# RE 3381

# REAL ESTATE FUNDAMENTALS CLASS:

# REAL ESTATE MARKETS AND VALUATION MODULE

## SPRING 2014

## CLASS NO. 9

## FEBRUARY 19, 2014

## NEXT CLASS: Module Exam!

## You only need something to write with.

# SEGMENT 1: RECONCILATION PROCESS

A. When two or more indications of value are developed, reconciliation is required.

**B. For our "Very Nice Office Building", we (me) developed three independent value indications:**

- Cost Approach: $25,400,000
- Sales Comparison Approach: $24,850,000
- Income Capitalization Approach: $27,500,000

C. To Reconcile:
   1. Check for "Appropriateness"
   2. Check for "Accuracy"
   3. Check for "Quantity of Evidence"

D. The final value….?

# SEGMENT 2: A REAL ESTATE INVESTMENT: IS IT AS SIMPLE AS "BUYING LOW AND SELLING HIGH?"

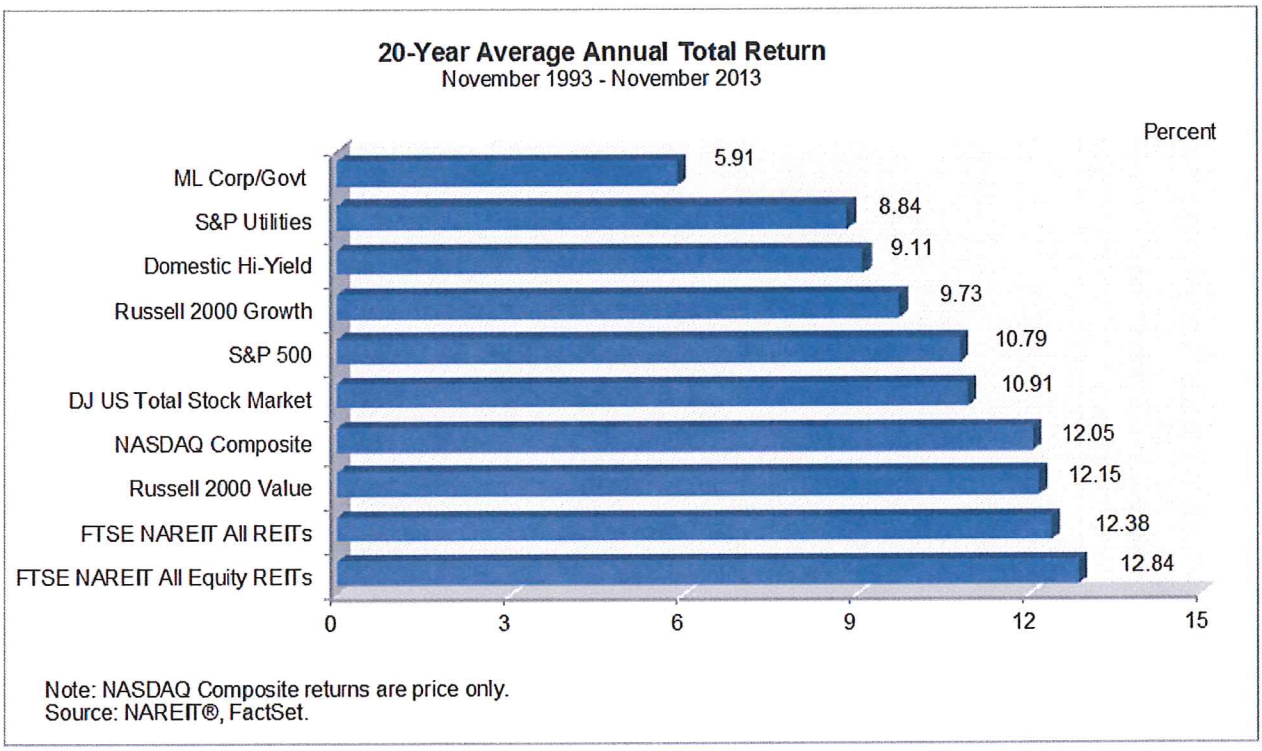
I. First step is to define your personal investment objectives:

