets	2,227,759		2,096,859
Total FF&E Assets	812,365 [4]	(326,965)	485,400
Total Accum Depreciation	-		-
Net FF&E Assets	812,365		485,400
Intangible Assets (net)	4,773,603 [5]	(4,773,603)	0
Other	-		-
Total Assets	7,813,727		2,582,259

- [1] Accounts receivables were adjusted by an A/R acquisition variance amount per management.
- [2] A cost accounting was performed for inventory as of the acquisition date, hence no adjustment is required. It should be noted, according to management, a physical inventory count was performed.
- [3] Other line item is attributed to prepaid loans fees and contract backlog premium, neither has fair value.
- [4] FF&E is a combination of vehicles, office furniture, shop equipment and the inclusion of a non-compete agreement carrying value. As discussed earlier we have elected to use a machinery & equipment appraisal to assign the fair value to this line item.
- [5] Intangible asset line item is the booked value of goodwill. Our assignment here to provide the fair values to identified separable intangible assets. Hence this line item is developed throughout this report.

#### 6.4 Prospective Financial Information

Management prepared a five-year forecast of the sales and expenses relating to gross revenues of the Company. Assumptions are presented in Exhibits 6-3 and 6-4. Major assumptions were:

- A core assumption is gross revenues are a function of the acceptance of the product in the marketplace. Sales growth rates are presented for five-years. In 20XX sales are not expected to grow beyond 20XX figure. In 20XX sales are expected to increase on an upward trend until peaking in 20XX (see Appendix A).
- Officer's compensation figure was obtained from employment contracts.

- Depreciation, amortization and interest expense were estimated by the financial terms of the contracts and asset purchase agreement.

Depreciation	5Y straight Line	485,400	56,630	97,080	97,080	97,080	97,080
Amortization	15 Y	4,201,341	280,089	280,089	280,089	280,089	280,089
Interest Expenses	Borrowed	5,500,000	\$ 256,644	\$ 438,880	\$ 386,466	\$ 360,337	\$ 304,282

Exhibit 6-3

Historical & Forecasted Income Statement									
	XYZ Fence			ABC Mfg, LLC					
	Historical			Forecasted					
Source: Tax Returns	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	
	Sales Growth Rate	30.8%	6.1%	0.0%	3.0%	5.0%	8.0%	10.0%	
Gross Revenues	6,828,743	8,931,977	9,472,555	9,472,555	9,756,732	10,244,568	11,064,134	12,170,547	
Cost of Goods	(2,303,260)	(2,659,007)	(4,103,222)	(4,101,616)	(4,224,665)	(4,435,898)	(4,790,770)	(5,269,847)	
Gross Profit	4,525,483	6,272,970	5,369,333	5,370,939	5,532,067	5,808,670	6,273,364	6,900,700	
Operating Expenses	(3,673,928)	(4,528,355)	(3,181,169)	(4,581,726)	(4,908,684)	(5,034,879)	(5,308,441)	(5,656,778)	
Other Income (Loss)	83	174,678	3,089	-	-	-	-	-	
Operating Income (EBT)	851,638	1,919,293	2,191,253	789,212	623,383	773,791	964,923	1,243,922	
Selected Line Items									
Advertising	61,194	86,197	110,790	113,671	117,081	122,935	132,770	146,047	
Officer's Compensation	477,158	565,508	801,098	312,000	312,000	312,000	312,000	312,000	
Pension, Profit Sharing, Annuity	184,000	194,000	198,000	217,869	224,405	235,625	254,475	279,923	
Rent	208,087	201,237	195,175	218,880	219,427	219,976	220,526	221,077	
Repairs/Maintenance	155,796	123,180	7,261	170,506	175,621	184,402	199,154	219,070	
Depreciation	33,250	35,005	29,089	56,630	97,080	97,080	97,080	97,080	
Amortization	-	-	-	280,089	280,089	280,089	280,089	280,089	
Interest Expenses	7,025	10,787	2,339	256,644	438,880	386,466	360,337	304,282	
Payroll	1,838,814	2,443,549	1,139,949	1,989,237	2,048,914	2,151,359	2,323,468	2,555,815	
Travel/Meals/Entertainment	37,026	49,193	49,506	47,363	48,784	51,223	55,321	60,853	
Insurance	89,263	120,909	84,641	142,088	146,351	153,669	165,962	182,558	
Utilities	15,391	17,047	15,778	18,945	19,513	20,489	22,128	24,341	
Telephone	29,454	27,522	28,833	28,418	29,270	30,734	33,192	36,512	
Taxes and License	30,203	50,078	12,053	56,835	58,540	61,467	66,385	73,023	
Office Expenses	101,262	103,050	78,921	123,143	126,838	133,179	143,834	158,217	
Legal & Professional Fees	9,662	31,116	14,757	18,945	19,513	20,489	22,128	24,341	
Vehicle Expense/Mileage	56,014	36,921	19,555	56,835	58,540	61,467	66,385	73,023	
Misc	340,329	433,056	393,424	473,628	487,837	512,228	553,207	608,527	
Total Operating Expenses	3,673,928	4,528,355	3,181,169	4,581,726	4,908,684	5,034,879	5,308,441	5,656,778	

Presented in Exhibit 6-4 is a five-year forecast in a common-size format. This allows the reader to more fully understand the assumptions used in the forecast by looking at the percentages both from the perspective of a historical and forecast basis.

High points are:

- Cost of goods (%) in 20XX was selected as a reasonable proxy for future events.
- Operating expenses (%) are expected to be higher in the forecasted years as higher annual non-cash charges and interest expenses will be incurred by the new Company.
- Operating income as anticipated will be lower in the early years of the forecast. Profitability increase over time, as interest and non-cash charges decrease.

## Exhibit 6-4

Historical & Forecasted Income Statement								
	XYZ Fence			ABC Mfg, LLC				
	Actual			Forecasted				
	Common-size as a % of Gross Revenues							
	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX
Gross Revenues	100%	100%	100%	100%	100%	100%	100%	100%
Cost of Goods	(0.337)	(0.298)	(0.433)	(0.433)	(0.433)	(0.433)	(0.433)	(0.433)
Gross Profit	0.663	0.702	0.567	0.567	0.567	0.567	0.567	0.567
Operating Expenses	(0.538)	(0.507)	(0.336)	(0.484)	(0.503)	(0.491)	(0.480)	(0.465)
Other Income (Loss)	0.000	0.020	0.000	-	-	-	-	-
Operating Income (EBT)	0.125	0.215	0.231	0.083	0.064	0.076	0.087	0.102
Selected Line Items								
Advertising	0.009	0.010	0.012	0.012	0.012	0.012	0.012	0.012
Officer's Compensation	0.070	0.063	0.085	0.033	0.032	0.030	0.028	0.026
Pension, Profit Sharing, Annuity	0.027	0.022	0.021	0.023	0.023	0.023	0.023	0.023
Rent	0.030	0.023	0.021	0.023	0.022	0.021	0.020	0.018
Repairs/Maintenance	0.023	0.014	0.001	0.018	0.018	0.018	0.018	0.018
Depreciation	0.005	0.004	0.003	0.006	0.010	0.009	0.009	0.008
Amortization	-	-	-	0.030	0.029	0.027	0.025	0.023
Interest Expenses	0.001	0.001	0.000	0.027	0.045	0.038	0.033	0.025
Payroll	0.269	0.274	0.120	0.210	0.210	0.210	0.210	0.210
Travel/Meals/Entertainment	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005
Insurance	0.013	0.014	0.009	0.015	0.015	0.015	0.015	0.015
Utilities	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Telephone	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Taxes and License	0.004	0.006	0.001	0.006	0.006	0.006	0.006	0.006
Office Expenses	0.015	0.012	0.008	0.013	0.013	0.013	0.013	0.013
Legal & Professional Fees	0.001	0.003	0.002	0.002	0.002	0.002	0.002	0.002
Vehicle Expense/Mileage	0.008	0.004	0.002	0.006	0.006	0.006	0.006	0.006
Misc	0.050	0.048	0.042	0.050	0.050	0.050	0.050	0.050
Total Operating Expenses	0.538	0.507	0.336	0.484	0.503	0.491	0.480	0.465

