



Housing In Crisis

Housing Oversupply:

Over the past 12 months varied reports and commentary regarding the current housing crisis have been released. Most of the commentary has focused on financial institutions and the lending practices of the past seven years. Analysis of the current crisis should not minimize these lending practices, but should recognize that these policies were part of the symptoms that analysts ignored.

Many factors can be attributed to this crisis, but perhaps the most significant variable is new housing starts. From 2000 to 2008, 15.1 million housing units were built¹. The level of new construction does not vary significantly in total units from similar growth patterns in the 80's (15.1 million units) and the 90's (15.7 million units), except the current cycle covers 8 years versus 10.

A review of the data indicates that there is no significant anomaly; however when one considers additional information such as the number of vacant units and primary units (seasonal units¹ are removed from count) a pattern of over development begins to emerge.

The data in the table below indicates an increase in vacant housing units² covering the latest development time period. Vacant units are segmented into occupied and renter units, units offered for sale and units being held vacant.

At 17 million units the vacancy level increased to 13.8% versus historical levels below 10%. During the last real estate correction in the late

Year	Housing Units	Primary	Occupied	Vacant	% Vacant
2008	128	123.6	111	17	13.8%
2000	115	111.5	105	10	9.0%
1990	102	98.9	92	10	10.1%
1980	87	84.3	80	7	8.3%
1960	58	56	53	5	8.9%

80's and early 90's, vacancy increased to 10%. Based on the data analyzed, one can conclude that there are 5 million excess housing units in the market as of 2008.

17-18 154th Street

Whitestone NY, 11357

Tel: 718-461-1310 Fax: 718-939-4006

Contact: John Watch

¹<http://www.census.gov/hhes/www/housing/hvs/annual08/ann08ind.html> , <http://www.census.gov/hhes/www/housing/census/histcensushsg.html>

²American Housing Survey for the United States 2007, published September 2008, Census Bureau

Cause of Excess Growth

Another segment of growth, the non-primary residence, grew from 3.5 million units to 4.4 million units during this time period. This increase in secondary housing units exceeds the trend for the past twenty years and appears to account for some of the excess development. Applying historical standards, one could surmise that 1 million of the 5 million excess units is associated with this sub-market.

The growth in non-primary residents can be attributed to social economic changes in the American Society and the increase in “Baby Boomers” seeking second homes in warmer climates. There is support of this change when one analyzes building permit activity by state.³ Building development since 2000 is the greatest in the Southeast, followed by the West coast.

Notable areas of extensive growth for the southern region are Florida, Georgia, North Carolina and Tennessee. Areas of high growth for the western states are Arizona, Nevada, Cali-

fornia and Washington.

ment can be attributed to meeting demand for natural migration patterns. However, it appears that development patterns ignored competing forces at the macro-economic level, and focused on the micro level. The development of 15 million housing units comprises of three elements;

1- Natural Population Growth

2- Replacement of Housing due to natural disasters, insurance damage and redevelopment of existing housing

3- Migration from state to state

There is significant level of data available from the Census Bureau relating to items 1 and 3. Item 2 cannot be supported in an empirical manner without information from the insurance industry. National Population growth can be reviewed at www.census.gov.

Data collected from this site is presented in millions for population and housing units. The fol-

Year	Population	Household Size to Primary Residences	Household Size based on Occupied Residences	Housing Units	Primary Residences	Occupied Residences
2008	304	2.46	2.73	128	123.6	111
2000	279	2.50	2.65	115	111.5	105
1990	248	2.50	2.69	102	98.9	92
1980	225	2.66	2.81	87	84.3	80
1960	181	3.23	3.41	58	56	53

lowing table shows Household Size by Primary and Occupied:

With demographic shifts in the population and the aging of the overall population, develop-

ment can be attributed to meeting demand for natural migration patterns.