A. Cash flow
B. Long term appreciation
C. Both the A and B
D. Quick profit turn

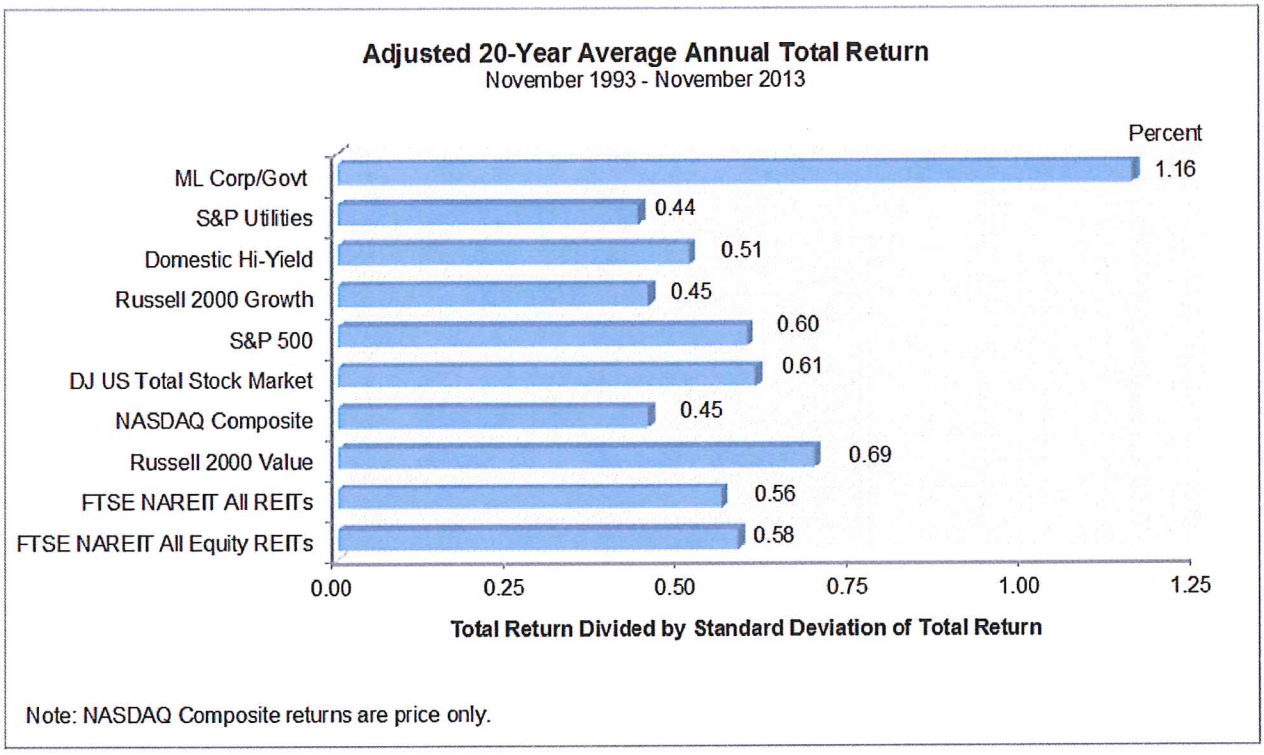
II. Real Estate Performance

A. Comparative analysis
- See following charts and graphs

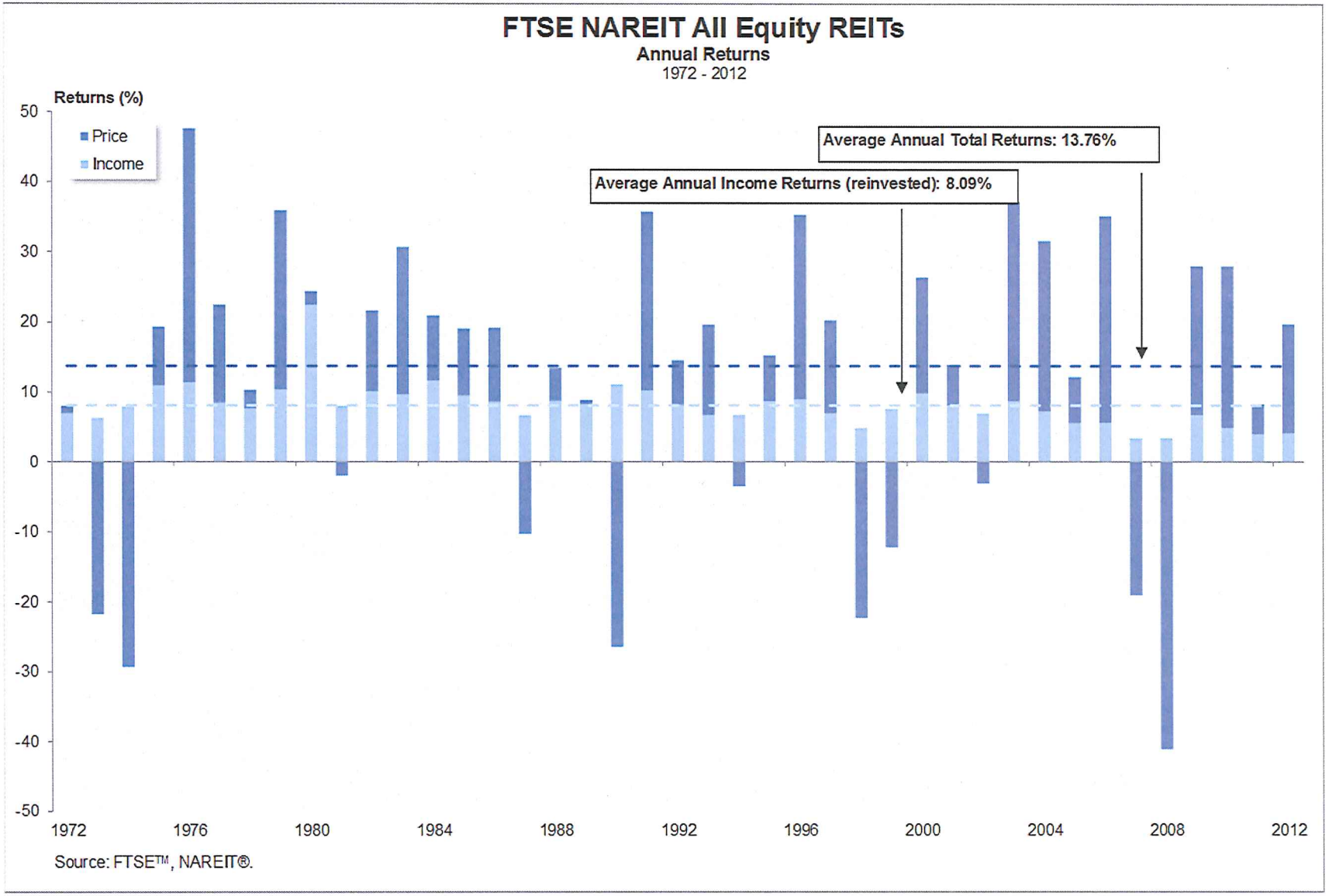
NAREIT®
REITWatch
National Association of Real Estate Investment Trusts®