Based upon the forecasted assumptions, we have calculated the enterprise value using the Company's developed weighted average cost of capital (WACC), see Exhibit 7-2. Reconciliation of the financial projections and enterprise value are presented in Exhibit 6-5. In estimating enterprise value, the assumptions used in the terminal year are cash flows will grow at a constant and stable rate into the future, an assumption that is supported in Table B (see Appendix A).

The estimated enterprise value of the Target Company is calculated in Exhibit 6-5 and is similar to the adjusted purchase price discussed in Section 8 of this report. The overall WACC rate used to estimate the enterprise value of the Target Company is the basis for measuring the fair value of the identified intangibles (see discussion in following sections).

Exhibit 6-5

Multiple Period Discounting Method - Invested Capital Model					
Selected Year	Projected Debt Free Net Cash Flow	WACC Discount Rate	Present Value Factor	Capitalization Rate	Present Value
20XX	\$ 611,415	17.1	0.8539		522,066
20XX	\$ 1,881,950	17.1	0.7291		1,372,101
20XX	\$ 913,328	17.1	0.6225		568,583
20XX	\$ 974,799	17.1	0.5316		518,169
20XX	\$ 1,077,221	17.1	0.4539		488,934
Terminal Year	\$ 1,104,151	17.1	0.4539	0.146	3,429,157
FMV of 100% Invested Capital on a Controlled, Closely-Held Basis					6,899,010

## 7 Fair-Value Measurement Analysis

Fair value measurement methodologies applied to an appraisal of any asset can be broadly classified into one of three approaches to value, namely, the asset-based (sometimes referred to as “cost”) approach, the market-based approach and the income-based approach. Within each of these approaches there are various methods which can be applied to estimate value of a particular asset or group of assets.

In any fair value measurement analysis, all three approaches must be considered and the approach or methods deemed most relevant will then be applied for providing an opinion of value for use in the fair value measurement of that asset.

### 7.1 Approaches to Value

A general description<sup>9</sup> of each approach is provided in the following paragraphs.

Asset Approach establishes value based on the cost of reproducing or replacing the asset, less depreciation from physical deterioration, functional and economic obsolescence, if present and measurable. This approach generally results in an upper limit of value in cases where the asset is easily replaced or reproduced, since no prudent investor would pay more for an asset than the cost to create a comparable asset.

Market Approach is a general way of determining a fair-value indication of a business, business ownership interest, security or intangible asset. However, intangible assets are typically transferred only as part of the sale of a going concern, not in piecemeal transactions. Furthermore, since intangible assets are unique to a particular business entity, comparison between entities would be difficult to make even if the data were available. We have considered the market approach in our analysis and have elected not to employ it to measure the fair value of the Subject’s assets as a whole. However,

<sup>9</sup> Source: *International Glossary of Business Valuation Terms*, published in January 20XX as a joint project by the AICPA, ASA, CICBV, National Association of Certified Fair Value Measurement Analyst and the Institute of Business Appraisers.

we have elected to use specific market data for certain intangible assets on a separable basis.

Income Approach utilizes an economic benefit stream of the asset under analysis and is usually based on historical or forecast cash flow stream. The focus is to determine a benefit stream that reasonably reflects an asset's most likely future benefit stream. The selected benefit stream is then discounted to present value with an appropriate risk-adjusted rate of return. The rate of return is commonly referred to as the discount rate. Discount rate factors often include general market rates of return at the measurement date, business risks associated with the industry in which the company operates and other risks specific to the asset being valued.

## 7.2 Fair Value Measurement of Tangible Assets

As discussed earlier, the tangible assets (machinery and equipment) estimate of values was provided in a separate valuation report prepared for ABC Bank (lender). The appraiser did not undertake a specific fair-value measurement of the fixed assets as part of our fair value measurement analysis. Rather, the appraiser relied upon the machinery and equipment valuation report as being a reasonable proxy for the fair value of these assets.

The reported market value of the fixed assets is \$485,400<sup>10</sup>. As part of the transaction price, the inclusion of the carrying value of accounts receivables (\$1,352,162) and inventory (\$745,253) were also part of the total assets. No liabilities were assumed in this transaction (*per the asset agreement*).

## 7.3 Valuation of the Acquired Intangible Assets

Intangible assets subject to valuation; (i) trademarks and trade names; (ii) non-compete agreement; (iii) customer base / relationships; (iv) contracts; and (v) assembled workforce.

### 7.3.1 Development of WACC

We must value the specific acquired intangible assets with defined lives and assign an estimate of value to each identifiable intangible asset. Generally, all of the tangible and intangible assets alike are supported by a mix of debt and equity. To estimate the required discount rate, it is necessary to determine an appropriate weighted average cost of capital ("WACC") to apply to each asset classification.

The assets are being valued using a fair value standard, in which the parties are presumed to be involved within a market rather than purely hypothetical. Therefore, *"the valuation methods selected for measuring assets should be consistent with the objective of measuring fair value. Those methods should incorporate assumptions that market participants would use in their estimates of values, future revenues, future expenses, and interest rates..."*<sup>11</sup>

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<sup>10</sup> See Machinery & Equipment Appraisal Report

<sup>11</sup> Larson, Randy J., et al, *Assets Acquired in a Business Combination* (New York: American Institute of Certified Public Accountants, 20XX), page 3.

In this case, the determination of the appropriate market participant WACC (discount rate) was made by assuming the fair value paid in the acquisition price and forecasted cash flows should equal the fair value discount rate for the Company.

The first step is to develop a rate of return for the Target Company's after tax equity. This is accomplished by using a build-up model which incorporates different risks factors (see Exhibit 7-1).

