

**Valuation of
One Share of Common Stock in
W.C. and A.N. Miller Development Company
as of July 1, 2014**

Prepared by:



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A. OPINION LETTER

November 24, 2014

Robert Miller
W.C. and A.N. Miller Development Company
4701 Sangamore Road, Suite S135
Bethesda, Maryland 20816

Dear Mr. Miller:

Valuation Services, Inc. (“VSI”) has been requested to determine the fair market value of one share of common stock (the “Interest”) in W.C. and A.N. Miller Development Company (the “Entity”) as of July 1, 2014 (the “Valuation Date”). The Entity holds (i) direct ownership in real estate assets, and (ii) ownership interests in closely held real estate companies, joint ventures, and limited partnerships. The following is a comprehensive list of the assets held by the Entity:

- Direct ownership of real estate assets:
 - The “Office and Shops at Sumner Place,” a mixed-use retail and office property located in Bethesda, Maryland;
 - The “Spring Valley Office Complex,” an office portfolio located in northwest Washington, D.C.; and
 - The “Spring Valley Retail Complex,” a neighborhood retail center located in northwest Washington, D.C.
- Ownership interests in closely held real estate companies, joint ventures, and limited partnerships:
 - A 100% interest in Sumner Highlands, LLC, which owns the “Sumner Highlands Property,” a multi-family property located in Bethesda, Maryland;
 - A 100% interest in Haymount Limited Partnership II (“Haymount LP2”), which owns approximately 101 acres of land located in Rappahannock Academy, Virginia (the “Haymount Land”);
 - An 85% interest in Haymount Limited Partnership (“Haymount LP”), which owns a single family home located in Rappahannock Academy, Virginia (the “Haymount House”); and
 - A 100% interest in Haymount Corporation, which serves as a shell entity and one of the two general partners of Haymount LP.

Throughout this report, the Office and Shops at Sumner Place, the Spring Valley Office Complex, the Spring Valley Retail Complex, the Sumner Highlands Property, the Haymount Land, and the Haymount House may collectively be referred to as the “Properties.”

This letter is being furnished to provide an overview of the valuation engagement. Attached to this letter is a comprehensive report that provides our valuation analysis and conclusion. Also attached to this letter is an executive summary that provides a summary of the important facts and the conclusions reached in our written report. This valuation has been conducted to determine the fair market value of the Interest for internal planning purposes.

The attached valuation report was prepared in accordance with the Development and Reporting Standards as promulgated by the National Association of Certified Valuators and Analysts (“NACVA”).

The standard of value used for the valuation of the Interest is “fair market value” as defined in the attached report. The fair market value of the Interest was determined by first computing the value of the Entity. The next step in determining the fair market value of the Interest is to calculate the *pro rata* portion of the value of the Entity that is allocable to the owner of the Interest. In establishing the fair market value of the Interest, certain adjustments were made to its *pro rata* value to account for the (i) level of control over the day-to-day operations of the Entity, (ii) limited liquidity and lack of marketability, and (iii) other unique characteristics that could affect its value. This method is commonly referred to as the “Net Asset Value Method.”

VSI, its managing directors, and its staff have no present or contemplated future interest in the Entity or the Interest. Our compensation is not contingent on an action or event resulting from any analyses, opinions, or conclusions in, or use of, the attached report. Moreover, VSI, its managing directors, and its staff have no personal interest or bias with respect to the subject matter of the attached valuation report or the parties involved.

To the best of our knowledge and belief, the statements of fact contained in the attached report, upon which the analyses, opinions, and conclusions expressed herein are based, are true and correct.

Any citations of law or references to court cases in the attached report are presented for informational purposes only and should not be construed as the rendering of legal advice. Strict reliance has not been placed on court cases or other sources of empirical data. Instead, the attached valuation report/opinion is based on the financial information provided to VSI, the economic facts related to the subject matter of the report, and the facts and circumstances available as of the Valuation Date.

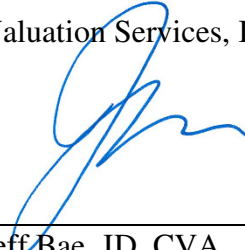
The opinions set forth in the attached report are not intended by VSI, and should not be construed, to be investment advice in any manner whatsoever. Furthermore, no opinion, counsel, or interpretation is intended in matters that require legal, accounting, tax or other appropriate professional advice. It is assumed that such opinions, counsel or interpretations have been or will be obtained from the appropriate professional sources.

The attached valuation report sets forth all of the limiting conditions, either imposed by the terms of the assignment or by the undersigned, affecting the analyses, opinions, and conclusions contained in this report.

Conclusion

In our professional opinion, the fair market value of one share of common stock in W.C. and A.N. Miller Development Company as of July 1, 2014 was **\$4,200**.

Valuation Services, Inc.



Jeff Bae, JD, CVA
Managing Director



Robert Kellam
Analyst

B. EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

**ONE SHARE OF COMMON STOCK IN
W.C. AND A.N. MILLER DEVELOPMENT COMPANY**

Valuation Date:	July 1, 2014
Valuation Method Used:	Net Asset Value Method
Background of the Entity:	The Entity was established in 1912. The Entity directly owns certain real estate assets and also holds in ownership interests in closely held real estate companies, joint ventures, and limited partnerships.
Net Asset Value of the Entity:	\$55,993,744
Valuation Discounts Used:	20% for minority interest/lack of control and 25% for lack of marketability/liquidity
Effective Overall Discount:	40%
Factors Considered for Minority Interest/Lack of Control Discount:	The owner of the Interest would have no control over decisions related to the management of the Entity including (i) the day-to-day management of the Entity, (ii) the dividend payments, (iii) the selection of the management companies (if any), or (iv) the initiation of a sale of the Entity's assets.
Factors Considered for Lack of Marketability/Liquidity Discount:	<p>In addition to the general lack of marketability attributes related to owning an interest in a private entity, below are the specific factors considered in establishing the appropriate discount for lack of marketability/liquidity:</p> <p>Negative: (i) unfavorable cash-on-cash return to the owner of the Interest, (ii) complexity of the investment, (iii) dissimilarity of assets, (iv) costs associated with selling the Properties, and (v) prepayment penalties.</p> <p>Positive: (i) working capital.</p>
Fair Market Value of the Interest:	\$4,200

C. VALUATION REPORT

1. VALUATION STANDARDS AND METHODOLOGY

1.1 Revenue Ruling 59-60

The valuation was completed in accordance with Internal Revenue Service Revenue Ruling 59-60 (the “Ruling”) which outlines “the approach, methods and factors to be considered in valuing shares of capital stock of closely held corporations and ... the valuation of corporate stocks on which market quotations are either unavailable or are of such scarcity that they do not reflect the fair market value.”

The Ruling has served as a general guideline for the valuation of closely held entities since 1959. The Ruling specifically addresses stock valuations for estate and gift tax purposes, and the principles set forth may be applied to a wide gamut of valuation scenarios, including those related to employee stock ownership plans, stockholder buy/sell agreements, mergers and acquisitions, corporate reorganizations, marital dissolutions and bankruptcies. The Ruling requires the appraiser to consider the following factors:

- The nature and history of the business enterprise;
- The economic outlook in general and the condition and outlook of the entity’s industry in particular;
- The financial condition of the business and the book value of its stock;
- The earnings capacity of the business;
- The dividends paid or the dividend-paying capacity of the business;
- The nature and value of the tangible and intangible assets of the business;
- Prior sales of stock of companies engaged in the same or similar lines of business, having their stocks actively traded in a free and open market; and
- Sales of the stock, size of the block of stock and stock restrictions that are binding in nature and impose limitations on transfers of ownership.

Furthermore, the Ruling provides that a sound valuation will be based upon all the relevant facts, but elements of common sense, informed judgment and reasonableness must enter into the process of weighing those facts and determining their aggregate significance.

1.2 Standard of Value

The standard of value used in determining the value of the Interest was “fair market value.” For purposes of this report, the “fair market value” of the Interest is defined as the price at which the Interest would trade between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts. The willing buyer and the willing seller are assumed to

be hypothetical parties to the transaction. The hypothetical parties are not specific individuals or entities, and their characteristics are not necessarily the same as the personal characteristics of the actual seller or the actual buyer. However, the hypothetical sale should not be constructed in a vacuum isolated from the actual facts that affect value.

In addition, it is implied that the hypothetical willing buyer and the hypothetical willing seller would aim to maximize profit and/or minimize cost in the setting of hypothetical sale. Consequently, in determining the fair market value of the Interest, equal consideration has been given to the viewpoint of both the hypothetical seller and buyer.¹

1.3 Hypothetical Buyer and Seller Concept

The “Hypothetical Buyer” under the fair market value standard is generally considered a financial buyer, who brings financial resources to a transaction, but little or no business synergies. This party is interested in the business’s ability to generate future cash flows or capital appreciation and may leverage the acquisition through use of 75% or more of debt to finance the acquisition. While the hypothetical buyer may see the possibility of increased cash flows, he or she will generally not pay for that potential.

Alternatively, a strategic buyer, inherent in the investment value standard, benefits from the synergies of buying a company. These benefits, for example, may include expanding sales territories, adding new products, reducing costs with better purchasing power, and eliminating duplicate functions. Under these circumstances, a strategic buyer may pay a premium over a financial buyer’s offer price to obtain these synergistic benefits. Because the standard of value used in this report is “fair market value,” the “strategic buyer” concept was not used in determining the fair market value of the Entity and the Interest.

The “Hypothetical Seller” under the fair market value standard is also not a specific person, although, it is assumed that this seller is prudent and has reasonable knowledge of relevant facts. This hypothetical seller is also rational and can be convinced to sell if the price is right. In addition, the seller is knowledgeable about the market and how it affects the value of his or her business, other business and financial risks specific to the subject company and other investment characteristics associated with the subject’s business interest.

Similar to excluding prospective buyers who have unique strategic advantages under the fair market value standard for the hypothetical buyer, the hypothetical seller must have common characteristics with other prospective sellers, including not being under duress or compulsion to sell. Rather, the seller under this standard of value will act rationally and with his or her best interest in mind.

1.4 Appropriate Market Sector

The fair market value standard implies that the hypothetical buyer and seller know the market for such property or asset, which means that both parties understand the industry and other

¹ Estate of Deputy, T.C. Memo. 2003-176.

economic conditions and their effects on the subject property or asset, on the valuation date, in a sale of the subject property or asset.

In this particular case, the most appropriate market sector under the fair market value standard requires us to measure value based upon a hypothetical sale of a non-controlling interest to a financial buyer. The requirements associated with this engagement were to determine the fair market value of the Interest as if it were to be sold to an independent third party.

1.5 Premise of Value

The valuation of the Interest is under the premise of value in continued use, as part of a going-concern business entity. This premise assumes that the Entity is an ongoing business enterprise with management operating in a rational way with a goal of maximizing ownership value. This valuation premise was considered appropriate based on the information provided by the Entity's representatives and our analysis of the Entity's business.

1.6 Known, Knowable or Foreseeable Standard

In determining the fair market value of the Interest, all events, facts, circumstances and occurrences that were reasonably "known, knowable or foreseeable" as of the Valuation Date have been taken into account. According to Estate of Gimbel, the inclusion of facts that were known, knowable or foreseeable as of the date of valuation has been supported by the Tax Court.² When determining fair market value, a fact finder must look to "the existing facts, circumstances and factors at the valuation date that influence a hypothetical willing buyer and willing seller in determining a selling price."³

1.7 Valuation Methodology

The choice of the appropriate valuation approach (or approaches) to be used in a given valuation project is based on the judgment of the valuation professional. The valuation professional's choice of methods is determined by, among others, the characteristics of the business to be valued, the purpose and use of the valuation, the pattern of historical performance and earnings of the subject entity, the entity's competitive market position, experience and quality of management, and the availability of reliable information that is required for the various valuation methods. These factors are embraced by the Ruling, which outlines relevant considerations when determining the value of a closely held business.

In determining the fair market value of the Interest, the Net Asset Value Method was used. A detailed explanation of this method is provided later in this report. In our opinion, given the specific facts in this case, the Net Asset Value Method was considered an appropriate method to use in determining the fair market value of the Interest.

² Estate of Gimbel, T.C. Memo. 2006-270.

³ Estate of Newhouse, 94 T.C. 193, 231 (1990).

In gift and estate tax cases, the Tax Court has also routinely opined that the Net Asset Value Method was an appropriate valuation method to use in establishing the fair market value of ownership interests in private entities that hold assets similar to the assets held by the Entity.⁴

1.8 Reviewed Information

In connection with this valuation, discussions with a representative of the Entity were conducted to obtain information on the Entity's background and operations. In addition, the following information and documents were reviewed as part of our valuation analysis:

- Amended and Restated By-Laws of W.C. and A.N. Miller Development Company as of January 26, 2013 (the "Bylaws");
- The following financial statements concerning the Entity and the Properties (collectively, the "Financial Statements");
 - Audited financial statements for the Entity prepared by Alan L. Gordon, CPA, P.A. for the fiscal years ended September 30, 2009 through 2013;
 - Internally prepared financial statements as of June 30, 2014; and
 - Internally prepared budgets for the Spring Valley Office Complex and the Sumner Highlands Property for the period from October 1, 2013 to June 30, 2014.
- The following appraisal reports (collectively, the "Appraisals");⁵
 - Appraisal Report of the Office and Shops at Sumner Place as of July 2, 2012 prepared by Integra Realty Resources;
 - Appraisal Report of the Spring Valley Retail Complex as of February 21, 2013 prepared by CL Group, LLC;
 - Appraisal Report of the Spring Valley Office Complex as of October 29, 2008 prepared by CB Richard Ellis; and
 - Summary Appraisal Report of the Sumner Highlands Property as of October 3, 2009 prepared by Axial Advisory Group, LLC.
- Tax assessments for the Haymount Land and the Haymount House as of 2014 provided by the Virginia Mass Appraisal Network (the "Tax Assessments");
- Rent rolls for the Properties as of August 1, 2014 (the "Rent Rolls");
- Internally prepared summary of the Entity's fixed assets with their depreciation for the period from October 1, 2013 to June 30, 2014 (the "Book Value Summary");
- PwC Real Estate Investor Survey for the 2nd quarter 2014 ("PwC Survey") to obtain capitalization rates and general information about the real estate market;

⁴ Such cases include: Estate of Green, T.C. Memo 2003-348, Estate of Bailey, T.C. Memo 2002-152, and Estate of Borgatello, T.C. Memo 2000-264.

⁵ It should be noted that only the Appraisal Report of the Office and Shops at Sumner Place was used in deriving a value for the Properties. The other appraisals were only used for purposes of describing the respective properties.

- 2014 Ibbotson[®] Stocks, Bonds, Bills, and Inflation[®] (“SBBI[®]”) Classic Yearbook published by Morningstar, Inc.; and
- The National Economic Report for July 2014 published by KeyValueData[™] for a discussion and analysis of the national economy through July of 2014 (the “National Economic Report”).

2. OVERVIEW

2.1 Background of the Entity

The Entity was established in 1912 by William C. Miller and Allison N. Miller. Throughout the 20th century, the Entity constructed many neighborhoods in the northwest Washington, D.C. and Bethesda area, including the Spring Valley neighborhood, the Wesley Heights neighborhood, the Sumner Village community, the Potomac Falls community, and the Spring Meadows community.

During the 2000s, the Entity's size and profitability rose and fell with the real estate market. Around the time of the 2008 financial crisis, the Entity discontinued many of its subsidiaries, sold many of its real estate assets, and downsized its staff. The Entity's reorganization from 2008 was complete as of the Valuation Date. As of the Valuation Date, the Entity had only two employees:

- Robert R. Miller – Chief Executive Officer
- Patricia R. Emory – Corporate Secretary

The Entity is a C-Corporation and is, therefore, subject to income taxes.

2.2 The Properties

Below is a list of the Entity's assets:

- Direct ownership of real estate assets:
 - Office and Shops at Sumner Place
 - Spring Valley Office Complex
 - Spring Valley Retail Complex
- Ownership interests in closely held real estate companies, joint ventures, and limited partnerships:
 - Sumner Highlands, LLC
 - Haymount Limited Partnership II
 - Haymount LP (85% interest)
 - Haymount Corporation

The following is summary information on the Properties. Detailed information on the Properties can be found in the attached Appendix F.

Name of Property/Entity	Real Estate/Business Type	General Description	Fair Market Value
Office and Shops at Sumner Place	Retail/Office property	196,974-square-foot mixed-use retail and office property in Bethesda, Maryland	\$ 58,026,500
Spring Valley Office Complex	Office property	133,419-square-foot office portfolio in Washington, D.C.	44,956,900
Spring Valley Retail Complex	Retail property	75,625-square-foot neighborhood retail center in Washington, D.C.	40,500,000
Sumner Highlands, LLC	Multi-family property	125-unit apartment property in Bethesda, Maryland	28,674,000
Haymount Limited Partnership II	Land	Vacant land located in Rappahannock Academy, Virginia	441,100
Haymount Limited Partnership	Single family home	Home situated on 1.22 acres of land located in Rappahannock Academy, Virginia	336,600
Haymount Corporation	Shell entity	Has no assets or liabilities; it is one of the two general partners of Haymount LP	0
Total			\$ 172,935,100

As shown above, the total estimated fair market value of the Properties has been estimated to be \$172,935,100.⁶ As indicated earlier, detailed information on the Properties above can be found in the attached Appendix F.

2.3 Working Capital

According to the Financial Statements, as of June 30, 2014, the Entity had a working capital balance of \$9,086,184, comprised of the following:

Current Assets			
Cash and Cash Equivalents	\$	4,928,679	
Accounts Receivable, Net		6,126,043	
Other Receivables		83,398	
Other Prepaid Expenses		193,217	
Total Current Assets			\$ 11,331,337
Current Liabilities			
Accrued Expenses		(1,071,679)	
Prepaid Income		(557,610)	
Security Deposits		(494,251)	
Accounts Payable		(121,613)	
Total Current Liabilities			(2,245,153)
Working Capital			\$ 9,086,184

⁶ This amount has been rounded to the nearest hundred.

2.4 Other Assets Held by the Entity

2.4.1 Mutual Fund

The Entity held a long-term mutual fund (the “Mutual Fund”) with a fair market value of \$3,218,497 as of the Valuation Date. According to the Financial Statements, the Mutual Fund was invested in equity securities and a money market fund.

2.4.2 Tax Escrow Account

The Entity had a tax escrow account that totaled \$347,916.

2.5 Financing

The Entity had two lines of financing as of the Valuation Date. The following is a description of each line of financing:

2.5.1 Mortgage Loans

According to the Financial Statements, as of the Valuation Date, some of the Properties of the Entity were subject to mortgage loans. The following is a list of those mortgage loans. As shown in the following table, the total principal balance of the mortgage loans was \$83,280,442. Detailed information on these mortgage loans can be found in the attached Appendix F (with the description of the Properties).

<u>Mortgage Loan by Property</u>	<u>Principal Balance</u>
Office and Shops at Sumner Place	29,165,120
Spring Valley Office Complex	21,116,244
Sumner Highlands Property	16,784,416
Spring Valley Retail Complex	16,214,662
Total	<u>\$ 83,280,442</u>

2.5.2 Other Notes Payable

As of the Valuation Date, the Entity had \$3,585,504 in promissory notes payable to shareholders of the Entity. These promissory notes had monthly payments of \$100,000, an interest rate of 3.0% per annum, a maturity date of December 2032, and were unsecured.

2.6 Financial Performance of the Entity

Below is a summary of the results of operations for the Entity for the fiscal years ended September 30, 2009 through 2013:

Year	Total Revenues	Total Operating Expenses	Net Operating Income	Net Other Income (Expenses)	Income (Loss) Before Taxes	Net Income (Loss)	Cash Distributions
2009	\$ 23,793,301	\$ (18,520,026)	\$ 5,273,275	\$ (2,333,467)	\$ 2,939,808	\$ 2,216,370	\$ 0
2010	15,126,710	(14,009,610)	1,117,100	(3,607,991)	(2,490,891)	(1,972,168)	400,000
2011	14,894,679	(14,390,296)	504,383	(2,184,662)	(1,680,279)	(1,679,489)	150,000
2012	15,177,455	(12,181,428)	2,996,027	(2,167,550)	828,477	1,159,797	200,000
2013	18,176,558	(11,767,145)	6,409,413	(1,857,042)	4,552,371	4,655,643	6,350,000

Total revenues include rental income and other sales revenues generated from 2009 to 2011. Total operating expenses include rental expenses, real estate taxes, interest expenses, cost of sales, and other general operating expenses. Net other expenses include depreciation and amortization, interest income, management fee income, losses on dispositions of fixed assets, and other miscellaneous income and expenses.

As shown above, total revenues and net operating income declined steadily from 2009 to 2011 before increasing in 2012 and 2013, as the Entity completed its reorganization and leased up several vacant spaces of the Properties.

It should be noted that, in 2013, the Entity paid an unusually large dividend to shareholders. This was due to an anticipation that the tax laws were going to change. \$5,000,000 of these dividends paid in 2013 were in the form of the unsecured promissory notes payable as described in [Section 2.5.2](#), and the additional \$1,350,000 was paid out to assist the shareholders of the Entity in paying their taxes related to the promissory notes.

2.7 Other Assets and Liabilities

It is our understanding that, as of the Valuation Date, the Entity had no other assets or liabilities except those previously discussed and those incurred in the ordinary course of business.

3. THE REAL ESTATE AND INVESTMENT MARKETS

Information regarding the real estate investment market can be found in the attached Appendix A. The attached appendix contains information derived from the PwC Survey.

General information regarding the investment market can be found in the attached Appendix B. This information was derived from SBBI[®] and from the National Economic Report.

The information contained in Appendices A and B is an integral part of this valuation report, and certain information contained in these appendices has been used in determining the fair market value of the Entity and the Interest. In determining the fair market value of the Interest, a hypothetical willing buyer and seller would consider the market conditions and the returns on alternative investments as of the Valuation Date.

4. THE BYLAWS

The valuation analysis for the Interest relies upon the Bylaws. It has been assumed for purposes of this report that this document was the current operative document in effect as of the Valuation Date. Below is a summary of the relevant provisions of the Bylaws considered in determining the fair market value of the Interest.

4.1 Annual Meetings

The annual meeting of the stockholders of the Entity shall be held within seven (7) months after the close of the fiscal year of the Entity, for the purpose of electing directors, and transacting such other business as may properly come before the meeting.

4.2 Voting of Shareholders

Except as otherwise provided by statute, the articles of incorporation of the Entity (the “Articles of Incorporation”), or the Bylaws, any corporate action by the stockholders shall be authorized by a majority of votes cast at a meeting of stockholders at which a quorum is present by the holders of shares entitled to vote thereon. The vote for directors, and upon the demand of any stockholder, the vote upon any question before the meeting, shall be by written ballot.

Except as otherwise provided by statute or by the Articles of Incorporation, at each meeting of stockholders, each holder of record of shares of the Entity entitled to vote thereat, shall be entitled to one vote for each share of capital stock held by such stockholder which has voting power upon the matter in question.

4.3 The Board of Directors

The number of the directors of the Entity shall be no less than five (5) but no more than eleven (11), unless and until otherwise determined by vote of the majority of the entire board or directors of the Entity (the “Board of Directors”). Notwithstanding the foregoing, the number of directors shall not be less than three (3) unless all of the outstanding shares are owned beneficially and of record by less than three (3) stockholders in which event the number of directors shall not be less than the number of stockholders.

Except as may otherwise be provided in the Bylaws or in the Articles of Incorporation, the members of the Board of Directors, who need not be stockholders, shall be elected by a majority of the votes cast at a meeting of stockholders, by the holders of shares entitled to vote in the election.

Each director shall hold office until the annual meeting of the stockholders next succeeding his or her election, and until his or her successor is elected and qualified, or until his or her prior death, resignation, or removal.

The Board of Directors shall be responsible for the control and management of the affairs, property and interests of the Entity, and may exercise all powers of the Entity, except as are in the Articles of Incorporation or by statute expressly conferred upon or reserved to the stockholders.

Any director may be removed with or without cause at any time by stockholders holding of record a majority of the entire capital stock of the Entity then issued and outstanding and entitled to vote at an election of directors.

4.4 Dividends

The Board of Directors, subject to any restrictions in the Articles of Incorporation or applicable law, may declare and pay dividends upon the shares of the Entity's capital stock at any regular or special meeting. Before payment of any dividend or making any distribution of profits, there may be set aside out of any funds of the Entity available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve fund to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Entity, or for such other purpose as the directors shall think conducive to the interests of the Entity, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

4.5 Amendments

All Bylaws of the Entity shall be subject to alteration or repeal, and new Bylaws may be made, by stockholders holding of record a majority of the entire capital stock of the Entity then issued and outstanding and entitled to vote in the election of directors.

4.6 Ownership Structure

The Entity had a total of 8,002 shares of common stock outstanding as of the Valuation Date. There were 55 shareholders as of August 4, 2014.⁷ The Interest consists of one share of common stock in the Entity. The Interest represents an approximate 0.012497% common stock interest in the Entity (1 share divided by 8,002 shares issued and outstanding).

⁷ For purposes of this report, it was assumed that there was no material difference in the ownership structure of the Entity between the Valuation Date and August 4, 2014.

5. VALUATION OF THE INTEREST

The fair market value of the Interest was calculated based on the Net Asset Value Method. Under this asset-based valuation approach, the first step in determining the fair market value of the Interest is to calculate the net asset value of the Entity.

In computing the net asset value of an entity, the valuation analyst should identify all of the entity's assets and liabilities. These assets and liabilities are normally obtained from the cost-basis balance sheet as of the valuation date or as close to that date as possible. After identifying all of the assets and liabilities held by the entity (including any off-balance sheet assets and liabilities), an analysis must be made to determine which assets and liabilities should be revalued to reflect fair market value. The revaluing of the assets and liabilities is necessary because business balance sheets are prepared based on the cost principle of accounting. That is, assets are usually recorded at their historical purchase/acquisition cost and are generally not restated for financial accounting purposes. Thus, a cost-basis balance sheet will typically bear little resemblance to fair market value. After adjusting the entity's assets and liabilities to fair market value, total liabilities are subtracted from the entity's total assets. The difference between the fair market value of the assets and liabilities provides an indication of the market value of the equity under the Net Asset Value Method.

After determining the net asset value of the Entity, the next step in calculating the fair market value of the Interest is to allocate the percentage share of the net asset value of the Entity to the Interest. The final step in computing the fair market value of the Interest is to conduct an analysis to determine whether valuation discounts are applicable to the *pro rata* value of the Interest. Valuation discounts or adjustments arise from the fact that any hypothetical owner that is considering the Interest as an investment would not directly own the Entity's assets or own 100% of the Entity. Instead, the hypothetical owner would own a fractional interest in the Entity that holds the assets. Under this ownership structure, there are risk factors related to the Interest that are in addition to those associated with the underlying assets of the Entity. To compensate a hypothetical owner of the Interest in assuming these additional risks, the *pro rata* value of the Interest would need to be adjusted by applying valuation discounts. By reducing the *pro rata* value of the Interest, the rate of return on the investment is increased to appropriately reflect the risk profile of the Interest. Detailed information on the assessment and application of valuation discounts are discussed later in this report.

5.1 Net Asset Value of the Entity and the Interest

Based on the information provided, VSI has calculated the pre-adjusted net asset value of the Interest to be \$6,997. This amount was calculated by taking the following steps:

1st Step – Determine the Fair Market Value of the Properties – To calculate the net asset value of the Entity, the aggregate fair market value of the Properties must first be determined. As mentioned in Section 2, the fair market value of the Properties was determined to be \$172,935,100.

2nd Step – Adjustment for Other Assets and Liabilities held by the Entity – The next step in determining the net asset value of the Entity is to adjust for the other assets and liabilities that are held by the Entity as of the Valuation Date:

Working Capital – As previously mentioned, the Entity had a working capital balance of \$9,086,184.

Other Assets – As previously mentioned, the Entity held the Mutual Fund, which had a fair market value of \$3,218,497, as well as a real estate tax escrow account in the amount of \$347,916.

Liabilities – As previously mentioned, as of the Valuation Date, the Entity held mortgage loans on some of the Properties in the amount of \$83,280,442, as well as \$3,585,504 in promissory notes payable to shareholders of the Entity.

Other Adjustments – In addition to the liabilities, the potential built-in-gains tax was considered in determining the net asset value of the Entity. As mentioned previously, the Entity is a C-Corporation. As a C-Corporation, the Entity would be subject to a built-in capital gains tax liability at the corporate level on any gain realized on a sale of the Entity's assets. In the instant case, the Entity would be subject to such embedded capital gains tax on the Properties and the Mutual Fund. Due to the fact that the Net Asset Value Method attempts to calculate a value for the Entity based on the net realizable proceeds from the sale of its assets, this built-in capital gains tax liability needs to be considered in determining the net asset value of the Entity.

In determining the built-in capital gains tax liability adjustment, VSI first calculated the total gain that the Entity would realize from the sale of each of the Properties and the Mutual Fund. Below is a table detailing the fair market value, net book value, gain on a hypothetical sale, and built-in-capital gains tax liability for each of the Properties and the Mutual Fund.

	Fair Market Value (per Section 2)	Net Book Value	Gain/(Loss)
Office and Shops at Sumner Place	\$ 58,026,500	\$ 17,281,162	\$ 40,745,338
Spring Valley Office Complex	44,956,900	9,171,697	35,785,203
Spring Valley Retail Complex	40,500,000	1,111,779	39,388,221
Sumner Highlands, LLC	28,674,000	13,692,432	14,981,568
Haymount Limited Partnership II	441,100	576,223	(135,123)
Haymount Limited Partnership	336,600	95,937	240,663
Mutual Fund	3,218,497	2,488,001	730,496
Total Gain/(Loss)			\$ 131,736,367
Less: Net Operating Loss Carryover			(24,916,349)
Net Gain/(Loss)			\$ 106,820,018
Built-in Capital Gains Tax Liability Taxed at 40%			\$ 42,728,007

As shown in the preceding table, the net book values of the Office and Shops at Sumner Place, the Spring Valley Office Complex, the Spring Valley Retail Complex, and the Sumner Highlands Property were derived from the Book Value Summary. The net book values for the Haymount Land, the Haymount House, and the Mutual Fund were derived from the Financial Statements as of June 30, 2014. As shown in the table on the previous page, the total capital gain on the Properties and the Mutual Fund was \$131,736,367. This amount was deducted by the net operating loss carryover of \$24,916,349 that the Entity had in the fiscal year ended September 30, 2013. The net gain after accounting for this carryover was \$106,820,018. For purposes of this report, in calculating the built-in capital gains tax liability adjustment, a combined Federal and state tax rate of 40% was applied on the gain that the Entity would realize from a hypothetical sale of each of the Properties and the Mutual Fund. Accordingly, as of the Valuation Date, the built-in capital gains tax liability adjustment was estimated to be \$42,728,007.