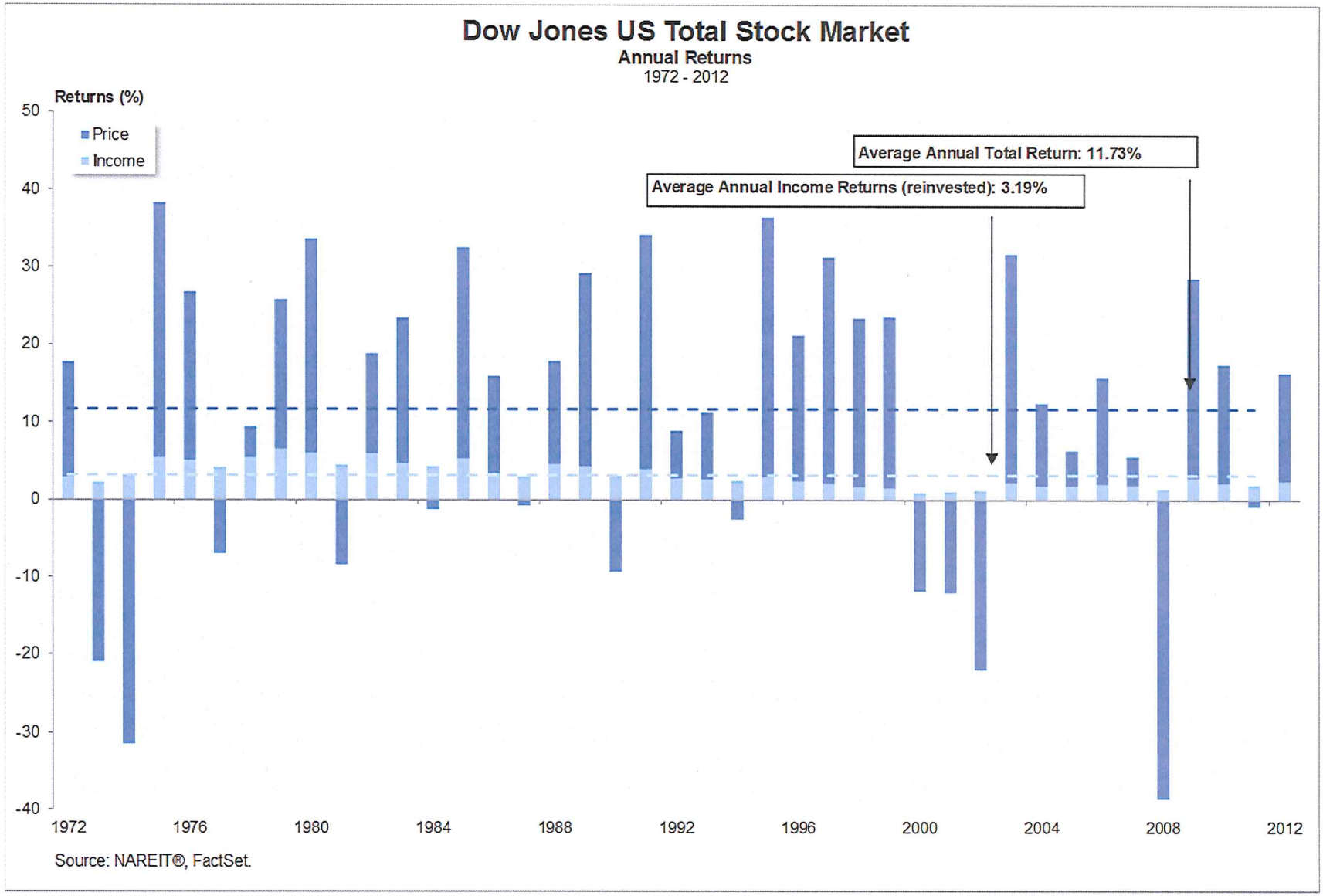



Note: NASDAQ Composite returns are price only.
Source: NAREIT®, FactSet.




Note: NASDAQ Composite returns are price only.


FTSE NAREIT All Equity REITs
Annual Returns
1972 - 2012
Returns (%)
Price
Income
Average Annual Total Returns: 13.76%
Average Annual Income Returns (reinvested): 8.09%
50
40
30
20
10
0
-10
-20
-30
-40
-50
1972
1976
1980
1984
1988
1992
1996
2000
2004
2008
2012
Source: FTSE™, NAREIT®.


Dow Jones US Total Stock Market
Annual Returns
1972 - 2012
Returns (%)
Price
Income
Average Annual Total Return: 11.73%
Average Annual Income Returns (reinvested): 3.19%
50
40
30
20
10
0
-10
-20
-30
-40
1972
1976
1980
1984
1988
1992
1996
2000
2004
2008
2012
Source: NAREIT®, FactSet.

# NPI–TOTAL RETURNS

## NPI – TOTAL RETURNS SUMMARY

| | Property Count | Market Value | Total | Income | Appreciation |
|---|---|---|---|---|---|
| 3rd Q 2013 | 7,027 | 343,691,930,224 | 2.59 | 1.37 | 1.22 |
| 2nd Q 2013 | 7,099 | 336,332,120,173 | 2.87 | 1.40 | 1.47 |
| 1st Q 2013 | 7,181 | 329,071,622,796 | 2.57 | 1.39 | 1.18 |
| 4th Q 2012 | 7,270 | 319,951,397,055 | 2.54 | 1.41 | 1.13 |
| 1 Year | | | 11.00 | 5.68 | 5.10 |
| 3 Year | | | 12.67 | 5.94 | 6.45 |
| 5 Year | | | 3.36 | 6.08 | -2.60 |
| 10 Year | | | 8.66 | 6.22 | 2.34 |
| 15 Year | | | 8.93 | 6.95 | 1.88 |
| 20 Year | | | 9.19 | 7.44 | 1.66 |
| Inception | | | 9.14 | 7.53 | 1.52 |

## NPI – TOTAL RETURNS BY PROPERTY - TYPE SUMMARY

| | Apartment | Hotel | Industrial | Office | Retail |
|---|---|---|---|---|---|
| 3rd Q 2013 | 2.48 | 2.11 | 3.14 | 2.42 | 2.70 |
| 2nd Q 2013 | 2.50 | 1.95 | 3.22 | 2.84 | 3.21 |
| 1st Q 2013 | 2.57 | 1.15 | 2.50 | 1.92 | 3.72 |
| 4th Q 2012 | 2.81 | 2.24 | 2.37 | 2.17 | 2.97 |
| 1 Year | 10.77 | 7.65 | 11.70 | 9.68 | 13.22 |
| 3 Year | 13.72 | 9.61 | 12.71 | 11.59 | 13.51 |
| 5 Year | 4.33 | -0.32 | 2.74 | 1.86 | 5.58 |
| 10 Year | 8.36 | 6.76 | 8.08 | 8.15 | 10.48 |
| 15 Year | 9.11 | 6.57 | 8.74 | 8.31 | 10.40 |
| 20 Year | 9.95 | 0.00 | 9.58 | 8.90 | 9.49 |
| Inception | 8.84 | 8.16 | 9.35 | 8.38 | 9.61 |

## NPI – TOTAL RETURNS BY REGION SUMMARY

| | East | Midwest | South | West |
|---|---|---|---|---|
| 3rd Q 2013 | 2.09 | 2.72 | 3.04 | 2.77 |
| 2nd Q 2013 | 2.52 | 2.97 | 3.05 | 3.09 |
| 1st Q 2013 | 2.09 | 2.47 | 3.03 | 2.77 |
| 4th Q 2012 | 2.20 | 2.31 | 2.96 | 2.67 |
| 1 Year | 9.21 | 10.88 | 12.64 | 11.78 |
| 3 Year | 11.86 | 11.40 | 12.73 | 13.86 |
| 5 Year | 2.73 | 3.52 | 4.18 | 3.46 |
| 10 Year | 8.80 | 7.11 | 8.49 | 9.25 |
| 15 Year | 9.42 | 7.37 | 8.24 | 9.61 |
| 20 Year | 9.50 | 7.64 | 8.65 | 10.01 |
| Inception | 10.29 | 7.99 | 8.12 | 9.58 |