Exhibit 7-1		
Development of Rate of Return Applicable to Equity		
as of May 30, 20XX		
Description	Increment	Rate
Long-Term Treasury Bond Yield		4.6%
Equity Risk Premium		6.2%
Small Company Risk Premium		9.7%
Industry Risk Premium		5.7%
Specific Company Risk Adjustments		2.8%
Depth of Management	-1.00%	
Stability of Local Industry	-0.50%	
Diversification of Customer Base	-0.50%	
Diversification/Stability of Suppliers	0.50%	
Geographic Location	1.00%	
Liquidity Discount	3.00%	
Earnings Margins	-0.50%	
Financial Structure	0.75%	
Net Cash Flow Discount Rate		29.0%

Discount/Capitalization rates vary among particular types of businesses and from one period of time to another. Expressed as a percentage, the more speculative a business' income stream, the higher a discount/capitalization rate (producing less value); conversely, the more stable an income stream, produces a lower discount/capitalization rate (producing a higher value). This stability or non-stability is termed "risk".

While various methods exist to estimate discount and capitalization rates (*rates of return*), a model used in this appraisal is Morningstar's<sup>12</sup> "build-up" model. The build-up model breaks the rate of return into various components for analysis. Once these separate components are derived, they are added together to "build up" a discount rate. To convert a discount rate into a capitalization rate, an estimate of annual growth in earnings or cash flows is subtracted from this discount rate. The basic components of a discount rate are:

**Risk-Free Rate** (i.e., a risk-free base rate) is the rate one could receive from an investment free of risk of default. This includes the investors' required rate of return for the "riskless" use of their funds and a factor for inflation. The rate of return earned on long-term U.S. Government Bonds (i.e., U.S. Treasury Bonds of 20-year duration) is considered to be a common proxy for the risk-free rate of return.

<sup>12</sup> *Stocks, Bonds, Bills, and Inflation (SBBI) Valuation Yearbook*; published by Morningstar.

Equity Risk Premium is designed to recognize for the next level of risk. Risk associated with investing in a portfolio of large publicly traded stocks. This is, in essence, an additional rate of return required by investors in the market place to compensate them for this additional risk in investing in a stock security as compared to a long-term U.S. government security. In a study published by Morningstar, it was calculated that between 19XX (when these statistics were available) and 20XX, the average total returns earned on large corporate stocks were higher than the total annual returns on long-term U.S. government bonds.

Small Company Risk Premium addresses the additional increment of risk associated with investing in common stock of smaller companies. In addition to the equity risk premium, the same Morningstar study indicated the smallest stocks traded on the New York Stock Exchange earned an additional premium over the larger stocks traded on the Exchange.

Industry Risk Premium: Prior to 20XX, formation of an industry premium for use in the buildup model was not quantitative in nature. Since 20XX, however, Morningstar has undertaken the development of an industry premium for use in the model. The introduction of quantifiable objective industry data can now account for a specific industry risk premium that was once determined by the appraiser.

Specific Company Risk Premium is the component that provides a return increment for the risk specific and unique to the company and its industry - an increment of risk not reflected in any of the above components. The only source for this component is the appraiser's informed and intuitive judgment. Although this may indeed be imprecise; it is, however, not without foundation. While considering the management team, financial structure, market place, and comparative ratios expected by the industry's mean performance producers, appraisers can assess risk and value factors, as presented in Exhibit 7-1.

Next, the weighted average cost of capital (WACC) incorporates the Target Company's equity discount rate, cost of debt and blended tax rate. Exhibit 7-2 presents the Target Company's WACC applicable to net cash flows. An industry capital structure (debt-to-equity mix) was selected as being the optimum market participant capital structure.

Exhibit 7-2				
Weighted Average Cost of Capital (WACC)				
Equity Discount Rate				29.0%
Cost of Debt				12.0%
Tax Bracket				38.6%
Market Capital Structure				
Debt %				55.0
Equity %				45.0
Computation of WACC				
Component	Tax Effect	Net Rate	Ratio	Calculation to WACC
Cost of Debt (1 minus tax rate)	61.4%	7.4%	55.0	4.1
Equity Rate (Discount Rate)		29.0%	45.0	13.1
Invested Capital Weighted Average Cost of Capital (WACC)				17.1

Exhibit 7-3 presents the appraiser's estimate of the applicable discount rates (*WACC*) for each specific asset classification. As gleaned, each asset classification may have a higher or lower discount rate. The lower the risk factors (*i.e., working capital and equipment*), the lower the discount rate required as opposed to other intangible assets that may command a higher discount rate.

Exhibit 7-3	
Contributory Asset Charges	
Working Capital	5.0%
Machinery & Equipment	7.0%
Trademark & Trade Names	16.0%
Non-Compete Agreement	16.0%
Assembled Workforce	16.0%
Contracts	20.0%
Customer Relationships	24.0%
Goodwill ( <i>Excluding Workforce</i> )	32.0%
Estimated Contributory Asset Charges	17.0%

At the end of the day, this combined rate must be near the estimated *WACC* to be supportable. The estimated total contributory asset capital costs are very close to the overall estimated *WACC* of the Target Company.

### 7.3.2 Amortization of Tax Benefit

In addition, an element of benefits to be generated from an acquisition is the tax benefit of the future amortization. This tax benefit has a life independent of the asset. Once the acquisition is completed, its realization is a function of the risk associated with the Target Company's overall success in generating taxable income, which can be sheltered.

The formula for the tax amortization benefit is:

$$PV_{CF} * (n / (n - ((PV(k, n, -1) * (1 - k)^{0.5}) * t)) - 1)$$

$PV_{CF}$	=	Present value of cash flows from the asset
$n$	=	Amortization period (finite over 15 years)
$k$	=	Discount rate
$PV(k, n, -1) * (1 - k)^{0.5}$	=	Present value of a \$1 annuity over 15 years, at the given discount rate
$t$	=	tax rate (38.6%)

IRC Section 197(a) provides for the tax amortization of intangible assets over a 15-year period. Since intangible assets are valued on an after-tax basis, this amortization benefit should be included in the forecast of cash flows to reflect the incremental value provided by the tax deduction to any given intangible asset that is amortizable for tax purposes. As such, the amortization amount is added back to cash flow, given its tax shield benefit.



The following table presents the Company's blended Federal & State taxable rates based upon the average pre-tax income over the prior three-years (20XX-20XX). This is an average rate over time, with some years having a higher taxable rate and other years with lower blended rates.

<b>Estimating Effective Tax Rate Table 20XX</b>		
<i>Corporate Rates</i>	Tax Rate	20XX
Income before Provision for Taxes		\$ 1,654,061
State Tax Provision	7.0%	115,784
Income before Provision for Federal Taxes		1,538,277
<b>Federal Tax Provision</b>		
0 - 50,000	15.0%	7,500
50,000 - 75,000	25.0%	6,250
75,000 - 100,000	34.0%	8,500
100,000 - 335,000	39.0%	91,650
335,000 - 10,000,000	34.0%	409,114
Federal Tax Provision		523,014
Total Provision for State & Federal Taxes		638,798
Blended Federal & State Tax Rate		38.6%

### 7.3.3 Fair Value Measurement of Assembled Workforce

Statement of Financial Accounting Standards specifies that the assembled workforce of an acquisition will not be treated as a discrete intangible asset apart from goodwill.<sup>13</sup> At the same time, the income generating characteristics of other intangible assets are dependent upon the existence of the assembled workforce and must be charged with a cost associated with its value.