This tax is unavoidable due to the tax status of the Entity and thus has been treated as a direct reduction in the net asset value of the Entity. It should be noted that in November of 2007, in Estate of Jelke, the 11th Circuit Court of Appeal remanded a decision made by the lower courts and accepted a dollar for dollar reduction of the entire built-in capital gains tax liability under the assumption that the private C-Corporation was liquidated and sold as of the decedent's date of death.⁸ Accordingly, in the instant case, the embedded capital gains tax on the hypothetical sale of the Properties must be deducted to arrive at the net asset value of the Entity.

Based on the net asset value of the Entity's assets and adjusting for its liabilities and other factors, the net asset value of the Entity has been determined to be \$55,993,744. Below is a calculation of the net asset value of the Entity:

Fair Market Value of the Properties	\$ 172,935,100
Plus: Working Capital	9,086,184
Plus: Mutual Fund	3,218,497
Plus: Tax Escrow Account	347,916
Less: Mortgage Loans	(83,280,442)
Less: Promissory Notes Payable	(3,585,504)
Less: Built-In Capital Gains Tax Liability	(42,728,007)
Net Asset Value of the Entity	<u>\$ 55,993,744</u>

3rd Step – Calculation of the Allocable Amount to the Owner of the Interest – To determine the net asset value of the Interest, the net asset value of the Entity allocable to the owner of the Interest must be determined. This calculation entails multiplying the net asset value of the Entity (\$55,993,744) by the 0.012497% common stock interest. Based on this computation, the net asset value of the Interest is determined to be \$6,997.

⁸ Estate of Jelke v. Commissioner, T.C. Memo 3512-03.

After determining the net asset value of the Interest, the next step in calculating the fair market value of the Interest is to analyze the Interest's investment risk profile. It should be noted that the net asset value of the Interest does not represent its fair market value. The Interest's net asset value calculation relates to the value of its *pro rata* ownership of the net assets of the Entity. To determine the fair market value of the Interest, the analysis must turn to the investment characteristics of the equitable ownership of the Entity because a hypothetical investor owning the Interest would not directly own the assets of the Entity. Similar to the Tax Court's findings in Knight, a hypothetical willing buyer and seller of the Interest would not disregard the capital structure of the Entity and its ownership of the assets. Instead, a potential owner of the Interest would need to consider this ownership structure and the bundle of rights and restrictions that are attached to the Interest in determining its fair market value.⁹

5.2 Application of Valuation Discounts

In general, a fractional ownership interest in a private, closely held entity has more investment risk than the direct comparable ownership of the entity's underlying assets. This increase in risk is caused by various factors that relate to management and control issues as well as lack of marketability issues, among other things. Since a fractional ownership of a private entity's units or shares generally has more investment risk, the expected economic rate of return of the private entity's units or shares is typically higher than the underlying assets of the entity. Mathematically, the higher rate of return or discount rate applied to the same economic benefit results in a lower value to the hypothetical investor. The mathematical comparison of the two separate concepts of value (i.e., net asset value and fair market value) is typically quantified through the application of what is referred to as the "valuation discount." As will be explained later in this report, the valuation discount is determined by a process that considers risk and reward (or negative and positive factors) in the context of alternative investments available in the marketplace. In addition to the general risk factors that will be discussed later in this report, VSI also considered the specific risks and positive factors that existed for the Interest in determining the appropriate discount under the fair market value standard.

The two most recognized and most often used valuation adjustments relate to the relative lack of control (also known as the "minority discount") and the relative lack of marketability/liquidity associated with the ownership of private fractional interests. Additional information regarding these two valuation discount categories, as well as their applicability to the Interest in determining its fair market value, is provided below.

As a starting point in determining the appropriate valuation discount for the Interest, the following references have been reviewed:

- Various studies and empirical evidence relating to valuation discounts; and
- Tax Court cases and IRS reference materials.

⁹ Knight, 115 T.C. 506 (2000).

5.2.1 Studies and Empirical Evidence

There are a number of published studies of publicly syndicated limited partnerships that attempt to quantify the total amount of valuation discounts associated with fractional ownership interests. Some of these studies and other sources of empirical evidence supporting valuation discounts for fractional ownership interests are summarized in the attached Appendices C and D. Appendix C contains studies that relate to real estate limited partnerships. It is important to note that Appendix C contains studies that relate to real estate limited partnerships and not C-corporations owning real estate such as the Entity. Despite this subtle difference, such studies were considered to help support the application of valuation discounts because a membership interest in the Entity has similar legal and economic attributes to the limited partnership interests included in the studies. As will be explained below, the discounts found in the *Annual Partnership Re-Sale Discount Studies* (presented in Appendix C) are mainly attributable to lack of control discounts or lack of control risk factors. The discounts found in the other studies summarized in Appendix C are attributable to both lack of control and lack of marketability risk factors. The discounts found in the studies presented in Appendix D are attributable only to the lack of marketability risk factors. The studies presented in Appendices C and D are presented for information purposes only and reliance has not been placed on any individual study in determining the fair market value of the Interest. However, these studies provide evidence for discounts related to fractional ownership interests in private entities and help support the reasonableness of applying valuation discounts to the Interest.

The particular studies summarized in Appendix C are the (i) *Annual Partnership Re-Sale Discount Studies* (31.00% mean discount), (ii) Willamette Management Associates Study (48.40% median discount), (iii) Barber Study (45.00% mean discount), and (iv) Kam, Smith and Schroeder Study (46.00% median discount).¹⁰ The average valuation discount from these studies is 42.60%.

Appendix D contains studies that illustrate discounts associated with investments not dealing with real estate assets. These published studies are also helpful in understanding the valuation discounts associated with owning non-marketable, fractional ownership interests such as the Interest. The studies summarized in Appendix D are the (i) 11 restricted stock studies (30.83% mean discount), (ii) two pre-IPO studies (48.90% mean discount), and (iii) *Marketability Discounts in the Courts, 1991–2002* (1st Quarter) study prepared by Dr. Janet Hamilton (23.00% mean discount). The average valuation discount from these studies is 34.24%.

5.2.2 Tax Court Cases/Internal Revenue Service (“IRS”) Reference Materials

Tax Court cases have also revealed a long history of support for valuation discounts of fractional interest holdings. Although each case was unique in its own right, valuation discounts have been accepted from 10% to 65% or higher. This range has been generally sustained in numerous court cases and memoranda decisions. The following are several recent cases in which the Tax Court has accepted valuation discounts for fractional interests in a variety of structures of

¹⁰ Although some of these studies (e.g., Willamette Management Associates, Barber Study, and Kam, Smith & Schroeder Study) are over 19 years old, these studies provide useful and relevant information regarding valuation discounts with respect to publicly traded limited partnerships that own various types of real estate.

entities (including family limited partnerships [“FLP(s)”], limited liability companies [“LLC(s)”], S Corporations, and C Corporations, among others) owning various types of assets.¹¹

Year	Case Name	Description of Asset	Overall Discount
2013	Estate of Tanenblatt v. Comm’r	LLC owned real estate	33.4%
2012	Keller v. U.S.	FLP owned marketable securities	47.5%
2011	Estate of Gallagher v. Comm’r	Closely held operating business	46.9%
2011	Estate of Giustina v. Comm’r	Closely held operating business	49.3%
2010	Pierre v. Comm’r	LLC owned marketable securities	35.6%
2009	Estate of Miller v. Comm’r	FLP owned marketable securities	35.0%
2009	Litchfield v. Comm’r	S corporation owned various assets C corporation owned various assets	36.1% 29.5%
2009	Estate of Murphy v. U.S.	Multi-tiered LLC held various assets FLP owned various assets	52.0% 40.9%
2008	Gross v. Comm’r	FLP owned marketable securities	35.0%
2008	Holman v. Comm’r	FLP owned marketable securities	22.4%, 25.0%, and 16.6%
2008	Astleford v. Comm’r	Real estate limited partnership	15.0% and 22.0%
2006	McCord v. Comm’r	FLP owned various assets	32.0%
2006	Temple v. U.S.	FLP owned marketable securities Closely held companies owned land	15.4% to 21.3% 38.0% and 60.0%

¹¹ The citations for these cases can be found in the attached appendix.

Year	Case Name	Description of Asset	Overall Discount
2006	Huber v. Comm'r	Closely held operating business	50.0%
2005	Estate of Jelke v. Comm'r	Closely held operating business	23.5%
2005	Estate of Kelly v. Comm'r	FLP owned marketable securities	32.2%
2005	W.G. Anderson v. Comm'r	LLCs owning mineral and exploration rights	46.0%

For a more extensive list of cases in which the Tax Court has accepted valuation discounts throughout the past 19 years, please see the attached [Appendix E](#).

The theory behind valuation discounts is also well recognized and accepted by the IRS not only in its acquiescence in Tax Court cases, but also internally in its training materials. The IRS has published a valuation training guide for use by its appeal officers entitled *IRS Valuation Training for Appeals Officers*. The guide devotes an entire chapter to the issue of valuation discounts. As a reference to be used by the IRS Appeals Officers, this chapter provides an exhibit that contains a series of court cases cited with an explanation of the Court's basis for the discounts determined. The cited cases involving fractional ownership interests indicate accepted discounts ranging from 10% to 65%.

It should be noted that the above studies, court cases, and sources of empirical supporting evidence for discounts related to fractional ownership interests in private entities are presented for reference purposes only. Consequently, strict reliance has not been placed on these published studies or cases in determining the fair market value of the Interest.

There are numerous other studies that generally support valuation discounts in the 35% to 45% range. Since each case is different, the specific fact pattern and risks related to a particular ownership interest must be individually analyzed. The use of widely accepted concepts and theories may not be sufficient, by itself, to support a valuation discount. Further, some of the studies presented above refer solely to public limited partnerships or other entities where information about the partnership or the entity and its operations and financial position is readily available. Such information is not available for non-public, closely held entities like the Entity, and accordingly, valuation adjustments for private, closely held entities are typically greater.

5.2.3 Summary

[Table 1](#) below summarizes all of the average valuation discounts that were discussed above and in [Appendices C and D](#). Based on [Table 1](#), a reasonable range of valuation discounts for the Interest would be between 23.00% and 48.90%.

TABLE 1

Summary of Valuation Discounts	
	Average Discount
Studies of Publicly Syndicated Limited Partnerships (<u>Appendix C</u>)	42.60%
Restricted Stock Studies (<u>Appendix D</u>)	30.83%
Pre-IPO Studies (<u>Appendix D</u>)	48.90%
Marketability Discounts in the Courts (marketability discount only) (<u>Appendix D</u>)	23.00%

As previously mentioned, however, the appropriateness of any given valuation discount is a function of the specific facts and circumstances surrounding the asset being valued. A valuation discount cannot be solely established simply by referring to past cases, past studies, or past transactions. Accordingly, the fair market value for the Interest was calculated based in part on the following factors:

- The previously discussed valuation discount studies;
- VSI's experience in preparing valuation reports for fractional ownership interest in closely held entities;
- VSI's experience supporting and defending valuations before the IRS; and
- Most importantly, the specific facts and circumstances relating to the Interest.

The following specific discount factors have been considered in valuing the Interest. These factors, as previously mentioned, can be divided into two categories (i.e., the minority interest/lack of control discount and the lack of marketability discount).

5.3 Minority Interest/Lack of Control Discount

5.3.1 General Description

Investments are generally perceived as less risky if the investor has the right to control a private entity's future course of action. All things being equal, a controlling interest typically commands a higher price than a non-controlling interest. As a result, when valuing an ownership interest in a private entity under the fair market value standard, the valuation professional must consider the control attributes (or lack thereof) that is attached to the investment.

According to the *International Glossary of Business Valuation Terms*, control is defined as “the power to direct the management and policies of a business enterprise.” If the owner of the interest does not have the power to direct the management and policies of the entity, then the *pro rata* control value of the subject interest needs to be adjusted to account for this lack of control. This valuation adjustment for the lack of control attributes of an ownership interest is also known as the “lack of control discount” or “minority interest discount.” The *International Glossary of Business Valuation Terms* defines discount for lack of control as “an amount or percentage deducted from the *pro rata* share of value of one hundred percent (100%) of an equity interest in a business to reflect the absence of some or all of the powers of control.” As will be shown later, this lack of control discount has been supported by a number of published studies and Tax Court cases.

Typically, an investor holding a minority interest or a fractional interest has little or no control over the business of the closely held entity. In most cases, the officers, who are elected by the majority owners or directors, are given control over these decisions that would affect the closely held entity and ultimately the fair market value of the investor’s interest in the closely held entity. In general, an owner that holds a controlling interest (greater than 50%) or a 100% interest in a private entity would be able to control the cash flow generating ability of the entity via management and operational initiatives. The following is a list of 20 of the more common prerogatives of absolute business ownership control:¹²

1. Appoint or change operational management.
2. Appoint or change members of the board of directors.
3. Determine management compensation and perquisites.
4. Set operational and strategic policy and change the course of the business.
5. Acquire, lease, or liquidate business assets.
6. Select suppliers, vendors, and subcontractors with whom to do business and award contracts.
7. Negotiate and consummate mergers and acquisitions.
8. Liquidate, dissolve, sell out, or recapitalize the entity.
9. Sell or acquire treasury shares.
10. Register the entity’s securities for an initial or secondary public offering.
11. Register the entity’s debt securities for an initial or secondary public offering.
12. Declare and pay cash and/or stock dividends.
13. Change the articles of incorporation, bylaws or operating agreement.
14. Set one’s own compensation (and perquisites) and the compensation (and perquisites) of related-party employees.
15. Select joint venturers and enter into joint venture and partnership agreements.

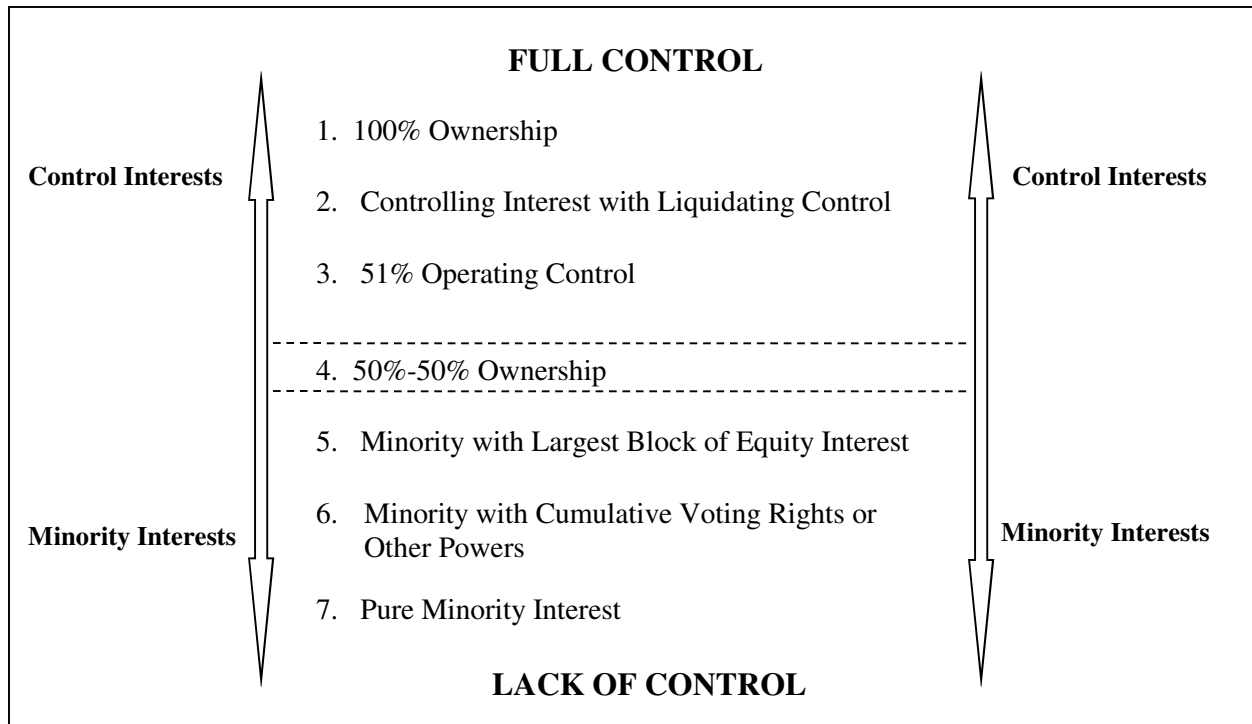
¹² Pratt, Shannon P., Robert E. Reilly, and Robert P. Schweihs, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* (New York: McGraw-Hill, 2000), p. 365.

16. Decide what products and/or services to offer and how to price those products/services.
17. Decide what markets and locations to serve, to enter into, and to discontinue serving.
18. Decide which customer categories to market to and which not to market to.
19. Enter into inbound and outbound license or sharing agreements regarding intellectual properties.
20. Block any or all of the above actions.

The risks associated with not being able to control the entity's business and instead being subject to the judgment, ethics, and management skills of the controlling owner(s) or the management team selected by the controlling owner(s) warrant the application of a lack of control or minority interest discount. Depending on the specific facts and circumstances, the impairment of value can be substantial. By making a downward adjustment to account for this risk, the expected rate of return on the investment is increased over what it would otherwise be if the discount were not applicable. Based on our experience and empirical evidence, discounts for this lack of control factor have typically ranged from 0% to 25%. Some Tax Court cases or published studies have suggested that such discount could be as high as approximately 35%.

5.3.2 Levels of Lack of Control

There are varying degrees of control or lack of control with fractional ownership interests in private entities. These different levels of control help determine the magnitude of the lack of control discount to be applied to the interest. As shown in the following chart, the different degrees of control could range from complete lack of control to full control. To establish the appropriate lack of control discount, the valuation professional must determine which level of control within the range below best fits the subject interest. This analysis involves determining the size of the ownership interest, reviewing the control rights that are attached to the interest, and comparing the ownership percentage to the other interests in the entity (if any).



As shown above, Levels #1 and #7 represent full control and absolutely no control, respectively. Level #4, on the other hand, represents the mid-point of the spectrum – i.e., it does not represent a control or minority interest. Even at that level, however, some type of lack of control discount would still be applicable due to the inability to fully control the entity. For example, the owner of a 50% interest would typically have veto power which could create corporate stalemates and potential disputes between owners. A 50% owner usually can prevent business actions but cannot cause them to happen.

Levels #3 and #5 represent, respectively, the weakest controlling interest and the strongest non-controlling interest. At Level #3, an owner of the interest could have operational control due to his/her ability to elect the board of directors and hire management. The owner at Level #3, however, would generally not be afforded the ability to effect liquidation, merger, or any other fundamental change of the entity. About half of the states require some degree of supermajority, most often two-thirds, for certain major business actions such as liquidating or merging. Even in states that do not have statutory requirements of supermajority votes for major business decisions, any individual entity may require supermajority votes for such actions through its articles of incorporation or any other entity agreement. If the ownership interest can control for certain actions but is not large enough to be able to control major business decisions, it falls in between a control value and pure minority value. Consequently, if the initial *pro rata* value is a control value, a lack of control discount could still apply, albeit at a lower percentage amount. According to *Business Valuation Discounts and Premiums*, such discounts could fall in the range of 5% to 15%.¹³

¹³ Pratt, Shannon P., *Business Valuation Discounts and Premiums* (New York: John Wiley & Sons, Inc., 2001), p. 21.

The next level of control, Level #2, is a supermajority interest that has the ability to liquidate or merge the entity. At this level (including a 100% ownership), a lack of control discount is typically not applied unless there is a compelling reason for applying a small percentage discount – i.e., state law, specific language in the entity agreement, or specific extenuating circumstances.

At Levels #5 and #6, a lack of control discount would generally apply, but the percentage discount could be reduced depending on whether the owner of an interest at those levels would have some type of control or quasi-control over the subject entity. For example, if the ownership interest is a minority interest but represents a swing block, then the lack of control discount could be adjusted accordingly but not at the level that represents a control interest. Similarly, if an entity allows cumulative voting for electing one or more directors, such ability could have an effect of adjusting the lack of control discount. Cumulative voting, while it is becoming less common, gives minority shareholders more power, by allowing them to cast all of their Board of Director votes for a single candidate, as opposed to regular or statutory voting, in which shareholders must vote for a different candidate for each available seat.

Other factors to consider when determining the lack of control discount include analyzing the ownership of other interests (if any) in the subject entity and comparing them to the subject interest. Fragmentation ownership of the other interest could play a role on the level of input a minority owner would have. By way of illustration, a 20% owner may have more input than any of the ten 2% owners would have. In this example, the corresponding 80% owner would likely be more responsive to the 20% minority owner than to any one of the ten 2% owners.

The following are two tables that provide an illustration of the effects of the ownership interests one might have in relation to the interests of others.¹⁴

Effects of Ownership

Greater than 50% Ownership

	Major Business Decisions	Ability to Control Board of Directors	Fragmented or Concentrated Ownership
Factors leading to a <i>smaller</i> discount for a greater than 50% block	Equity interest sufficient to liquidate, merge, or restructure.	Interest permits control of the Board of Directors (BOD).	Fragmented ownership of the remaining interest in the entity.
Factors leading to a <i>larger</i> discount for a greater than 50% block	Equity interest insufficient to liquidate, merge, or restructure.	Cumulative voting: interest cannot control the entire BOD.	Concentrated ownership of the remaining interest in the entity.

¹⁴ David W. Simpson, “Minority Interest and Marketability Discounts: A Perspective: Part I,” *Business Valuation Review* (March 1991).

Less than 50% Ownership

	Major Business Decisions	Ability to Control Board of Directors	Fragmented or Concentrated Ownership
Factors leading to a <i>smaller</i> discount for a less than 50% block	Interest sufficient to suppress a merger, liquidation, or restructure.	Cumulative voting: Interest is sufficient to affect the BOD.	Fragmented ownership of the remaining interest in the entity.
Factors leading to a <i>larger</i> discount for a less than 50% block	Interest insufficient to suppress a merger, liquidation, or restructure.	Interest cannot affect the BOD.	Concentrated ownership of the remaining interest in the entity.

To determine the lack of control discount for the Interest, a review was made of published studies that provide support for the application of lack of control discounts. Tax Court cases were also reviewed in establishing the support of the use of lack of control discounts. After analyzing the studies and Tax Court cases and setting the appropriate platform in establishing the lack of control discount for the Interest, an analysis was conducted to determine the level of control (or lack thereof) that is afforded to the owner of the Interest in establishing the appropriate lack of control discount. A review was also made of the ownership structure of the Entity and the effects of ownership. Below is a discussion of the published studies and Tax Court cases.

5.3.3 Studies and Tax Court Cases on Minority Interest / Lack of Control Discounts

There are a number of published studies that provide support for the use of lack of control discounts. These studies gather empirical data from public markets for stocks or partnership interests. The empirical data that is available can be categorized in two groups:

1. Premium paid for acquisitions of companies compared with public market minority trading prices prior to the acquisition announcement.
2. Where net asset value is known or reasonably estimated, the percentage discount observed in minority interest transactions compared with the underlying net asset value.

Below is a discussion of the empirical data for each of the two groups.

Mergerstat Studies –For the first category, a review was made of Mergerstat Review® and Mergerstat/BVR Control Premium Study (collectively, “Mergerstat”). Mergerstat tracks acquisition premiums for completed transactions involving publicly traded target companies where a controlling interest (greater than 50%) was acquired. The sources of the information used include SEC/government/regulatory filings and public announcements for mergers and acquisition transactions. Mergerstat provides information on control premiums for various industries. A

control premium is defined as the additional consideration that an investor would pay over a marketable minority equity value (i.e., current, publicly traded stock prices) in order to own a controlling interest in the common stock of a company. The lack of control discount or minority interest discount is the inverse of the control premium. The implied minority interest / lack of control discount, therefore, can be computed based on the control premium. To determine the implied minority interest or lack of control discount, the following formula can be used.

$$\text{Discount for Lack of Control} = 1 - (1 / [1 + \text{Control Premium}])$$

The following table provides the median control premiums and the implied lack of control discount from transactions for the last 10 years (2004 through 2013). This information was obtained from Mergerstat. The implied lack of control discounts over those years ranged from 14.5% to 26.9%, with the mid-point of the range at 20.5%. In the past three years, the implied lack of control discount averaged 22.7%.

Year	Number of Transactions	Median Control Premium	Implied Lack of Control Discount
2004	453	22.3%	18.3%
2005	502	17.0%	14.5%
2006	548	19.5%	16.3%
2007	765	18.4%	15.6%
2008	678	25.7%	20.5%
2009	446	36.8%	26.9%
2010	509	32.6%	24.6%
2011	622	30.3%	23.3%
2012	520	29.8%	22.9%
2013	453	28.2%	22.0%

Partnership Re-Sale Discounts – For the second category of empirical data on lack of control discounts, a review was made of Partnership Profiles, Inc.’s annual study (*Annual Partnership Re-Sale Discount Studies*). Partnership Profiles, Inc. performs an annual survey of discounts on minority, non-controlling interests in non-publicly-traded real estate limited partnerships and real estate investment trusts (REITs) that are bought and sold in secondary markets. Additional information on this study is provided in the attached appendix. For the past 21 years, the study has provided average price-to-value discounts based on the prices at which minority interests trade in the secondary market. The last 10 years are briefly summarized on the next page:

Survey Year	Average Discount
2004	23%
2005	28%
2006	29%
2007	27%
2008	25%

Survey Year	Average Discount
2009	28%
2010	29%
2011	33%
2012	32%
2013	31%

As shown above, the average discount has ranged between 23% and 33% over the past 10 years, with a mid-point of 28%. Over the last three years, the average discount has ranged between 31% and 33%. As explained in the attached appendix, the majority of the discounts found in this study relate to lack of control factors because the units that are bought and sold represent a non-controlling, marketable unit. Based on the study above, it appears that the lack of control discount for the subject interest could have a high-end range of 31% to 33%.

Tax Court Cases – As previously discussed, the Tax Court (and other courts) have affirmed the application of valuation discounts in the context of valuing non-controlling, illiquid ownership interests (including tenant-in-common interests). Such application of lack of control discounts have become the standard over the years. Below are a number of cases where the court has opined on the lack of control discount:

Year	Case Name	Lack of Control Discount
2011	Estate of Gallagher v. Comm'r	23.00%
2010	Pierre v. Comm'r	8.00%
2009	Litchfield v. Comm'r	11.9% and 14.8%
2009	Estate of Murphy v. U.S.	11.1% and 12.5%
2008	Holman v. Comm'r	11.3%
2008	Astleford v. Comm'r	17.5%
2006	McCord v. Comm'r	15.0%
2005	Estate of Jelke v. Comm'r	10.0%
2005	Estate of Kelley v. Comm'r	12.0%
2004	Estate of Josephine Thompson v. Comm'r	15.0%
2004	Estate of Hillgren v. Comm'r	10.0%
2003	Lappo v. Comm'r	15.0%
2003	Hess v. Comm'r	15.0%
2002	Estate of Bailey v. Comm'r	20.0%

As shown above, the range of discounts for lack of control appears to have a wide spread in numerous cases (8% to 23%) due to the different circumstances for each case. However, most of the cases suggest that the range can fall generally between 10% and 20% for lack of control discounts, with the mid-point of approximately 15%. This range and mid-point can be viewed as conservative discounts because they are less than the discounts that can be found in studies and empirical data which are derived from the public marketplace. A possible explanation for this trend is that the Tax Court cases tend to result in conservative figures since they represent situations where the IRS strongly contested taxpayer valuation discount positions. Notwithstanding this observation, there have been numerous cases over the past 10 years where the Tax Court has

affirmed the application of lack of control discounts. Such cases provide support that the use of lack of control discounts can be appropriate depending on the facts and circumstances.

Summary of Lack of Control Discounts – The studies and Tax Court cases provide strong support that the market clearly considers minority or fractional interests to be worth less than their *pro rata* share of the fair market value of the enterprise. Below is a summary of the lack of control discounts from the studies and Tax Court cases discussed previously. As shown below, the general range of discounts for lack of control have averaged between 15.0% and 28.0%, with the mid-point of 21.5%.

<i>Summary of Valuation Discounts For Lack of Control</i>	
	<u>Average Discount</u>
Mergerstat	22.7%
Partnership Profiles, Inc.	28.0%
Tax Court cases	15.0%

5.3.4 Analysis of Lack of Control Discount for the Subject Interest

In establishing the appropriate lack of control discount for an interest in a private entity, the valuation professional should not solely rely on the above studies and Tax Court cases and simply apply one of the discounts automatically to the subject interest. Instead, the empirical data and case law should be used as a guide to help support the application of valuation discounts for lack of control.

In determining the lack of control discount, a careful and thorough analysis of the facts and circumstances in each individual situation is required. While selecting the appropriate lack of control discount is not an exact science, by examining and analyzing the control attributes of the subject interest and the overall ownership structure of the entity, the valuation professional can provide a reasonable estimate of the lack of control discount for the interest. As mentioned earlier in this section, based on our experience and empirical evidence, discounts for lack of control have typically ranged from 0% to 25%. It is the valuation professional's responsibility to determine where the subject interest falls in this discount range. Pursuant to the Ruling, the valuation professional must use common sense, informed judgment, and reasonableness when determining the lack of control discount (as well as the lack of marketability discount).