## MARKET INDEX COMPARISONS

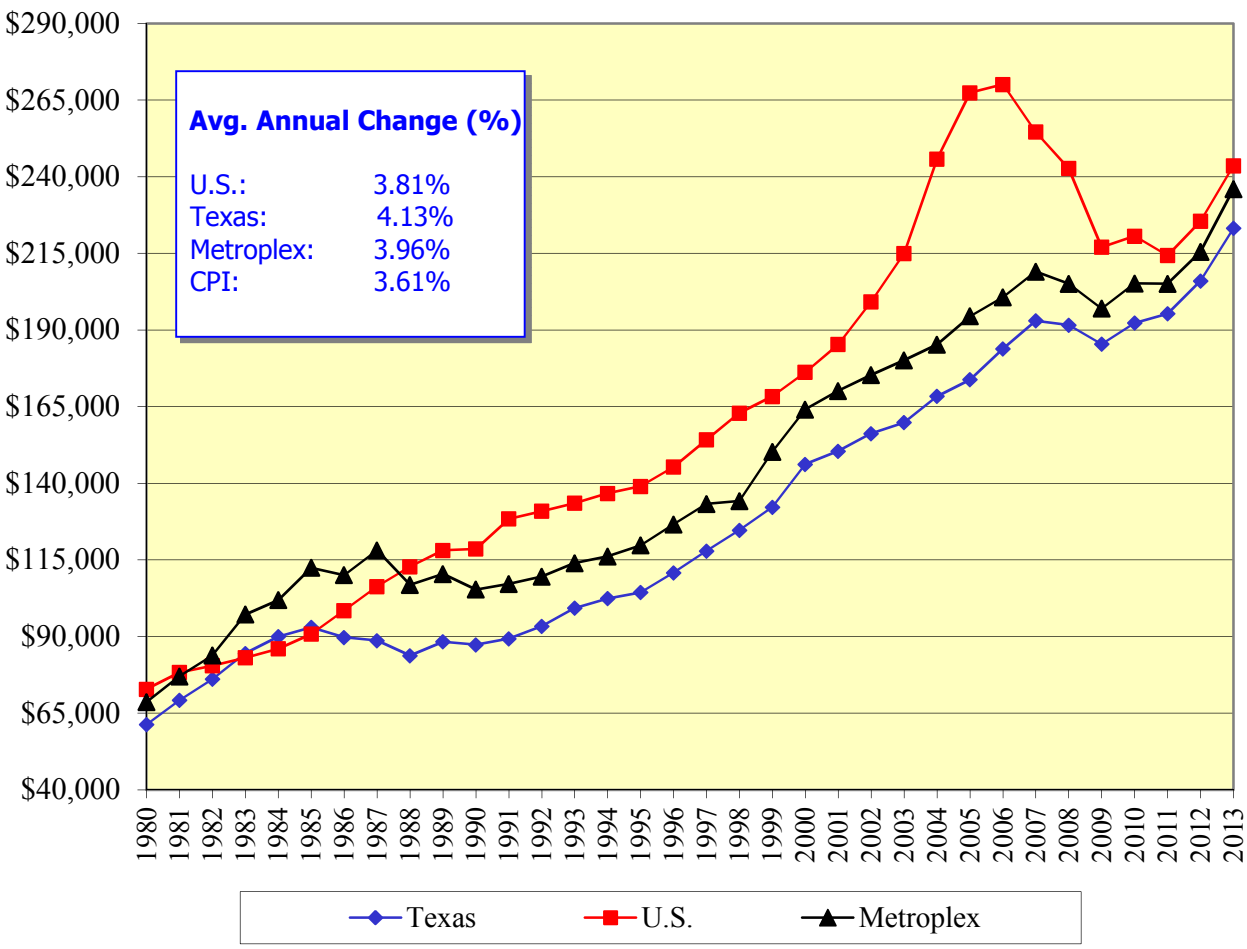
| | 2nd Q2013 Returns % | Change from 1st Q2013 | 1yr. | 3yr. | 5yr. | 10yr. | 15yr. | 20yr. | Inception |
|---|---|---|---|---|---|---|---|---|---|
| NPI | 2.59 | -0.28 | 11.00 | 12.67 | 3.36 | 8.66 | 8.93 | 9.19 | 9.14 |
| S&P 500 Index | 5.24 | 2.33 | 19.34 | 16.27 | 10.02 | 7.56 | 5.33 | 8.82 | 11.56 |
| Barclays Capital Govt Bond | 0.12 | 2.00 | -1.98 | 2.13 | 4.00 | 4.17 | 4.94 | 5.34 | 7.54 |
| Barclays Capital U.S. Govt/Credit | 0.36 | 2.87 | -1.96 | 2.89 | 5.71 | 4.52 | 5.24 | 5.73 | 7.88 |
| T-Bills (90 day) | 0.01 | -0.01 | 0.07 | 0.08 | 0.15 | 1.61 | 2.30 | 2.97 | 5.23 |
| NAREIT Equity REIT Index | -2.61 | -0.48 | 6.23 | 12.78 | 6.00 | 9.67 | 10.29 | 9.90 | 12.71 |
| Consumer Price Index | 0.16 | -0.15 | 1.07 | 2.30 | 1.34 | 2.36 | 2.41 | 2.42 | 3.78 |

* Barclays Capital U.S. Government Bond Index (formally known as Lehman Brothers U.S. Government Bond Index)
** Barclays Capital U.S. Government/Credit Bond Index (formally known as Lehman Brothers U.S. Government/Credit Bond Index)
For more information reference the document titled THE BENCHMARK IN FIXED INCOME: BARCLAYS CAPITAL INDICES REBRANDING THE UNIFIED BARCLAYS CAPITAL INDICES located at https://ecommerce.barcap.com/indices/index.dxml

Opinion: Successful investing in income producing real estate depends on cash flow, not just appreciation. Recall the following chart – next page:

If long term average annual increases in commercial real estate are in the 2-4%/year range, proper management of operations is critical to achieving an appropriate return on investment.

B. Investing in single-family housing, of which most is for owner occupancy, not income production, depends more heavily on appreciation not cash flow, as depicted in the graph below (also from Class 1)




4Q 2013

Source: Real Estate Center at Texas A, www.realtor.org (US data thru 4Q 2012)
Compiled and edited by Crosson Dannis, Inc.

K:\Excel\Charts\Residential Sales Price.xls

Your home is different than investment real estate: it is purchased as shelter first; investment, second. Long term, well-located and well-maintained single family homes have increased in value at a pace greater than inflation. By so doing, a "real return" is achieved.

III. The use of leverage (other people's money) to enhance real estate returns

A. Real estate is a hard asset that lenders like: it is (in "normal times"!) readily financeable using someone else's money.