Therefore, the assembled workforce must be valued in order to define the level of these contributory charges in the income approach methodology. The buyer obtained an assembled and trained workforce. Expenditures for recruiting, selecting and training would be required to replace this workforce with individuals of comparable skills and expertise. By acquiring a fully trained workforce, the buyer avoided the expenditures associated with hiring and training equivalent personnel. The following are some of the types of costs that might be incorporated into an assembled workforce.

- Advertising placement expenses
- Recruitment fees (agency)
- Salary and benefits associated with company personnel
- Time to train employee (loss productivity)
- Supervisory training costs
- Relocation costs
- Signing bonuses (incentives for rare skills)
- Travel and lodging expenses

<sup>13</sup> Financial Accounting Standards Board, *Statement of Financial Accounting Standards*

The cost approach is generally favored for valuing an assembled workforce. It is generally recognized that a well trained group of workers, well versed in the products and practices of the company, adds to the value of a business. Application of the cost approach for valuing an assembled workforce aggregates all of the costs that would be required to hire and train a duplicate workforce.

Based on information from and discussions with management, estimates were made on anticipated salaries that a market participant would pay for each grouping of employees of the Target Company.

Presented in Exhibit 7-4 is the anticipated salary group cost. The summation of the hiring costs, training costs and loss of efficiency costs is the cost to replace the Target Company's workforce. The replacement cost is adjusted for the added amortization benefit factor to reflect the additional value accruing to the asset due to the deduction of tax amortization over the 15-year tax life of the asset.

SAMPLE

Exhibit 7-4

Assembled Workforce - Cost Approach													
Employee Classification	Average Annual Salary	Hiring Costs (15%)	Employer Burden (30%)	Average Salary with Benefits	Inefficient for Months	Loss of Efficiency (Training Period)	Costs Associated with Training	Loss of Efficiency of Supervisor	Costs Associated with Trainer	Direct Training Cost Per Employee	Number of Employees	Total Hiring Cost	
Executive Staff	\$ 156,000	23,400	46,800	226,200	6	50%	113,100	20%	22,620	135,720	2	271,440	
Accounting Staff	\$ 60,000	9,000	18,000	87,000	3	25%	21,750	20%	4,350	26,100	1	26,100	
Office Admin	\$ 25,000	3,750	7,500	36,250	3	25%	9,063	15%	1,359	10,422	1	10,422	
Support Staff	\$ 65,000	9,750	19,500	94,250	4	33%	31,417	10%	3,142	34,558	4	138,233	
Foreman	\$ 45,000	6,750	13,500	65,250	3	25%	16,313	10%	1,631	17,944	16	287,100	
Laborers	\$ 25,000	3,750	7,500	36,250	1	8%	3,021	10%	302	3,323	17	56,490	
Sales Staff	\$ 80,000	12,000	24,000	116,000	6	50%	58,000	20%	11,600	69,600	6	417,600	
Replacement Cost of Assembled Workforce												47	\$ 1,207,385
Less: Tax Expense												38.6%	(466,292)
Total													\$ 741,093
<u>Tax Shield Amortization Benefit</u>													
				WACC Rate	16.0%								
				Tax Rate	38.6%								
				Tax Amortization Period	15								
				Tax Shield Benefit PV Rate	0.2008								
				Amortization Benefit					148,800				
				Indicated Value					\$ 889,893				
Fair Value of Assembled Workforce (rounded)												\$	890,000

### 7.3.4 Fair Value Measurement of Trade Name

A trademark, as defined in the Trademark Act of 1946, “includes any word, name, symbol or device or any combination thereof adopted and used by a manufacturer or merchant to identify his goods and distinguish them from those manufactured by others.” A trademark serves three basic functions:

- it identifies the product;
- it guarantees a certain level of quality; and
- it acts as a public relations tool that provides a marketing function.

Trademark value comes from the extent to which these three functions are served. As such, the value of a trademark lies in its ability to command a premium price, market share and/or royalties in the marketplace. In that case, a competitor is prevented from sharing the profits accruing to the trademark owner who has invested the time and expense in cultivating the trademark. In this section, the appraiser has developed an indication of fair value for the combination all trade names and trademarks, (*hereafter referred to as trademarks*) in current use by ABC Manufacturing.

Having been in business for many years, ABC Manufacturing has developed a valuable name in relation to its products and services offered. A portion of the Company’s revenue base can be attributed to its trademarks. In order to establish the value of these trademarks, certain qualitative and quantitative issues should be considered. There are numerous qualitative factors to consider in the assessment of trademarks. These attributes were considered and assessed prior to the quantitative analysis of the trademarks. The relevant factors and the corresponding impact on value were as follows:

- Absolute age – ABC Manufacturing has been in business since 1998 and is known within the industry to be a reliable company with which to do business.
- Consistent use – The Company has been known as ABC Manufacturing and markets itself through print, Internet and other means of advertising.
- Geography of use – The Company’s product and service lines are distributed mainly in within Arizona.

In the Income Approach we utilized the relief from royalty method. The value of a marketing related intangible asset is estimated as the present value of the future economic income (net cash flow) attributable to the ownership of the asset over its expected remaining useful life.

We relied on revenue projections utilized in determining the business enterprise (invested capital) value of the Company as provided by management. Revenue projections were provided beginning in 20XX and ending in 20XX with the following period as the residual year. We determined the appropriate royalty rate based on a review of publicly available information on trademark/trade name licensing transactions – see Exhibit 7-5. As gleaned from Exhibit 7-5, the range of royalty rate is quite wide. This wide range is confirmed by the high coefficient of variation. The median for the low and high range is 3.00% and the mean is 4.04% and 4.49% respectively.

We elected to start with the median royalty rate as our base figure and took into consideration that nearly all of the market-based information are for royalty rates based upon national or

international markets. ABC Manufacturing market in primarily the greater Phoenix area, but in most cases is limited to the State of Arizona. This scenario would command a lower royalty rate and in this case we approximated a 20% reduction to be appropriate from the median royalty percentages.

Information for royalty rates was obtained from *RoyaltySource* intellectual property database for royalty payments pertaining to trademarks/trade names. The Acquirer has the right to use the name "ABC Manufacturing" into perpetuity; therefore, the trade name is an indefinite life asset. No contributory or supporting assets are applicable under this method to estimate fair value of trade name.