The first step in establishing the appropriate lack of control for the Interest is to determine the degree of control (or lack thereof) that is attached to the Interest. This analysis involves determining the size of the ownership interest (as a percentage of the entire ownership group) and

examining the control rights that are afforded to the owner of the Interest. As previously explained, the different levels of control can be summarized as follows:

1. 100% Ownership
2. Controlling Interest with Liquidating Control
3. 51% Operating Control
4. 50%/50% Ownership
5. Minority with Largest Block of Equity Interest
6. Minority with Cumulative Voting Rights or Other Powers
7. Pure Minority Interest

In the instant case, the owner of the Interest would own one share of common stock in the Entity (i.e., a 0.012497% interest in the Entity). To determine the control rights that are attached to the Interest, a review was made of the governing documents for the Entity – i.e., the Bylaws. According to the Bylaws, the Board of Directors shall be responsible for the control and management of the affairs, property, and interests of the Entity, and may exercise all powers of the Entity. Additionally, any corporate action by the stockholders shall be authorized by a majority of votes cast at a meeting of stockholders at which a quorum is present by the holders of shares entitled to vote thereon. Finally, any removal of a member of the Board of Directors, or amendments to the Bylaws may be made by stockholders holding a majority of the entire capital stock of the Entity. The owner of the Interest would own one share of common stock in the Entity and would not have any control over the management of the Entity, any corporate actions by stockholders, removal of a member of the Board of Directors, or amendments to the Bylaws. Therefore, the owner of the Interest would not be able to control the following important decisions for the Entity:

1. Appoint or change operational management.
2. Appoint or change members of the board of directors.
3. Determine management compensation and perquisites.
4. Set operational and strategic policy and change the course of the business.
5. Acquire, lease, or liquidate business assets.
6. Select suppliers, vendors, and subcontractors with whom to do business and award contracts.
7. Negotiate and consummate mergers and acquisitions.
8. Liquidate, dissolve, sell out, or recapitalize the entity.
9. Sell or acquire treasury shares.
10. Register the entity's securities for an initial or secondary public offering.
11. Register the entity's debt securities for an initial or secondary public offering.
12. Declare and pay cash and/or stock dividends.
13. Change the articles of incorporation or bylaws or operating agreement.
14. Set one's own compensation (and perquisites) and the compensation (and perquisites) of related-party employees.
15. Select joint venturers and enter into joint venture and partnership agreements.
16. Decide what products and/or services to offer and how to price those products/services.

17. Decide what markets and locations to serve, to enter into, and to discontinue serving.
18. Decide which customer categories to market to and which not to market to.
19. Enter into inbound and outbound license or sharing agreements regarding intellectual properties.
20. Block any or all of the above actions.

Based on the discussion above, the Interest represents a “pure minority interest” or Level #7.

In addition to examining the level of control of the Interest, other factors to consider when determining the lack of control discount include analyzing the ownership of other interests in the Entity, if any, and comparing them to the Interest. Fragmented ownership of the other interest(s) could play a role on the level of input an owner of the Interest would have and, therefore, influence the degree in the lack of control discount. The following is a chart that recreates the two tables that were previously provided that address the issue of effects of ownership.¹⁵

		Least Impaired
Greater than 50% Equity Interest		
100% Ownership	1	
Less than 100% Interest		
Interest sufficient to liquidate, merge, or restructure	2	
Interest insufficient to liquidate, merge, or restructure		
Interest permits control of the Board	3	
Cumulative voting: Cannot control entire Board		
Fragmented remainder ^a	4	
Concentrated remainder ^b	5	
Less than 51% Equity Interest		
Interest sufficient to suppress merger, liquidation, etc.		
Cumulative voting: Interest can affect Board		
Fragmented remainder	6	
Concentrated remainder	7	
Interest cannot affect Board		
Fragmented remainder	8	
Concentrated remainder	9	
Interest insufficient to suppress merger, liquidation, etc.		
Cumulative voting: Interest can affect Board		
Fragmented remainder	10	
Concentrated remainder	11	
Interest cannot affect Board		
Fragmented remainder	12	
Concentrated remainder	13	
		↓
		Most Impaired

^a Fragmented ownership of remaining interest in company

^b Concentrated ownership of remaining interest in company

¹⁵ Id.

In the instant case, the owner of the Interest would own an interest in the Entity with 55 other stockholders who would collectively own the remaining 99.987503% of the common stock interests in the Entity. This ownership structure would appear to fall under the fragmented remainder category due to the fact that the remaining interests in the Entity are held by 55 other owners and no one owned a majority interest in the Entity. Based on this ownership structure, the Interest would fall under the 12th ranking. At this level, there are factors that existed that would point to a higher lack of control discount for the Interest.

As previously concluded, the owner of the Interest would own an interest that would be considered a “pure minority interest,” which represents the lowest level of control. The owner of the Interest would also own an interest that has the second-lowest ranking on effects of ownership. Based on the qualitative analysis of the control attributes of the Interest, it is our professional opinion that the lack of control discount should be at the high end of the 0%-to-25% discount ranged mentioned earlier in this section. Based on the specific control attributes and ownership structure of the Entity, a 20% lack of control discount was determined to be a reasonable and supportable discount to apply to the Interest under the fair market value standard.

5.4 Lack of Marketability/Liquidity Discount

The concept of marketability deals with the liquidity of a fractional ownership interest in a closely held entity – that is, how quickly and certainly it can be converted to cash at the owner’s discretion. According to the *International Glossary of Business Valuation Terms*, marketability is defined as “the ability to quickly convert property to cash at minimal cost.” With respect to investment characteristics of assets, the term “marketability” and “liquidity” are sometimes used interchangeably.

The lack of marketability valuation discount relates to the degree of difficulty that an owner of a fractional interest in a private entity would generally encounter if trying to sell the interest to realize the cash value of the investment or if attempting to value such an interest. Fractional ownership interests in private entities are difficult to sell because:

- They are complex investments that are difficult to price;
- There is a limited pool of investors who purchase such interests;
- There is no organized exchange that efficiently prices or sells such interests, and thus the interest cannot be converted easily to its cash equivalent value; and
- Information on the private entity and its assets is limited or not made available to the general public, and a substantial amount of time, energy, aggravation and cost is expended in performing the necessary due diligence in order to properly determine whether the interests are a worthwhile investment.

Generally speaking, as a result of the above factors, fractional ownership interests in private entities are considered illiquid investments and a further discount (a valuation discount in addition to the minority interest/lack of control discount) would be required to compensate a potential buyer of the interest for this illiquidity.

Based on review of the studies and empirical evidence previously discussed and based on our professional experience valuing similar assets, fractional, non-controlling ownership interests in private entities usually warrant valuation discounts for lack of marketability/liquidity ranging from 20% through 40%, or even higher if no cash flow is projected or other risks associated with owning the interest are substantial. An interest with substantial risks would have a higher lack of marketability discount than an interest with fewer risks.

The appropriate issue to be resolved by the valuation expert is exactly where within this 20% to 40% range the lack of marketability/liquidity discount should be established for the subject ownership interest. Determining the lack of marketability discount needs to be accomplished on a case-by-case basis and is a function of the specific facts, circumstances and risk factors related to the ownership interest being valued. It is the task of the valuation expert to examine all of the specific factors as they relate to the ownership interest, weigh the importance of each factor and then determine where within this 20% to 40% range the lack of marketability discount should fall. Discussed below is a list of specific factors that should be considered in determining the lack of marketability discount. The appropriate factors are then reviewed to determine if they have a negative or a positive effect on the overall marketability discount.

5.4.1 Factors Normally Considered in Determining the Lack of Marketability Discount

In addition to the four general items listed previously (i.e., complexity, limited pool of investors, lack of an organized exchange system and substantial due diligence required in valuing the interest), in determining the appropriate lack of marketability valuation discount attributable to an ownership interest, the valuation expert should consider the specific factors identified below. These factors can be either negative or positive. A negative factor results in an increase in the lack of marketability discount. Alternatively, the existence of positive factors results in a decrease in the lack of marketability discount. Not all of the factors listed below are applicable to every ownership interest. However, it is our opinion that a prudent investor would consider these factors in establishing the appropriate lack of marketability discount for a potential investment in a private ownership interest.

- Cash flow attributes/distributions to an owner of the interest;
- Phantom income and other income considerations;
- Size of the investment;
- Existence of and terms of any transfer restrictions on the interest;
- Nature of working capital balances/deficits;
- Debt structure associated with the entity;
- Vacancy rate/potential vacancies of any underlying real estate assets;
- Overall investment quality of the underlying operating asset of the entity;
- Terms of loans to/from affiliates;
- Added complexity of investment;

- Litigation issues;
- Title issues;
- Need for potential capital expenditures;
- Existence of potential and contingent liabilities; and
- Existence of ground lease risks.

VSI has reviewed the Bylaws and analyzed the various financial and operational risks associated with owning the Interest. VSI has also analyzed the above list of risk factors and has identified those attributes from the list that are pertinent to the valuation of the Interest. The factors relevant to the Interest have then been classified as either a negative or a positive attribute of owning the Interest. These specific factors are discussed on the next page.

5.4.2 Specific Negative Factors

As mentioned previously, in the case of the Interest, the following specific negative factors have been identified as being applicable, as of the Valuation Date, in determining the appropriate valuation discount attributable to the Interest's lack of marketability/liquidity:

- Unfavorable Cash-on-Cash Return to the Owner of the Interest;
- Complexity of the Investment;
- Dissimilarity of Assets;
- Costs Associated with Selling the Properties; and
- Prepayment Penalties.

Unfavorable Cash-on-Cash Return to the Owner of the Interest– Based on our experience, probably the single most important criteria in establishing the lack of marketability discount of any fractional ownership interest (whether buying or selling) in an entity is the related cash flow or earnings stream to be realized from the investment. Investors depend heavily on the level of projected cash flow distributions generated from an investment in determining the lack of marketability discount. An investment, or fractional ownership interest with a smaller defined stream of current cash flow, no cash flow, or a less certain stream of cash flow, would be considered risky relative to an investment that is projected, with reasonable certainty, to provide meaningful cash flow in the near future. Investors (both buyers and sellers) place great significance on the assurance, predictability, and immediacy of cash flow.

Investors generally require higher rates of return if the historical and projected levels of cash flow distributions generated from an investment are low. Because it would be generally difficult for an owner of a fractional interest in an entity to realize the cash value of the investment, many investors would place emphasis on the entity's potential cash flow that would be distributable, at least on an annual basis to its owners. In trying to determine fair market value, investors rely heavily on information regarding the historical and projected levels of cash flow distributions generated from a potential investment.

Generally speaking, an interest in a private entity with a history of making distributions to its owners is more marketable than an interest that makes no distributions or has a history of making unpredictable distributions. If a private entity makes little or no distributions, the holder of the private interest is dependent entirely on some future ability to sell the interest to realize any cash return at all.

According to the *Annual Partnership Re-Sale Discount Studies*, “historically, non-distributing partnerships have been priced at the top end of the discount spectrum. This is to be expected considering the ‘premium’ secondary market buyers place on the units of distributing partnerships ... If a non-distributing partnership has no prospects for making operating distributions and there is no reason to believe that a liquidation of assets will occur in the foreseeable future, price-to-value discounts tend to be high.”

As previously discussed, below is a summary of the dividends paid by the Entity for the years ending September 30, 2009 through 2013.

Year	Dividends Paid
2009	\$ 0
2010	400,000
2011	150,000
2012	200,000
2013	6,350,000

In the instant case, the dividends paid by the Entity over the past five years have been very inconsistent. In 2009, the Entity did not distribute any cash to its stockholders as it worked through its reorganization following the downturn of the real estate market in 2008. In 2013, the Entity paid \$6,350,000 in dividends to its stockholders in the form of both cash and a promissory note in anticipation that the tax laws were going to change. Due to the outlier nature of the cash distributions, the fiscal years ending September 30, 2009 and 2013 were not considered in analyzing the cash-on-cash return to the owner of the Interest. Instead, the fiscal years ending September 30, 2010 to 2012 were analyzed to determine the cash-on-cash return a hypothetical owner of the Interest would normally expect to receive. During that three-year period, the average amount of dividends paid by the Entity was \$250,000. As previously mentioned, the net asset value of the Entity was \$55,993,744. Therefore, the average cash-on-cash return to the owner of the Interest during that period was approximately 0.45% (\$250,000 divided by \$55,993,744).

In general, investors who acquire fractional interests in real estate entities emphasize the importance of having consistent, reliable, and predictable cash flow. Based on our experience, as of the Valuation Date, many investors interested in closely held, illiquid real estate fractional ownership interests in entities whose real estate produces good, reliable, and consistent cash flow, were willing to accept cash-on-cash returns in the 6% to 10% range. A 0.45% cash-on-cash return

would be considered an unfavorable cash-on-cash return to the owner of the Interest given the risks involved.

Given the inconsistency of low cash-on-cash return historical dividend payments, many potential investors would likely seek out alternative investments. An alternative investment that investors may consider are publicly-traded real estate investment trusts (REITs), which are companies that own, and in most cases, operate income-producing real estate. As of the Valuation Date, the average dividend yield for publicly-traded REITs in the U.S. was 3.52%.¹⁶ Investments in publicly-traded REITs are attractive because they offer diversification of assets, are highly liquid, and provide predictable cash flow to investors since all REITs are required to distribute at least 90% of its taxable income to their shareholders. Accordingly, an investor could invest his/her money in publicly-traded REITs and receive a consistent cash return (with far more liquidity, consistency, and access to his/her funds) on the investment without having to accept the substantial risks associated with owning the Interest. To balance the risk profile of the Interest with public REITs, an adjustment would need to be made to the net asset value of the Interest.

Accordingly, based on the aforementioned, the unfavorable historical cash-on-cash return to the owner of the Interest would serve to increase the lack of marketability discount associated with owning the Interest.

Complexity of the Investment – There is a significant degree of complexity associated with the Entity and the Interest. The Entity owns numerous real estate assets either directly or through closely held entities. The real estate portfolio consists of six properties that vary in real estate type – i.e., office property, multi-family property, retail property, land, and single-family home. In order for an investor to complete an adequate due diligence analysis related to the potential ownership of the Interest, the investor would have to understand and analyze the financial aspects of the Properties as well as other non-financial aspects, such as leasing risks, market conditions, location, and condition of the properties. An investor would also need to have a firm understanding of the real estate markets in Washington, D.C., Bethesda, Maryland, and Rappahannock Academy, Virginia, where the underlying real estate assets are located. This burdensome due diligence work assumes, of course, that such information would be available for review.

Any potential investor interested in acquiring the Interest would need to be a very astute and sophisticated investor and/or would likely require the assistance of real estate attorneys, accountants, investment advisors, and other professionals. The complexity of the investment associated with the Interest would likely dissuade most potential investors from considering owning the Interest. Such negative attributes would serve to increase the lack of marketability discount for the Interest.

Dissimilarity of Assets – The non-homogenous nature of the Entity's assets poses a potential liquidity problem. Such liquidity issue relates to the concept of the "Portfolio Discount." A portfolio discount is an amount or percentage deducted from the value of a business enterprise to reflect the fact that it owns dissimilar operations or assets that do not appear to have a good fit together. Another rationale for valuing a portfolio of dissimilar operations or assets at a discount

¹⁶This data was taken from the National Association of Real Estate Investment Trusts website and reflects the dividend yield for all REITs as of June 2014.

is the fact that a prospective investor was not provided the opportunity to select the composition of the portfolio. It is unlikely that a potential investor would be prepared to pay the highest price for each individual asset in a portfolio that are dissimilar in nature and one that he or she did not have control in selecting the assets that comprise the portfolio. This lack of interest to purchase a miscellaneous assortment of operations and assets and the resulting discount from breakup value is often called the “portfolio effect.”

The following are other potential reasons for applying a portfolio discount:

- The difficulty of managing the diverse set of investments (need expertise in various types of investments).
- The expected time needed to sell undesired assets.
- Costs expected to be incurred upon the sale of the investments.
- The risk associated with disposal of undesired investments.

The portfolio discount effect is especially notable when valuing minority interests because such owners generally do not have the ability to redeploy underperforming (or nonperforming) investments. More importantly, owners of minority interests cannot liquidate the asset portfolio or cause the private entity to dissolve. This suggests that a portfolio discount could be greater for a minority position because such investor has partial or no control to implement changes to the make-up of the investments to help improve the rate of return or increase value.

In the instant case, such portfolio discount would apply because of the dissimilarity in assets held by the Entity. Within the real estate assets, there is a mixture of different type of real estate assets, such as vacant land, office property, retail property, multi-family property, and single-family homes. A prudent investor of the Interest would likely consider the real estate assets to be dissimilar in nature. The different property types would likely be unattractive to a potential buyer seeking a position in any one of the real estate asset classes.

Such combination of assets may necessitate a discount to sell the entire Entity as a package. It is unlikely that one purchaser would be interested in this “total bag” of assets. As a result, if the inherent value of the assets of the Entity is to be realized, the assets would have to be broken up and sold piecemeal to various potential purchasers. This piecemeal sale approach would likely cause the value of the Entity’s entire portfolio to be reduced, which gives rise to the notion of a portfolio discount. The Tax Courts have allowed portfolio discounts of nearly 10% in certain cases.¹⁷

The unique, non-homogenous and complex nature of the Entity’s assets would further justify a lack of marketability valuation discount for the Interest.

Costs Associated with Selling the Properties – Another risk factor that would lower the marketability of the Interest would be the costs associated with selling the Properties. Since the primary assets of the Entity are the Properties, in order for the Entity to realize the value, it would have to sell the Properties and distribute the proceeds to its stockholders. Before even selling the Properties, the Entity would have to complete several tasks in order to make the Properties

¹⁷ Patricia M. Adams v. United States – 88 AFTR2d Par. 2001-5361.

marketable to potential buyers, including: (i) creating financial and/or accounting records satisfactory to potential buyers, (ii) hiring a team of professionals to facilitate the sale, and (iii) incurring management's time to address potential negative items that would be of concern to potential buyers. These factors would lead the Entity to incur time, energy, aggravation, and cost before even finding a suitable buyer.

After finding a buyer for the Properties, the Entity would incur transaction costs, including any or all of the following: appraisal fees, brokerage commission, legal fees, recording fees, state transfer taxes, survey fees, title searches, etc. Such total fees could represent 3% to 6% of the value of the Properties, or approximately \$5,188,100 to \$10,376,200. These costs would reduce the amount of proceeds available to ultimately be distributed to the owner of the Interest upon a sale of the Properties. Such costs do not typically exist when selling other types of investments such as marketable securities. Therefore, the resources associated with preparing for a sale of the Properties and the transaction costs associated with selling the Properties would help support the application of a marketability discount associated with the Interest.

Prepayment Penalties – According to the Financial Statements, each of the mortgage loans of the Entity are subject to a prepayment penalty. Below is a table detailing the each of the prepayment penalties by property:

<u>Mortgage Loan by Property</u>	<u>Principal Balance</u>	<u>Prepayment Penalty</u>
Office and Shops at Sumner Place	29,165,120	Greater of 1% or the present value of principal and interest, less the outstanding principal balance as of the date of prepayment.
Spring Valley Office Complex	21,116,244	Greater of 1% or the present value of principal and interest, less the outstanding principal balance as of the date of prepayment.
Sumner Highlands Property	16,784,416	Greater of 1% or the present value of principal and interest, less the outstanding principal balance as of the date of prepayment.
Spring Valley Retail Complex	16,214,662	3% through 2015, with lower prepayment penalties in later years.
Total	\$ 83,280,442	

Having prepayment penalties significantly limit the Entity's ability to take advantage of lower mortgage rates, refinance these properties in order to make capital improvements, or sell these properties. It also significantly reduces the overall potential equity of the stockholders. Therefore, the prepayment penalties are a negative factor that reduces the marketability of the Interest.

Conclusion of the Specific Negative Factors – Based on the negative factors alone, a valuation discount associated with the lack of marketability/liquidity of the Interest would normally be near the mid-point of the 20% to 40% range, possibly 30%.

5.4.3 Specific Positive Factor

In the case of the Interest, the specific positive factor associated with the working capital was identified as being applicable, as of the Valuation Date, in determining the appropriate valuation discount attributable to the Interest's lack of marketability/liquidity. Below is a brief summary of the specific factor.

Working Capital – According to the Financial Statements, the Entity had a working capital balance of approximately \$9,086,184 (current assets of \$11,331,337 less current liabilities of \$2,245,153). This working capital held by the Entity would somewhat increase the flexibility that the Board of Directors would have in managing the real estate assets. The particularly high level of cash and cash equivalents (\$4,928,679) set aside by the Entity could be sufficient to cover some of the expenses and possible loss of rental income that would result from unexpected capital expenditures or any major vacancy and associated expenses. Accordingly, this level of cash could help mitigate some of the risks of owning the Interest.

5.4.4 Conclusion of Specific Factors Affecting Lack of Marketability/Liquidity Discount

In summary, the following is a list of the specific factors considered in establishing the lack of marketability/liquidity discount for the Interest:

Negative Factors	Positive Factors
Unfavorable Cash-on-Cash Return to the Owner of the Interest Complexity of the Investment Dissimilarity of Assets Costs Associated with Selling the Properties Prepayment Penalties	Working Capital

As mentioned earlier in this report, in determining where the lack of marketability/liquidity discount falls within the 20% to 40% range, the valuation professional must examine all of the specific factors as they relate to the ownership interest and weigh the importance of each factor. In addition to considering the general risk factors associated with owning an illiquid fractional interest in a privately held entity, VSI has also considered specific factors associated with the Interest. The unfavorable cash-on-cash return to the owner of the Interest, complexity of the investment, dissimilarity of assets, costs associated with selling the Properties, and the prepayment penalties would all have to be considered by a potential owner of the Interest. Based on just the negative factors that existed as of the Valuation Date, a valuation discount associated with the lack of marketability/liquidity of the Interest near the midpoint of the 20% to 40% range would be appropriate. A prospective investor would likely assign a 30% lack of marketability/liquidity discount based on the negative factors alone.

Mitigating these risk factors, however, is the fact that a potential owner of the Interest would own a fractional interest in a private entity that has an adequate working capital balance. A prospective owner of the Interest would likely consider this positive factor and make an adjustment

to the 30% lack of marketability discount. Based on the facts that existed as of the Valuation Date, a 25% lack of marketability discount was established for the Interest.

5.5 Summary of all Valuation Discounts Applicable to the Interest

In summary, after calculating the percentage share of the Entity's net asset value that would be allocable to the owner of the Interest, the following valuation discounts have been applied to determine the fair market value of the Interest:

Type of Valuation Discount

Minority Interest/Lack of Control Discount	<u>20%</u>
Lack of Marketability/Liquidity Discount	<u>25%</u>

After determining that the net asset value of the Interest was \$6,997, the above valuation discounts have been applied sequentially. As shown below, the fair market value of the Interest has been calculated to be **\$4,200**.¹⁸

Net Asset Value of the Entity Allocable to the Interest		\$	6,997
Less: Minority Interest/Lack of Control Discount	20%		(1,399)
Value of a Non-Controlling, Marketable Interest			5,598
Less: Lack of Marketability/Liquidity Discount	25%		(1,399)
Fair Market Value of the Interest (rounded)		\$	<u>4,200</u>

The concluded fair market value of the Interest represents an overall effective discount of 40% from its net asset value. This overall valuation discount is within the range of discounts that are listed in Table 1 of this report. As previously mentioned, based on empirical evidence, published studies, court cases, and VSI's experience, a reasonable range of valuation discounts for the Interest would be between 23.00% and 48.90%.

¹⁸ This amount has been rounded to the nearest hundred.

6. CONCLUSION

In our professional opinion, the fair market value of one share of common stock in W.C. and A.N. Miller Development Company as of July 1, 2014 was **\$4,200**.

D. LIMITING CONDITIONS

LIMITING CONDITIONS

This valuation was commissioned for the sole purpose of valuing the Interest for internal planning purposes and is intended for no other purpose. This report is not to be copied or made available to any persons without the express written consent of VSI. It is agreed that any user of this valuation who uses it contrary to this prohibition indemnifies VSI, its officers and directors, and the author(s) of this report, and holds them harmless of and from all claims, including attorney's fees, arising from said use.

Consistent with the Ruling, it is our belief that "a ... valuation is not an exact science." Therefore, the reader of this report may disagree with the valuation, and the amount of that difference may be significant. VSI assumes no liability whatsoever for these differences of opinion. Our compensation for making the attached report is in no way contingent upon the value reported.

This valuation report was prepared in accordance with NACVA standards for reporting on business valuations.

For purposes of this valuation, the fair market value of the Interest is defined as that price at which the Interest would trade between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.

The fair market value of the Interest represents the opinion of the Valuation Date. Economic conditions change constantly and therefore the value of the Interest can change under varying economic conditions.

To the best of our knowledge and belief, the statements of fact contained in this report, upon which the analyses, opinions, and conclusions expressed herein are based, are true and correct.

The Interest is valued as though the Properties are owned and operated as described in the report, under responsible ownership and competent management. It is assumed that none of the owners are subject to adverse circumstances that would pressure them to dispose of the Properties or their interests.

This report has relies on the Appraisals for purposes of describing and determining the fair market value of the Office and Shops at Sumner Place as of the Valuation Date. VSI has relied on the value of the Office and Shops at Sumner Place as provided in the Appraisals without independent analysis or verification. VSI has not opined to the appraised value of the Office and Shops at Sumner Place.

It is our understanding that current real estate appraisal were unavailable for the Spring Valley Retail Complex, the Spring Valley Office Complex, and the Sumner Highlands Property. In order to value the Interest, however, VSI needed to derive a fair market value for the Spring Valley Retail Complex, Spring Valley Office Complex, and the Sumner Highlands Property. For the

Spring Valley Retail Complex, VSI has relied on information provided by a representative of the Entity. For the Spring Valley Office Complex and the Sumner Highlands Property, VSI used an income-based approach to compute their values. The values of the Spring Valley Office Complex and the Sumner Highlands Property are merely estimates and are only used to establish the fair market value of the Interest. VSI is not an MAI certified real estate appraisal firm. If the actual values of the Spring Valley Office Complex and the Sumner Highlands Property were materially different from our estimates, the fair market value of the Interest would be impacted. VSI assumed no responsibility for any changes in the fair market value of the Interest due to any changes in the value of the aforementioned properties.

Our report is partially based on historical financial information provided to us by the Entity's management and representatives. VSI has not audited or confirmed this information for accuracy and completeness. If the underlying data had been subject to an audit or review by VSI, matters may have come to our attention that would have resulted in our using amounts that differ from those provided. Accordingly, VSI takes no responsibility for the underlying data presented in this report.

All information furnished by the client and from other sources is believed to be reliable, but VSI assumes no responsibility for its accuracy. VSI takes no responsibility for information that has not been furnished.

Public information and industry and statistical information that were used in this report were obtained from sources that are believed to be reliable and accurate. VSI makes no representation as to the accuracy or completeness of such information and have not conducted any procedures to substantiate the information.

VSI does not assume responsibility for legal matters nor does VSI render any opinion as to the title to the Properties that is assumed to be good, clean, and marketable.

It is assumed that all required licenses, consents, or other legislative or administrative authority from any local, state, or national governmental or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.

VSI has made no formal survey of the Properties. It is assumed that there are no hidden or unapparent conditions of the Properties, subsoil, or structures that would render it more or less valuable. No responsibility is assumed for such conditions or for engineering that may be required to discover such factors.

It is assumed that there is full compliance with all applicable Federal, state, and local environmental regulations and laws as of the date of the report.

It is assumed that there is full compliance with all applicable zoning and use regulations and restrictions.

It is assumed that utilization of the land and improvements is within the boundaries of property lines of the properties described and that there is no encroachment or trespass unless noted within the report.

Unless otherwise stated in the report, the existence of hazardous material, which may or may not be present on the Properties, was not observed. VSI has no knowledge of the existence of such materials on or in the Properties. However, we are not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, PCB transformers, underground storage tanks or other potentially hazardous materials may have an effect on the value of the Properties. The value estimate is predicated on the assumption that there is no such material on or in the Properties that would cause a loss in value. No responsibility is assumed for any such conditions.

VSI may be requested to give testimony or appear in meetings, depositions or court because of having made this valuation. If additional time is required after the completion of this valuation then all time will be charged at normal rates at the time the work is performed, including reimbursement of out of pocket expenses incurred.

Neither all nor any part of the contents of this report shall be conveyed to the public through advertising, public relations, news, sales, or other media, without the written consent and approval of the author, particularly as to the valuation conclusions.

VSI has no present or contemplated financial interest in the subject of this report. Our fees, for this valuation, are based upon our normal hourly billing rates, and are in no way contingent upon the results of our findings. VSI has no responsibility to update this report for events and circumstances occurring subsequent to the date of this report.

It should be noted that the valuation analysis herein considered various studies, statutes, case law, and other rulings that may be subject to change and, in many instances, subject to varying interpretations. VSI assumes no responsibility for such changes or varying interpretations.

E. APPENDICES

APPENDIX A

THE REAL ESTATE INVESTMENT MARKET

PwC Survey:

Note: The following real estate market information was derived from the 2nd Quarter 2014 PwC Survey.

NATIONAL HIGHLIGHTS

Investors Ponder Residual CAP Rates

Positive trends continue throughout much of the U.S. commercial real estate industry from a property owner's perspective, keeping investors searching for opportunities to buy, sell, and develop in order to benefit from the current recovery occurring in many metros, as well as the one "on the verge" in many others. "We still see the potential for upside in a number of office markets due to an increase in net leasing activity," says an investor. "The warehouse sector still has room for rent growth," adds another. While such optimistic outlooks warrant upbeat cash flow assumptions when analyzing potential acquisitions, many Survey participants feel challenged when it comes to selecting a residual capitalization (cap) rate for their analyses. "Deciding on an exit cap rate for a point in time when interest rates will likely be higher is difficult," remarks a participant. "The uncertainty in interest rate shifts makes choosing an exit cap rate very hard," comments another.

Since the peak of the last real estate cycle in midyear 2007, average residual cap rates have declined along with overall cap rates in each Survey market. As expected, the quarterly shifts have been uneven within each property sector, as well as across geographies. At the same time, the gap between the average residual cap rate and the average overall cap rate has shrunk in each Survey market. Looking at the Survey's national CBD office market, the average residual cap rate declined 90 basis points between the second quarter of 2007 and the second quarter of 2014, suggesting an increasingly favorable outlook among Survey investors. In unison, this market's average overall cap rate has declined 53 basis points – resulting in an average spread of about 47 basis points.