³<http://www.census.gov/const/www/C40/table2.html>

The occupied per housing unit population has decreased from 3.4 to 2.7 individuals per household from 1960 to present. Household size appears to be fairly stable at 2.7 for the past thirty years. Applying the average household size of 2.7 with the growth in housing units of 15.1, the population would have increased by 40 million since 2000 versus the actual growth of 25 million as reported by the Census Bureau.

Even if one considers the effect of illegal immigration, the number of housing units constructed does not correlate with the natural population growth cycle. Analysis of the census data indicates that approximately 5 million housing units exist which are not supported by current population growth estimates. Referring back to the Table 1 on page 1, vacant housing units represent 17 million units.

Reducing the level of vacant units from 17 million to 12 million would bring the percent vacant into historical standards. The variance of 5 million units is calculated as the number of excess units constructed over the past eight years.

Applying the calculation in reverse based on the natural population growth of 3.5 million per annum, 1.3 million housing units can be absorbed annually through natural growth.

Correlating census estimates with existing occupied housing unit data, one can surmise that the actual number of housing units developed over the past eight years exceeded market demand by 600,000 units per year since 2000. Applying the results of this analysis and considering natural building permit activity, one could conclude that the existing over supply of housing will take no less than two years to be absorbed, possibly longer in areas with extensive over development.

Year	Actual Vacant	Projected Vacant	Actual and Projected % Vacant
2008	17	12	13.8% / 9.7%
2000	10	10	9.0%
1990	10	10	10.1%
1980	10	10	8.3%
1960	5	5	8.9%

Cause and Effect

The excess development of housing has caused several significant issues for the United States economy:

- 1- How long will it take to absorb the additional housing units?
- 2- What is the affect on existing real estate values?
- 3- If new home construction remains in a natural cycle of development, what other economic development can support the construction industry in lieu of housing?

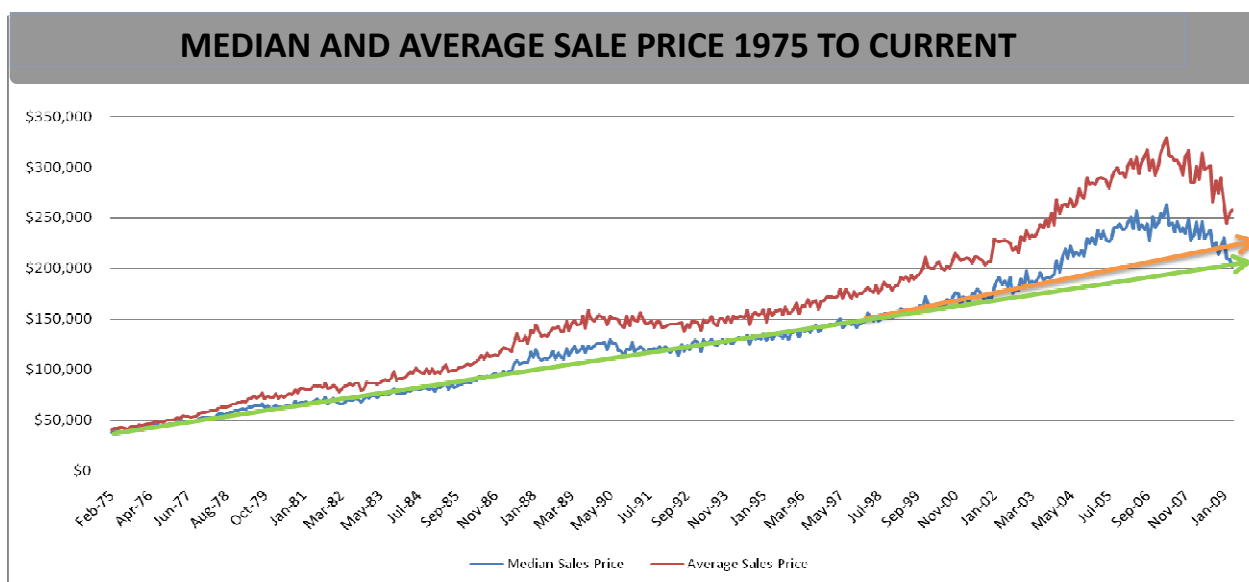
3. Natural permit activity is defined as building permits issued because of insurance claims, tear down and rebuilds or loss from natural disasters.