B. Commercial real estate financing

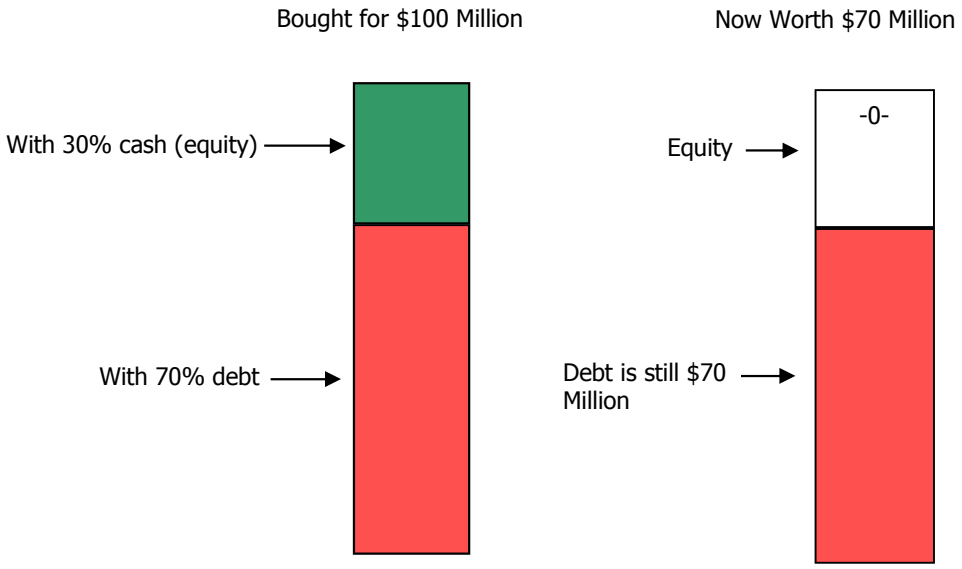
1. Typical financing would be 75% of "market value":

| | |
|---|---|
| Property Type: | Office Building |
| Market Value | $10,000,000 |
| Loan: | $ 7,500,000 |
| Equity: | $ 2,500,000 |
| Interest Rate: | 6.0% |
| Term: | 25 years |
| Debt Service: | $ 586,700 |
| NOI: | $ 750,000 |
| Cash Flow to Equity (NOI – Debt Service) | $ 163,300 |
| Return on Equity: | 6.5% (NOI ÷ Equity) |

Assume historical trends, shown earlier in the graph above continues over the next ten years, and this asset appreciates, say, 2.50%/year, here's what a sale would then produce:

| | | | |
|---|---|---|---|
| | Today's Value | = | $10,000,000 |
| | Inflated at 2.5%/year, 10 years, | | |
| | Sell in 10 Years at | | 12,800,000 |
| (Less) | Loan Balance | | (5,725,000) |
| | Cash to Investor | | $7,075,000 |
| | IRR | = | 15.4% |

2. But leverage is likewise magnified when the property value goes down, as seen in the example below:




To keep the property, your new lender will again loan you 70% of the "new" value – or, $49 million – but you owe $70 million: therein lies the problem in today's commercial real estate market.

C. Single Family Home

Lenders are even more generous on one's personal homestead: You can borrow (with good credit) as much as 100% of the purchase price - and with the seller's help, pay no closing costs[1]. In other words, you may be able to buy the real estate (your own home, that is) with none of your money invested!

Example:

| | |
|---|---|
| Sale Price[2]: | $200,000 |
| Loan: | $200,000 |
| Seller Paid Closing Costs: | $6,000 (3% estimate) |

Assume 1) You stay in the home for 10 years and
2) home prices continue to increase, at, say, 4.5%/year.

| | |
|---|---|
| Then: Sale price, 10 years hence | $310,000 |
| (less) Loan Balance (10 years hence) | (153,000) |
| Cash Equity | $157,000 |
| Cash Invested | -0- |
| Return on Cash | Infinite! |

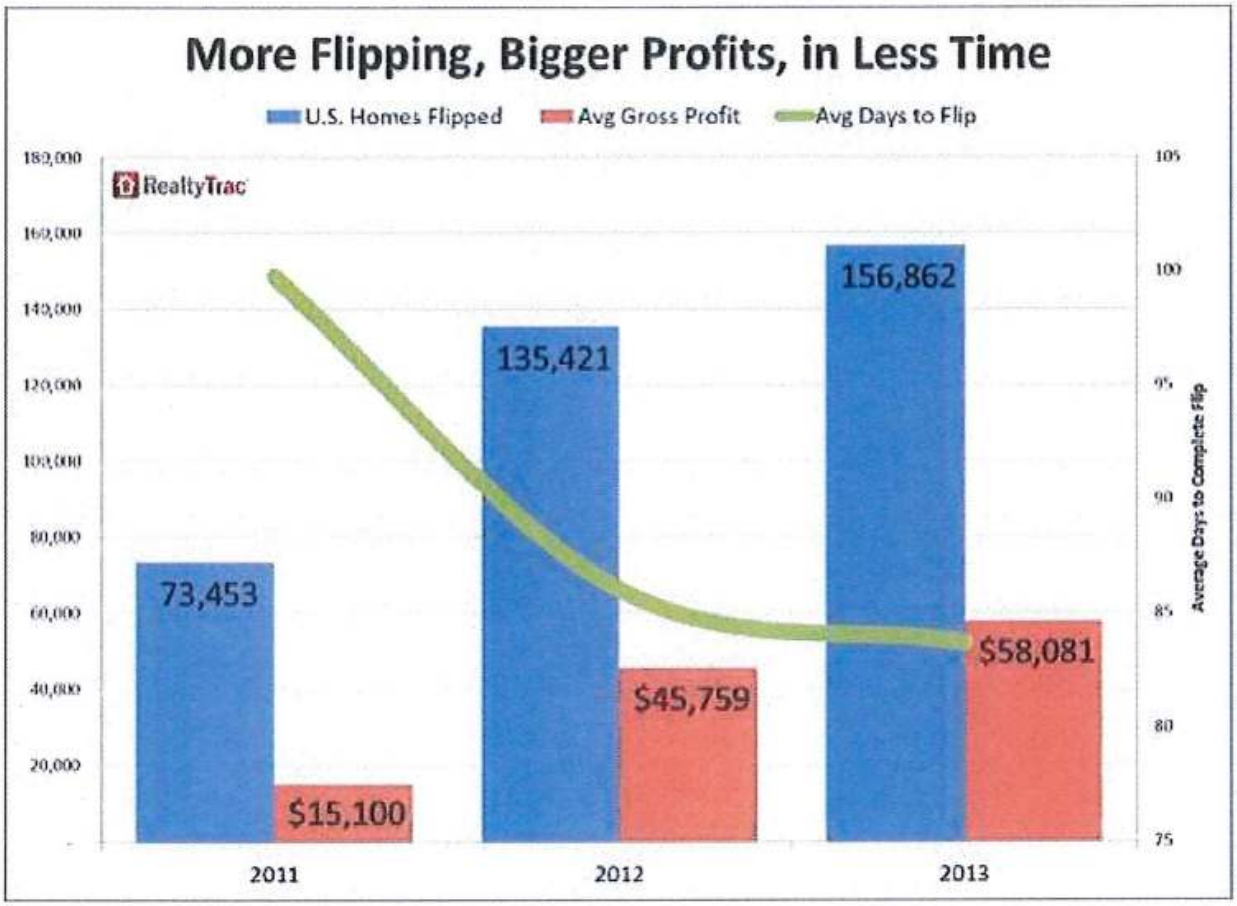
[1] This may or may not be true in today's rapidly changing credit market. It is, however, a useful sample for this classroom exercise. [2] Lenders will base loan to value ratio on the lesser of sale price or appraised value.