Of the 11 national markets in our Survey, the regional mall market reports the largest decline in its average residual cap rate since the peak of the last cycle, dropping 125 basis points and resulting in a spread of 34 basis points when compared to its average overall cap rate. At the peak of the cycle, the gap was 131 basis points. While the use of lower residual cap rates is due largely in part to still-low interest rates and their impact on initial returns, many investors wonder if the narrowing spread accurately reflects future risk. "We know interest rates are going to trend upward, but it seems as if this notion is not being accurately reflected in resale assumptions," states a participant.

In a few of the Survey's city-specific office markets that recovered more steadily from the recent recession and have long-standing investor interest, steeper declines are reported for average residual cap rates than for average overall cap rates since midyear 2007. In Manhattan and Los Angeles, for example, average residual cap rates have plummeted about 75 basis points while average overall cap rates are down only about 35 basis points.

While some investors contend that certain core office properties may command low exit cap rates in the short term, future interest rate increases temper those projections over the long term. A Survey participant suggests using more aggressive market rent growth rates to reflect anticipated appreciation in value and income in lieu of using low residual cap rates. Another recommends being more aggressive with lease-up assumptions. While challenging, finding the right balance of appropriate cash flow assumptions is vital when valuing CRE assets in today's environment since the economy is still a bit skittish, the CRE recovery is ongoing, and interest rate increases seem inevitable.

SUBURBAN MARYLAND OFFICE MARKET

Investors in the Suburban Maryland office market require patience as this market deals with an excessive amount of supply at a time when government leasing has contracted. "It is very difficult to underwrite vacant space with the exception of Class-A space in Bethesda-Chevy Chase," states a participant. In the first quarter of 2014, overall vacancy in the Suburban Maryland office market was 20.2% – 110 basis points higher than a year ago, according to Cushman & Wakefield.

In the submarket of Bethesda- Chevy Chase, the supply-demand leasing dynamic is much better with an overall vacancy rate of 10.8% for the same time period. During the first quarter of 2014, nearly 40.0% of the leasing activity in Montgomery County occurred in this submarket. While smaller, the submarket of Silver Spring is also performing well, posting an overall vacancy rate of 11.0%.

Overall, rent growth expectations are not the greatest for this market and certain surveyed investors are using negative growth rates in year one of their cash flow forecasts. The average for this key assumption stands at 0.60% this quarter. While it is up slightly from last quarter, this average represents the second lowest for the 19 city-specific office markets in our Survey this quarter.

According to PwC, the discount rate for this type of real estate is between 7.00% and 10.00% with an average rate of 8.68%. The overall cap rate is between 5.25% and 9.00% with an average rate of 7.45%. The residual cap rate is between 6.50% and 9.75% with an average rate of 8.03%.

NATIONAL SUBURBAN OFFICE MARKET

Changes in this quarter's key indicators suggest that investors are a bit more optimistic with regard to the long-term performance of the national suburban office market. Both the average overall cap rate and the average residual cap rate slip this quarter while the average initial-year market rent change rate increases for the fifth consecutive quarter. However, deciding on a market rent change rate assumption can be tricky as "there is no 'one-size-fits-all' rate for this sector."

In certain suburban office locations, rent growth can be very difficult to model since only certain transit-oriented assets with a technology and/or energy-related employment base are seeing a robust recovery, according to one participant. "Using an average market rent growth rate will undervalue these assets and overvalue others," adds the investor. Another challenge is estimating lease-up time as several markets have numerous space options for tenants. In others, however,

leasing velocity appears to be accelerating and certain suburban areas are experiencing strong positive net absorption.

Suburban office areas that boast overall vacancy rates below the U.S. average include San Francisco, Portland, Miami, San Diego, and Houston, as per Cushman & Wakefield.

According to PwC, the discount rate for this type of real estate is between 6.00% and 11.00% with an average rate of 8.03%. The overall cap rate is between 5.00% and 9.00% with an average rate of 6.75%. The residual cap rate is between 6.00% and 10.00% with an average rate of 7.55%.

NATIONAL STRIP SHOPPING CENTER MARKET

Sales of strip shopping centers continue to surge even though underlying fundamentals continue to illustrate a slow-moving recovery for the bulk of this sector. Based on data from Real Capital Analytics, the U.S. retail sector recorded \$22.9 billion in sales in the first quarter of 2014, more than double a year ago. At the same time, however, our Survey reveals an increase in this market's average overall cap rate, suggesting guarded investor optimism for this sector.

Ownership challenges in this market largely relate to leasing issues, such as weak tenant credit, re-leasing difficulties, the rising cost of tenant improvements, and an inability to raise rents. "I question whether some tenants can afford current rent levels," says a participant. This quarter, the average initial-year market rent change rate dips 19 basis points for the national strip shopping center market – the first quarterly decline in over a year.

Due to sluggish rent growth and lackluster tenant demand, some shopping center owners are facing foreclosure, which could open up acquisition opportunities for eager buyers. "It's a great time to take advantage of grocery-anchored centers that are in financial trouble, but otherwise well-occupied," comments an investor.

According to PwC, the discount rate for this type of real estate is between 6.25% and 11.00% with an average rate of 8.31%. The overall cap rate is between 5.00% and 10.00% with an average rate of 7.09%. The residual cap rate is between 6.00% and 10.00% with an average rate of 7.44%.

REGIONAL APARTMENT MARKETS

Similar to the national apartment market, many of the metros that comprise the Mid-Atlantic, Pacific, and Southeast regional apartment markets are in various stages of the expansion phase, causing some investors to evaluate both their acquisition and development strategies. "We are focused on development opportunities in neighborhoods adjacent to the path of urban renewal," explains a participant specializing in the Mid-Atlantic region. In the Southeast region, one participant favors Class-B apartment product with renovation potential. With regard to the Pacific region, an investor states, "If there isn't any rent growth potential for a certain asset, it's time to take advantage of this sellers' market."

This quarter, the majority of our Survey participants believe current market conditions favor sellers in each region. For investors looking to acquire apartment assets in these markets,

pricing ranges from 60.0% to 125.0% of replacement cost. The Pacific region's average pricing sets the high end of the range at 103.3% of replacement cost and the Southeast region sets the low end of the range at 99.6% of replacement cost. The Mid- Atlantic region falls in the middle with average pricing of 102.5% of replacement cost. The average for these three markets is 100.0% of replacement cost.

Certain investors foresee a window of opportunity before some metro markets reach their peaks. "We are targeting markets in the Pacific region that we feel have not yet peaked and have rent growth potential," cites a participant. Overall, rent growth expectations have stabilized, particularly in the Mid-Atlantic and Pacific regions. The largest quarterly increase in the average initial-year market rent change rate occurs in the Mid-Atlantic region (21 basis points), followed by the Pacific region (9 basis points). This key indicator holds steady in the Southeast apartment region.

According to PwC, the discount rate for the Southeast region apartment real estate is between 6.00% and 10.00% with an average rate of 7.70%. The overall cap rate is between 4.00% and 7.25% with an average rate of 5.55%. The residual cap rate is between 5.00% and 7.00% with an average rate of 6.15%.

According to PwC, the discount rate for the Mid-Atlantic region apartment real estate is between 6.00% and 11.00% with an average rate of 8.08%. The overall cap rate is between 4.00% and 7.50% with an average rate of 5.46%. The residual cap rate is between 4.50% and 9.75% with an average rate of 6.10%.

NATIONAL DEVELOPMENT LAND MARKET

As both the U.S. economy and the commercial real estate (CRE) industry's fundamentals show continued signs of improving, interest in CRE development has picked up across each main property sector – office, retail, industrial, apartments, and lodging. As a result, certain investors in the national development land market are looking to acquire new parcels, finish entitling owned tracts, and/or convert parcels into readied sites. "We are seeing more interest from developers and expect to reduce our existing land inventory over the next several months," shares a participant.

As is typically the case, the resurgence of development land opportunities is following the recovery path of both the U.S. housing market and the U.S. economy. "Job growth markets are seeing construction activity pick up first in order to support growing local economies," says an investor. After several dormant years, the pick-up in activity is welcome news for development land investors. In fact, for the first time in quite a while, our surveyed investors are unanimous in their expectations that values for development land will increase over the next 12 months.

Total spending on U.S. private construction was up 12.5% on a year-over-year basis in March 2014, according to the U.S. Census Bureau. Within this total, residential construction was up 15.2% while nonresidential was up 4.4% over that time frame. Office, lodging, and communication sectors reported the highest year-over-year gains in spending in the nonresidential sector, as of March 2014. In contrast, U.S. private construction spending dropped the most in the religious and public safety sectors over the past 12 months.

Discount Rates

Free-and-clear discount rates including developer's profit range from 10.0% to 25.0% and average 18.15% this quarter. This average is down 16 basis points from the fourth quarter of 2013 and assumes that entitlements are in place. Without entitlements in place, certain investors increase the discount rate between 400 and 1,500 basis points (an average increase of 1,040 basis points).

Growth Rate Assumptions

Growth rates for development expenses, such as amenities, real estate taxes, advertising, and administration, typically range from 1.0% to 5.0% and average 3.2%. For lot pricing, investors indicate a range up to 5.0%; the average growth rate for lot pricing is 2.0%.

Absorption Period

The absorption period required to sell an entire project varies significantly depending on such factors as location, size, and property type. This quarter, preferred absorption periods for participants range from 12 to 240 months. The mean absorption period is 100 months (just over eight years), about two years lower than the absorption period reported six months ago.

Forecast Value Change

Over the next 12 months, all investor participants expect development land values to increase. Appreciation ranges up to 10.0% and averages 3.6% – up quite a bit from six months ago when the average was 2.6%. No surveyed investors expect property value declines in the national development land market over the next 12 months.

Marketing Period

The typical time that a development land parcel is on the market prior to selling ranges from 9 to 240 months and averages 53 months.

APPENDIX B

THE INVESTMENT MARKETS

SBBI®

Note: The following information was derived from SBBI®. It should be noted that this is for information purposes only.

Events of 2013

2013 was a banner year for the United States stock market, as the bull market, beginning in late 2012, continued its torrid pace for the duration of the year. While economic data showed only modest improvement, equities marched higher on virtually all headlines. Though the stock market's rally raged on, many continue to wonder just how strong the underlying economy is. Despite a substantial drop in unemployment to the 7 percent level, the labor participation rate reached a new generational low in 2013.

Still, the S&P 500 seemingly took all news as good news. Despite talks of sequestration and the fiscal cliff, the SBBI large company stock index quashed the 16 percent returns seen in 2012 by posting gains of 32.4 percent, setting several all-time highs along the way. Small company stocks also saw large returns in 2013 with an annual return of 45.1 percent. Amid these high returns in equities, long-term corporate bonds, long-term government bonds, and intermediate-term government bonds saw negative returns in 2013 with -7.1 percent, -11.4 percent, and -1.1 percent, respectively. These bond returns are largely affected by the Fed's announcement that reductions in asset purchases would begin at a rate of \$10 billion per month awoke the long-dormant Treasury yields. The winding down of the Fed's asset-purchasing program likely will be a key theme in 2014 and will play a major factor in determining not only how strong the U.S. economy truly is, but also how long the equity market can rally. More specific events are summarized in later pages of this chapter.

Economic Overview

The United States economy grew an estimated 1.9 percent in 2013 compared with a 2.8 percent growth rate in 2012. The potential end to the federal government shutdown and budget impasse raised both consumer and business confidence, spurring substantially higher growth in the back half of 2013. About a third of the year-over-year slowdown was due to lower government spending and two thirds was due to slow business-investment spending. Growth rates in most other categories did not change appreciably from 2012.

Investors spent most of the year focusing on the Federal Reserve beginning to taper its bond purchases and the Congressional budget settlement. Greater certainty on these two issues explained the improvement in market sentiment and increase in year-end spending by both businesses and consumers. However, it also meant that interest rates, as measured by the 10-year U.S. Treasury bond, increased from 1.8 percent to 3.0 percent. Employment growth also continued to improve at its relatively lethargic 2.0 percent rate in 2013. The big surprise was that the unemployment rate dropped sharply from 7.9 percent to 6.7 percent. This was driven partially by private-sector employment growth, but more importantly by falling participation rates as students

stayed in school longer, baby boomers retired in droves, and programs that encouraged people to stay in the work force expired. Inflation continued to fall despite the Fed's easy money policies, as the output gap still remains unusually wide. The housing market continued to grow but performed substantially below expectations because of higher prices, increased mortgage rates, and lack of available land.

On the world stage, U.S. growth rates stood out compared with other developed markets, which showed little or no growth. The biggest news here was that the Eurozone finally emerged from its recession in the second quarter, showing at least some growth. New monetary stimulus in Japan ultimately arrested years of low growth and deflation. China's growth remained above 7 percent, but it was one of its poorer showings of the last 20 years, as the nation attempts to move from an export-investment-oriented economy to one more closely tied to local consumption. Other developing markets also had issues in 2013, including falling commodity prices and the withdrawal of capital often blamed on the Fed's plans to reduce bond purchases. Those pressures may well continue in 2014.

Real GDP – Real GDP growth for 2013 really depends on exactly what period one is looking at. One method is to compare fourth-quarter data to fourth-quarter data. On that basis, GDP growth looks very robust at 2.7 percent, as Hurricane Sandy depressed year-ago data and some unusual calendar flukes sharply aided auto sales growth in late 2013. Very strong utility demand in late 2013 also provided an artificial boost to fourth-quarter growth. When comparing full-year 2013 data to full-year 2012 data, however, growth was a much softer 1.9, reflecting a weak first half and a seemingly more robust second half. Based on very similar consumption numbers (by far the biggest component of GDP) for 2014 and less of a government-spending drag, both full-year over full-year growth and fourth-quarter to fourth-quarter GDP growth could fall in the 2.0 percent-2.5 percent range – even with less help from inventories and more balanced and slower auto sales growth. That would be very similar to the results of the last four years, with consumers driving the bulk of the growth during each of those periods. The drag from slowing government spending should diminish in 2014, and business investment, which was unusually weak in 2013, will aid the new year. Housing and inventories are likely to be smaller contributors to 2014 results compared with 2013, offsetting the government and business investment increases.

Unemployment – Though U.S. monthly job growth was often erratic, year-over-year private sector employment growth remained at just above 2.0 percent, as it has since mid-2011. That amounts to about 190,000 jobs per month. Job growth looks a little more lethargic when adding in government workers, who are still taking it on the chin. Total nonfarm payrolls, which include government workers, grew an even more lackluster 1.7 percent year over year, as it has since 2012. With employment growth this low, it will be difficult to see GDP growth much outside the 2.0 percent to 2.5 percent forecast range for 2014. Unfortunately, a great deal of the job growth in 2013 was from retail, leisure (restaurants and hotels), and temporary jobs, which all tend to provide low pay and few hours. Also, all of jobs that were lost in the last recession were not recovered by the end of 2013. That is more likely to happen sometime in 2014, making this the longest recovery period of the post-World War II era. Employment growth of just more than 2.0 percent in the private sector and maybe a little improvement to 1.8 percent in combined government and private payrolls remain most likely for 2014.

The real surprise for 2013 was the large drop in the unemployment rate from 7.9 percent at the end of 2012 to 6.7 percent at the end of 2013. While some of that was a result of an increased number of jobs, a substantially larger part of the improvement was a result of decreased labor-force participation. The lion's share of the decline was due to retiring baby boomers who put off their retirement during the recession and stock-market collapse. Young people staying in school longer also helped the participation rate decline. This is certainly not a bad thing for the economy. However, some of the decline also was due to discouraged workers leaving the work force, especially since the maximum number of available weeks of unemployment compensation declined in 2013. A failure to renew extended unemployment benefits for 2014 could cause an even bigger decline in the participation rate in 2014. It also means that the unemployment rate could fall as low as 6.0 percent in 2014 with the combination of lower participation rates and continued job growth.

Consumer Price Index – The consumer price index increased by 1.2 percent between the fourth quarter of 2012 and the fourth quarter of 2013, compared with 1.8 percent inflation growth a year ago and the average rate of 3.9 percent in the post-World War II era. Inflation rates in excess of 4.0 percent are generally associated with the end of economic recoveries. Today's low inflation could mean that an end to this recovery is in the distant future and doesn't represent an immediate threat to the recovery. However, inflation in 2014 could be a bit higher than in 2013, perhaps 2.0 percent or more, as some of the 2013 inflation-reducing items bounce back in 2014. Falling energy and utility prices and blockbuster drugs coming off patent were two big contributors to the low inflation rates in 2013 that aren't likely to recur in 2014.

Consumer Spending – Consumer consumption is the key to short-term economic growth, as it represents about 68 percent of the U.S. GDP. Without good prospects for consumer spending, businesses would be less likely to invest, and governments would not be able to generate the tax revenue necessary to continue spending. The consumer has been a reliable contributor to GDP, growing between 1.9 percent and 2.5 percent year over year for the last two and a half years. Recent data for the fourth quarter suggests some acceleration in fourth-quarter over fourth-quarter consumption. Growth approached the high end of the recent range, or about 2.3 percent. However, quirks in the reporting of auto sales and unseasonably cold weather that drove utility sales, winter weather gear purchases, and even grocery transactions as consumers hoarded food in front of a major storm, all served to artificially boost fourth quarter results. Therefore, sales in 2014 could start off slowly and accelerate back to the 2.0 percent to 2.5 percent rate that has typified the last several years, by mid-year.

Consumer Debt and Income – Consumer incomes, as measured by real disposable income, showed almost no growth in the last three months of 2013 compared with 2012. Increased income tax rates, higher social security taxes, and tax-avoidance measures (paying bonuses in 2012 instead of early 2013 to beat higher tax rates in 2013) contributed to this relatively sad state of affairs. Consumers dipped into savings, took out more loans, and spent some of their stock market gains to finance consumption growth that was above 2 percent for the same period. With the effects of the tax increases now behind the U.S. economy, income growth should look more like employment growth, or about 2 percent in 2014.

According to the Federal Reserve, consumer debt decreased in 2009, 2010, and 2011 before showing a small increase in 2012 as consumers improved their balance sheets. Through the first

nine months of 2013, labor and credit market improvements have enabled consumers to increase debt by 0.8 percent on an annualized basis, still tiny by historical standards. From 2009 until the third quarter of 2013, consumer liabilities as a percentage of disposable income have fallen from 128 percent to 109 percent.

Through the first nine months of 2013, the financial obligations ratio – which compares mortgage or rent, auto loan, student loan, and credit card payments to incomes – was little changed compared with the end of 2012. The ratio, which had fallen like a rock for several years, showed a tiny increase from 15.23 percent to 15.36 percent through those nine months, compared with a high of 18.10 percent in late 2007. Higher home prices and rising interest rates will bring an end to this very useful economic tailwind in 2014. Another small increase in the financial-obligations ratio in 2014 to 15.60 percent is likely.

Non-Residential Corporate Investment Spending – Overall corporate spending, including structures, equipment, and software, was lackluster in 2013, increasing 2.2 percent from fourth quarter to fourth quarter, compared with 8.6 percent in 2011 and 5.0 percent in 2012. Stagnant spending on buildings was largely behind the 2013 slow-down. The budget-deficit drama and government shutdown didn't do much to encourage businesses to go out on a long limb, either. The budget deal could unleash more spending, some of which became more visible in the fourth quarter. Corporate spending growth of 5 percent to 8 percent in 2014 looks like a real possibility.

Housing Starts – If 2012 was the year of a big upside surprise in housing, 2013 was a big disappointment. Housing starts jumped 22.0 percent to 829,000 units in 2012, surprising pundits, many of whom expected sales to jump that same 22.0 percent in 2013 to more than a million starts. Instead, sales grew a less robust 11.0 percent for the full year (fourth-quarter over fourth-quarter growth was very close at 12.4 percent). Higher mortgage rates, lack of available land, and even spot labor shortages weighed on the 2013 data. As some credit and building bottlenecks are broken, partially offset by higher interest rates, growth in housing starts could increase to 15.0 percent, or 1.05 million to 1.1 million total starts in 2014.

Government Spending – From fourth quarter to fourth quarter, government spending declined 2.3 percent. This would mark the fourth year in a row of both fourth-quarter and year-over-year declines in government spending. Federal defense-spending cuts account for most of the change, while federal nondefense and state and local government spending have not shown much change. At about 19 percent of GDP, that magnitude of decline removes 0.3 percent from overall GDP growth (that doesn't include the even larger impact from taxation changes). For 2014, government spending will probably grow a small amount and break the chain of recent losses, potentially adding a small amount to GDP growth.

U.S. Monetary and Fiscal Policy – Monetary and fiscal policies were at odds with each other for most of 2013, as a loose monetary policy marked by zero short-term interest rates and large bond purchases (to reduce interest rates) offset fiscal austerity. The federal budget deficit fell from \$1.1 trillion to less than \$0.7 trillion between 2012 and 2013. The federal deficit that had gotten as high as 10 percent of GDP and has now fallen to about 4 percent for fiscal-year 2013, with smaller but still meaningful improvements in store for the next couple of years – assuming Congress creates no new spending programs. Because of this tightening, the Federal Reserve was probably more liberal with its monetary policy than it otherwise might have been. Aside from

fiscal austerity, a low capacity-utilization rate (as measured by the output gap) and still-tight lending conditions have kept inflation in check, despite the Fed's relatively liberal policies. Looking to 2014, the budget deficit likely won't shrink nearly as much as in 2013, but the feel is slowing some of its more liberal programs and tapering its major bond- and mortgage-buying programs. Even early hints of tapering drove U.S. government bond and mortgage rates sharply higher in 2013.

Emerging Markets – While emerging markets saw higher economic growth in 2013 (estimated at 4.7 percent by the International Monetary Fund in January 2014) than developed markets (1.3 percent), growth rates in both sectors were slower but similar to 2012. China, while remaining slow by historical standards, grew by 7.6 percent in 2013, with a similar or perhaps slower number possible in 2014. That number is weighing on commodity prices, which in turn are weighing on other emerging markets that are commodity-dependent (Russian oil and South African gold, for example). Fed bond purchases and low U.S. interest rates caused capital to flow into emerging markets for the last several years. Countries that spend that money well (more infrastructure and equipment) and run trade account surpluses are faring much better than other less fortunate countries. Countries such as Indonesia, Turkey, and India are doing worse than China. Indeed, emerging markets seem to be decoupling from each other, making it more difficult to describe them as a single group. That said, the IMF is projecting that overall emerging-markets growth will accelerate slightly in 2014 to 5.1 percent, which seems just a little optimistic given recent turmoil. This IMF projection is very dependent on improvements in developed markets, which are important for emerging-markets exports.

Developed Markets – The European sovereign debt crisis and harsh austerity programs are beginning to fade into the rearview mirror. The Eurozone appeared to turn the corner in 2013, with the recession apparently ending in the second quarter as the economy showed growth for the first time since 2011. Still, for the entire year, Europe's GDP shrunk 0.4 percent, which was still better than the 0.7 percent decline in 2012. For 2014, the IMF is expecting European growth of 1.0 percent. Europe still might not be totally in the clear, however. Banks remain in need of restructuring and both debt and unemployment remain high, especially in France. Nevertheless, trends are looking better in Europe than they have in some time.

Japan had a much better 2013 than in the last couple of decades, growing at an estimated 1.7 percent compared with a meager 0.3 percent in 2012. Japan's introduction of a stronger quantitative easing program, its targeting of higher inflation rates, and a weaker yen all helped. Growth of 1.7 percent is expected again in 2014 as the 2013 changes continue to work their way through the system, though fundamental reforms in the economy seemed to be less than fully implemented. At an estimated 1.9 percent, the U.S. growth rate was the best of the developed economies, which averaged 1.3 percent combined in 2013. Developed-markets growth is pegged at a much stronger 2.2 percent rate in 2014, with improvements in Europe, the U.S., and smaller developed markets and similar growth rates in Japan.

Global Currencies

Overall, on average, the euro showed the strongest gains across all other highlighted countries. Since 2011, the dollar has flip-flopped and weakened against the euro. In 2013, the dollar fell by 1.9 percent compared to the euro. Europe continues to show signs of stabilization,

gaining traction against the U.S. and all other currencies. The U.S. saw higher dollar appreciations against the Australian dollar, the Brazilian real, the Indian rupee, and the Japanese yen.

Commodities

In 2013, energy commodity prices increased slightly, metal prices decreased, and agriculture prices were mixed compared to 2012 prices. Through 2013, the best performer was cocoa, increasing 18.4 percent, and the worst performer was silver, ending the year down more than 35 percent. The energy commodity markets saw crude oil gaining 3.2 percent on the year. Heating oil and unleaded gas managed to hold only slight gains and are still near the low end of the five-year range, while natural gas had a surprising gain of 15.8 percent on the year – an increase from the 9 percent increase it saw in 2012. All of the metal commodities saw medium to high drops in prices, with gold and silver prices decreasing the most.

The grain commodities saw volatile returns over the year with only coca and cotton seeing positive returns. Certain grains and softs like corn, coffee, and wheat saw dramatic price decreases over 2013. These decreases seem excessive due to the weather in 2012. Unfortunately, it was the main culprit that impacted much of the yields last year when the Midwest and Plains had one of the worst droughts in history, and grain prices surged as a result.

Sector Highlights

Below are the opinions and expectations of Morningstar's Equity Research sector teams regarding the highlights of 2013 and the outlook for 2014. These comments are to be used for informational purposes only and should not be construed as advice.

Financial Services – Five years after the turbulent days of late 2008, the long-awaited Volcker Rule was finalized. The overarching goal was to ensure that a clear bright line was drawn between the acceptable activities for commercial banks, hedge funds, private equity funds, and investment banks. The rule is primarily meant to address proprietary trading, where banks use their own capital to speculate on short-term price movements. For example, the trades that led to JPMorgan's now-famous London Whale debacle in 2012, causing a \$6 billion loss for the firm, became a real-world test case that regulators studied carefully. Despite earlier concerns of banning the type of portfolio hedging that led to the loss, the final rule allows portfolio hedging but forces the banks to identify specific risks as well as perform a correlation analysis between the risk and the hedge.

The biggest banks have been planning for the Volcker Rule for years as it wound its way through the rule-making process. Citigroup and JPMorgan, among others, already have shut down or spun off proprietary trading desks and private equity and hedge fund arms. Banks also have been rewriting compliance manuals and computer programs as well as retraining employees to better comply with the new rule. At the same time, Goldman Sachs is reportedly studying whether it can invest in business development companies, which appear to be exempt from Volcker requirements, as a way around the rule.

Health Care – The Affordable Care Act (ACA) will bring major changes to the health care sector in 2014. Expanded coverage should increase volume; however, pressure on prices could create an overall neutral effect for most industry players in the long run. We would expect to see

some profitability hiccups, especially for service providers who likely will be first affected as the pricing pressure goes into effect. Additionally, the ACA will squeeze managed-care profitability primarily through standardization initiatives, minimum medical-loss ratios, and less profitable Medicare Advantage contracts. We recommend staying with firms in the space that are supported by strong competitive advantages.

Energy – Morningstar continues to believe that the dominant theme in oil is production growth in the United States. Certainly the impact of Iran, Libya, Iraq, and Nigeria on world markets is noteworthy; if each of these nations were producing at full capacity, there would be much lower oil prices. However, it is the surging growth of U.S. oil—led by tight oil plays like the Bakken, Eagle Ford, and Permian – that represents the greatest near-term downside risk to prices, in our view. The United States Energy Information Agency recently increased its baseline projections for U.S. oil production, forecasting 2020 crude oil production at 9.6 million barrels a day, up from 7.4 million barrels a day forecast just last year. This would put U.S. production of crude on par with Saudi Arabia and Russia and account for roughly half of U.S. oil consumption.

Producers have responded rationally to low natural gas prices, and they have shifted virtually all drilling capital toward oil. Production in dry gas basins is in decline, with one key exception: the Marcellus. The combination of prolific wells and increasing pipeline takeaway capacity has resulted in surging production. We estimate exit-rate 2013 Marcellus production of around 13 billion cubic feet per day, accounting for close to 20 percent of total dry gas production. This, along with gas associated with oil drilling, represents a cheap source of new production, placing a lid on prices in the near term. However, we continue to believe that declining dry gas production and increasing demand will result in gas prices moving substantially higher during the next five years. In the U.S., we see more commodities upside to gas than oil.

Basic Materials/Agriculture – Price uncertainty, caused by Uralkali’s late-July decision to leave the cartel-like Belarusian Potash Company and pursue a volume-over-price strategy, has continued to roil potash markets. Producer profits have suffered from a lack of buyer interest in potash, as dealers and large purchasing countries hold out for lower expected prices. China and India have chosen to draw down inventories rather than return to the market in a meaningful way. With pressure on both price and volumes, potash producer earnings have been weak.

We think demand will normalize, likely as soon as next year. That said, there is still a fair amount of uncertainty regarding the path of future potash prices.

Price pressure also has affected nitrogen and phosphate fertilizer markets. In nitrogen, high-urea imports from China have pressured prices, and in phosphate, major buyers have taken a step back from purchasing.

Basic Materials/Metals and Mining – Supported by solid Chinese demand growth, prices for iron ore, the mining industry’s biggest moneymaker, traded in the \$130-range for much of the fourth quarter in 2013. Looking ahead to the first quarter, the potential for cold-weather constraints at Chinese mines and seasonally wet conditions in Brazil and Australia are reasons for tightness. However, with inventories of iron ore at Chinese ports up significantly from this time last year, material increases in prices seem unlikely. After the almost-always eventful first quarter, which

includes steel mill shutdowns for Chinese New Year, we see iron ore prices on a downward trajectory as new supply hits the market and Chinese demand growth slows.

Prices for metallurgical coal, iron ore's partner in steelmaking, continued to struggle. At prevailing spot prices of \$138 per metric ton for premium-grade coking coal and a quarterly contract price of \$152, many producers are making cash-on-cash losses. That's quite a reversal from the \$209 averaged in 2012. Take-or-pay contracts with railways and ports are largely to blame. This condition isn't permanent, but will take some time to resolve.

Basic Materials/Coal – Trends in thermal coal prices differed across basins at the end of 2013. Powder River Basin (PRB) coal pricing continued to improve. Since the end of October, Western Rail PRB coal swaps have gained 14 percent to almost \$12 per ton. This represents a 19 percent gain since the start of the year. In comparison, Central Appalachian coal futures have only gained 2 percent since the end of October to nearly \$56 per ton. This represents a 4 percent decline since the start of the year. We believe PRB coal will carry this positive momentum into 2014, with pricing expected to continue to strengthen. Metallurgical coal pricing has slightly improved from lows seen in the third quarter, although pricing remains weak. We continue to expect that recovery levels will differ among the various U.S. basins, with western U.S. thermal basins (primarily Powder River Basin) outperforming both eastern U.S. metallurgical and thermal operations.