How long will it take to absorb the additional housing units?

Over the past 30 years, population growth increased at a rate of approximately 1% per annum. Applying this growth rate, there should be an increase in the population of approximately 3.5 million people per annum (excluding illegal immigration⁴).

What is the affect on existing real estate values?

The median and average sale price change from 1975 to present indicates a continuous upward trend in values, with the bubble of 2004 to 2008 clearly identified. The median and average sale



Utilizing a 3.5 million growth rate and 2.7 average unit size, 1.3 million housing units can be absorbed annually. This figure relates to existing housing units and does not consider new construction related to natural disasters or insurance claims.

At 1.3 million housing units, absorption will take three years. Several economists and industry experts state that the housing supply should have a six month supply. There is validity in these statements, yet if one focuses on actual population growth to support housing starts than the three year absorption cycle is valid.

Until there is a significant absorption of vacant housing units, property values will remain flat.

price is presented because each factor represents different occurrences in the market, but reflects the same overall trend line. The median is the pure middle point and does not address other elements that exist in the market place. The average sale price is the average of all the sales. Variance in the average and median sale price indicate that a group of sales is affecting the overall population.

The 1988 to 1991 bubble is significantly lower than the 2003 to 2007 bubble. Late in 2006, the market began to trend downward significantly versus the prior cycle which took several years of correction.

⁴Issues of illegal immigration are not the point of this analysis and should be removed from consideration.

The green trend line is drawn from 1975 to current indicating the median value will stabilize in the \$205,000 to \$210,000 range.

Recognizing the average sales price, the orange trend line indicates \$220,000 if one considers the effect of larger home construction from the prior eight years.

A critical element that can affect the trend lines is the actual number of sales that occur. Current projections place sales activity 25% to 30% below the high of 2006. The diminished level of sales may be overly influenced by foreclosure sales and not completely representative of the overall market.

Housing Affordability

Many economists and analysts tracking the housing industry project a further erosion of property values based on housing affordability factors. There is a basis for some of their predictions based on historical data, however analysis of this data does indicate a different pattern than what has been the topic of discussion.

Information relating to median house values, median income and median rental levels are

Median Sale to Income: This rate is the median sale price divided by median income. Historically this factor has been below 3, yet for the past eight years it is above 4. Many housing analysts site this factor for justification of further declines in the overall value of housing. There is sufficient evidence from the banking industry that can be used to counter this argument.

The Ability to Own calculation is a ratio that assumes mortgage debt does not exceed 28% of gross income. The Ability to Own calculation

Year	Median Sales Price	Median Sale to Median	Rate of Change in Median Sale	Median Income	Median Rent	Monthly Mortgage Payment	Ability to Own based on	Income to Rent Factor	Income to Mortgage Factor
2008	\$202,000	4.05	1.688	\$49,901	\$781	\$1,089.29	\$46,684	5.324	3.82
2000	\$119,600	2.85	1.512	\$41,994	\$602	\$644.94	\$27,640	5.813	5.43
1990	\$79,100	2.63	1.675	\$30,056	\$447	\$426.55	\$18,281	5.603	5.87
1980	\$47,200	2.80	3.966	\$16,841	\$243	\$254.53	\$10,908	5.775	5.51
1960	\$11,900	2.10	4.050	\$5,660	\$71	\$71	\$2,750	6.643	7.35

presented in the attached table. Mortgage data is presented based on 80% Loan to Value factors using the corresponding average interest rate for the respective time period⁵.