## Exhibit 7-5

**Trademark: Industrial & Commercial/Construction Royalty Rates (Sales Basis)**

	<i>Licensee</i>	<i>Business Type</i>	Royalty Rate Range	
			<i>Low</i>	<i>High</i>
1	Enviro-Clean of America Inc.	Machinery, Equipment & Supplies	3.00%	3.00%
2	Puradyn Filter Technologies	Motor Vehicle Parts & Accessories	1.00%	1.00%
3	O.Y.L. Mfg Company	Refrigeration & Heating Equipment	2.00%	5.00%
4	NBDE	Mfg & Sales of Control Units	2.00%	2.00%
5	Knickerbocker LL Co., Inc.	ECT Clean Room Systems	2.00%	2.00%
6	Semi-Tech Global	Household Audio & Video Equipment	1.50%	1.50%
7	OTAM Spa	Boat Mfg, Sales & Distribution	7.50%	10.00%
8	Coleman Spas, Inc	Sale, Mfg & Distribution of Spas	8.00%	8.00%
9	Ranco, Inc	Process Control Instruments	5.00%	5.00%
10	Central Sprinkler Corp	Misc Fabricated Metal Products	3.00%	3.00%
11	Genicom Corp	Computer Peripheral Equipment	1.50%	5.00%
12	Seychelle Environment Tech, Inc	Refrigeration Industry Machinery	2.00%	2.00%
13	Morris Material Handling, Inc	Industrial Trucks & Tractors	0.75%	0.75%
14	Jore Corp	Cutlery, Handtools & Hardware	3.00%	3.00%
15	National Safety Associates	Water Filters & Treatment Systems	3.00%	3.00%
16	Hawk Marine Power, Inc	Ship & Boat Building & Repair	2.50%	2.50%
17	Rule Grit, Inc	Cutley, Handtools & Hardware	10.00%	10.00%
18	Isagro	Agrochemicals	7.00%	7.00%
19	American Remodeling, Inc	Construction - Specialty Trade	12.00%	12.00%
20	Catalina Lighting, Inc	Electrical Lighting & Wiring Equipment	4.00%	4.00%
Range			0.75%	12.00%
Median			3.00%	3.00%
Mean			4.04%	4.49%
Standard Deviation			0.0318	0.0327
Coefficient of Variation			0.7884	0.7289
Selected Royalty Rate (rounded)			2.50%	

Next, we multiplied this pre-tax royalty rate to the forecast revenue over the seven-year forecast period and the residual year revenue projection. Trade advertising of 1% was deducted to arrive at pre-tax relief from royalty. We applied our blended tax rate to the projected trade name cash flows to calculate our after-tax royalty cash flows. Our final step was to calculate and add the amortization benefit factor to arrive at the fair value of trade name.

## Exhibit 7-6

## Fair Value of Trade Name - Relief from Royalty Method

	20XX	20XX	20XX	20XX	20XX	20XX	20XX	Residual
Gross Revenues	9,472,555	9,756,732	10,244,568	11,064,134	12,170,547	13,144,191	13,801,400	
<i>Sales Growth in Model</i>	0.0%	3.0%	5.0%	8.0%	10.0%	8.0%	5.0%	
Royalty Avoided (EBIT)	236,814	243,918	256,114	276,603	304,264	328,605	345,035	
Less: Trade Name Advertising	(94,726)	(97,567)	(102,446)	(110,641)	(121,705)	(131,442)	(138,014)	
Pre-Tax Relief from Royalty	142,088	146,351	153,669	165,962	182,558	197,163	207,021	
Less: Taxes	(54,875)	(56,521)	(59,347)	(64,095)	(70,504)	(76,144)	(79,952)	
After-Tax Royalty	87,214	89,830	94,322	101,867	112,054	121,019	127,069	
Present Value Factor (mid-year)	0.9285	0.8004	0.6900	0.5948	0.5128	0.4421	0.4421	
Present Value Royalty Savings	80,976	71,901	65,083	60,594	57,460	53,497	56,172	
Residual Capitalization Rate							13.5%	
Residual ( <i>Terminal Year</i> )							\$ 416,091	
Residual Value	416,091							
Sum of Present Values	389,512							
<i>Tax Shield Amortization Benefit</i>								
WACC Rate	16.0%							
Tax Rate	38.6%							
Tax Amortization Period	15							
Tax Shield Benefit PV Rate	0.2008							
Indicated Fair Value	78,208							
	883,811							
Fair Value of Trade Name (rounded)	\$ 884,000							

### 7.3.5 Fair Value Measurement of Non-Compete Agreement

A non-compete agreement identifies the seller as restricted from competing with the buyer for a period of three years, beginning on the effective date of the asset purchase transaction.

Discussions with management were held to determine whether the seller had the ability to have a material impact under the non-compete agreement. A critical element of the transaction was the execution of a non-compete agreement between the seller and buyer. In addition to the standard non-competition provisions, the agreement contains a non-solicitation provision with respect to all ABC Manufacturing employees and pirating of customers. No other ABC Manufacturing employees were required to sign a separate non-compete agreement as an element of this transaction.

Management projected that if the seller were free to compete, the seller would be able to take a significant percentage of revenues. Over time, the loss of revenues would be reduced by actions taken by the buyer. This appraiser has assigned an average annual sales reduction percentage for each year as shown in Exhibit 7-7. The reader is reminded the forecasted period is for a partial year 20XX, and partial year 20XX, to complete a full three years under the agreement. While the non-compete agreement specifically states the three year period begins upon the satisfaction of the \$3.5 million carryback note, we have elected to use the first 36 months from the acquisition date as the proxy period which to estimate the fair value of the agreement. If elected to do so, the buyer could find better financing terms and pay off the carryback note which has higher financing charges. We believe this is a real option available to the buyer and a prudent market participant would in all likelihood secure better financing terms to reduce costs and increase profitability.

Presented in the following table, the presumed effect of the lack of a non-compete agreement is reduced over time, notwithstanding the continuing growth of the business, as the seller is presumed to have re-established his connections with both staff and customers. The buyer would likely attempt to take some action to mitigate their losses in revenues over time. Management believes the seller could take 30% of the business in the final seven months of 20XX. The percentage of lost sales is reduced over time, as shown in the table *(based on discussions with management)*.

12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/2012	12/31/2013
-50.0%	-25.0%	-10.0%	-10.0%	-0.5%	0.0%
0.58	1.00	1.00	0.42	1.00	1.00
-29.0%	-25.0%	-10.0%	-4.2%	-0.5%	0.0%

In the calculation of the fair value of the non-compete agreement, the fair value is based upon the present value of the periodic differences in realized debt-free cash flows. Utilizing a debt-free cash flow stream places the seller and buyer on an equal basis, because currently the buyer has debt owed, due to the acquisition in the form of a seller's carryback note. Another assumption used in this calculation is related expenses are a direct function of gross revenues.

To value the non-compete agreement, we used the income approach, more specifically, the availability of debt-free cash flows for a period of 36 months *(as of the valuation date)*. The differential in debt-free cash flows with and without a non-compete agreement are considered

in the following exhibits. Cash flows were computed over the 36 month life of the non-compete agreement under two different scenarios:

**Scenario One:** The hypothetical scenario, in which there is no agreement and the seller chooses to leave the Company and compete immediately (Exhibit 7-7).

**Scenario Two:** The actual current scenario with the non-compete agreement in place – restricting the possibility of future competition (Exhibit 7-8).

Discussions were held with management to determine what impact the seller would have on the financial prospect of the Company if the seller were able to compete. We started with projections provided by management after verifying the weighted average cost of capital and enterprise value of the Company.