We are optimistic for a recovery in domestic thermal coal, and believe that despite continued near-term weakness, there are positive signs of improvement with electric utilities nearing desired inventory levels and prices improving. We continue to believe lower-cost regions such as Powder River Basin and Illinois Basin are likely to see a recovery that is much sooner and much better than the high-cost Appalachian region. We are not so hopeful for domestic metallurgical coal, as U.S. supply sits on the higher end of the cost curve and the industry currently suffers from oversupply.

Technology – With consumers continually gravitating toward mobile and cloud-based computing, and consensus now embracing the fact that global PC shipments continue to fall, investors rewarded firms that already have strong positions in key strategic areas of tech. M&A activity remains healthy, as announced (and rumored) deals range from land-grab-based tuck-ins to a potential \$40 billion Time Warner Cable deal. Most of these deals are being completed at seemingly high valuations, where buyers must either be taking advantage of favorable credit markets, cutting meaningful costs, identifying operational synergies, or baking in aggressive growth expectations (or some combination of all four). In any case, we continue to see the shift toward mobility as playing a key role in firms' investment decisions.

In spite of our bullishness for digital ad spending and our positive views of the competitive positions of several stocks in our coverage universe, we see meaningful downside risk in most of the sector. During the quarter, Twitter priced its initial public offering exactly at our fair value estimate (\$26), but the share price has gone on to more than double as investors have thrown caution to the wind. Furthermore, continued strong performance from Facebook and Google highlighted the advantages of firms with wide Morningstar Economic Moats, as industry spending is consolidating around these market leaders. Deceleration in revenue growth is likely to pressure these stocks, however. We'd feel most comfortable holding Google at these levels, given its relatively modest overvaluation. By contrast, Yahoo continues to lose market share, although

increasing optimism about the potential for an IPO of Alibaba Group (a portion of which is owned by Yahoo) by the end of 2014 has pushed its stock price to a level where, if the IPO were to be delayed, investors may be disappointed.

Strong growth in digital-advertising spending should continue, and Google, Facebook, and LinkedIn are all well positioned to capitalize on this growth. For Google, the market leader, we believe revenue growth from desktop-based Internet search will begin a modest slowdown and advertising revenue coming from (Google subsidiary) DoubleClick and mobile advertising will continue to grow in importance. Furthermore, we believe a focus on the lack of attractive economics of the Motorola handset business may begin to take on greater importance. These businesses have lower structural operating margins. As Google's advertising reach broadens, the Entity will be forced to share revenue with a greater number of partners, including handset manufacturers, content owners, and developers. Although the Entity is actively pruning its product portfolio, we do not expect to see a measurable improvement in the overall cost structure.

Communication Services – Gaining scale to improve competitive positioning and control costs is the primary name of the game. Content costs for cable and satellite television companies have risen significantly faster than the average cable bill during the past couple of years. Although consolidation may help, we believe this trend will remain firmly entrenched as the Internet provides content creators with a compelling distribution alternative. In addition, we expect that cable and phone companies will increasingly look to television service as a means of driving high-margin Internet access business, effectively shifting profit dollars to the services in which they have the strongest competitive advantage.

While the strategic wrangling across the U.S. wireless industry appeared to be winding down in the back half of 2013, the merger of Sprint and T-Mobile might be nearer at hand than we had expected, making for an interesting 2014. A combined Sprint/T-Mobile would still operate at a disadvantage relative to AT&T and Verizon Wireless, but the gap would certainly be much smaller than either firm faces individually today. The key question is whether regulators will allow the U.S. market to consolidate to three nationwide players from four today. We expect that both companies will gain familiarity with new FCC chief Tom Wheeler in the coming months; a decision on whether to attempt a merger in early 2014 should serve as a strong indication of whether these firms will join forces soon or wait for a new administration to take over beyond 2016.

Consumer Cyclical – We believe e-commerce has been the most disruptive headwind to traditional retailers during the past decade; players like Amazon.com operate with more capital-efficient business models than traditional retailers and can pass these savings to consumers in the form of lower prices. E-commerce now represents more than 6 percent of U.S. retail sales and is up approximately 14 percent year to date, according to comScore, and we expect industry growth trajectories to remain in the low-double-digit range during the next several years.

Retailers are not taking the e-commerce threat lying down. Amazon and eBay's impressive user and revenue growth trends have forced many retail management teams to employ more tactical measures across all channels. Since the holiday season of 2012, we've seen traditional brick-and-mortar retailers adopt more aggressive (and transparent) price-matching efforts as well as other promotional activities to remain competitive with online players. This list includes a

number of retailers in commoditized categories where consumers will typically make their final purchase decisions based on price and not the expertise level of a sales associate.

Many retailers also have embraced mobile devices as a way to stay relevant. Consumers have been using smart-phones and other mobile devices as a price-comparison tool for a few years now, but some retailers have created mobile apps that enhance in-store shopping trips. The more-effective retailer mobile apps seen include features like detailed product information, in-store price comparisons, access to loyalty program balances and special promotional offers, and social media and interactive gaming tie-ins. In our view, embracing mobile technology is an important step for traditional retailers, as we believe those that find ways to engage customers across multiple channels will be the best positioned to compete with e-commerce over the long haul.

Industrials – Largely speaking, most macroeconomic indicators were positive for industrials in 2013, we expect housing and auto demand to continue to drive recovery though at a more modest pace than in 2013. However, most of the industry, aside from select automakers, appears to be fairly valued. November industrial production increased 1.1 percent sequentially and 3.2 percent year over year, representing the largest sequential jump since November 2012 (up 1.3 percent). This gap upward is more in line with the recent persistently optimistic sentiment metrics, like the U.S. ISM Purchasing Manager Index. Moreover, industrial production improved in most categories. Sentiment indicators outside the United States remain in positive territory. The Eurozone manufacturing recovery appears to be continuing, for the Markit Flash Eurozone Manufacturing PMI December data reached a 31-month high of 52.7 (versus 51.6 in November). New orders and output lifted the index as both showed their highest readings since spring 2011. Growth is uneven across the Eurozone. The China Flash Manufacturing PMI (based on 85 percent-90 percent of final data points) was modestly lower sequentially and barely above 50 (50.5 December reading versus 50.8 in November).

In housing, recent quarterly results from the homebuilders indicate that the demand response to higher mortgage interest rates was significant. Toll Brothers' net new order growth decelerated from 49 percent in the January quarter to 36 percent in the quarter ending in April, 26 percent by July quarter-end, and just 6 percent growth in the October-ending quarter. However, the housing recovery has not been derailed; industry orders should rebound as the sticker shock effect wears off and interest rates stabilize. While many macroeconomic indicators look positive we see a relatively small pool of undervalued firms in the industrials space, mainly in select automakers.

Consumer Defensive – The year started strong for the consumer defensive sector, based on investors' quest for yield and optimism for merger and acquisitions fueled by Berkshire Hathaway's acquisition of H.J. Heinz. However, as the Federal Reserve hinted at tapering quantitative easing, the market saw a new opportunity for yield, and consumer defensive shares traded down. While we find that consumer defensive names are trading at roughly fair value, we continue to believe there are pockets of value in the space, since roughly two thirds of the 100 or so consumer defensive companies that Morningstar covers have either a wide or narrow economic moat.

Consumers have continued to trade down to lower-priced options in some household categories (like cleaning products, food storage, and laundry detergent), but personal-care

offerings generally have held up fairly well. However, the competitive landscape remains fierce. In our opinion, promotional spending isn't a sustainable or profitable strategy over the long run, but rather product innovation ultimately will drive long-term, profitable growth.

Real Estate – Real estate appears to have ended 2013 on a pause. Home prices had been going up faster and faster each month; now those month-to-month growth rates have begun to slow. Home prices closed out 2013 with December to December increases of about 13.6 percent, with most of the bigger gains happening earlier in the year. Therefore, next year's growth is likely to slow, perhaps as low as a 5 percent growth rate.

Existing home sales had a huge spike over the summer as buyers rushed to beat interest-rate increases. Existing home sales got as high as 5.4 million units on a seasonally adjusted, annualized rate in July, then fell 10 percent to 4.9 million units in November. Even housing starts are nothing to write home about (when looking at three-month-averaged data). The final starts number for all of 2013 is likely to come in at just 925,000, well below most forecasts for a million or more, as momentum in the early part of the year died over the summer.

Utilities – Utilities investors rode more ups and downs in 2013 than they have in many years while they watched the market steadily climb past them. With a 12 percent total return in 2013 through mid-December, utilities returned less than half what the S&P 500 has and trailed every sector except real estate. Still, the sector's 12 percent return was above its 8 percent average annual return during the past decade, and it showed the sector's total-return staying power regardless of interest-rate sentiment. We continue to think a dip on market fears about rising interest rates offers an opportunity for long-term investors to pick up high-quality utilities that offer steady, positive total returns.

Adding to the sector's attractiveness going into 2014 is its average 4 percent dividend yield, nearly double the average S&P 500 dividend yield and more than 1 percentage point higher than 10-year U.S. Treasuries. Our analysis of returns going back 20 years suggests that 10-year U.S. Treasuries could climb to 4 percent from 3 percent today, with little impact on utilities' total returns. We think utilities with 3 percent to 5 percent earnings growth prospects during the next few years offer a compelling risk-adjusted total-return package for any investor.

Results of 2013 Capital Markets

Large Company Stocks – The market for U.S. large company stocks is represented here by the total return on the S&P 500 (the total return includes reinvestment of dividends). Large company stocks for the year produced a total return of 32.39 percent up from 16.00 percent return of 2012. Ten of the twelve months of 2013 produced positive returns. The month of January produced the highest return at 5.18 percent, while the month of August produced the lowest return at -2.90 percent.

An index of large company stock total returns, initialized at \$1.00 on December 31, 1925, closed up from the previous year. The index increased to \$4,676.88 by the end of 2013, compared with \$3,532.56 a year earlier.

Small Company Stocks – Small company stocks produced a total return of 45.07 percent in 2013. Ten of the twelve months of 2013 produced positive returns. The month of August

produced the lowest return at -3.48 percent while the month of June produced the highest return at 7.41 percent.

The cumulative wealth index, initialized at \$1.00 at the end of 1925, increased to \$26,641.17 at the end of 2013, compared with \$18,364.60 at the end of 2012.

Long-Term Corporate Bonds – Long-term corporate bonds (with maturity near 20 years) posted a total return of -7.07 percent in 2013. Total returns were positive in six of the twelve months during the year with April having the highest return of 3.49 percent while May had the lowest return of -5.36.

The bond default premium, or net return from investing in long-term corporate bonds rather than long-term government bonds of equal maturity, was 4.83 percent in 2013, compared with 7.13 percent in 2012. One dollar invested in long-term corporate bonds at year-end 1925 decreased to \$161.80 by the end of 2013, compared with \$174.12 at the end of 2012.

Long-Term Government Bonds – Long-term government bonds (with maturity near 20 years) returned -11.36 percent in 2013. This return was significantly lower than the 3.31 percent return seen in 2012 and much lower than the long-term average return (1926-2013) of 5.5 percent. Eight of the months produced negative returns with May at the lowest return of -5.77 percent, and April having the highest with return of 4.45 percent.

A wealth index of long-term government bonds, initialized at \$1.00 at year-end 1925, increased to \$109.14 by December 2013. The capital appreciation index of long-term government bond returns closed at \$1.19 at year's end, down from \$1.40 in 2012. This index reached its all-time high of \$1.43 in early 1946.

Intermediate-Term Government Bonds – The total return on intermediate-term government bonds (with maturity near 5 years) in 2013 was -1.07 percent. This return was lower than the 2.07 percent return for 2012. The 2013 return was lower than the long-term average return (1926-2013) of 5.3 percent. Returns were positive for five months of the year with February having the highest return of 1.63 percent while May had the lowest return of -1.64 percent.

The wealth index of intermediate-term government bonds, initialized at \$1.00 at year-end 1925, decreased to \$92.98 at the end of 2013, down from \$93.99 at year-end 2012.

Treasury Bills – An investment in bills with approximately 30 days to maturity returned 0.02 percent in 2013, less than the return in 2012 of 0.06 percent and below the long-term average (1926-2013) of 3.5 percent. The cumulative index of Treasury bill total returns ended the year at \$20.58, compared with \$20.57 a year earlier. Because monthly Treasury bill returns are nearly always positive, each monthly index value typically sets a new all-time high.

Inflation – Inflation decreased to 1.50 percent in 2013, compared to 1.74 percent in 2012. The result is lower than the long-term historical average (1926-2013) of 3.0 percent. Inflation has remained below 5 percent for 31 of the last 32 years (the exception was the 6.11 percent rate seen in 1990).

A cumulative inflation index, initialized at \$1.00 at year-end 1925, finished 2013 at \$13.00, up from \$12.81 at year-end 2012. That is, a "basket" of consumer goods and services that cost \$1.00 in 1925 would cost \$13.00 today. The two baskets are not identical, but are intended to be.

THE NATIONAL ECONOMIC REPORT

***Note:** The following is the July 2014 National Economic Report. It is based upon KeyValueData™'s review of current economic statistics, articles in the financial press and economic reviews from current business periodicals. The purpose of the review is to provide a representative "consensus" on the condition of the national economy and its general outlook. This report is being provided for informational purposes only.*

During July 2014, the U.S. economy showed renewed signs of strength. Most notably, the gross domestic product (GDP), which had contracted at an annualized 2.1% rate during the first quarter, strongly rebounded in the second quarter. Overall, the economy grew at a seasonally adjusted annualized pace of 4.0% during the quarter. The first quarter's 2.1% GDP decline (upwardly revised from an earlier estimate of a 2.9% decline) previously had been the steepest drop in quarterly GDP since the depths of the last recession. For all of 2013, growth was a modest 1.9%, down from 2.8% in 2012. The job market also continued to gain momentum. The economy added 209,000 jobs in July—the 23rd straight monthly improvement in the country's overall number of jobs, as well as the sixth straight month in which employers had added more than 200,000 jobs, something that has not happened in 14 years. However, the unemployment rate, which had fallen from 6.3% in May to 6.1% in June, edged back up to 6.2% in July.

Other concerns remain. The Federal budget deficit continues to grow, climbing to nearly \$17.7 trillion in August. And despite a decline in the budget deficit for FY 2013 to \$680.3 billion from the prior year's \$1.09 trillion, both Federal spending and Federal tax revenues continued to hit all-time highs. In other areas, on the positive side, stocks once again posted new records in August, industrial production and manufacturing activity both increased, productivity turned around sharply to reach positive growth, auto sales surged, existing-home sales hit their highest level in 10 months, consumer confidence increased, and gasoline prices fell. On the negative side, new-home sales were down, consumer spending fell, retail sales were flat, and food prices continued upward.

1. THE ECONOMY

Economic growth rebounds in the second quarter. The U.S. gross domestic product (GDP), which had contracted at an annualized 2.1% rate during the first quarter, strongly rebounded in the second quarter. Overall, the economy grew at a seasonally adjusted annualized pace of 4.0% during the quarter, according to the U.S. Commerce Department's initial estimate for growth during April, May, and June, released on July 30. The 4.0% growth rate, which surpassed market expectations, demonstrated that the U.S. economy was "shaking off the negative effects of an unusually harsh winter and stirring hopes that it might finally be establishing a solid enough footing to put the lingering effects of the recession squarely in the past," in the words of The New York Times. The first quarter's 2.1% GDP decline (upwardly revised from an earlier estimate of a 2.9% decline) previously had been the steepest drop in quarterly GDP since the depths of the last recession and had marked the biggest downward revision in the second estimate of quarterly GDP growth since records were first kept in 1976. Prior to the first quarter, the economy had grown by 4.5% during Q3 2013 and by 3.5% in Q4 2013. For all of 2013, the economy grew

at a rate of 2.2%, down slightly from a 2.3% growth rate in 2012. (Note: these figures differ from those reported in the past due to a significant revision in the way that the government calculates U.S. economic activity.)

Recession less severe than first reported. In revised economic numbers released on July 31, the U.S. Bureau of Economic Analysis reported that the Great Recession that ended in 2009 was less severe than first reported, with cumulative real GDP falling by 4.3% versus the originally estimated 4.7%. In addition, since 2009, real GDP had grown by a cumulative 8.5% as compared to the previous estimate of 8.1% growth.

America is on the wrong track. According an August 17 Rasmussen Reports poll, just 24% of likely U.S. voters think that the United States is headed in the right direction (down from 25% on July 16), as compared with 69% saying that the United States is on the wrong track (up from 67% on July 16). These figures represent the most unfavorable right direction/wrong track numbers this year.

Political approvals headed downward. The results from the most recent NBC News/Wall Street Journal are not favorable for the nation's political leaders. As the NBC News report summarizes, "Two words sum up the mood of the nation: Fed up. Six in 10 Americans are dissatisfied with the state of the U.S. economy, [nearly] 70% believe the country is headed in the wrong direction, and nearly 80% are down on the country's political system... The frustration carries over to the nation's political leaders, with President Barack Obama's overall approval rating hitting a new low at 40%, and a mere 14% of the public giving Congress a thumbs up." For Mr. Obama himself, an August 28 Gallup poll reported that the number of those "strongly disapproving" of his performance as president is now double the number of those "strongly approving."

Election forecasts favor Republicans. A Washington Post–ABC News Poll, released on March 3, showed Republicans "in a stronger position in the states with Senate races this fall and more than holding their own in the battle for control of the House." In the 34 states with Senate contests, for instance, 50% of voters said they favored Republicans while just 42% favored Democrats. A follow-up Washington Post-ABC News poll released on April 28 revealed that a majority of voters now say that they prefer a Congress in Republican hands in order to check the president's agenda. As a May 5 Pew Research-USA Today poll corroborates, "The Republican Party is at its strongest point in two decades heading into midterm elections" registering even stronger "than in previous 'wave' elections in 1994 and 2010, and looks poised to make major gains—and possibly take control of the U.S. Senate."

Federal government viewed unfavorably. A Gallup poll released on October 10 showed American's satisfaction with the U.S. government dropping to a new low of 18%, with dissatisfaction rates soaring to 81%. Another Gallup poll published on January 23 said that two-thirds of Americans thought the Federal government was too big and powerful and were dissatisfied with how government was working. Finally, an August 8 CNN/ORC International poll found that just 13% of Americans said that the government can be trusted to do what is right always or most of the time—another all-time low.

Fed sharply cuts economic growth forecast. The U.S. Federal Reserve, on June 18, sharply lowered its forecast for the growth of the U.S. economy. The Fed's projection for 2014 is for GDP growth of from 2.1% to 2.3%, down significantly from the forecast of 2.8% to 3.0% growth in its March estimates. The Fed's projection for 2015 is for growth of from 3.0% to 3.2%, and for 2016 for growth of from 2.5% to 3.0%.

Fed Bank president predicts interest-rate rise. Federal Reserve Bank of St. Louis President James Bullard on June 26 predicted that the U.S. Federal Reserve would begin raising interest rates during the first quarter of 2015—sooner than most of his colleagues think—as unemployment falls and inflation starts to pick up. Supporting this forecast, the London Daily Telegraph reported on July 16 that “the U.S. Federal Reserve has begun to pivot. Monetary tightening is coming sooner than the world expected...”

Fed dissenters increasingly vocal about stimulus. According to an August 20 report in The New York Times, an increasingly vocal majority of Federal Reserve officials want the central bank to retreat more quickly from its stimulus campaign, arguing that the bank has largely exhausted its ability to improve economic conditions.

Fed official warms of coming growth challenges. On August 11, Stanley Fischer, the vice chairman of the Federal Reserve, acknowledged that global growth had been “disappointing” and warned of fundamental headwinds that might temper future gains.

China poised to pass U.S. as world's leading economic power. “The U.S. is on the brink of losing its status as the world's largest economy, and is likely to slip behind China this year, sooner than widely anticipated,” according to an April 30 analysis by the International Comparison Program of the World Bank, the most authoritative source of estimates on what money can buy in different countries, the Financial Times reported.

2. EMPLOYMENT

Job levels up strongly again in July. The U.S. economy added 209,000 jobs in July, the U.S. Bureau of Labor Statistics reported on August 1. The new figures represented the 23rd straight monthly improvement in the economy's overall number of jobs, as well as the sixth straight month in which employers had added more than 200,000 jobs—something that has not happened in 14 years. Industries with the strongest hiring were professional and business services, as well as manufacturing and construction. These results dovetailed with a private estimate of job growth, published a few days previously by the human-resources firm ADP, which showed a broad-based improvement in the labor market. Previously, in May, the U.S. job market had reached a watershed goal, having finally recaptured all of the jobs lost since the recession hit in late 2007. Nevertheless, while payroll levels are now back to where they were nearly seven years ago, the working-age population has risen by 15 million over that time, meaning that job growth has fallen far short of the growth of the working-age population.

Unemployment rate edges back up to 6.2%. After holding at 6.7% in February and March and then diving to 6.3% in April and May—its lowest level since September 2008—the U.S. unemployment rate dipped further to 6.1% in June. However, in July, the rate edged back up

to 6.2%, the U.S. Labor Department said on August 1. Still, even this figure represents a significant drop from the 7.0% rate reported just last November.

Long-term unemployment stable. According to an August 1 report from the U.S. Department of Labor, the number of long-term unemployed individuals (those jobless for 27 weeks or more) was essentially unchanged at 3.2 million in July.

Underemployment edges back up. The U.S. underemployment (U-6) rate—defined as unemployed individuals plus part-time workers who would prefer to be working full-time—fell from 14.4% in December 2012 to 12.1% in June 2014. Thereafter, the rate ticked back up to 12.2% in July, the U.S. Department of Labor said on August 1.

New jobless claims fall for second week. The number of Americans filing new claims for unemployment benefits fell for a second straight week during mid-August, underscoring the strengthening labor market fundamentals, analysts said. Initial claims for state unemployment benefits slipped by 1,000 to a seasonally adjusted 298,000 for the week ended August 23, the Labor Department reported on August 28.

Labor force participation edges up. After hitting a 34-year low of 62.8% in May and June—the lowest level since February 1978—the U.S. labor force participation rate edged up to 62.9% in July, the U.S. Bureau of Labor Statistics reported on August 1. The last time the labor force participation rate was above 66%—the 10-year average—was more than five years ago, in August 2008. Altogether, the U.S. Labor Department says, a new high of just under 92 million Americans 16 and older are now not in the labor force, as compared with 80.5 million who were out of the labor force five years ago. As a result, the Labor Department says, no one now works in 20% of U.S. families.

Millions have left the workforce. According to data released by the U.S. Bureau of Labor Statistics on August 1, a total of 11,472,000 Americans have left the workforce since January 2009.

Temp work becoming a way of life. According to an April 24 CNBC report, “For Americans who can’t find jobs, the booming demand for temp workers has been a path out of unemployment, but now many fear it’s a dead-end route. With full-time work hard to find, these workers have built temping into a de facto career, minus vacation, sick days, or insurance.” Altogether, some 2.8 million people—or more than 2% of the U.S. work force—are employed in temporary jobs.

Women’s unemployment jumps back up. After edging back up to 6.2% in March, the unemployment rate for women aged 20 and above fell sharply to 5.7% in April—the figure’s lowest level in more than a year—and then further to 5.3% in June. Thereafter, the rate jumped back up to 5.7% in July.

African-American jobless rate rises again. The unemployment rate for African Americans aged 20 and above fell from 13.7% in June 2013 to 10.7% in June 2014. Subsequently, the rate jumped back to 11.4% in July.

Teen unemployment slips back. The teen (aged 16 to 19) unemployment rate fell from 20.9% in March to 19.1% in April—the first time the rate has dipped below 20% since October

2008. Thereafter, the rate edged back up above 20%, to 21.0%, in June before falling back to 20.2% in July. At the same time, the unemployment rate for African American teens (aged 16 to 19), which had risen from 31.1% in May to 33.4% in June, continued upward to 34.9% in July. Similarly, a June 2 analysis by the Employment Policy Institute showed that unemployment among teens without a high school diploma was more than 50% in some large U.S. urban areas.

Average workweek climbs. According to The Washington Examiner, “the old ‘9 to 5’ work week is becoming about as obsolete as the American Dream,” with an August 29 Gallup poll finding that economically-stressed Americans are now working an average of 47 hours, with a growing number clocking 60 hours or more.

New jobs went to immigrants. According to a report from the Center for Immigration Studies, released on June 26, net employment growth in the United States since 2000 has gone entirely to immigrants—legal and illegal. Overall, in fact, there were 127,000 fewer working-age natives holding a job in the first quarter of 2014 than in 2000, while the number of immigrants with a job in 2014 was 5.7 million above the 2000 level.

Fed foresees continuing improvement in unemployment rate. In its most recent formal assessment, released on June 18, the U.S. Federal Reserve projected that the U.S. unemployment rate would range between 6.0% and 6.1% by year-end 2014, down slightly from its March forecast of from 6.1% to 6.3% unemployment and well below its December forecast of from 6.3% and 6.6%. Thereafter, jobless-rate projections for 2015 were between 5.4% and 5.7% and, for 2016, between 5.2% and 5.6%.

Jobs recovery three to four years away. Each month, the Hamilton Project, a Washington, D.C., based research initiative under the aegis of The Brookings Institution, examines the so-called “jobs gap”—the number of jobs that the U.S. economy needs to create in order to return to pre-recession employment levels. According to the Project, by the end of July 2014, the country faced a jobs gap of 5.7 million jobs. If the economy added 176,000 jobs per month—the average monthly number of new jobs since the recovery began in March 2010—the jobs gap would not close until June 2018. Given a more optimistic rate of 214,000 new jobs per month—the average over the past 12 months—the economy would reach pre-recession job levels by August 2017.

3. FEDERAL BUDGET & TAXES

Budget deficit dips to five-year low. After topping \$1 trillion for each of the past four years, the Federal budget deficit fell sharply to \$680.3 billion for the 12 months ending September 30 (FY 2013), far and away the narrowest budget gap since 2008, the U.S. Treasury Department reported on October 30. In comparison, the Federal budget shortfall was \$1.09 trillion in FY 2012.

U.S. national debt heads toward \$17.7 trillion. After being artificially held down for five months, the U.S. Federal debt on October 17 soared past \$17 trillion for the first time ever. Thereafter, the national debt continued its upward climb and, as of August 29, stood at \$17.69 trillion, up from just over \$17.6 trillion on July 28 and from \$17.5 trillion on June 23. Overall, the Federal debt has increased by \$7.06 trillion since January 2009.

Debt up \$2.7 trillion under Boehner debt-limit deals. Republicans often attempt to portray themselves as guardians of the Federal debt, but that doesn't appear to have been the case in recent years. According to the conservative news outlet CNSNews.com, U.S. debt has increased by \$2.678 trillion in the two and one-half years since House Speaker John Boehner (R-Ohio) completed his first deal to put legislation increasing the debt limit through the GOP-controlled House of Representatives. In the same way, the Republican-leaning Washington Times wrote on August 5: "After initial success in cutting Federal spending and reducing deficits, House Republicans have drifted into the red with a series of tax measures and spending bills that are not offset—either adding to the pile of debt or hiding the costs with accounting gimmicks.

Debt to go up still further. Under the budget he presented to Congress in March, President Obama would add \$7.2 trillion dollars to the national debt—nearly a 50% increase—over the 2015 to 2024 decade. And despite the highest sustained tax rates in U.S. history, the federal government still would run a deficit every year, the U.S. Congressional Budget Office (CBO) projects.

U.S. faces huge long-term "fiscal gap." According to an estimate by Boston University economics professor Larry Kotlikoff that has been endorsed by twelve winners of the Nobel Prize in economics, the U.S. Federal government faces a long-term "fiscal gap"—the difference between projected future expenditures and receipts—of about \$200 trillion. The economists, both conservatives and liberals, have endorsed a bill to require the government to publish an official annual calculation of the long-term fiscal gap.

Unfunded liabilities reach \$1.1 million per taxpayer. According to the U.S. Debt Clock, as of December 26, total long-term unfunded liabilities in the United States are now \$127.1 trillion, or an average of a \$1.1 million tax liability for each U.S. taxpayer.

"Unlimited" debt increase approved. The U.S. Congress, on February 12, approved an essentially unlimited, though temporary, increase in the Federal debt. The measure won approval only after Republican House and Senate leaders joined with nearly-united Democrats to pass a plan that will allow President Obama to borrow as much money as desired to cover Federal obligations over the next 13 months.

U.S. investment outflow hits record. The U.S. posted a record cross-border investment outflow in June as China and Japan reduced their holdings of Treasuries and private investors abroad sold bonds and notes.

Congress approves \$1 trillion spending bill. The U.S. Senate on January 16 approved on a bipartisan 72-26 vote what USA Today called "a sweeping spending bill" to fund the Federal government through September and eliminate the threat of another government shutdown during that time. The \$1.012 trillion spending package, endorsed overwhelmingly by the U.S. House one day earlier, was subsequently signed into law by President Obama prior to the current stopgap's bill's expiration on January 18.

Federal spending sets all-time record. According to the U.S. Department of the Treasury, Federal spending hit an all-time record in FY 2013, which ended on September 30. Spending for the period came in at \$3.49 trillion, the Department noted.

Federal tax revenues set record. The Federal government took in a record of more than \$2.87 trillion in taxes during Fiscal Year 2013, which ended on September 30, according to the U.S. Treasury Department. Then, for the first 10 months of FY 2014, revenues again hit a record of \$2.47 trillion, according to the August Monthly Treasury Statement. Yet the government still ran a \$460 billion budget deficit during that time.

Tax rates on wealthy at historic highs. According to the Tax Policy Center, a Washington, D.C., research group, the top 1% of U.S. households (incomes averaging \$1.4 million) will pay an average tax rate of 35.5% this year—among the highest recorded since the Congressional Budget Office started reporting such data in 1979.

Corporate tax avoidance doubles. According to an April 8 Reuters report, foreign profits held overseas by U.S. corporations to avoid taxes in the United States nearly doubled from 2008 to 2013 to top \$2.1 trillion, a report by Audit Analytics said, prompting U.S. Senate Finance Committee Chairman Ron Wyden (D-Ore.) to call for reform.