All data is obtained from the Census Bureau, Federal Reserve and Housing and Urban Renewal. Cross reference data is available at the Commerce Department.

indicates that prior to 2000, a large segment of property owners could afford to acquire a home and make the required payments.

The 28% gross income factor utilized by financial institutions is very close to the Sale to Income Factor of 4 times gross annual income and will continue to be a benchmark for determining affordability.

⁵<http://www.federalreserve.gov/Releases/H15/Update/>

The Rate of Change factor, measures the change in the median sale prices from one time period to the next. Overall the rate of change is holding consistent with other time periods since the 1950's. Except for the 1990 to 2000

of home ownership began to increase reaching a peak of approximately 71.8% in late 2006 early 2007. This represented an increase in ownership of approximately 3.5 million housing units for individuals who previously rented.

Year	Occupied	Owner	Occupied Mover	% of Group	Renter	Renter Mover	% of Group	Seasonal
2008	111	75			36			4.4
2000	105	70	7.2	10%	35	13.8	39%	3.5
1990	13.6	59	5.5	9%	33	13.6	41%	3.1
1980	12	52	6.2	12%	28	12	43%	2.7
1960	8	33	4	12%	20	8	40%	2

The table above provides a historical trend of home ownership and renter activity covering a 10 year cycle. From 2000 to 2008, there has been a significant growth

time period, property values have increased at least 1.6 times every 10 year cycle.

in ownership while renter levels have remained flat.

Median income has increased at a rate greater than 1.3 times every ten years, yet in the past eight years it only increased 1.18 times. Current economic conditions place further pressure on income levels and this factor is expected to be lower over the next several years.

There has been steady increase in home ownership since 1950, but as a percentage of total housing units, approximately 68% of all housing units are owned.

At the current Median Income of \$49,901 this is a sustainable level for home ownership. The hidden factor that may be an underlying the element for the recent housing crisis is the median rental.

Year	Rent	Mortgage	Ability To Own	Income To Rent	Income To Mortgage
2008	\$781	\$1,089.29	\$46,684	5.324	3.82
2000	\$602	\$644.94	\$27,640	5.813	5.43
1990	\$447	\$426.55	\$18,281	5.603	5.87
1980	\$243	\$254.53	\$10,908	5.775	5.51
1960	\$71	\$64.17	\$2,750	6.643	7.35

Home Ownership vs. Renting

For the past 40 years, the ability to rent versus purchase factor, as related to median income, has always favored rental. However, beginning in the late 90's the percentage

The cost to rent was less expensive in the past than paying a mortgage, however the median income levels indicate home ownership was plausible. Based on the data presented relating to historical trends for income and property sales, the seeds for a new building wave was set. The bubble that developed starting in 2003 and ending in late 2006 does not follow the pattern of any prior cycles for the past 40 years. The higher than average growth rate can be attributed to three separate influences, that when occurring together created the perfect storm.

- Migration from cities after 9-11
- Baby Boomer Population seeking retirement settings
- First time home buyers provided easier access to financing.

Migration after 9-11 can be analyzed by studying sales activity in suburban areas outside of metropolitan areas in 2002 and 2003. There is no strong empirical data that supports sustained valuation increases after the initial surge and increases in sales price. The table below shows the rate of change in median sale price from 1999 to 2008 from January to December⁶.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
7.10%	-0.93%	4.94%	5.31%	7.30%	8.75%	6.50%	-0.08%	-11.73%	-1.22%

The rate in change of median sale prices does not become significant until 2003 and 2004. During this period there was a change in lending standards which permitted more individuals to gain home ownership.

Coupled with the post 9-11 movement from metropolitan areas and the influx of federal spending after 9-11, this time period is most likely the trigger period for the “Bubble”.