Exhibit 7-7

Non-Compete Agreement - Scenario One					
Without Noncompete Agreement In Place					
	Actual	Forecasted			
	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX
Gross Revenues	9,472,555	9,472,555	9,756,732	10,244,568	11,064,134
<i>Average Annual Sales Reduction</i>	<i>0.0%</i>	<i>-50.0%</i>	<i>-25.0%</i>	<i>-10.0%</i>	<i>-10.0%</i>
Adjusted Annual Gross Revenues		4,736,278	7,317,549	9,220,111	9,957,720
<i>EBITDA as a Percentage of Revenues</i>	<i>26.4%</i>	<i>14.6%</i>	<i>14.8%</i>	<i>15.0%</i>	<i>15.4%</i>
Adjusted EBITDA Earnings Stream		691,288	1,079,574	1,383,684	1,532,186
EBITDA Partial Period Adjustment	1.00	0.58	1.00	1.00	0.42
Adjusted EBITDA	2,498,438	400,947	1,079,574	1,383,684	643,518
Less: Depreciation & Amortization	(29,089)	(336,719)	(377,169)	(377,169)	(377,169)
Operating Income EBIT	2,469,349	64,228	702,405	1,006,515	266,349
Provision for Income Taxes	38.6% (953,663)	(24,805)	(271,269)	(388,716)	(102,864)
Debt Free Net Income	1,515,686	39,423	431,136	617,799	163,485
Cash Flow Adjustments					
Debt Free Net Income	1,515,686	39,423	431,136	617,799	163,485
Add: Depreciation & Amortization	29,089	336,719	377,169	377,169	377,169
<i>Depreciation &amp; Amortization as a % of Adjusted Revenues</i>	<i>0.3%</i>	<i>7.1%</i>	<i>5.2%</i>	<i>4.1%</i>	<i>3.8%</i>
Plus/Minus: Change in Working Capital	(501,893)	(23,681)	(36,588)	(46,101)	(49,789)
<i>Working Capital as a % of Adjusted Revenues</i>	<i>-5.3%</i>	<i>-0.5%</i>	<i>-0.5%</i>	<i>-0.5%</i>	<i>-0.5%</i>
Plus/Minus: Capital Expenditures	67,405	(34,261)	(88,100)	(105,720)	(105,720)
<i>Capital Expenditures as a % of Adjusted Revenues</i>	<i>0.7%</i>	<i>-0.7%</i>	<i>-1.2%</i>	<i>-1.1%</i>	<i>-1.1%</i>
Debt Free Net Cash Flow	1,110,287	318,200	683,618	843,148	385,146
Subject's WAAC Rate	16.0%	0.928	0.800	0.690	0.595
Indication of Present Value		295,441	547,175	581,780	229,098
Sum of PV Interim Cash Flows (3 Full Years)					1,653,494



## Exhibit 7-8

Non-Compete Agreement - Scenario Two					
With Noncompete Agreement In Place					
	Actual	Forecasted			
	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX	12/31/20XX
Gross Revenues	9,472,555	9,472,555	9,756,732	10,244,568	11,064,134
<i>Sales Growth Rate</i>	6.1%	0.0%	3.0%	5.0%	8.0%
<i>EBITDA as a Percentage of Revenues</i>	26.4%	14.6%	14.8%	15.0%	15.4%
EBITDA		1,382,576	1,439,433	1,537,427	1,702,429
EBITDA Partial Period Adjustment	1.00	0.58	1.00	1.00	0.42
Adjusted EBITDA	2,498,438	801,894	1,439,433	1,537,427	715,020
Less: Depreciation & Amortization	(29,089)	(336,719)	(377,169)	(377,169)	(377,169)
Operating Income EBIT	2,469,349	465,175	1,062,263	1,160,258	337,851
Provision for Income Taxes	38.6% (953,663)	(179,650)	(410,246)	(448,091)	(130,478)
Debt Free Net Income	1,515,686	285,524	652,017	712,166	207,373
Cash Flow Adjustments					
Debt Free Net Income	1,515,686	285,524	652,017	712,166	207,373
Add: Depreciation & Amortization	29,089	336,719	377,169	377,169	377,169
<i>Depreciation &amp; Amortization as a % of Revenues</i>	0.3%	3.6%	3.9%	3.7%	3.4%
Plus/Minus: Change in Working Capital	(501,893)	(47,363)	(48,784)	(51,223)	(55,321)
<i>Working Capital as a % of Revenues</i>	-5.3%	-0.5%	-0.5%	-0.5%	-0.5%
Plus/Minus: Capital Expenditures	67,405	(68,522)	(117,467)	(117,467)	(117,467)
<i>Capital Expenditures as a Percentage of Revenues</i>	0.7%	-0.7%	-1.2%	-1.1%	-1.1%
Debt Free Net Cash Flow	1,110,287	506,359	862,936	920,646	411,755
Subject's WAAC Rate	16.0%	0.928	0.800	0.690	0.595
Indication of Present Value		470,142	690,704	635,254	244,926

In scenarios One and Two, the annual implied debt-free cash flows are discounted to present value at ABC Manufacturing overall assigned intangible asset WACC rate. The fair value of the non-compete agreement is based upon differences between the two indicated values, plus the tax shield amortization benefit as presented in Exhibit 7-9.

## Exhibit 7-9

Summary Fair Value of Non-Compete Agreement		
Scenario One:	Without Non-Compete in Place	1,653,494
Scenario Two:	Non-Compete Agreement In Place	2,041,026
	Difference	387,532
<u>Tax Shield Amortization Benefit</u>		
	WACC Rate	16.0%
	Tax Amortization Period	15
	Tax Shield Benefit PV Rate	0.2008
	Indicated Value	77,810
		465,342
Fair Value of Non-Compete Agreement (rounded)		\$ 465,000

### 7.3.6 Fair Value Measurement of Customer Base / Relationships

As part of the acquisition of ABC Manufacturing, the buyer acquired customer relationships and avoided the cost of having to develop customer relationships through years of advertising and marketing expenditures. Customer-related intangible assets refer to a customer base, list or relationships purchased in the acquisition of a business. Customer relationships represent to the purchaser, the expected ongoing and continued business relationship and thus future revenues with that base of customers. It should be noted, ABC Manufacturing does not have any contractual agreements with regard to customer relationships.

The acquisition of the customer base has allowed the buyer to avoid the cost of having to build up the customer base through years of expenditures (i.e. advertising, salesperson salary, etc). The cost approach can be utilized to estimate the value of this intangible asset, with management's input, by the cost-to-create method. However, most often the more appropriate method is to consider the available cash flows contributed by the customer base to provide an indication of value. In cases where an income approach or the multiple period excess earnings method is utilized, contributory charges of other assets must be developed.

**Contributory Charge:** It is important to note, the assumed fair value of contributory assets are not necessarily static over time. Working capital (*averaged 12% of revenues*) and other tangible assets may fluctuate in the forecasted period. Average balances of tangible assets subject to accelerated depreciation may decline as depreciation outstrips capital expenditures in the early years of the forecast. While the carrying value of amortizable intangible assets declines over time, there is a presumption that these assets are replenished each year so the contributory charge usually takes the form of a fixed charge each year.

The *return of* is the cost to replace the assets and is deducted from the Company's cash flows. An exception to this rule is ABC Manufacturing non-compete agreement, which has a useful life of three-years and does not function as a supporting asset past its expiration period. Exhibit 7-10 presents the calculation of the contributory asset charge, as a percentage of gross revenues.