Regulatory burden increases by nearly half a trillion dollars. According to a September 19 analysis from the American Action Forum, the burden of new regulations promulgated in the last four years has topped \$488 billion, including \$70 billion in added costs during 2012. Likewise, according to a September 20 report by the Competitive Enterprise Institute, a Washington, D.C., based research center, current Federal regulations plus those emerging under Obamacare will cost American taxpayers \$1.8 trillion annually, more than 20 times the \$88 billion the administration had estimated.

Federal government sets regulatory record. The Federal government set an all-time record for the volume of regulations promulgated during 2013. In all, the government issued 3,659 final rules consuming 26,417 pages in the Federal Register, according to an annual tally by Wayne Crews of the Competitive Enterprise Institute. Another 2,594 rules are on the way to becoming final, while 3,305 regulations are moving through the pipeline. Mr. Crews estimates that these regulations cost U.S. households an average of \$14,974 a year, equivalent to a tax increase of 23% on N average income of \$65,596.

4. FINANCIAL MARKETS

Bank failure rates down. After climbing in 2010 to the highest rates in nearly 30 years—a total of 157 bank failures—bank failure rates were down considerably in 2011, when a total of 92 banks failed. For 2012, bank failures plummeted to 51. In 2013, just 24 banks failed. Through July 25, just 14 banks had failed in 2014.

Banks ordered to raise capital levels. After Citibank failed to meet federal “stress tests,” the U.S. Federal Reserve on April 8 ordered the eight largest “too big to fail” banks to raise capital levels from the current 3.0% to 5.0% in order to address emerging market weaknesses of the type seen during the 2008 financial crisis.

Stocks hit new records in August. The Dow-Jones Industrials Average, which was 17,100.18 on July 18, slipped to 16,838.74 on August 18. By contrast, the S&P 500, which had registered at 1,978.22 on July 18, was down only slightly to 1,971.74 on August 18, but crossed 2,000 for the first time ever on August 25 and closed at 2,000.02 on August 26—an all-time record.

And the NAQDAQ Composite, which was 4,432.15 on July 18, rose to 4,508.31 on August 18—a 14-year high.

Markets may be poised for a steep fall. U.S. stock markets could soon face a drop of up to 60%, two market experts told CNBC on August 27. The crash will be initiated, one of the experts—David Tice of Tice Capital—said, by a disillusionment with the Federal Reserve’s “confidence game,” which will then see inflation rise, and the Fed scrambles to raise rates. At that point, Tice noted, “the Fed starts to lose control.”

5. INDUSTRIAL PERFORMANCE

Industrial production up in July. After rising by 0.6% in May and by an upwardly revised 0.4% in June, U.S. industrial production increased again in July, offering what The Wall Street Journal called “a sign that the economy carried momentum into the second half of the year.” In all, the output of factories, mines, and utilities rose by 0.4% from June’s level, the Federal Reserve said on August 15. Manufacturing output climbed by 10%, with a boost in vehicle production driving the increase. Capacity utilization—a measure of slackness across industries—rose by a tenth of a point to 79.2%

Manufacturing sector expands again in July. Economic activity in the U.S. manufacturing sector expanded in July for the 14th consecutive month, according to an August 1 report from the Tempe-based Institute for Supply Management (ISM), a private trade group. The group’s index of manufacturing jumped from 55.3% in June to 57.1 in July. Readings above 50 indicates expansion, while those below 50 signify contraction.

Manufacturing sector expected to grow in 2014. On May 6, the Tempe-based Institute for Supply Management (ISM) released its Semiannual Economic Forecast, projecting that the U.S. manufacturing sector would continue to grow throughout the remainder of 2014. The ISM’s panel of purchasing and supply executives forecast a 5.3% net increase in manufacturing revenues for 2014—appreciably higher than the 4.4% jump forecast on December 10. Capital expenditures—a major driver in overall U.S. economic growth—were projected in the new estimate to increase by 10.3% in 2014 versus the previous projection of 8.0% growth in capital expenditures for 2014.

New factory orders climb back in June. After falling by a downwardly revised 0.6% in May following three monthly increases, new orders for U.S. factory goods rose by a solid 1.1% in May, beating economists’ expectations of a 0.6% increase, the U.S. Commerce Department reported on August 5.

Durable goods orders soar by a record 23% in July. After climbing by an upwardly revised 2.7% in June (up from an originally reported 0.7% increase), new U.S. durable goods orders soared by 23% in July—the biggest monthly increase on record—the U.S. Commerce Department reported on August 26. The gain far outpaced economists’ forecasts for a 7.5% advance.

Productivity rebounds in second quarter. The productivity of U.S. workers rose by more than projected in the second quarter, rebounding from the biggest drop in productivity in more than three decades. Specifically, the measure of employee output per hour increased at an

annualized 2.5% rate following a downwardly revised 4.5% drop in the measure in the first quarter. The median forecast in a Bloomberg survey of 57 economists had called for a 1.6% advance. Previously, productivity climbed by a modest 0.5% in 2013, down from a 1.5% increase in 2012.

6. KEY SECTORS

U.S. auto sales surge in July. U.S. auto demand roared ahead in July thanks to healthy summer sales incentives, with top auto makers posting near double-digit increases over last year on top of significant gains in previous months. In all, car makers sold 1.435 million vehicles in the U.S. last month, up 9.1% from a year earlier and lifting the seasonally-adjusted annualized selling rate to 16.48 million, from 15.76 million vehicles in 2013, according to researcher Autodata Corp.

Courts split on Obamacare subsidies. In a split decision, two Federal appeals courts disagreed in opinions released on July 22, with one court ruling that Federal subsidies provided to 4.7 million individuals under Obamacare (as opposed to subsidies provided by state exchanges) were illegal. Subsequently, a second court found that the subsidies were legal. The contradictory decisions make it likely that the cases will soon land before the U.S. Supreme Court. For now, the subsidies remain in effect.

President announces 7.1 million Obamacare signups. President Obama, on April 1, took what some in the news media called “a victory lap” in announcing that 7.1 million Americans had signed up for Obamacare—exceeding the administration’s 7 million target that analysts had said was necessary in order for the law’s health exchanges to remain financially solvent. The administration reported that more than 1 million people signed up for an Obamacare health plan on the last day of eligibility this year. “The debate over repealing this law is over,” the President declared.

Only a minority of uninsured now covered. According to an analysis by Robert Laszewski of Health Policy Associates, only about one in four subsidy-eligible people signed up for health insurance under Obamacare, leaving 13 million subsidy-eligible people uninsured. Another report—by DailySignal.com—released on June 24, found that just 3.4 million of the 38 million previously uninsured people (9%) now had insurance.

Health-insurance market closed down. In a planned development that heretofore has received little public attention, news reports on April 9 revealed that, from now until the next open enrollment period at the start of 2015, most people—absent a very limited number of “qualifying events”—will simply not be able to buy any health insurance at all, even outside the Obamacare exchanges. “It’s all closed down,” John DiVito, president of 2,500-broker-strong Flexbenefit, told Fox News. “You cannot buy a policy that is a qualified policy for the purpose of the ACA until next year on January 1.”

Quality of care expected to suffer. In an April 7 Rasmussen Reports poll, 53% of likely U.S. voters said they believed that the quality of health care would worsen under Obamacare—up six points (from 47%) over month-ago levels and the highest since March 2011. Just 24% expected the quality of health care to improve under the law.

New health premiums up by triple-digits for some businesses. “The Affordable Care Act’s employer-coverage mandate doesn’t take effect until 2015, but early plan renewals are

starting to roll in,” according to a May 4 report in the Las Vegas Review-Journal. “For some businesses,” the newspaper notes, “the premium jumps are positively painful. Local insurance brokers are reporting spikes ranging from 35% to 120% on policies that renew from July to December. The increases are especially acute among employers with workforces made up of younger, healthier men.”

Public blaming Obamacare for rate hikes. According a September 26 CNBC All-America Economic Survey, nearly one in five Americans believes their health insurance costs have gone up because of Obamacare. Although Republicans are most likely to hold this belief, 20% of independents and 11% of Democrats also do. In addition, in a November 9 ABC News poll, 56% of respondents blamed the cancellation of health insurance policies on “mismanagement” rather than normal startup problems. In addition, by a 2-to-1 margin, respondents in a January 8 Bankrate.com poll said that Obamacare had a negative vs. a positive impact on their own health care.

Americans continue to be opposed to Obamacare. According to an April 7 Rasmussen Reports poll, 43% of respondents said they had a “very unfavorable” opinion of the Affordable Care Act (up 2 points since March) while just 16 percent had a “very favorable” opinion. When other favorable and unfavorable answers were added in, 58% of respondents said they viewed the law unfavorably (just shy of the high of 58% in November 2013), while 39% viewed the health-care law favorably. Support was even lower in a March 28 AP-GfK survey, in which just 26% of voters approved of the law.

Americans report having been hurt by Obamacare. According to a March 3 Rasmussen Reports Survey, 33% of Americans said that the Affordable Care Act (ACA) had had a negative effect on them personally—up from 29% in January—while 14% said the law had helped them—down from 16% in January. Separately, in a July 23 CNN poll, only 18% of Americans—or fewer than 1 in 5—said they or someone in their family was better off because of the ACA. Nearly twice that number—35%—said that they or someone in their family was worse off. Some 46% said they are about the same. In addition, in nearly all demographic categories—age, income, education, etc.—more people said they were worse off because of Obamacare than said they were better off. This was even true among families earning less than \$50,000 per year (35% to 21% negative)—the main intended beneficiaries of Obamacare.

CBO says Obamacare will push 2 million workers out of the labor market. A February 4 study by the U.S. Congressional Budget Office concluded that Obamacare would push the equivalent of about 2 million workers out of the labor market by 2017 as employees decided either to work fewer hours or to drop out of the labor market altogether, The Washington Times reported. Likewise, a prominent union official representing 300,000 low-wage hospitality workers contended on March 9 that Obamacare would cut wages by up to \$5.00 an hour while increasing income inequality.

Businesses say Obamacare will add thousands of dollars per employee. Obamacare will cost large companies between \$4,800 and \$5,900 more per employee and add up to \$200 million to their administrative overhead, according to an April 2 survey of 100 large employers by the American Health Policy Institute.

New-home sales down again in July. After falling in June by 8.1%, sales of newly built U.S. homes slipped in July by 2.4% to a seasonally adjusted annual rate of 412,000 units—the lowest level since March, the U.S. Commerce Department said on August 26. However, a Reuters report noted that “a surge in the stock of properties on the market and slower price gains should help stimulate demand in the months ahead.” On a year-over-year basis, sales were up in July by 12.3%.

Housing starts rebound strongly in July. Following steep drops of 7.3% in May and 9.3% in June, U.S. housing starts shot up by 15.7% in July, the U.S. Commerce Department said on August 19. The annualized rate of starts reached 1.096 million—the highest level in seven months. While the month-over-month gain is strong, the change from the prior year is even greater, with starts 21.7% higher than they were in July 2013.

Existing-home sales up strongly in July. Existing-home sales in the United States climbed in July for the fourth straight month, hitting their highest level in 10 months. Overall, sales rose by 2.4% in July after having climbed by 2.6% June, reaching a seasonally adjusted annual rate of 5.15 million, the National Association of Realtors reported on August 21. Still, existing-home sales continue to trail last year’s levels, with sales down by 4.3% vs. last July. Notably, fewer sales came from short sales of underwater homes and foreclosures, with such sales accounting for just 9% of totals—the lowest level since the peak of the U.S. financial crisis in October 2008.

Housing prices up in June but below double digits. The Standard & Poor’s/Case-Shiller National Home Price index gained 6.2% in the 12 months ending June 2014, while the 10-City and 20-City Composites gained 8.1%—a dramatic shift from the double-digit price increases that had become common over the last year.

Home-ownership rate hits 19-year low. Following a decline to 65.2% in the fourth quarter of 2013, the U.S. home-ownership rate fell further to 64.8% during the first quarter of 2014—the lowest level since the second-quarter 1995 rate of 64.7%—the U.S. Census Bureau reported on April 29. Thereafter, the Census Bureau says, the home-ownership rate slipped to 64.7% in the second quarter, tying the 1995 rate.

U.S. foreclosure filings edge back up in July. After falling by 1% in April, by 5% in May, and by 2% in June, foreclosure filings on U.S. homes edged back up by 2% in July (although they were down by 16% over a year ago), according to an August 12 report from RealtyTrac, the leading online marketplace for real-estate foreclosure data.

7. CONSUMERS

Consumer confidence rises again in August. The Conference Board Consumer Confidence Index, which had increased in July, improved again in August. The Index now stands at 92.4 (1985=100), up from a revised 90.3 in July. The Present Situation Index increased to 94.6 from 87.9 in July, while the Expectations Index slipped to 90.9 from 91.9 in July. Said Lynn Franco, Director of Economic Indicators at The Conference Board: “Consumer confidence increased for the fourth consecutive month as improving business conditions and robust job growth helped boost consumers’ spirits. Looking ahead, consumers were marginally less optimistic about

the short-term outlook compared to July, primarily due to concerns about their earnings. Overall, however, they remain quite positive about the short-term outlooks for the economy and labor market.”

Thomson Reuters index rebounds in August. After declining in each of May, June, and July, the Thomson Reuters/University of Michigan Index of Consumer Sentiment rebounded in August. The index increased from 81.8 in July to 82.5 in August, reaching the measure’s highest level since July 2007.

Bloomberg consumer index stable through August. After hitting its second highest level of the year—37.6—during the third week of July, the Bloomberg Consumer Comfort Index held roughly stable over the ensuing month, bouncing back to 37.3 during the week ended August 24 from 36.6 during the prior period.

Economic optimism falls in August. After slipping in July, the Investor’s Business Daily/TIPP Economic Optimism Index fell again in August, declining to 44.5 from 45.6 the previous month.

Personal incomes rise again in July. After climbing by an upwardly revised 0.5% in each of May and June, U.S. personal incomes rose by another 0.2% in July, the U.S. Commerce Department reported.

U.S. poverty rate higher than originally thought. U.S. Census Bureau data released on September 17 indicated that a record 46.5 million Americans were living in poverty. However, on November 6, the Census Bureau published new unofficial numbers (that do not, however, replace the lower “official” count) showing that 49.7 million Americans—or one in six Americans—are now in poverty due largely to out-of-pocket medical costs and work-related expenses.

American middle class no longer the world’s wealthiest. According to an April 22 report in *The New York Times*, “The American middle class, long the most affluent in the world, has lost that distinction... After-tax middle-class incomes in Canada—substantially behind in 2000—now appear to be higher than in the United States.”

“American dream” becoming harder to achieve. A July 4 analysis by *USA Today* revealed that achieving the “American dream” would cost the average family of four about \$130,000 a year today. Only 16 million U.S. households—about 1 in 8—earned that much money in 2013, according to the U.S. Census Bureau.

America’s wealthy fading from tops in the world. According to a June 18 report in the *Financial Times* of London, “Asia is on the brink of overtaking North America as the largest wealth management market in the world,” as the number of millionaires worldwide grew by some 15% last year.

Income inequality grows due to recession and slow recovery. According to a study by researchers at the University of Michigan, released on June 25, the disparity between the wealthiest Americans and the rest of the country has grown because of the Great Recession and the slow recovery. According to the study, the top 5% of Americans, who had an average 16.5 times as much wealth as the median American family in 2007, had an average of 24 times as much wealth

as median families in 2013. New data from the U.S. Census Bureau, released on August 21, likewise revealed a 7% decline in average U.S. household wealth from 2000 to 2011, with the richest Americans actually gaining assets while the poorest Americans suffered losses.

Government payments increase sharply. The amount of money that the Federal government distributes in direct payments to individuals has risen by 32% over the last three years—an increase of nearly \$600 billion. The most recent Federal budget calls for another \$500 billion increase by 2016. Over the previous two years, the percentage of American families relying on some form of government payment has risen by 23%. In 2013 alone, the Federal government paid out more than \$2 trillion in benefits to Americans, according to the U.S. Treasury Department's August Treasury Statement.

Means-tested recipients outnumber full-time workers. According to a U.S. Census Bureau report released on August 20, there were 109.6 million people in the United States in the fourth quarter of 2012 who were recipients of one or more means-tested government benefit programs—a measure that excludes such non-means-tested programs as Social Security, Medicare, and unemployment benefits. That figure is one million higher than the 108.6 million recipients one year earlier.

Food stamp expenditures hit record high. During FY 2012, the U.S. government spent a record \$80.4 billion on food stamps, a \$2.7 billion increase over FY 2011 levels and nearly twice the levels of 2008, according to the U.S. Treasury Department. The U.S. Department of Agriculture (USDA) further reported on January 21 that a record 20% of Americans were on food stamps in 2013. And a report released on January 17 noted that the number of able-bodied recipients without dependents more than doubled from 1.7 million in FY 2007 to 3.9 million in FY 2010, largely because of the Obama Administration's waiving of the work requirement.

Disability beneficiaries total holds below 11 million. After topping 11 million in May, the total number of U.S. disability beneficiaries slipped to 10,971,450 in June and, further, to 10,913,450 in July, according to the U.S. Social Security Administration.

Consumer spending slips in July. U.S. personal consumption expenditures slipped by 0.1% in July after climbing by 0.3% in May and by another 0.4% in June, the U.S. Commerce Department reported. Economists had expected a 0.2% rise for July.

Self-reported daily consumer spending increases. After reaching a six-year high of \$98 in May, U.S. self-reported daily consumer spending fell back to \$91 in June before climbing back to \$94 in July, according to a an August 4 Gallup poll. The July 2014 figure was marginally above the \$89-a-day average in July 2013.

Consumer debt is soaring. According to Federal Reserve data, U.S. consumer credit has breached the \$3 trillion mark and, at \$3.04 trillion, is up by 22% over the previous three years. Aggregate student loan debt over the same period is up by 61%. Total household debt now stands at \$13 trillion, nearly back to its pre-crisis level of 2007.

Retail sales flat in July. After ticking up by 0.2% in June, seasonally adjusted U.S. retail sales were unchanged in July, according to an August 13 U.S. Commerce Department report.

8. INFLATION

Consumer prices rise by 0.1% in July. On a seasonally adjusted basis, the U.S. Consumer Price Index (CPI) for all goods increased by 0.1% in July after rising by 0.4% in May and by 0.3% in June. The index for all items less food and energy rose by 0.1% in July following gains of 0.3%

Producer prices climb by 0.1% in July. The Producer Price Index (PPI) for finished goods—often, a harbinger of future consumer price movements—rose by 0.1% in July after having fallen by 0.2% in May and having risen by 0.4% in June. With volatile food and energy prices excluded, producer prices rose by 0.3% in July after having fallen by a downwardly revised 0.2% in May and having increased by 0.1% in June.

Crude oil prices fall back. In the wake of the ongoing conflict in Iraq, U.S. crude oil prices rose from \$103.37 on May 28 to \$107.52 on June 16—their highest level in 10 months and their biggest weekly gain this year. Thereafter, prices slid to \$102.76 by July 24 and, thereafter, tumbled to \$95.39 on August 25.

Gasoline prices fall further in August. After hitting \$3.70 per gallon on June 23, the retail price of a regular gallon of unleaded fuel in the United States slipped to \$3.54 on July 28 and, further, to \$3.45 on August 25. Still, as of that date, the national average price for a gallon of regular, unleaded gasoline marked its 1,342nd straight day above \$3.00. Those 1,342 days represent the longest period of time in U.S. history during which gasoline prices have been above the \$3.00-a-gallon mark.

Food prices up by 19% in first quarter. According to an analysis by the finance web site ZeroHedge.com, as of March 26, U.S. food prices—as measured by the U.S. Foodstuffs spot price index—were up by 19% in the first quarter of the year.

Food prices hit record highs. The seasonally adjusted price index for meats, poultry, fish, and eggs hit all-time highs in May, according to a June 17 report from the U.S. Bureau of Labor Statistics (BLS). In January 1967, when the BLS started tracking this measure, the index for meats, poultry, fish, and eggs was 38.1. As of last May, it was 234.6. By this January, it hit 240.0. By April, it hit 249.4. And, in May, it climbed to a record 252.8.

Beef prices hit all-time high. The average price for all types of ground beef per pound hit an all-time high—\$3.884 per pound—in the United States in July, according to data released on August 19 by the U.S. Bureau of Labor Statistics.

Fruit & vegetable prices expected to soar. According to an April 15 report in The Wall Street Journal, the prices of many fruits and vegetables are expected to climb by double-digits this year, due largely to a three-year drought in California that is just now beginning to abate. Projected 2014 price increases range from between 13% and 14% for berries, corn, and packaged salad and between 17% and 22% for broccoli, grapes, tomatoes, melons, and peppers to 34% for lettuce and 28% for avocados.

Butter futures reach all-time high. Butter futures have reached an all-time high in Chicago, according to an August 29 Bloomberg report.

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APPENDIX C

STUDIES OF PUBLICLY SYNDICATED LIMITED PARTNERSHIPS

As part of the valuation analysis, consideration has been given to a number of published studies of publicly syndicated limited partnerships that own real estate. There are several published studies of publicly syndicated limited partnerships which own real estate that attempt to quantify the total amount of valuation discounts associated with fractional interests in real estate limited partnerships. These studies are summarized below.

Annual Partnership Re-Sale Discount Studies – Partnership Profiles, Inc. (“PPI”) performs an annual survey (*Annual Partnership Re-Sale Discount Studies*) of discounts on minority, non-controlling interests in non-publicly-traded real estate limited partnerships and real estate investment trusts (REITs) that are bought and sold in secondary markets. For the past 21 years, the study has provided average price-to-value discounts based on the prices at which minority interests trade in the secondary market. The results of this study are used by real estate appraisers, business valuation professionals, and CPAs when valuing non-controlling interests in entities that own real estate. Depending upon the facts and circumstances, valuation professionals also use the price-to-value discount data to value fractional and tenant-in-common interests in real estate, provided that such interests are non-controlling. Below is the average price-to-value discounts reported by PPI for the last 21 years (the average discount is 30.5%).

Although the table at right shows a relatively stable trend in valuation discounts over the last 17 years, valuation discounts for interests in real estate limited partnership’s purchased in the secondary market declined significantly from the early 1990’s through the year 2000. According to the study, the relative decline in the average discounts during this time period was attributable to the increased frequency of partnership liquidations. Partnership liquidations that occurred in the early 1990’s were normally the result of forced liquidations. In the mid to late 1990’s, as the real estate market improved, investors in real estate limited partnerships began selling the underlying properties much sooner. The increased number of liquidations caused buyers to expect a shorter holding period – i.e. from eight to ten years down to two to four years. Since buyers began anticipating gains from partnership liquidations in the near term, they were willing to pay higher prices for publicly syndicated limited partnership interests in the secondary market, and therefore, the overall valuation discount decreased.

In PPI’s 2013 survey, the price-to-discount analysis was conducted by examining 56 publicly-registered real estate programs whose units (or shares) traded in the secondary market. Consistent with the previous discount surveys published by PPI, this year’s

Survey Year	Average Discount
1993	46%
1994	48%
1995	41%
1996	38%
1997	30%
1998	29%
1999	27%
2000	25%
2001	28%
2002	22%
2003	21%
2004	23%
2005	28%
2006	29%
2007	27%
2008	25%
2009	28%
2010	29%
2011	33%
2012	32%
2013	31%

survey grouped the publicly-registered real estate programs into categories based upon the key attributes that impact how secondary market buyers price these interests. As can be seen below, while the overall average discount was 31% in 2013, the price-to-value discounts can vary from one program to the next depending primarily upon debt structure and the ability to pay cash distributions from operating cash flow.

Category	# of Programs	Average Discount	Average Yield
Equity – Distributing (low or no debt)	5	18%	7.8%
Equity – Distributing (moderate-to-high debt)	11	26%	6.8%
Equity – Non-Distributing	18	46%	0.0%
Triple-Net-Lease	17	16%	7.7%
Undeveloped land	2	56%	0.0%
Mortgage Loans	3	36%	10.0%

According to PPI, while the discounts above can vary based on the debt structure of the programs as well as the ability to pay cash distributions, it should be noted that the overall discounts are mainly attributable to the lack of control issues. As discussed earlier in this report, the studies conducted by PPI provide useful support and guidance on discounts for lack of control only. There are certain attributes of lack of marketability that are incorporated in the discounts; however, while not exactly quantifiable, PPI estimates that less than 10% of the discounts are attributable to lack of marketability. According to PPI, the marketability issues are somewhat muted because the main issue is timing and not whether qualified buyers can be found for the interests in the study. The partnership secondary market where these interests are bought and sold is a market where there are multiple bidders who stand ready to purchase the units. More than \$1.5 billion in sales transactions occurred in the secondary market from 1994 through 2012, which provides a good indication on the marketability of the interests that change hands in this market. With an abundance of secondary market buyers standing ready to purchase these interests, the real issue of liquidity is the amount of time it takes for the seller to receive payment for their units which is simply a function of the mechanics of this market and the transfer cycle of the particular partnership or REIT. According to PPI, a typical seller receives payment for their units in approximately 45 days. Consequently, since most, if not all, of the discounts are attributable to lack of control risks, PPI suggests that when using the discounts from the study to value a minority interest in a family limited partnership or some other illiquid, closely-held investment involving real estate, the appraiser should adjust these discounts upward to account for the fact that the subject interest is less marketable than the partnership interests included in the survey.

Willamette Management Associates – Willamette Management Associates, a valuation consulting, economic analysis, and financial advisory firm, published a study of 78 public real

estate limited partnerships in 1994 and summarized the median, high, and low percentage of the overall valuation discounts. The study categorized limited partnerships by the type of real estate properties owned. A summary of their findings is presented as follows:

Discounts From the Net Asset Value of Publicly Traded Limited Partnerships			
<u>Type of Properties Owned</u>	<u>Median</u>	<u>High</u>	<u>Low</u>
Apartments	41.7%	61.1%	16.8%
Commercial	48.4%	71.2%	26.9%
Industrial	57.5%	74.6%	25.5%
Office	48.1%	64.6%	11.2%
Other	57.9%	80.6%	33.4%
All Limited Partnerships	48.4%	80.6%	11.2%

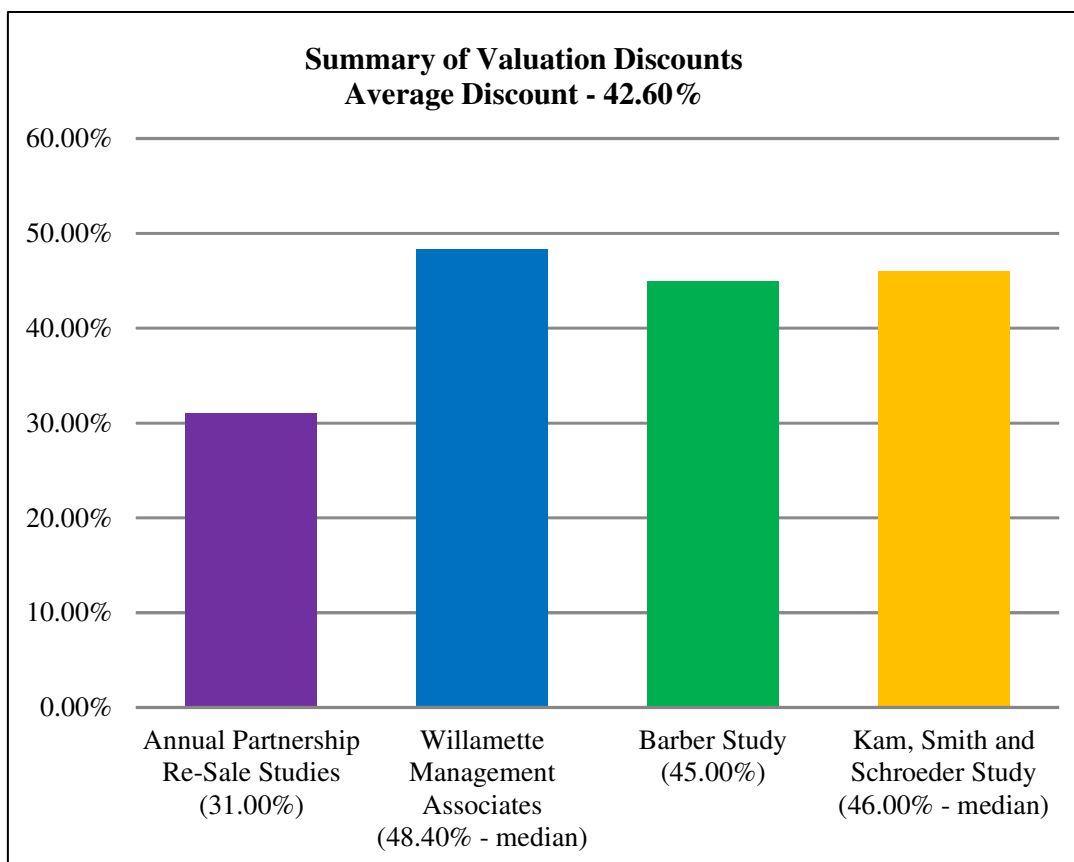
The median of all discounts in the study was 48.4%.

Barber Study – In 1995, Brad M. Barber published a research paper detailing the discounts of market prices from the appraised values for 60 publicly traded real estate limited partnerships. His study documented a mean discount of 45.00%, with the majority of the discounts falling in the 10.00% to 80.00% range.

Kam, Smith and Schroeder Study – Messieurs Kam, Smith and Schroeder conducted a study in 1993 of discounts from appraised value for 146 public limited partnerships owning various types of real estate. The study found a median discount of 46.00%, within a general range of 12.00% to 76.00%. A summary of their study is presented below:

Discounts From the Net Asset Value of Publicly Traded Limited Partnerships			
<u>Type of Real Estate</u>	<u>Median</u>	<u>High</u>	<u>Low</u>
All Real Estate	46%	76%	12%
Apartments	48%	76%	22%
Commercial	55%	72%	39%
Mini-warehouse	25%	38%	12%
Mortgage Loans	43%	67%	20%
Other Real Estate	50%	67%	34%

Based on the above-mentioned studies, the following graph has been prepared to illustrate the size of valuation discounts associated with limited partnership interests.