Housing Size, since 1975 the variance in the average to median sale price has grown from 6% to 22%. This variance can be attributed to many factors, but the most notable would be building size. Since 1960 the median house size has increased from

Square Footage	Units in Millions
Less than 500	1
500 to 749	2.7
750 to 999	6.4
1,000 to 1,499	20.7
1,500 to 1,999	20
2,000 to 2,499	13.9
2,500 to 2,999	7.3
3,000 to 3,999	6.8
4,000 or more	4.2
Not Reported	5.7
Total	88.7

around 1,400 square feet to 1,769. During the recent construction boom, many areas of the country experienced development with homes exceeding 2,200 square feet , with additional improvements such as garages, central air condi-

tioning and two or more bathrooms. Many of these elements can be addressed with further analysis of data sets from various assessment offices.

⁶www.census.gov/uspricemon.pdf

Over one third of the housing units exceed 2,000 square feet and over 40% have been constructed in the last fifteen years. This housing demographic shift has had a significant impact on property values and overall economic conditions in the housing market.

Year Built	Total Units	Occupied
2008	15.1	11.6
2000	15.7	13.9
1990	15.8	14.1
1980	39.6	35.1
1960	28.1	18.3
1940	28.2	17.1
Total	142.5	110.1

Focusing on historical home ownership levels and the ability to own indicates that the current market conditions are a natural correction to adjust for housing starts exceeding demand.

The issue of oversupply will continue to affect states that experienced extensive development beyond natural population growth increases.

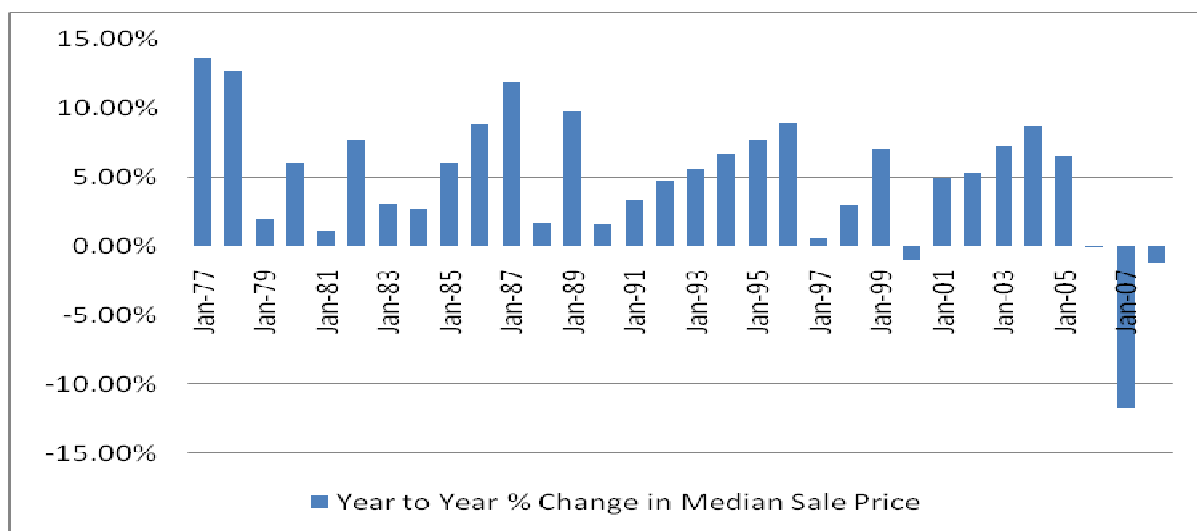
The graphic below indicates an actual decrease in the Median Sales Price as a percentage of value that has only occurred three times in the past 30 years. All of the declines are reported since 2000.

It appears that the decline for 2007 and 2008 is a reverse of the growth patterns from 2003 to 2006 in that the size of the home is impacting the value, more than inflationary or other economic factors. With close to 25% of all new housing units constructed since 1990 at sizes that are 25% to 30% larger than previous periods, data analysis indicates that value increases/decreases are directly attributed to this component.

Analysis of property sales on a per square foot basis indicate that values have not declined as sharply when this parameter is utilized.