IV. Short-term real estate investing

A. "Flipping" property

This usually involves the purchase then the sale of an "undervalued" property immediately (say, is less than a month or so) for a profit. In a simple "flip", the property is brought below "market" because 1) the seller is highly motivated to sell immediately (financial problems usually) 2) the seller is stupid – maybe ignorant – and does not know true "market value", i.e., what the property can be sold for if property marketed. Consider these data:

| **FORECLOSURE DEALS** | | | **BARGAINS FOUND** | | | |
|---|---|---|---|---|---|---|
| **A look at the postings brought by third-party buyers at auction in 2008:** | | | **Average price paid on the dollar in foreclosure auctions compared with appraised value.** | | | |
| | **Average Assessed Value** | **Average Bid** | | **2006** | **2007** | **2008** |
| **Dallas** | $174,404 | $98,872 | **Dallas** | $0.69 | $0.66 | $0.53 |
| **Tarrant** | 118,019 | 68,707 | **Tarrant** | 0.79 | 0.70 | 0.57 |
| **Collin** | 206,098 | 137,735 | **Collin** | 0.77 | 0.65 | 0.67 |
| **Denton** | 183,329 | 122,206 | **Denton** | 0.80 | 0.60 | 0.67 |
| **D-FW** | 162,251 | 99,254 | **D-FW** | 0.73 | 0.66 | 0.59 |
| Source: Foreclosure Listing Services; DMN 2.05.09 | | | | | | |




The number of homes flipped nationwide doubled between 2011 and 2013. The average gross profit on flipped homes nearly quadrupled during that time, while the average number of days to flip was reduced by more than 15. ***Chart courtesy of RealtyTrac.

Requirements:

1. Right place, right time.
2. Ability to fund immediately
3. Market knowledge – be sure that the acquisition price is indeed less than "market"
4. Execution of deal

B. Fixer-uppers/Flipping

Another example is buying "distressed" properties; in this example, a single family home that has not been maintained and needs repair.

Example:

| | | |
|---|---|---|
| **Sale Price:** | | **$100,000** |
| **Repairs Needed:** | | |
| **Roof -** | **$10,000** | |
| **Carpet -** | **10,000** | |
| **Paint -** | **5,000** | |
| **Kitchen -** | **15,000** | |
| **Total Repairs** | | **+$ 40,000** |
| **Total Cost Basis** | | **=$140,000** |
| **Market Value, As Repaired** | | **175,000** |
| **Gross Profit** | | **$35,000 (25%)** |

Requirements:

1. Ability to properly qualify repair costs
2. Market knowledge – be sure "market value – as repaired" is valid
3. Ability to get work done right, and on time
4. Bank financing for the entire $140,000 – short term

## V. Investing in Land

Marketing in land generally requires cash equity and the ability to fund the annual carrying costs of real estate taxes, insurance and maybe maintenance.

Because vacant land does not produce income (unless it is leased for some purpose), financing is more difficult and less generous than for improved properties.

Profit in land is maximized while the highest and best use of the land changes from one use to a "higher" use.

Examples:
- Farm land to residential land
- Low rise-to-high rise usage
- Vacant commercial corner after market area has developed out

On average, rural land prices in the U.S. increase long term in the 2-5%/year range – very similar to that of inflation – assuming continued use. See Texas Overhead.

This rate of increase is similarly observed in urban areas not constrained in supply.

If taxes are 1-3% (of value) per year, this annual rate of increase is not an attractive investment (based upon return only).

See Aerial.

Comments on "Land Development"

# SEGMENT 3: CREDIT SC0RES AND YOU

## Credit Report & Credit Score Basics

**The following has been reproduced from credit.com**

**The Major Players –** the three national credit bureaus – TransUnion, Equifax, and Experian – collect data on consumers from a network of reporting banks and institutions. The credit bureaus store this information and sell it to banks and other companies looking for ways to evaluate consumer risk and market credit offers. Consumers can also purchase their data from the credit bureaus. The credit reporting process is regulated by the Fair Credit Reporting Act (FCRA).

**Credit Reports –** Credit Reports are keyed off of your Social Security number and contain information about your name, address, employer, phone number, credit and loan accounts, payment records, collection accounts, and public records such as bankruptcies, liens, and judgments. Credit reports also contain a history of when your credit was checked, either for a credit application (hard inquiry) or an account review (soft inquiry). Credit reports are constantly updated with new information; most banks report new customer data every 30 days. It is voluntary for banks and creditors report to the credit bureaus.

**Checking your credit –** Checking your own credit does not harm your credit score and is not considered a hard inquiry. Consumers can purchase their credit data online anytime or can request a free disclosure from each credit bureau every 12 months at AnnualCreditReport.com. Unfortunately, AnnualCreditReport.com does not include your free credit scores so it may not be the best option for consumers who wish to view all three credit reports and three credit scores. Consumers also have the option to purchase a 3-in-1 credit report which does include all three credit scores. Credit reports should be reviewed every 6-12 months for errors and issues. If inaccuracies are found, consumers can file a dispute with the credit bureaus to have the record investigated.

**Credit scores –** Credit scores are used as an algorithmic "filter" to interpret complex credit information into a three-digit number. Banks and other institutions use this number to predict how risky a consumer is. Most credit scores use a range from 300-850 and are designed to predict how likely you are to be 90+ days late on an account in the next year. Fair Isaac Corporation creates and licenses the popular FICO score.

Lenders can use one of many different credit-scoring models to determine if you are creditworthy. Different models can produce different scores. However, lenders use some scoring models more than others. The FICO score is one such popular scoring method.

Its scale runs from 300 to 850. The vast majority of people will have scores between 600 and 800. A score of 720 or higher will get you the most favorable interest rates on a mortgage, according to data from Fair Isaac Corp., a California-based company that developed the first credit score as well as the FICO score.