APPENDIX D

STUDIES OF DISCOUNTS FOR NON-REAL ESTATE INVESTMENTS

Note: The information regarding the Restricted Stock Studies and the Pre-IPO Studies was derived from “Business Valuation: Discounts and Premiums,” Shannon P. Pratt, John Wiley & Sons, Inc. 2001, New York, “2008 Update: Marketability Discounts-A Comprehensive Analysis,” by Darrel D. Dorrell, Gregory A. Gadowski, Thomas S. Brown, *The Value Examiner* (NACVA), September/October 2008 (pp. 10-33) and the 2011 edition of “The FMV Restricted Stock Study Companion Guide™.” It should be noted that this information is presented for information purposes only.

Restricted Stock Studies

Restricted stock studies analyze the differences in prices between publicly traded securities and those of restricted stocks of the same companies. In certain instances, the SEC restricts, for a period of time, the sale of certain types of publicly traded stock. Restricted stock studies attempt to measure the marketability discount by determining the difference in price of the unrestricted stock and identical federally mandated restricted stock of the same companies.

SEC Institutional Investor Study – In 1971, the SEC published the first and the most comprehensive restricted stock study comprising of 398 transactions from January 1, 1966 through June 30, 1969. The SEC study provides an analysis of restricted securities and deals by various criteria including: (i) trading market, (ii) type of institutional purchaser, (iii) transaction size, (iv) sales of issuer, and (v) earnings of issuer. In terms of trading market the smallest discounts were from New York Stock Exchange listed companies, whereas the largest discounts were from the over-the-counter (“OTC”) non-reporting companies. The OTC non-reporting companies are public, but due to asset size or number of shareholders are not compelled to file SEC reports. This category reflects companies most similar to privately held companies. The SEC study concluded an average marketability discount of 32.6% for restricted stock of the OTC non-reporting companies compared to their unrestricted counterpart stock. The SEC study also concluded that the blocks of stocks from companies with smaller sales and lower earnings exhibited greater discounts compared to blocks of stocks from companies with higher sales and higher earnings.

Gelman Study – In 1972, Milton Gelman published the results of his study of the prices paid for restricted securities by four closed-end investment companies specializing in restricted securities investments. Based upon an examination of 89 transactions which took place between 1968 and 1970, Gelman found that both the average and median price discounts were 33% and that almost 59% of the purchases studied were at discounts of 30% and higher, and 36% of the transactions were at discounts of at least 40%.

Moroney Study – Robert E. Moroney, associated with the Houston investment banking firm Moroney, Beissner & Co., studied 146 transactions in restricted securities by 10 registered investment companies. His study was published in the Taxes-The Tax Magazine’s March 1973 issue. The discounts observed in these transactions ranged from 3% to 90% (including one transaction at a 30% premium), with a mean discount of 35.8%.

Maher Study – J. Michael Maher published in the September 1976 issue of *Taxes* the results of a study of restricted stock discounts in 34 transactions taking place from 1966 to 1973. The 34

transactions (30 of which were less than \$2 million) comprised of SEC and annual report filings of four mutual fund companies' purchases of restricted common stock. Maher's study indicates an average price discount of 35.4%.

Standard Research Consultants ("SRC") Study – In 1983, William F. Pittock and Charles H. Stryker, consultants with SRC, published a study of 28 private placements of restricted common stock that occurred from October 1978 through June 1982. The indicated price discounts ranged from 7% to 91%, with a median of approximately 45%. This study's universe was relatively small, and the U.S. equity markets were depressed during the latter portion of their study. The revenue size of the issuing company appeared to affect the amount of the price discount with smaller issuers of restricted stock associated more with larger discounts.

Silber Study – William L. Silber presented the results of his restricted stock study in a 1991 article published in *Financial Analysts Journal*. Based on 69 private placements occurring between 1981 and 1989, Silber examined that the price discount for these 69 transactions ranged from a premium of 12.7% to a discount of 84%, with an average price discount of approximately 33.75%.

FMV Restricted Stock Study™ – FMV Opinions, Inc. ("FMV"), researched thousands of private placements of publicly traded common stock covering the period July 1980 to October 2008. The sample was "cleaned" to include only "plain vanilla" transactions. Transactions were eliminated from the study for the following reasons:

1. The transaction was not a private placement of unregistered shares (i.e., the stock was registered prior to the transaction date) or the stock was registered and became fully marketable within 30 days of the transaction;
2. The private placement was of debt, preferred stock, convertible preferred stock, or some kind of hybrid equity-derivative security (the security issued must be identical to the publicly traded common stock in all respects other than its unregistered status);
3. The private placement was issued as part of a stock-warrant unit or had warrants attached, or detachable warrants or options were issued with the common stock;
4. The transaction did not close (i.e., was announced and later withdrawn);
5. The stock was not traded on a domestic exchange;
6. The stock traded below \$1 for the entire month of the transaction;
7. Significant pieces of information were unavailable, to the extent we were unable to determine the private placement discount, such as the following:
 - (a) the market reference price for the fully liquid shares was unavailable;
 - (b) the private placement transaction price was unavailable;
 - (c) only the net transaction proceeds to the issuer were reported publicly (net of unknown transaction costs and fees), not the gross purchase price;
8. There were special contractual arrangements between buyer and seller limiting either the economic upside or downside of the buyer (e.g., an agreement to increase the number of shares purchased if the market trading price were to fall below a certain level within some specified period of time);

9. The stock was issued in connection with a merger or acquisition, in exchange for services, or in connection with any other transaction that could cast doubt on what the fair market value of the restricted stock was; and
10. The lead purchaser in the transaction was, based on explicit language provided in the issuer's public filings (or, if not explicitly stated, based on our best judgment considering all available evidence), a "related party" or received one or more seats on the issuer's board of directors as a result of the transaction.

FMV identified 596 plain vanilla private placements of restricted common stock. The study resulted in a mean discount of 20.6% and a median discount of 17.1%. The main conclusions of the FMV restricted Stock Study™ are as follows:

1. The discount for lack of marketability is negatively correlated with the issuing entity's:
 - Market value;
 - Revenues;
 - Net profit margin;
 - Total assets; and
 - Book value of shareholders' equity.
2. The discount for lack of marketability is positively correlated with:
 - The issuing entity's market value-to-book value ratio;
 - The issuing entity's stock price volatility;
 - The block size of the placement, described as a percent of the total ownership; and
 - The level of market volatility prevailing as of the transaction date, as measured by The CBOE Volatility Index®.
3. The discount for lack of marketability is not significantly correlated with the issuing entity's industry.

Management Planning Study – Robert P. Oliver and Roy H. Meyers members of the business valuation firm Management Planning, Inc. ("MPI"), published the results of their study of selected transactions covering a 17-year period in the book "Handbook of Advanced Business Valuation," McGraw-Hill, New York, 2000.

The authors began their study with all the transactions published in Investment Dealers' Digest, Private Placement Letter, and Private Equity Week at the time of their study. These sources provided a base of 231 transactions which they narrowed to 53 transactions without registration rights and 27 with registration rights, after eliminating the following:

- Market price less than \$2 per share
- Less than \$3 million in sales volume
- Startup or "development stage" entities
- Companies lacking sufficient information for analysis

The entire set of transactions, transactions without registration rights and transactions with registration rights yielded average discounts of 29%, 27% and 12.8%, respectively. The significant differences in discounts between transactions with and without registration rights can be seen as a tangible evidence of the strong impact of liquidity on an investment.

As shown on the table below, the authors also indicated that certain factors affect discounts more than others:

Factor	Effect on Discounts
Size of revenues	Companies with higher revenues tended to have lower discounts.
Size of earnings	Companies with higher earnings tended to have lower discounts.
Market price/share	Higher per share prices tended to result in lower discounts.
Price stability	Lower standards of deviation of trading price tended to result in lower discounts.
Trading volume	Block sizes representing a higher percentage of average trading volume tended to have higher discounts.
Value of block	Large dollar blocks tended to have lower discounts.

Johnson Study – Bruce A. Johnson of the firm Munroe, Park & Johnson, studied 72 private placements that occurred during the period 1991 through 1995. This period represented the five years following relaxation of Rule 144 restrictions. His study concluded an average discount of 20%. Johnson’s study also indicated four factors potentially impacting the size of a discount: (i) positive net income, (ii) sales volume, (iii) transaction value, and (iv) net income strength.

Pluris Valuation Advisors Study – Espen Robak of Pluris Valuation Advisors, LLC (“PVA”), developed the LiquiStat database from the secondary market in restricted stock. LiquiStat contains transactions facilitated by SecondMarket from April 2005 to December 2006. The data set for the study consisted of 61 trades in restricted common equity in 100 percent cash for stock transactions. Both buyer and seller could estimate with precision the number of days of illiquidity remaining for each block of stock because the ownership history of the stock was known. Until each transaction is priced, buyers and sellers were unknown to each other, and none of the buyers or sellers was affiliated with each other in any way.

The mean restricted stock illiquidity discounts in the LiquiStat database averaged about 33%, even though the average expected period of illiquidity is less than 150 days. A significant positive correlation exists between the days of illiquidity left and the discount rate, consistent with other studies which have demonstrated a link between the holding period and the discount.

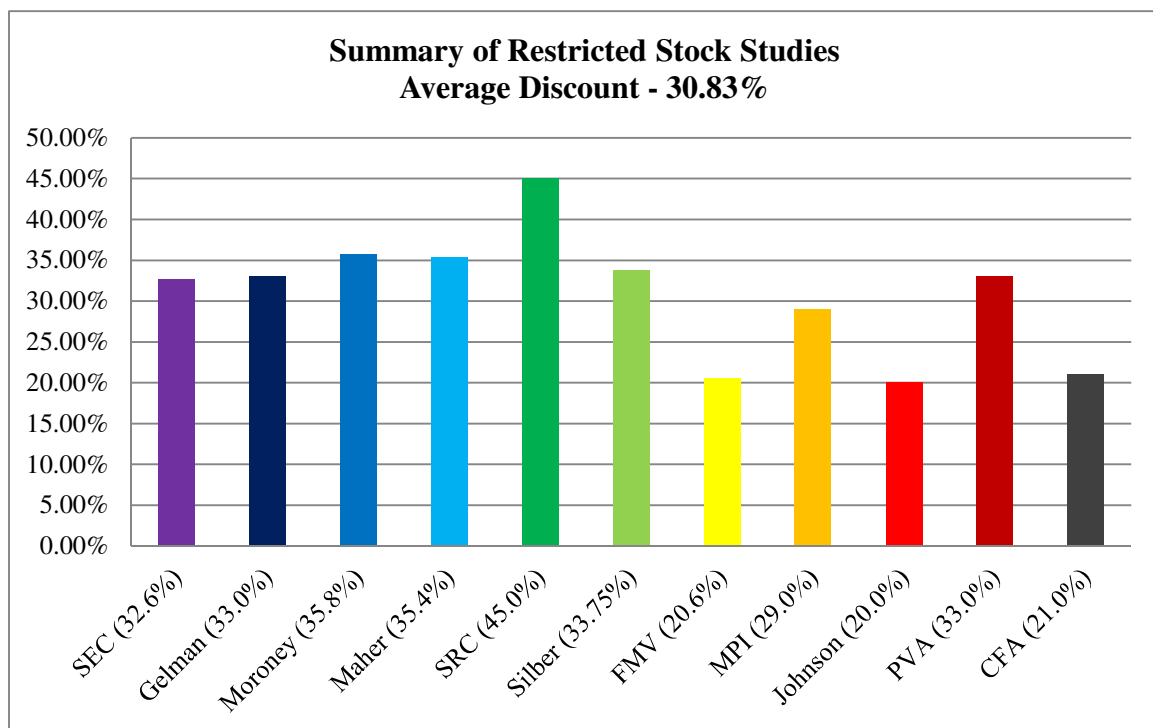
Columbia Financial Advisors Study – Kathryn Aschwald of the Columbia Financial Advisors, Inc. (“CFA”) looked at “before and after” impact of the Rule 144 holding period reduction from two-year to one-year which became effective as of April 29, 1997. The reduction

in the holding period meant a shareholder had a greater chance of realizing liquidity for restricted public. This study covered two periods: (i) January 1, 1996 through April 30, 1997 (23 transactions), and (ii) May 1, 1997 through December 31, 1998 (15 transactions). The study concluded that the discounts for the two-year holding period were higher and averaged at 21%, compared to the average 13% discount for one-year holding period (May 1, 1997 through December 31, 1998). In the study, Kathryn Aschwald indicated:

“The studies conducted after 1990 are not relevant for purposes of determining discounts for lack of marketability for privately held stock, because they reflect the increased liquidity in the market for restricted securities. Such increased liquidity is not present in privately held securities.”

Conclusion – Restricted Stock Studies

Based on the above-mentioned studies, the following graph has been prepared to illustrate the size of the marketability discounts.



Once again, it must be noted that in April 1997, the holding period required by SEC Rule 144 was changed from two years to one year. Studies which only include the data before 1997 (i.e., SEC, Gelman, Moroney, Maher, SRC and Silber) resulted in higher discounts when compared to studies that include post 1997 data. The reduced level of discounts in the post 1997 data can be attributable to the increased marketability of the restricted stocks due to reduction of the holding period from two years to one year.¹⁹

¹⁹ The 21.0% discount from the Columbia Financial Advisors Study represents the discounts for the two-year holding period, compared to the average 13.0% discount for one-year holding period.

Pre-IPO Studies

Pre-IPO studies analyze the relationship between the prices of companies whose shares were initially offered to the public and the prices at which their shares traded privately within a five-month period immediately preceding the initial public offering (“IPO”).

Emory Pre-IPO Studies – John D. Emory, Sr. has completed nine studies of pre-IPO discounts since 1986. The methodology applied to each study has remained consistent, requiring a financially sound company, and private transaction occurrence within five months prior to the IPO date.

In the first eight studies the following companies were eliminated:

- Development-stage companies
- Companies with an operating loss history
- Companies with an IPO Price less than \$5 per share

Emory’s article accompanying the first study included the following comments:

“The final question to be answered is that if these kinds of discounts are appropriate for promising situations where marketability is probable, but not a certainty, how much greater should discounts be for the typical company’s stock that has no marketability, [has] little if any chance of ever becoming marketable, and is in a neutral to compromising situation?”

The ninth study was different from the preceding eight studies because:

- Only companies with “com” in their names were included.
- The study covered a 35-month period as opposed to the 18-month periods covered by the preceding eight studies.
- All transaction were actual sales, whereas the earlier studies also included options issued.
- Most of the companies in the ninth study did not have earnings.

Below is the list of the nine studies conducted by Emory:

Study	Time Frame	Number of Prospectus Companies	Number of Selected Transactions	Mean Discount
1	January 1980-June 1981	97	13	60.0%
2	January 1985-June 1986	130	21	43.0%
3	August 1987-January 1989	98	27	45.0%
4	February 1989-July 1990	157	23	45.0%
5	August 1990-January 1992	260	35	42.0%
6	February 1992-July 1993	443	54	45.0%
7	January 1994-June 1995	314	46	45.0%
8	November 1995-April 1997	732	91	43.0%
9	May 1997-March 2000	53	53	<u>54.0%</u>
Average Discount				<u>46.9%</u>

The Emory Pre-IPO Study also demonstrated a link between the magnitude of the discount and the illiquidity period prior to IPO, which concluded that the closer to the IPO, the lower the discounts were. The average discount for 30 days, 60 days, 90 days, 120 days and 153 days between the transaction and the IPO were 30%, 40%, 42%, 49% and 55%, respectively.

Valuation Advisors Pre-IPO Study – As of December 2007, the Valuation Advisors’ Lack of Marketability Discount Study contained 3,728 transactions and over 1,580 companies dating from 1995 to 2007. This study compares the IPO stock price to pre IPO common stock, common stock option, and convertible preferred stock prices. This study includes time horizons (1-90 days, 91-180 days, 181-270 days, 271-365 days, and 1-2 years) based on the length between the private company transaction and the IPO. The study shows that the median discount gets higher as the holding period increases. The total average discount as of December 2007 was 50.9%.

Conclusion – Pre-IPO Studies

The average lack of marketability discount indicated by the two pre-IPO studies conducted by John D. Emory, Sr. and Valuation Advisors is approximately 48.9%.

Marketability Discounts in the Courts, 1991–2002

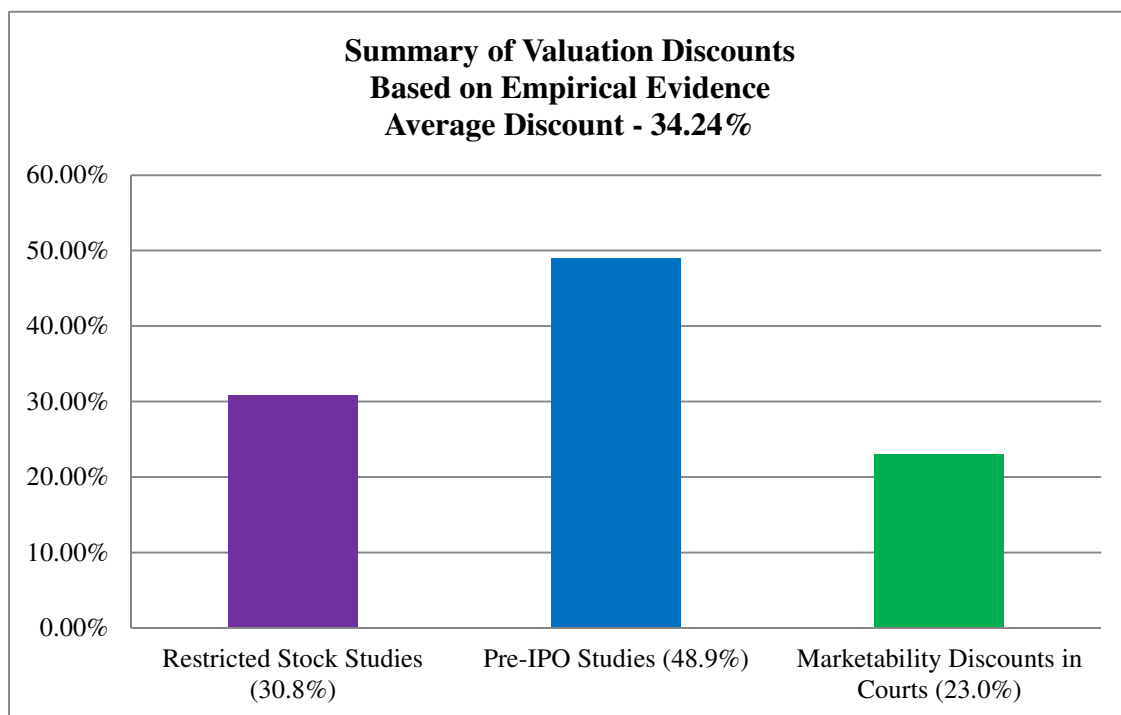
This study was prepared by Dr. Janet Hamilton, a professor of finance at Portland State University. Dr. Hamilton began this study by reviewing over 186 court cases to determine whether or not discounts for lack of marketability were major factors in the court-case outcomes. The main asset in these court cases was stock in closely held, non-publicly traded companies. The lack of marketability associated with closely held, non-publicly traded stock is often attributable to the inability to sell the stock because there is no readily available market or exchange on which these shares are freely traded. Additionally, financial information is normally not available for closely

held companies, making it difficult to evaluate the merits of the investment. The concept of marketability deals with the liquidity of the investment; that is, how quickly it can be converted to cash at the owner's discretion. Neither the stock involved in the court cases, nor the Interest, can be quickly converted into cash at the owner's discretion. Accordingly, the empirical evidence in the Dr. Hamilton study provides a reasonable benchmark for determining the relative discount for lack of marketability of the Interest.

Of the 186 cases reviewed, the Hamilton study reported 64 cases that involved discounts for lack of marketability. We have reviewed the summary table of the 64 cases involving only discounts related to lack of marketability and found that the discounts for lack of marketability ranged from 0% to 40%, with an average of approximately 23%.

Conclusion – Studies Of Discounts for Non-Real Estate Investments

The average discounts for the above-cited studies are graphed below.



APPENDIX E

VALUATION DISCOUNTS AFFIRMED BY THE TAX COURT

The table below shows selected court cases from the past 19 years in which the courts have affirmed the use of a valuation discount for fractional interests in private entities.

Year	Case Name	Citation	Description of Asset	Total Discount
2013	<u>Estate of Tanenblatt v. Comm'r</u>	T.C. Memo 2013-263	LLC owned real estate	33.4%
2012	<u>Keller v. U.S.</u>	697 F.3d 238 (5th Cir. 2012)	FLP owned marketable securities	47.5%
2011	<u>Estate of Gallagher v. Comm'r</u>	T.C. Memo 2011-148	Closely held operating business	46.9%
2011	<u>Estate of Giustina v. Comm'r</u>	T.C. Memo 2011-141	Closely held operating business	49.3%
2010	<u>Pierre v. Comm'r</u>	T.C. Memo 2010-106	LLC owned marketable securities	35.6%
2009	<u>Estate of Miller v. Comm'r</u>	T.C. Memo 2009-119	FLP owned marketable securities	35.0%
2009	<u>Estate of Litchfield v. Comm'r</u>	T.C. Memo 2009-21	S corporation owned various assets C corporation owned various assets	36.1%29.5%
2009	<u>Estate of Murphy v. U.S.</u>	U.S. District Court, W.D., Ark. El Dorado Division, No. 07-CV-1013	Multi-tiered LLC owned various assets FLP owned various assets	52.0%40.9%
2008	<u>Gross v. Comm'r</u>	T.C. Memo 2008-221	FLP owned marketable securities	35%
2008	<u>Holman v. Comm'r</u>	130 T.C. No. 12	FLP owned marketable securities	22.4%, 25.0%, and 16.6%
2008	<u>Astleford v. Comm'r</u>	T.C. Memo 2008-128	Real estate limited partnership	15.0% and 22.0%

Year	Case Name	Citation	Description of Asset	Total Discount
2006	McCord v. Comm'r	2006 U.S. App. LEXIS 21473	FLP owned various assets including marketable securities and real estate partnership interests	32.0%
2006	Temple v. U.S.	2006 U.S. Dist. LEXIS 16171	FLPs owned marketable securities Closely held companies owned land and a winery	15.4% to 21.3% 38.0% and 60.0%
2006	Huber v. Comm'r	2006 Tax Ct. Memo LEXIS 97	Closely held operating business	50.0%
2005	<u>Estate of Jelke v. Comm'r</u>	T.C. Memo 2005-131	Closely held entity that held marketable securities	23.5%
2005	<u>Estate of Kelley v. Comm'r</u>	T.C. Memo 2005-235	FLP owned cash and certificates of deposit	32.2%
2005	<u>W.G. Anderson v. Comm'r</u>	2005 U.S. Dist. LEXIS 39573	LLCs owned mineral and oil exploration rights	46.0%
2004	<u>Estate of Josephine Thompson v. Comm'r</u>	2004 Tax Ct. Memo LEXIS 180	Closely held operating business that produced and sold industrial and manufacturing business guides	40.5%
2004	<u>Estate of Hillgren v. Comm'r</u>	T.C. Memo 2004-46	FLP owned real estate	41.5%
2003	<u>Peracchio v. Comm'r</u>	T.C. Memo 2003-280	FLP owned marketable securities	29.5%
2003	<u>Lappo v. Comm'r</u>	T.C. Memo 2003-258	FLP owned marketable securities and real estate	35.4%
2003	<u>Hess v. Comm'r</u>	T.C. Memo 2003-251	Closely held business that manufactured metal processing machines for the auto industry	36.3%
2003	<u>Estate of Deputy v. Comm'r</u>	T.C. Memo 2003-176	FLP that owned shares in a boat building business	30.0%
2002	<u>Okerlund v. U.S.</u>	53 Fed. Cl. 341, 2002 U.S. Claims LEXIS 221	Closely held operating business	45.0% to 50.0%

Year	Case Name	Citation	Description of Asset	Total Discount
2002	<u>Estate of Bailey v. Comm'r</u>	T.C. Memo 2002-152	Closely held business that owned and operated motels	50.0%
2002	<u>Estate of Mitchell v. Comm'r</u>	T.C. Memo 2002-98	Closely held business that sold hair care products	35.0%
2002	<u>Estate of Heck v. Comm'r</u>	T.C. Memo 2002-34	S Corporation that produced champagne and owned land	25.0%
2002	<u>Estate of Adams v. Comm'r</u>	T.C. Memo 2002- 80	S Corporation that owned an insurance agency	35.0%
2001	<u>Estate of HA True v. Comm'r</u>	T.C. Memo 2001-167	Closely held operating businesses	10.0% to 30.0%
2001	<u>Estate of Dailey v. Comm'r</u>	T.C. Memo 2001-263	FLP held marketable securities	40%
2001	<u>Adams v. U.S.</u>	2001 U.S. Dist. LEXIS 13092	General partnership owned various assets	53.2%
2000	<u>Estate of Weinberg v. Comm'r</u>	T.C. Memo. 2000- 51	Limited partnership owned an apartment property	49.6%
2000	<u>Estate of Maggos v. Comm'r</u>	T.C. Memo 2000-129	Closely held Pepsi-Cola bottling business	25.0%
2000	<u>Estate of Dunn v. Comm'r</u>	T.C. Memo 2000-12	Closely held heavy equipment rental business	21.4%
2000	<u>Estate of Borgatello v. Comm'r</u>	T.C. Memo. 2000-264	Real estate holding company	33.0%
2000	<u>Knight v. Comm'r</u>	115 T.C. 506, 115 T.C. No. 36, 2000 U.S. Tax Ct. LEXIS 88	FLP owned various assets	15.0%
1999	<u>Estate of Marmaduke v. Comm'r</u>	T.C. Memo 1999-432	Closely held book, music, and video business	30.0%
1999	<u>Estate of Desmond v. Comm'r</u>	T.C. Memo 1999-76	Closely held paint manufacturing business	30.0%

Year	Case Name	Citation	Description of Asset	Total Discount
1999	<u>Estate of Simplot v. Comm'r</u>	112 T.C. 130, 112 T.C. No. 13, 1999 U.S. Tax Ct. LEXIS 15	Closely held potato processor business also owned marketable securities	35.0% to 40.0%
1998	<u>Estate of Davis v. Comm'r</u>	110 T.C. 530, 110 T.C. No. 35, 1998 U.S. Tax Ct. LEXIS 35	C corporation owned Winn Dixie stock	32.0%
1998	<u>Furman v. Comm'r</u>	T.C. Memo 1998-157	C corporation owned Burger King franchises	40.0%
1998	<u>Dockery v. Comm'r</u>	T.C. Memo 1998-114	Closely held reinsurance company	40.0%
1997	<u>Estate of Gray v. Comm'r</u>	T.C. Memo 1997-67	Personal holding company	15.0%
1996	<u>Estate of Barudin v. Comm'r</u>	T.C. Memo 1996-395	General partnership owned real estate	40.1%
1996	<u>Kosman v. Comm'r</u>	T.C. Memo 1996-112	FLP owned interests in closely held companies	25.0% to 29.0%
1996	<u>Estate of Freeman v. Comm'r</u>	T.C. Memo 1996-372	Closely held semiconductor business	10.0%
1995	<u>Mandelbaum v. Comm'r</u>	T.C. Memo 1995-255	Closely held company	30.0%
1995	<u>Estate of McCormick v. Comm'r</u>	T.C. Memo 1995-371	General partnership owned real estate	34.4% to 47.0%
1995	<u>Estate of Ford v. Comm'r</u>	T.C. Memo 1993-580	Family-owned closely held companies	10.0%

APPENDIX F

THE PROPERTIES

Below is a list of the Properties owned by the Entity:

- Direct ownership of real estate assets:
 - Office and Shops at Sumner Place
 - Spring Valley Office Complex
 - Spring Valley Retail Complex
- Ownership interests in closely held real estate companies, joint ventures, and limited partnerships:
 - Sumner Highlands, LLC
 - Haymount Limited Partnership II
 - Haymount LP (85% interest)
 - Haymount Corporation

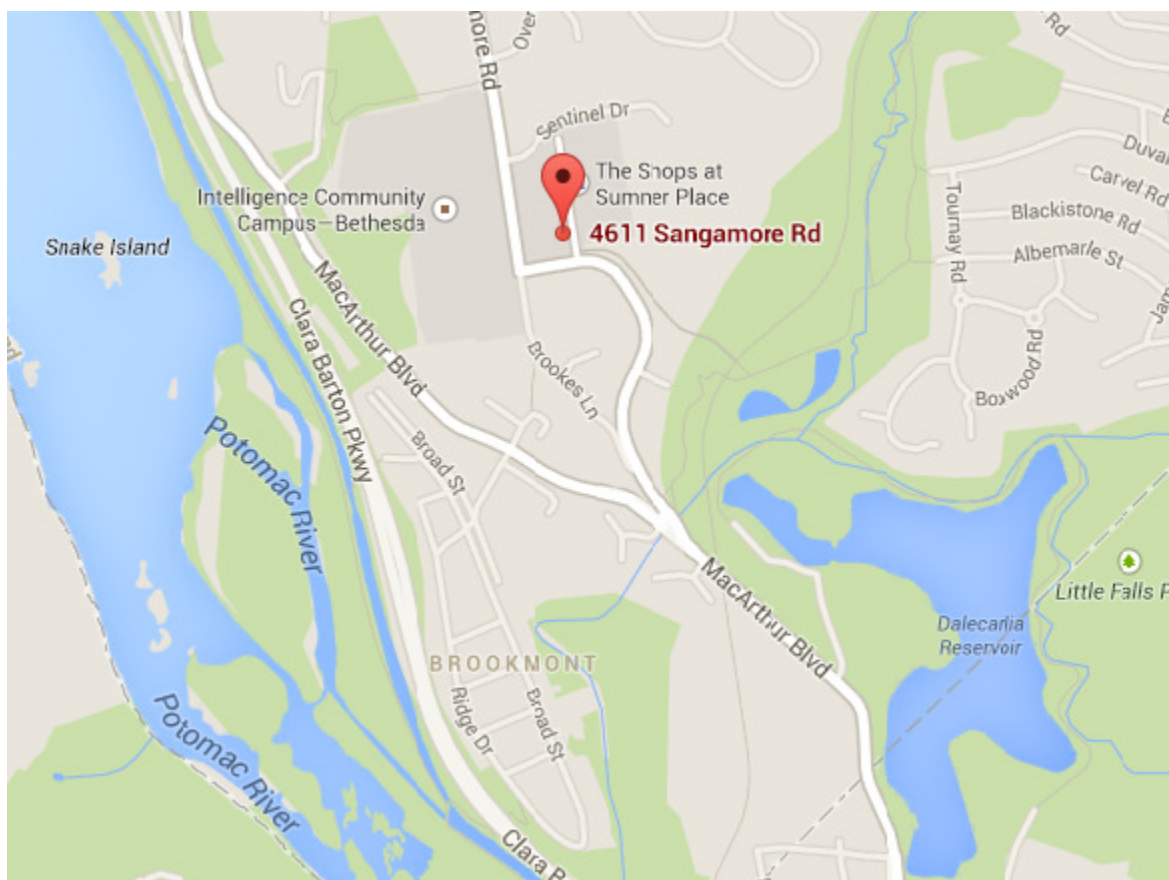
Below is detailed information on the Properties:

1. Office and Shops at Sumner Place

General Description – The Office and Shops at Sumner Place is a 196,974-square-foot, mixed-use retail and office center located at 4611 and 4701 Sangamore Road, Bethesda, Maryland. The retail component includes a Safeway-anchored shopping center and has 120,848 total square feet. The office component contains 76,126 square feet and has two stories. The improvements were originally constructed in 1966 and last renovated in 2001. According to the Rent Rolls, the retail component was 97.46% occupied and the office component was 91.38% occupied. Overall, occupancy was 95.11%. The Office and Shops at Sumner Place had over 50 total tenants. Below is an overall rent roll of the Office and Shops at Sumner Place:

Tenant	Square Feet	Lease Expiration	Rent PSF	Annual Rent
Safeway	47,643	1/31/26	\$ 8.50	\$ 404,966
Case Design/Remodeling	14,759	2/28/19	33.31	491,622
Burdeshaw Associates, Inc.	14,064	4/30/16	32.47	456,658
CVS	10,581	1/31/21	27.22	288,068
Long & Foster	10,143	2/6/19	34.00	344,862
Others (Total)	90,154	7/31/14 to 5/31/13	27.56 - 65.00	3,247,315
Vacant	9,630	N/A	N/A	N/A
Total	196,974		\$ 26.52	\$ 5,233,491

The Office and Shops at Sumner Place is situated in the southwest section of the city of Bethesda. The neighborhood is bounded by Interstate 495 to the north and west, the Potomac River to the south and west, and the District of Columbia border to the east. According to the Appraisals, the neighborhood features a high-end residential setting with well-maintained properties. Below is a map showing the location of the Office and Shops at Sumner Place:



Below is a picture of the Office and Shops at Sumner Place:



Financial Information – The following is a summary of the financial information on the Office and Shops at Sumner Place for the years ended September 30, 2009 to 2013.