Exhibit 7-10

Development of Contributory Asset Charges							
	20XX	20XX	20XX	20XX	20XX	20XX	Residual
Forecasted Gross Revenues	9,472,555	9,756,732	10,244,568	11,064,134	12,170,547	13,144,191	13,801,400
<i>Asset Balances</i>							
Net Working Capital	2,141,038	1,170,808	1,229,348	1,327,696	1,460,466	1,577,303	1,656,168
Machinery & Equipment	485,400	485,400	485,400	485,400	485,400	485,400	485,400
Trademark	884,000	884,000	884,000	884,000	884,000	884,000	884,000
Non-Compete Agreement	465,000	465,000	465,000				
Assembled Workforce	890,000	890,000	890,000	890,000	890,000	890,000	890,000
<i>Returns necessary to support assets</i>	<i>Rate</i>						
Net Working Capital	5.0%	107,052	58,540	61,467	66,385	73,023	82,808
Machinery & Equipment	7.0%	33,978	33,978	33,978	33,978	33,978	33,978
Trademark	16.0%	141,440	141,440	141,440	141,440	141,440	141,440
Non-Compete Agreement	16.0%	74,400	74,400	74,400	-	-	-
Assembled Workforce	16.0%	142,400	142,400	142,400	142,400	142,400	142,400
Total Contributory Asset Charges		499,270	450,758	453,685	384,203	390,841	400,626
As a Percentage of Gross Revenues		5.3%	4.6%	4.4%	3.5%	3.2%	2.9%

In Exhibit 7-11, our starting point is the Company's projected financial debt free cash flows. We applied the contributory asset charges to the customer base cash flows to arrive at after-tax residual cash flows. Next, we developed a customer survivor curve by use of an attrition statistical technique, which estimates customer life expectancy.

An attrition analysis considers the aggregate retirement experience of the customer population based on an analysis of annual customer business activities and management's input over a couple of years. Aggregate customer retirement activity is calculated through a process of identifying the number of customers with which ABC Manufacturing has done business with during the past year.

This same analysis is performed on this same base of customers' business activity for the next year. The observed retirement rate is used to identify the survivor curve that describes the relationship between the length of the customer relationship and the percentage surviving from the total customer population.

In our case, the Company has identified a customer relationship population of 608. The observed retirement rate is 10% proposed by management however, we believe a retention rate calculated at 80 percent is probably more realistic.

Our thinking is along the lines of: (i) most clients are contractors; (ii) these contractors in most cases have their subs submit a bid; and (iii) these bids may not always be accepted, hence adjusting from a 10% retirement rate to a 20% retirement rate. The survivor curve is derived as the cumulative product of the 80% retention rate, so at the end of the first year, 80% of the customers are expect to remain, second year 64% and so on.

We selected the seventh year as the Company's base. This period represents the average annual customer retention of slightly more than 20 percent on an ongoing basis. Next, the available debt free cash flows were present valued and summed.

Our final step is to add the amortization benefit factor by use of the WACC and tax rate as presented in Exhibit 7-11.

## Exhibit 7-11

## Fair Value of Customer Base/ Relationships

	20XX	20XX	20XX	20XX	20XX	20XX	20XX	20XX
Revenues	9,472,555	9,756,732	10,244,568	11,064,134	12,170,547	13,144,191	13,801,400	
EBITDA	1,382,576	1,439,433	1,537,427	1,702,429	1,925,373	1,902,214	1,863,639	
Less: Non-Cash Charges	(336,719)	(377,169)	(377,169)	(377,169)	(377,169)	(315,461)	(276,028)	
EBIT	1,045,857	1,062,263	1,160,258	1,325,260	1,548,204	1,586,753	1,587,611	
Less: Effective Tax Rate	(403,910)	(410,246)	(448,091)	(511,815)	(597,916)	(612,804)	(613,135)	
Debt Free Net Income	641,947	652,017	712,166	813,445	950,288	973,949	974,476	
Add: Non-Cash Charges	336,719	377,169	377,169	377,169	377,169	315,461	276,028	
Changes in Working Capital	(47,363)	(48,784)	(51,223)	(55,321)	(60,853)	(65,721)	(69,007)	
Changes in Capital Expenditures	(94,726)	(97,567)	(102,446)	(110,641)	(121,705)	(131,442)	(138,014)	
Debt Free Net Cash Flow	836,578	882,836	935,667	1,024,652	1,144,899	1,092,247	1,043,483	
Less Returns Of:								
Contributory Asset Charge (% of Sales)	5.3%	4.6%	4.4%	3.5%	3.2%	3.0%	2.9%	
Contributory Asset Charges	(499,270)	(450,758)	(453,685)	(384,203)	(390,841)	(396,683)	(400,626)	
After-Tax Residual Cash Flows	337,308	432,077	481,982	640,449	754,058	695,564	642,856	
Customer Survivor Curve (%)	80.0%	64.0%	51.2%	41.0%	32.8%	26.2%	21.0%	
Available Debt Free Cash Flow	269,846	276,529	246,775	262,328	247,090	182,338	134,817	
Present Value Factor	24.0%	0.7242	0.5840	0.4710	0.3798	0.3063	0.2470	
Residual Surviving Cash Flows	242,329	200,267	144,127	123,557	93,855	55,854	33,305	
Sum of the Surviving Present Values							893,294	
<i>Assumptions based on Managements' Input</i>								
Year 1 - First time customers	20%							
Year 2 - Repeat customer base	80%							
<i>Tax Shield Amortization Benefit</i>								
WACC Rate						24.0%		
Tax Rate						38.6%		
Tax Amortization Period						15		
Tax Shield Benefit PV Rate						0.1587		
Amortization Benefit							141,765	
Indicated Fair Value							1,035,059	
Fair Value of Customer Relationships (rounded)								\$ 1,000,000

### 7.3.7 Fair Value Measurement of Contracts

As part of the acquisition of ABC Manufacturing, the buyer acquired two contracts; (i) Oneida Educational Services Cooperative (*referred to as Oneida*) and (ii) WIS County (*referred to as WISCO*). The Oneida contract in effect was awarded September 28, 20XX, expiring five-years later on September 28, 20XX. The WISCO contract is a five-year contract awarded on September 19, 20XX.

Due to the lack of market derived empirical data in this case, the market approach was not used. The income approach was given the most consideration; however, the variables in determining the annual net cash flows (i.e., working capital requirements, capital expenditures, etc.) related specifically to the contracts would have been purely a guess, hence using the multiple period excess earnings method was not used. We decided a pre-tax, debt-free earnings stream method would be the most appropriate model to use, mainly because we could calculate the fair value of the contracts with minimal assumptions.


The first step in developing fair value for this intangible asset is to determine the “profitably” and “probability” of renewal for each contract. Management stated both contracts carried a profit margin of 25 percent under the current signed agreements. Probability of renewing the Oneida five-year contract was estimated at 75%, mainly because the Company has been a vendor since 19XX; and future profitability is estimated at 20% of gross sales, slightly less than the previous contract. The renewal of the WISCO contract would be three-years and is estimated to have a 50% chance of being awarded with a 25% profitability margin. According to management, the WISCO contract is expected to have average annual sales of \$400K, increasing yearly by five-percent. The Oneida contract is estimated at an average \$800k annually, with a five-percent annual increase.