Fair Isaac reports that the American public's credit scores break out along these lines:

| Credit Score | Percentage |
|---|---|
| 499 and Below | 2 percent |
| 500-549 | 5 percent |
| 550-599 | 8 percent |
| 600-649 | 12 percent |
| 650-699 | 15 percent |
| 700-749 | 18 percent |
| 750-799 | 27 percent |
| 800 and Above | 13 percent |

**Credit issues –** Late payments, high credit card debt levels, too many applications for credit, and/or a credit history that is not old enough can all damage your credit standing. Records such as collection accounts, bankruptcy filings, tax liens, and judgments are also very damaging to your credit scores. Negative credit report records have a set expiration date under the FCRA, usually 7-10 years. Repayment of a record such as a collection account does not remove the record from your credit report.

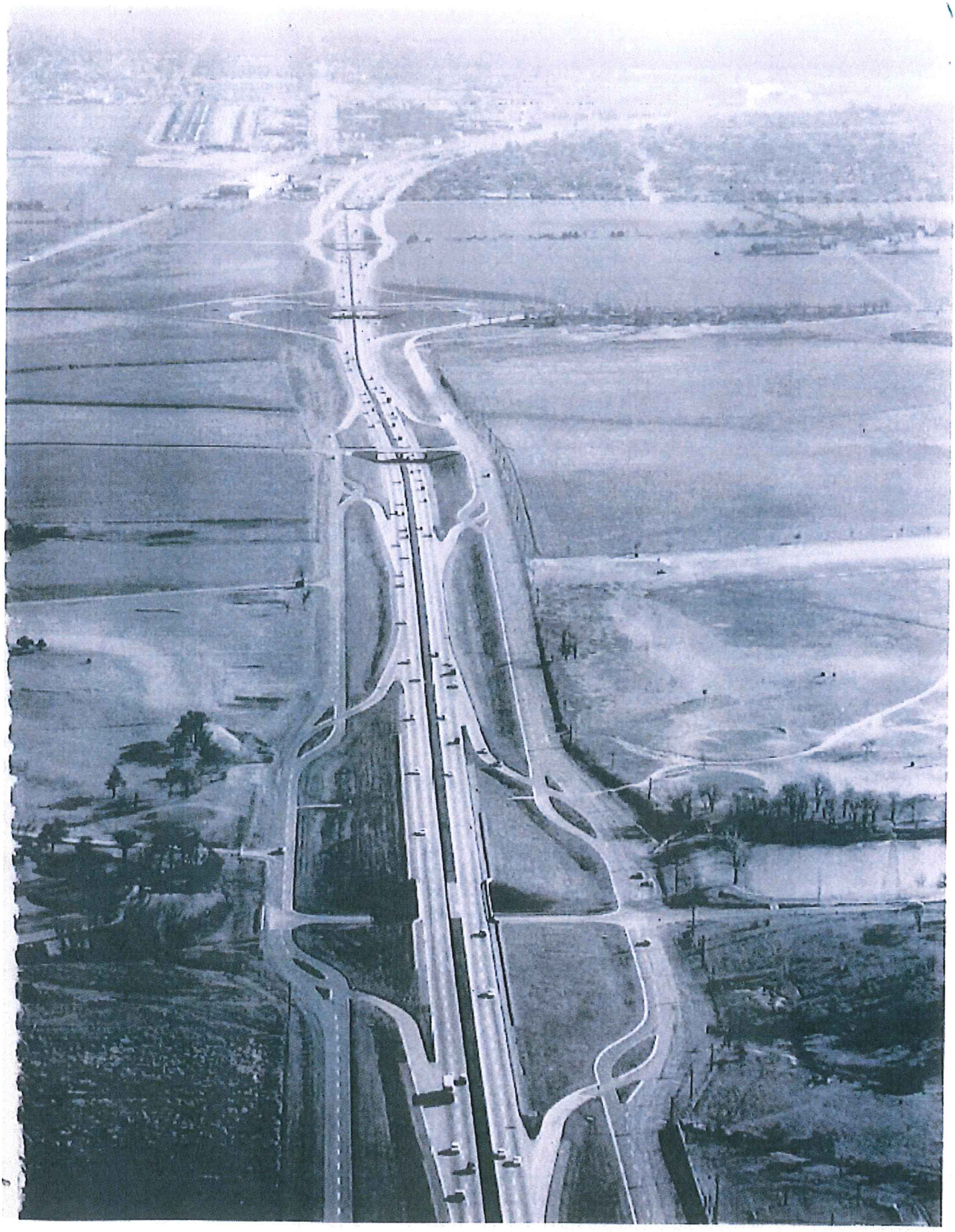
**Maximizing your credit –** For the best credit score: always pay your bills on time; only use 10% of your available credit card limits each month; keep accounts open for as long as possible; avoid unnecessary applications for new accounts. Having a mix of credit card and loan accounts is also beneficial. Credit score formulas are designed to appreciate stability, so avoid changes to your data if you already have good credit scores. You should always check your credit data at least three months before a major purchase.