Year	Rental Income	Total Operating Expenses	Net Operating Income
2009	\$ 5,480,319	\$ (1,858,665)	\$ 3,621,654
2010	5,720,235	(2,651,433)	3,068,802
2011	4,621,895	(1,943,769)	2,678,126
2012	5,153,283	(1,836,832)	3,316,451
2013	5,952,317	(2,035,064)	3,917,253

This Office and Shops at Sumner Place is encumbered by a loan from Guardian Mortgage Partners, LLC. The outstanding balance on this loan was \$29,165,120 as of the Valuation Date. This loan is subject to an interest rate of 4.08% per annum and has a maturity date of October 31, 2022. According to the Financial Statements, this loan has a prepayment penalty equal to the greater of 1% or the present value of principal and interest, less the outstanding principal balance as of the date of prepayment.

Valuation –According to the Appraisals, the fair market value of the Office and Shops at Sumner Place was \$54,700,000 as of July 2, 2012. For purposes of this valuation, in determining the fair market value of the Office and Shops at Sumner Place as of the Valuation Date, the appraised value of the Office and Shops at Sumner Place was increased by 3% annually, prorated by approximately 24 months. This 3% growth assumption is in line with the historical average rate of inflation. Accordingly, the fair market value of the Office and Shops at Sumner Place as of the Valuation Date was estimated to be approximately \$58,026,500.

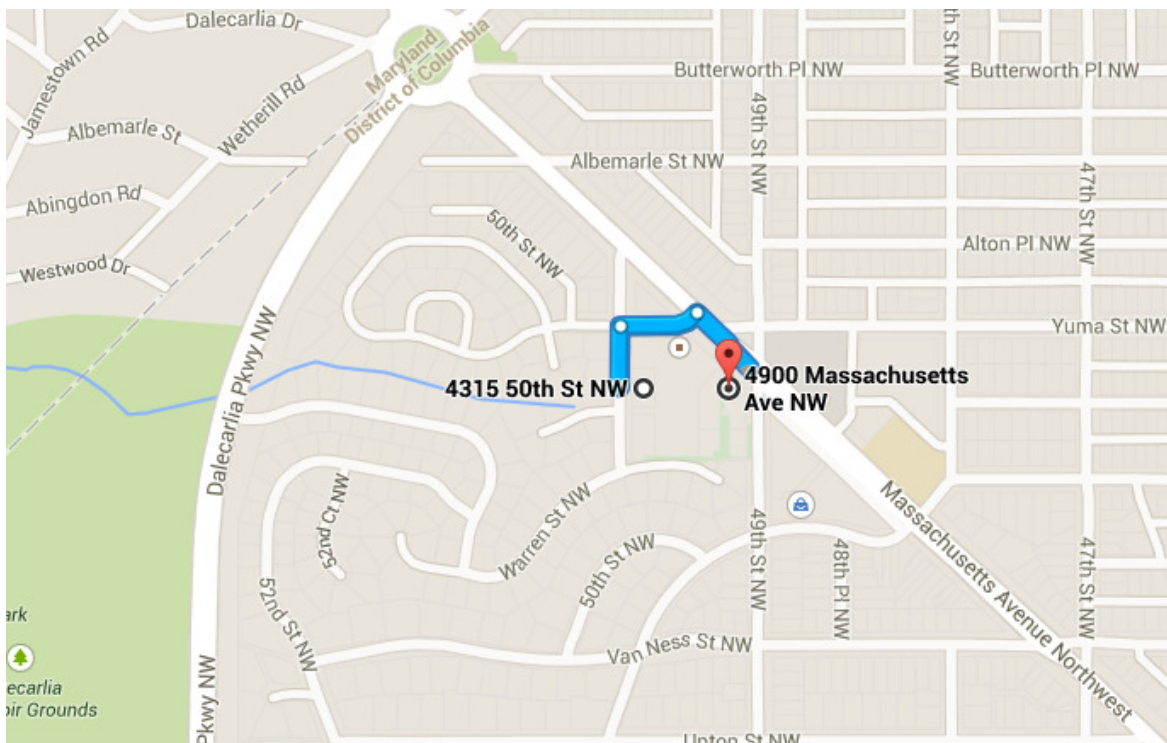
2. Spring Valley Office Complex

General Description – The Spring Valley Office Complex is a 133,419-square-foot office portfolio located at 4900 & 4910 Massachusetts Avenue, N.W., and 4301 & 4315 50th Street, N.W. in Washington, D.C. 4900 Massachusetts Avenue, N.W. is a three-story building built in 1960 and renovated in 1996. This property has 32,653 square feet of rentable space. 4910 Massachusetts Avenue, N.W. is a three-story building built in 1987 and has 71,850 square feet of rentable space. 4301 50th Street, N.W. is a three-story building built in 1990 and has 13,616 square feet of rentable space. 4315 50th Street, N.W. is a three-story building built in 1989 and has 15,300 square feet of rentable space. The site also includes an additional 30,000 to 35,000 square feet in development density located on Parcel 1467-0884, which is used for parking. The Spring Valley Office Complex is owned in its entirety by the Entity.

The Spring Valley Office Complex is situated on a 3.741-acre site. The Spring Valley Office Complex was approximately 91.65% occupied and was considered to be in good condition. On the next page is a rent roll for the Spring Valley Office Complex.

Tenant	Square Feet	Lease Expiration	Rent PSF	Annual Rent
American University, WCL (4 offices)	18,088	8/31/15 to 12/31/17	\$ 31.89 - 36.84	\$ 620,104
McEneaney Associates, Inc.	10,200	12/31/15	39.14	399,228
Spring Valley Pediatrics	7,702	1/31/21	37.15	286,150
Eye Associates	5,270	12/31/16	38.63	203,598
Morganwingate & Co., P.C.	4,800	4/30/17	41.59	199,619
Others (Total)	76,213	7/31/14 to 1/31/24	21.00 - 65.78	3,212,247
Vacant	11,146	N/A	N/A	N/A
Total	133,419		\$ 36.23	\$ 4,920,946

The Spring Valley Office Complex are located on the west side of Massachusetts Avenue, N.W. just south of its intersection with Yuma Street, N.W. in the Spring Valley/Tenleytown neighborhood in Northwest Washington, D.C. According to the Appraisals, the neighborhood has a high income demographic profile. Below is a map showing the location of the Spring Valley Office Complex.



On the next page is a picture of the Spring Valley Office Complex:



Financial Information – Below is a summary of the financial information on the Spring Valley Office Complex for the years ended September 30, 2009 to 2013 and the nine months ended June 30, 2014.

Year	Rental Income	Total Operating Expenses	Net Operating Income
2009	\$ 11,335,322	\$ (1,921,915)	\$ 9,413,407
2010	4,983,385	(2,498,599)	2,484,786
2011	4,978,401	(2,302,941)	2,675,460
2012	5,058,268	(2,232,874)	2,825,394
2013	5,515,545	(2,209,638)	3,305,907
10/1/13 thru 6/30/14	3,672,558	(1,661,949)	2,010,609

The Spring Valley Office Complex was encumbered by a mortgage loan from TIAA-CREF. The outstanding balance of this loan was \$21,116,244 as of the Valuation Date. This loan is subject to an interest rate of 7% per annum and has a maturity date of October 1, 2018. According to the Financial Statements, this loan has a prepayment penalty equal to the greater of 1% or the present value of principal and interest, less the outstanding principal balance as of the date of prepayment.

Valuation – It is our understanding that no recent real estate appraisal was available for the Spring Valley Office Complex. Therefore, VSI estimated the Spring Valley Office Complex's future income stream and applied an appropriate capitalization rate based on industry resources. The projected Year 1 net operating income ("NOI") was used as the basis for the Spring Valley Office Complex's future income stream. The following is a discussion of the components used to estimate the fair market value of the Spring Valley Office Complex:

- **Year 1 Projected NOI** – Based on the Financial Statements, the trailing-12 months NOI as of July 1, 2014 Spring Valley Office Complex was determined to be \$2,837,086. This amount was increased by 3% in order to determine the Year 1

NOI of the Spring Valley Office Complex as of the Valuation Date. This 3% growth rate is in line with the historical average rate of inflation. Accordingly, the Year 1 NOI of the Spring Valley Office Complex was calculated to be \$2,922,198.

- **Capitalization Rate – 6.50%** - Investors who want to acquire real estate similar to the Spring Valley Office Complex would take into account the Spring Valley Office Complex's size, location, age, and general physical conditions when determining the risks and associated returns of real estate ownership.

The Spring Valley Office Complex is a 133,419-square-foot office portfolio located in Northwest Washington, D.C. The Spring Valley Office Complex was assumed to be in good condition as of the Valuation Date and was 91.65% occupied. According to the PwC Survey, the overall capitalization rates for the 2nd quarter of 2014 for the national suburban office market ranged from 5.00% to 9.00% with an average rate of 6.75%. After considering the size, location, age, and physical condition of the Spring Valley Office Complex, a capitalization rate of 6.50%, which is slightly below the average of the range as reported by the PwC Survey, was determined to be appropriate.

The capitalization rate is then divided into the projected Year 1 NOI for the Sumner Highlands Property. This results in a value for the Sumner Highlands Property of \$44,956,900 as of the Valuation Date, as shown below:

Year 1 Projected NOI	\$ 2,922,198
Capitalization Rate	<u>6.50%</u>
Value of the Spring Valley Office Complex ²⁰	<u>\$ 44,956,900</u>

3. Spring Valley Retail Complex

General Description – The Spring Valley Retail Complex is a 75,625-square-foot neighborhood retail center located at 4820, 4866, 4872, and 4860 Massachusetts Avenue, N.W. and 4300 Fordham Road, N.W., Washington, D.C. The Spring Valley Retail Complex was constructed in 1942, was considered to be in good condition, and is owned in its entirety by the Entity. The Spring Valley Retail Complex was approximately 96.2% occupied as of the Valuation Date. The following is a rent roll of the Spring Valley Retail Complex:

²⁰ This amount was rounded to the nearest hundred.

Tenant	Square Feet	Lease Expiration	Rent PSF	Annual Rent
Crate & Barrel	48,000	5/31/19	\$ 20.16	\$ 967,451
Ski Tours, Inc.	9,305	5/31/16	27.30	253,980
Le Pain Quotidien	5,916	2/28/19	41.77	247,155
Capital One Bank	3,534	8/31/18	53.93	190,582
Bank of America	3,081	10/31/17	84.66	260,838
Images Hair Design	2,565	10/31/14	45.49	116,687
Vacant	2,864	N/A	N/A	N/A
Total	<u>75,265</u>		<u>\$ 28.13</u>	<u>\$ 2,036,692</u>

The Spring Valley Retail Complex is located along the west side of Massachusetts Avenue, N.W., between Fordham Street, N.W. and 49th Street, N.W. It is located just southeast of the Maryland state line and is proximate to American University. According to the Appraisals, the neighborhood is primarily residential, with most housing constructed prior to 1959. The nearest Metro stops are the Friendship Heights and Tenleytown stations. The Spring Valley Retail Complex is located next to the Spring Valley Office Complex. Below is a picture of the Spring Valley Retail Complex:



Financial Information – The following is a summary of the financial information on the Spring Valley Retail Complex for the years ended September 30, 2009 to 2013.

Year	Rental Income	Total Operating Expenses	Net Operating Income
2009	\$ 2,200,453	\$ (612,643)	\$ 1,792,558
2010	1,941,672	(709,698)	1,231,974
2011	2,048,921	(529,656)	1,519,265
2012	2,405,201	(696,439)	1,708,762
2013	4,135,177	(637,543)	3,497,634

The Spring Valley Retail Complex was encumbered by a mortgage loan from Cardinal Bank. The outstanding balance of this loan was \$16,214,662 as of the Valuation Date. This loan is subject to an interest rate of 4.35% per annum, was originated through a refinancing of a previous loan on March 15, 2013, and has a maturity date of March 14, 2023. According to the Financial Statements, this loan had a prepayment penalty of 3.00% during its first two years, with lower prepayment penalties in later years.

Valuation – According to a representative of the Entity, the Spring Valley Retail Complex was under contract for sale and was expected to be sold on September 30, 2014 at a purchase price of \$40,500,000. It is our understanding that this purchase price represented an arm's length transaction and was indicative of the fair market value of the Spring Valley Retail Complex as of September 30, 2014. For purposes of this report, it has been assumed that there was no significant difference in the fair market value of the Spring Valley Retail Complex between the Valuation Date and September 30, 2014.

4. Sumner Highlands, LLC

General Description – The Entity owns a 100% interest in Sumner Highlands, LLC, which owns a 125-unit, garden-style apartment property built approximately in 1980 and last renovated from April 2006 to May 2008 (i.e., the Sumner Highlands Property). The Sumner Highlands Property is located at 4507 Sangamore Road, Bethesda Maryland. According to the Appraisals, the Sumner Highlands Property had approximately 87,790 square feet of net leasable area. According to the Rent Rolls, as of August 1, 2014, the Sumner Highlands Property was approximately 93.6% occupied. The monthly rent per unit of the Sumner Highlands Property ranged from \$1,595 to \$2,375.

The Sumner Highlands Property is situated in the southwest section of the city of Bethesda, next to the Office and Shops at Sumner Place. The population within the subject neighborhood is relatively stable with very high-income levels.

On the next page is a picture of the Sumner Highlands Property:



Financial Information – Below is a summary of the financial information on the Sumner Highlands Property for the years ended September 30, 2009 to 2013 and the nine months ended June 30, 2014.

Year	Rental Income	Total Operating Expenses	Net Operating Income
2009	\$ 1,323,156	\$ (854,435)	\$ 468,721
2010	2,274,923	(876,220)	1,398,703
2011	2,397,350	(709,037)	1,688,313
2012	2,392,503	(717,153)	1,675,350
2013	2,394,570	(777,921)	1,616,649
10/1/13 thru 6/30/14	1,766,167	(499,997)	1,266,170

The Sumner Highlands Property is encumbered by a mortgage loan with Key Bank. The outstanding balance of the loan was \$16,784,416 as of the Valuation Date. This loan is subject to an interest rate of 6.47% per annum and has a maturity date of June 30, 2021. According to the Financial Statements, this loan has a prepayment penalty equal to the greater of 1% or the present value of principal and interest, less the outstanding principal balance as of the date of prepayment.

Valuation – It is our understanding that no recent real estate appraisal was available for the Sumner Highlands Property. Therefore, VSI estimated the Sumner Highlands Property's future income stream and applied an appropriate capitalization rate based on industry resources. The projected Year 1 NOI was used as the basis for the Sumner Highlands Property's future income stream. The following is a discussion of the components used to estimate the fair market value of the Sumner Highlands Property:

- **Year 1 Projected NOI** – Based on the Financial Statements, the trailing-12 months NOI as of July 1, 2014 of the Sumner Highlands Property was determined to be \$1,670,332. This amount was increased by 3% in order to determine the Year 1 NOI of the Sumner Highlands Property as of the Valuation Date. This 3% growth rate is in line with the historical average rate of inflation. Accordingly, the Year 1 NOI of the Sumner Highlands Property was calculated to be \$1,720,442.
- **Capitalization Rate – 6.00%** - Investors who want to acquire real estate similar to the Sumner Highlands Property would take into account the Sumner Highlands Property's size, location, age, and general physical conditions when determining the risks and associated returns of real estate ownership.

The Sumner Highlands Property is a 125-unit garden-style apartment property built around 1980 and last renovated from 2006 to 2008. The Sumner Highlands Property was assumed to be in average overall condition as of the Valuation Date and was 93.6% occupied. According to the PwC Survey, the overall capitalization rates for the 2nd quarter of 2014 for the regional mid-Atlantic apartment market ranged between 4.00% and 7.50%, with an average rate of 5.46%. After considering the size, location, age, and physical condition of the Sumner Highlands Property, a capitalization rate of 6.00%, which is higher than the average of the range as reported by the PwC Survey, was determined to be appropriate.

The capitalization rate is then divided into the projected Year 1 NOI for the Sumner Highlands Property. This results in a value for the Sumner Highlands Property of \$28,674,000 as of the Valuation Date, as shown below:

Year 1 Projected NOI	\$ 1,720,442
Capitalization Rate	<u>6.00%</u>
Value of the Sumner Highlands Property ²¹	<u>\$ 28,674,000</u>

5. Haymount Limited Partnership II

General Description – Haymount LP2 is wholly owned by the Entity. Haymount LP2 owns approximately 101 acres of land located at 22121 Ware Creek Road, Rappahannock Academy, Virginia (i.e., the Haymount Land). The Haymount Land is farm land that is zoned for agricultural use. According to the Financial Statements, Haymount LP2 did not own any other assets other than the Haymount Land.

According to the Tax Assessments, the tax assessed value of the Haymount Land was \$441,100. For purposes of this report, it has been assumed that the tax assessed value of the Haymount Land was indicative of its fair market value as of the Valuation Date.

According to the Financial Statements, the Haymount Land was not encumbered by a mortgage loan or any type of debt.

²¹ This amount was rounded to the nearest hundred.

6. Haymount Limited Partnership

General Description – The Entity owns an 85% interest in Haymount LP. As of the Valuation Date, it is our understanding that Haymount LP owned a single family home located at 22022 Ware Creek Road, Rappahannock Academy, Virginia (i.e., the Haymount House). Haymount LP did not own any assets other than the Haymount House. The Haymount House was built in 1790, has four bedrooms and 4.5 bathrooms, is situated on 1.22 acres of land, and is approximately 3,428 square feet. According to the Tax Assessments, the tax assessed value of the Haymount House was \$396,000. For purposes of this report, it has been assumed that the tax assessed value of the Haymount House was indicative of its fair market value as of the Valuation Date. Since the Entity owns an 85% interest in Haymount LP, the *pro rata* value of its interest has been estimated to be \$336,600 (\$396,000 multiplied by 85%).

Haymount LP owed the Entity \$8,250,230 related to a distressed asset sale of 1,600 acres of land to Avanti Investment Advisors, Inc. (“Avanti”) on May 30, 2008. Due to the lack of liquid assets held by Haymount LP as of the Valuation Date, there was no expectation that the loan would be paid off, and the Entity had carried the loan receivable amount down to \$825,023 to reflect this circumstance. For purposes of this report, neither the receivable nor the payable associated with the distressed asset sale was included in the net asset value of the Entity.

As part of the distressed asset sale, Haymount LP did retain a right to receive additional payments from Avanti if it was successful in selling the 1,600 acres of land mentioned above and after Avanti received a certain preferred return. According to the Financial Statements, it was management’s opinion that, based on the state of the real estate market, the likelihood of any payments to Haymount LP under the agreement with Avanti would be negligible. Based on this information, for purposes of this report, no value was allocated to this receivable.

7. Haymount Corporation

The Entity owns a 100% interest in Haymount Corporation. This entity had no assets or liabilities as of the valuation date. According to the Entity’s management, this entity was a shell entity that served to function as one of the two general partners of Haymount LP. Accordingly, this entity was considered to have no value as of the Valuation Date.

Summary of the Properties

Below is a summary of the Properties as of the Valuation Date:

Name of Property/Entity	Real Estate/Business Type	General Description	Fair Market Value
Office and Shops at Sumner Place	Retail/Office property	196,974-square-foot mixed-use retail and office property in Bethesda, Maryland	\$ 58,026,500
Spring Valley Office Complex	Office property	133,419-square-foot office portfolio in Washington, D.C.	44,956,900
Spring Valley Retail Complex	Retail property	75,625-square-foot neighborhood retail center in Washington, D.C.	40,500,000
Sumner Highlands, LLC	Multi-family property	125-unit apartment property in Bethesda, Maryland	28,674,000
Haymount Limited Partnership II	Land	Vacant land located in Rappahannock Academy, Virginia	441,100
Haymount Limited Partnership	Single family home	Home situated on 1.22 acres of land located in Rappahannock Academy, Virginia	336,600
Haymount Corporation	Shell entity	Has no assets or liabilities; it is one of the two general partners of Haymount LP	0
Total			\$ 172,935,100

F. VALUATION SERVICES, INC. – CORPORATE OVERVIEW

CORPORATE OVERVIEW

Valuation Services, Inc. (“VSI”), a premiere business valuation firm based in the Washington, D.C. area, has one of the largest dedicated group of valuation consultants in the Mid-Atlantic Region. VSI specializes in valuing private, closely held businesses and their respective ownership interests.

Since 1995, VSI has provided over 10,000 valuation opinions for both private and public entities. We have valued private entities owning real estate and operating businesses with annual revenues ranging from under \$1 million to over \$1 billion. VSI provides its clients with comprehensive, supportable business valuation services that meet all of the relevant IRS and FASB regulations. We have served clients in the U.S., Europe, and South America.

VSI’s professional staff prepare and support valuations on a full-time basis. Our team of professionals is uniquely positioned to handle various types of valuations and has a history of successfully defending them as expert witnesses before the IRS and in many different courts. Our valuation work has been reviewed and accepted by major agencies of the federal government, as well as national accounting firms and law firms.

VSI’s accredited business valuation experts have highly specialized industry experience, successfully applying their knowledge and discipline to sectors as diverse as high tech, hospitality, real estate, government contracting, manufacturing, professional services, healthcare, construction, automotive, and others. VSI has the experience, knowledge, and ability to perform in-depth valuations for businesses of all sizes and in all industries.

VSI has also valued intangible assets such as patents and royalties, lawsuit claims, note and mortgage receivables, Rule 144 stock, stock options and warrants, large blocks of publicly traded stock, and interests in Family Limited Partnerships and Limited Liability Companies.

VSI offers a broad range of valuation services including:

- Estate planning and administration
- Income tax reporting
- Employee Stock Ownership Plans (ESOPs)
- Litigation support
- Succession / exit planning
- Marital dissolution
- Mergers and acquisitions
- Bankruptcy
- ASC 805/350 (formerly SFAS 141/142)
- Financial reporting
- Section 409A

CRAIG STEPHANSON, CPA, CVA

Managing Director

Craig specializes in the valuation of family limited partnerships and the valuation of real estate entities for estate planning and administration as well as succession planning and partner disputes. Craig has hands-on experience working in closely held businesses where he was responsible for all accounting and tax functions, as well as project financing, management, and acquisition and feasibility analysis.

Prior to joining VSI, Craig had 14 years of real estate accounting, financing, and management experience as a Controller and Chief Financial Officer. Working directly with entrepreneurs of closely held businesses, he managed and oversaw their real estate investments and operational, accounting, and financing needs.

Previous to this, he began his career in the Washington, D.C. office of Arthur Anderson & Co., where he worked in both the audit and tax departments. While at Arthur Andersen, Craig specialized in the audit, tax implications, and the financial analysis of closely held real estate entities.

Craig graduated *magna cum laude* from the University of Richmond (1981), and holds a BS degree in Business Administration, with a major in Accounting. Craig is also a member of the American Institute of Certified Public Accountants (AICPA), the National Association of Certified Valuation Analysts (NACVA), the Institute of Business Appraisers, the Northern Virginia Estate Planning Council, and the Washington D.C. Estate Planning Council.

JEFF BAE, JD, CVA

Managing Director

Jeff provides valuation and consulting services for attorneys and other professional services providers, for purposes of gift and estate tax planning, reorganizations, buy/sell agreements, Section 409A compliance, ASC 805/350 and other financial reporting purposes and litigation support. His valuation experience includes the valuation of ownership interests in operating businesses and closely held private entities that own real property, marketable securities, and other income producing assets.

He began his career at PricewaterhouseCoopers in their National Tax Office. As an international tax associate, he advised U.S. and foreign multinational companies on the tax implications of their international operations as well as coordinating U.S. tax laws with foreign tax laws to develop an optimal worldwide tax strategy.

Jeff holds a BA in Sociology from Emory University (1995), as well as a JD from the University of Miami School of Law (1998) and an MS in Accounting from the University of Virginia (2000). He is also an active member of NACVA.

THOMAS (TOM) DE FILIPPE, MBA

Managing Director

Tom has over 25 years of business valuation and financial reporting experience. Tom provides valuation and consulting services for a wide array of service professionals, including attorneys, accountants, and financial advisors, as well as for business owners, executives, and private equity firms. He has been involved in numerous valuation engagements that cover many different industries.

Tom has extensive experience in valuing closely held entities and intellectual property for purposes of gift and estate tax reporting, purchase price allocations, corporate planning, and fairness opinions. Tom was previously a VP/Regional Director at a national business valuation firm and CFO at two middle market companies. He is an active member in a number of NYC metro area business development organizations, as well as a board of director member in several not-for-profit organizations.

Tom holds a BS in Marketing and Economics from St. John's University (1974) in the Business Honors Program, as well as an MBA from the Hofstra University (1978) with a concentration in Finance.

EMRAH KOCAK, MBA, CVA

Director

A graduate of Purdue University (2003) with an MBA in Finance and Strategy, Emrah also holds a BS in Public Administration & Political Science from the Middle East Technical University in Turkey. Prior to joining VSI, Emrah worked at Hogan & Hartson L.L.P. as a Financial Analyst where he analyzed financial data for the Executive Committee and worked closely with the Chairman and Managing Partners performing a variety of financial and analytical tasks. Emrah is also a member of NACVA.

Emrah provides valuation and consulting services for tax and financial reporting purposes. Emrah has particular experience in valuation of ownership interests in operating businesses (including early-stage companies with complex capital structures), private equity, and venture capital funds. His experience also includes valuation of stock options, warrants, restricted stock and other types of equity-based compensation for tax and financial reporting purposes.

REZA SADEGHI, CVA

Manager

A graduate of Johns Hopkins University (2008) with a Master's in Applied Economics, Reza also holds a BS in Business Administration from Carnegie Mellon University (2002).

Prior to joining VSI, Reza worked at America Online as a Financial Analyst where he performed financial reporting and budget analysis. Reza also has experience in the public sector at the Department of Transportation where he produced monthly financial profiles, projected fiscal year purchases and assisted in the fiscal year close out process.

Reza provides valuation and consulting services for attorneys and other professional services providers, for purposes of gift and estate tax planning, reorganizations, buy/sell agreements, divorce and litigation support. He is also an active member of NACVA.

JENIFER SHAPIRO, MBA

Manager

Jenifer has extensive experience providing valuation opinions for companies that encompass many industries such as real estate, government services, financial institutions, information technology and retail and hospitality. Jenifer has worked closely with clients conducting fair market valuations for gift and estate tax planning, buy-sell agreements, shareholder disputes, and the issuance of employee stock options. Jenifer also has experience conducting intangible asset valuations and goodwill impairment testing for financial reporting purposes and valuing early-stage, high-growth companies.

Prior to joining Valuation Services, Jenifer was a Manager at a national valuation firm specializing in the valuation of middle-market companies using fair value measurements. Jenifer is a graduate of American University, with an MBA in Finance and an MA in International Affairs. Jenifer also holds a BA in International Relations from Tufts University.

AYHAN NAZLI, CFA, CVA

Manager

Ayhan provides valuation consulting services to attorneys, accountants, and business owners for gift and estate tax reporting, buy/sell agreements, ESOPs, shareholder disputes, internal planning, and litigation support. Ayhan has particular experience in the valuation of ownership interests in operating businesses within various industries, private equity investments, and real estate holding companies.

Ayhan is a graduate of The Robert H. Smith School of Business at the University of Maryland, College Park with a BS in Finance. Prior to joining VSI, Ayhan began his career at Lehman Brothers Holdings, Inc. as an Analyst in the Mortgage Capital Division. At Lehman Brothers, he was involved with performing due diligence, analyzing cash flow accounts, and other treasury functions. Ayhan is a CFA charterholder and is a member of the CFA Society of Washington, D.C. and NACVA.