Governmental Spending and Property Taxes:

A hidden factor relating to the valuation adjustment is the effect of property taxes on housing.



A separate analysis needs to be conducted to determine the impact on municipal budgets which developed services based on the recent housing boom.

As new construction remains stagnate and until the oversupply of housing is absorbed, property owners will be impacted with increased tax levies to cover the short fall of revenue. This increase in property taxes will further erode the financial analysis of affordability.

With Median Income levels stabilizing, actual real income is decreasing further because property taxes are growing at rates in excess of 5% per annum. In three to five years, property values in distressed areas could be impacted further by this hidden financial element.

Several states are experiencing budgetary issues as a result of the decline in revenues from tax dollars. Most of the focus has been on Federal and State spending, with little attention given to county, town or city budgets. Each year property assessments are reset in most areas of the country. As the assessments decline and new housing starts wane, tax shortfalls can only be recovered by increasing taxes or cutting expenses.

In both cases, the effect on housing can further erode property values that are weakened by other economic factors.

Conclusion

How does one create additional supply when the population is not growing?

The critical mass for sustaining real estate value and new construction is the first time home buyer.

The real estate food chain is basic economics at its purest level. One group feeds to the next and that group to the next. The chain is a basic supply and demand chain that has been structurally sound with a fundamental basis for the past four decades.

However, at the beginning of the 21st Century anticipation of what the aging population was going to do increased demand for new development to meet the needs of the over 65 Age Group.

The notable problem is in the basic math of the

population size. We have more baby boomers than first time home buyers. As such there is a diminished demand for housing and baby boomers must acquire a second home in lieu of selling their first home. This stress on financial strength of the aging population may be one of the contributing factors to the recent decline in housing values.

In response to this situation, the solution was to lower the ownership standards and permit those who could not afford home ownership the ability to do so with No-doc, No Asset verification loans.

Home ownership is based on decades of proven lending standards since the Great Depression. So, did we lower standards to meet demand or were standards lowered to create demand?

In either case, the result is the same, leading to the following questions.

Did analysts conclude that a loan made to an unqualified buyer at a lower loan amount would be offset by a quality loan from a qualified owner?

Did 3.5 million new home buyers (former renters) in the market cause a “bubble”?

Did developers, who needed new home buyers to stimulate the housing market ignore supply and demand factors out of greed or just bad analysis?

And finally, were new communities in warmer climates, notably Florida developed to attract those preparing for retirement or did an influx in migration cause development?

There is no less than 4 million excess residential units in the United States, of this over 70% are single family properties. Given current population growth estimates and natural building activity needs, an absorption cycle of no less than three years will be needed before the housing industry experiences a significant increase in housing starts and achieves development of over 1 million units per annum.

Because of the housing supply issue, specific areas of the country will continue to experience property values that fall below historical trends and median income levels. The best and most reliable standard for determining home ownership are the ratios established by the financial industry that have worked for decades.

The current crisis is not a result of incorrect standards, but the lack of applying those standards. Financial Institutions use ratios of 28%, which represents the total monthly mortgage payment as related to gross income and 35%, which represents total monthly debt payments including mortgage payments as relating to gross income.

Additionally, sale prices are being pulled down by the increased level of foreclosures and excessive housing supply. Financial institutions are forcing developers to liquidate projects, exacerbating the decline in values further for the short term.

Property values will stabilize and show a slight recovery from the over correction in 2009, but values will not show substantial improvement until the existing over supply diminishes in 2011.

Statistical models indicate that areas where over 20% of the sales are foreclosures, market values can be deflated by an additional 10% to 15%. Basically, current market conditions are reflecting liquidation values, not market values. As the markets absorb foreclosed properties and excess housing, values will improve upward in the later part of 2010..

Hundreds of questions can be debated and discussed by real estate analysts, market pundits and the general population, but the end result is the same; too many new housing units were built, defying the basic laws of economics:

Supply and Demand.