While the process is easy to describe, its execution is complex. The fair value of contracts has two critical assumptions; (i) probability of renewal; and (ii) estimated gross sales for each period in the forecast. With management’s input we accepted the sales figures for each of the remaining contract periods, plus the probability of renewal for one additional term (*see grey shaded areas of the forecast in Exhibit 7-12*). Accordingly, in our opinion, the remaining useful life of this intangible asset (i.e., contracts) is the current remaining term plus one renewal term. The projected pre-tax debt free cash flows are then discounted at the appropriate weighted average cost of capital. The assigned WACC is near the high end of the range, due to the fact contracts can be rebid or cancelled at any time.

A pre-tax income stream was selected under the income approach, and as such, the after-tax rate of return must be adjusted to a pre-tax rate of return. The table illustrates the steps taken to convert the WACC. Exhibit 7-12 presents the actual and forecasted contract results, based on management’s information.

WACC Discount Rate	20.0%
Minus: LT Growth Rate	<u>-3.0%</u>
WACC Cap Rate	17.0%
Convert to Pre-Tax ( <i>1 minus tax Rate</i> )	<u>61.4%</u>
Pre-Tax Cap Rate	27.7%
Plus: LT Growth Rate	<u>3.0%</u>
Pre-Tax WACC Discount Rate	30.7%

A midyear convention was employed for each period, because income is disturbed throughout the year, rather than a single amount at year-end. Since fair value was determined on a pre-tax basis, there are no allowable tax amortization benefits.



## 8 Residual Value Assigned to Goodwill

Goodwill is not specifically identified as a separate intangible asset. Goodwill is not a distinct and independent asset, as the IRS and various courts might assert. Its value arises from the inability or lack of inclination to properly value intangible assets and intellectual property. All of the positive attributes and characteristics cited as evidence of a goodwill asset are really attributes and characteristics of specific intangible assets and intellectual property own by the business.

Goodwill value is calculated as the residual between the value of the underlying identifiable assets (*tangible and intangible*) of a business and the value of the business as a whole. We start with the acquisition price minus; (i) value of monetary assets; (ii) value of tangible assets and (iii) value of identifiable intangible assets. The residual results are assigned to goodwill.

The acquisition costs contained several components in terms of financing the acquisition of ABC Manufacturing. These terms are spread over of period of time and we need to determine the present value of the acquisition to establish the residual goodwill value. It should be noted, current FASB regulations do not permit contingency payments to be recorded for financial reporting purposes.

- \$1,600,000 buyer down payment (no adjustment required).
- \$2,000,000 bank note at closing (no adjusted required).
- \$3,500,000 seller carryback note payable over 8 years with the first 24-months of payments being interest only and the remaining 72 months at 9% annually. We calculated the present value of this carryback note to reflect the true payment if made on the date of acquisition. We used as our proxy only the interest bearing years in this calculation. As gleaned from the table, there is a reduction in the carryback note, hence, reducing the acquisition purchase price.

Seller Carryback Note	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>Total</u>
Principal Balance	460,772	503,995	551,274	602,987	659,551	721,422	3,500,000
PV Factor	<u>0.9174</u>	<u>0.8417</u>	<u>0.7722</u>	<u>0.7084</u>	<u>0.6499</u>	<u>0.5963</u>	
PV Amount	422,712	424,213	425,693	427,156	428,642	430,184	2,558,600

- \$625,000 seller carryback note payable of \$150k on January 15, 20XX and the balance on June 1, 20XX (no adjustment is required).

The total adjusted acquisition price, as of May 30, 20XX (*our valuation date*), for financial reporting purposes is presented in the following table.

Acquisition Price (Present Value)	
Bank Note	2,000,000
Seller Carryback Note	2,558,600
Seller Carryback Note	625,000
Buyer Down payment (cash)	<u>1,600,000</u>
Adjusted Purchase Price	\$ 6,783,600

Exhibit 8-1 presents the breakdown of the identifiable tangible and intangible assets, with the balance allocated to goodwill.

Exhibit 8-1		
Valuation of Goodwill		
Adjusted Acquisition Price		\$ 6,783,600
<u>Tangible Assets</u>		
Accounts Receivable	1,351,606	
Inventory	745,253	
Fixed Assets	485,400	
	Less: Tangible Assets	(2,582,259)
<u>Intangible Assets</u>		
Trademark	884,000	
Non-Compete Agreement	465,000	
Customer Base	1,000,000	
Contracts	600,000	
	Less: Intangible Assets	(2,949,000)
Residual Goodwill <i>(includes Assembled Workforce)</i>		\$ 1,252,341

### 8.1 Reconciliation of WACC to Weighted Average Rate of Return

The Company's weighted average cost of capital (WACC) of 17.1% was estimated based on a market participant's average debt and equity financial structure. We selected different rates (see Exhibit 7-3) for each asset classification based on the risk of that particular asset.

Assets that have less risk assigned to them have a lower discount rate; such is the case with working capital assets. Each asset classification's discount rate increases as the perceived risk increases. For intangible assets, goodwill typically carries the highest discount rate while assembled workforce and trade names are at the lower end of the intangible asset discount rate range.

Exhibit 8-2 presents the valuation conclusions in groups indicating a summary of the allocated fair values. This schedule provides a sanity check in the form of a weighted return calculation. The weighted return employs the rate of return for each asset, weighted according to its fair value relative to the whole. This weighted return figure should approximate the overall weighted average cost of capital (WACC), as developed for ABC Manufacturing. The discount rates for each asset are those actually used in this fair value measurement assignment.

As gleaned from Exhibit 8-2, it should become clear that the one asset for which we do not have a return is goodwill, and admittedly, the rate assigned to this return is a function of the overall rate approximating ABC Manufacturing WACC rate. The estimated return for goodwill should be the riskiest asset, as discussed earlier, and as such, demands the highest discount rate.



## Exhibit 8-2

**Reconciliation of Purchase Price**Valuation Summary *(as of May 30, 20XX)*

Asset Name	Fair Value	Return	% to Price	Wtg Return
Cash	-			
Accounts Receivable	1,351,606	5.0%	19.9%	1.0%
Inventory	745,253	5.0%	11.0%	0.5%
Machinery & Equipment	485,400	7.0%	7.2%	0.5%
Trademark	884,000	16.0%	13.0%	2.1%
Non-Compete Agreement	465,000	16.0%	6.9%	1.1%
Customer Base	1,000,000	24.0%	14.7%	3.5%
Contracts	600,000	20.0%	8.8%	1.8%
Assembled Workforce	890,000	16.0%	13.1%	2.1%
Total Intangible Assets	3,839,000			
Goodwill <i>(Excluding Assembled Workforce)</i>	962,341	32.0%	14.2%	4.5%
Total Assets (Adjusted Purchase Price)	6,783,600			17.2%

## 9 Professional Qualification

## 10 Appendix A