## Table 1. Texas Statewide Trends in Size-Adjusted Average Price of Rural Land, 1966–2011

| Year | Nominal | | | Real | | | Volume of Sales | Median Tract Size (acres) |
|---|---|---|---|---|---|---|---|---|
| | Size-Adjusted Average Price per Acre | Year-to-Year Percentage Change | Annual Compound 5-Year Growth Rate | Deflated* Size-Adjusted Average Price per Acre | Year-to-Year Percentage Change | Annual Compound 5-Year Growth Rate | | |
| 1966 | 172 | | | 172 | | | 6,449 | 125 |
| 1967 | 183 | 6 | | 177 | 3 | | 5,695 | 118 |
| 1968 | 190 | 4 | | 177 | 0 | | 5,219 | 109 |
| 1969 | 200 | 5 | | 177 | 0 | | 5,360 | 101 |
| 1970 | 212 | 6 | | 178 | 1 | | 4,504 | 112 |
| 1971 | 230 | 8 | 6 | 184 | 3 | 1 | 5,290 | 113 |
| 1972 | 248 | 8 | 6 | 191 | 4 | 1 | 6,014 | 125 |
| 1973 | 323 | 30 | 11 | 236 | 23 | 6 | 5,227 | 157 |
| 1974 | 404 | 25 | 15 | 270 | 14 | 9 | 5,516 | 154 |
| 1975 | 409 | 1 | 14 | 250 | -7 | 7 | 3,722 | 129 |
| 1976 | 440 | 8 | 14 | 254 | 2 | 7 | 4,405 | 131 |
| 1977 | 464 | 5 | 13 | 252 | -1 | 6 | 4,566 | 124 |
| 1978 | 520 | 12 | 10 | 264 | 5 | 2 | 4,171 | 128 |
| 1979 | 582 | 12 | 8 | 273 | 3 | 0 | 3,889 | 135 |
| 1980 | 670 | 15 | 10 | 287 | 5 | 3 | 3,374 | 139 |
| 1981 | 778 | 16 | 12 | 305 | 6 | 4 | 3,721 | 125 |
| 1982 | 802 | 3 | 12 | 296 | -3 | 3 | 3,299 | 106 |
| 1983 | 832 | 4 | 10 | 296 | 0 | 2 | 3,869 | 114 |
| 1984 | 863 | 4 | 8 | 296 | 0 | 2 | 4,037 | 128 |
| 1985 | 866 | 0 | 5 | 288 | -3 | 0 | 3,972 | 119 |
| 1986 | 722 | -17 | -1 | 235 | -18 | -5 | 3,191 | 117 |
| 1987 | 634 | -12 | -5 | 201 | -15 | -8 | 3,077 | 130 |
| 1988 | 608 | -4 | -6 | 186 | -7 | -9 | 3,637 | 140 |
| 1989 | 594 | -2 | -7 | 175 | -6 | -10 | 3,691 | 140 |
| 1990 | 588 | -1 | -7 | 167 | -5 | -10 | 3,777 | 137 |
| 1991 | 545 | -7 | -5 | 149 | -10 | -9 | 3,780 | 138 |
| 1992 | 564 | 3 | -2 | 151 | 1 | -6 | 3,891 | 147 |
| 1993 | 560 | -1 | -2 | 147 | -3 | -5 | 4,109 | 140 |
| 1994 | 605 | 8 | 0 | 155 | 6 | -2 | 4,770 | 132 |
| 1995 | 631 | 4 | 1 | 159 | 2 | -1 | 3,929 | 122 |
| 1996 | 680 | 8 | 5 | 168 | 6 | 2 | 4,193 | 111 |
| 1997 | 696 | 2 | 4 | 169 | 0 | 2 | 4,428 | 140 |
| 1998 | 744 | 7 | 6 | 178 | 6 | 4 | 4,411 | 139 |
| 1999 | 788 | 6 | 5 | 186 | 4 | 4 | 4,862 | 120 |
| 2000 | 845 | 7 | 6 | 195 | 5 | 4 | 4,691 | 117 |
| 2001 | 886 | 5 | 5 | 200 | 3 | 4 | 4,721 | 101 |
| 2002 | 977 | 10 | 7 | 217 | 9 | 5 | 5,700 | 105 |
| 2003 | 1,077 | 10 | 8 | 235 | 8 | 6 | 7,000 | 100 |
| 2004 | 1,281 | 19 | 10 | 271 | 16 | 8 | 7,770 | 100 |
| 2005 | 1,487 | 16 | 12 | 305 | 12 | 9 | 8,005 | 100 |
| 2006 | 1,830 | 23 | 16 | 363 | 19 | 13 | 7,891 | 96 |
| 2007 | 2,083 | 14 | 16 | 402 | 11 | 13 | 7,344 | 80 |
| 2008 | 2,247 | 8 | 16 | 424 | 6 | 13 | 5,880 | 90 |
| 2009 | 2,079 | -7 | 10 | 389 | -8 | 7 | 4,139 | 73 |
| 2010 | 2,091 | 1 | 7 | 388 | 0 | 5 | 4,747 | 75 |
| 2011 | 2,150 | 3 | 3 | 396 | 2 | 2 | 4,520 | 74 |

*In 1966 dollars

Source: Real Estate Center at Texas A&M University



## SEGMENT 4: RELATED REAL ESTATE ACTIVITIES SERVICES ("JOBS")

A. Consulting

B. Appraisal/Appraisal Review Function

C. Litigation Work:
   1. Condemnation
   2. Property Tax Appeals
   3. Lawsuits/Litigation/Bankruptcies

D. Brokerage Services

   1. Leasing side: Tenant v. Landlord
   2. Sales side: High risk, High reward

E. Management

F. Development

# MODULE TEST REVIEW

Length

Structure

Pop Tests

Class 1: Nothing

Class 2:

A. Introduction-

B. Commentary on the market-
   - SFR
   - Commercial

C. Commentary of Appraiser/Appraising

D. Real Estate vs. Real Property

E. Distinctions between Real Estate, Personal Property and Trade Fixtures
   - Know differences and examples

F. Concepts of Land
- Geographical/environmental
- Legal
- Economic
- Social

G. Four Factors of Value
- Utility
- Scarcity
- Desire
- Effective Purchasing Power

H. RE Valuation Terminology
- Price
- Cost
- Value

**Know definitions & differences**

- Investment value
- Insurable value
- Assessed value
- Going concern value

**Know definitions**

I. Comment on Classical vs. Neo-Classical Economic Theory

J. History - nothing

Class 3

A. Four major real estate types
   - nothing

B. Neighborhood
   - Forces: S – E – G – E

Class 4

A. Continued discussion on "Neighborhoods"

B. Land Description
   - Methods used in U.S.
   - Physical/Locational characteristics that affect value (I listed 7 of them)

- Improvement Analysis and HBU Analysis – See Class #6

Class 5 – No class that day.

Class 6

A. Highest and Best Use
   - Definition
   - Four Criteria!!

B. Sales Comparison Approach
   - Strengths/weaknesses

C. Relationship to Appraisal Principles

D. What is the "comparable" property?

E. **Elements** and **units** of comparison definition(s)

F. Adjustment process

Class 7

A. Improvement Analysis (Continued from Class 4)
   - Variations/definitions of size and how different types of properties are measured
   - Functionality

B. Cost Approach
   - Strengths/Weaknesses
   - Appraisal Principles
   - Definitions of Direct/Indirect Cost/Profit
   - Types of Depreciation/Obsolescence
     - Physical
     - Functional
     - External/Economic

## Class 8

A. Income Capitalization Approach
- Strengths/Weaknesses
- Appraisal Principles
- Relationship
- Definitions of PGI, EGI, V&CL, NOI
- Fixed/Variable Expenses
- Above and below "the line" accounting for expenses – know differences
- Types of leases
- Expense categories
- Direct Capitalization concept/formula

B. DCFA
- Process
- What is accounted for "above" and "below" the line
- Know all of the important terms we discussed in class: holding period, tenant renewal, discount rate, reversionary value

## Class 9

A. Reconciliation Process

B. Nothing specific on investing, but I hope you can make some money sometime in real estate!

C. No credit score questions