

Effect of Policy Changes on Homeownership

Focus: Florida

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Table of Contents

Introduction	3
Housing’s Impact on the Economy.....	5
Size of the Housing Sector	5
Housing’s Impact on the Economy.....	6
Housing’s Impact on Communities	10
Homeownership’s Contribution to Positive Social Outcomes.....	10
Housing in Recent Business Cycle	11
Housing’s Impact on Florida’s Economy	14
Impact Analysis on Homeownership	16
Demographic and Migration Impact.....	17
Affordability Impact	20
Potential Impacts from Changes in Real Estate Taxes	24
Impact Analysis of Transfer Tax	33
Impact Analysis of Tax on Business Receipt	36
Impact Analysis of Property Tax	37
Impact Analysis of General Housing Fees	39
Conclusion	40
List of Tables and Figures	41
Appendix	42
Reference.....	56

Introduction

Realtors® are in the business of helping Americans fulfill their dreams of homeownership. In Florida many residents in recent years have attained that goal. The state's homeownership¹ rate has declined only slightly from its all-time high of 72.4 percent in 2005 and 2006. The annual homeownership figure for 2009 was 70.9 percent. However, this is well above the national homeownership rate of 67.4 percent in 2009. The current national rate has fallen from its 2004 peak of 69.0 percent to 67.4 percent—the same homeownership rate as in 2000. This rate is significantly higher than the 63.9 percent rate in 1990. Low mortgage rates and lax lending standards qualified many new households to purchase a home in the early part of the decade. More affordable housing prices in Florida then also played a role. However, rising prices and the perception that prices would perpetually rise, led to an unsustainable run-up and commensurate bust that have strained markets. While reduced prices should help the level of affordability, further economic growth is a prerequisite for a return to a robust housing market. In this period of housing market healing, policies that would hamper markets in normal times are of even greater concern.

Homeownership trends have been different for the U.S. and Florida over the last decade. The nation's homeownership² rate has fallen back to its 2000 level compared to a 2.5 percentage point gain for Florida over the same period (this despite the boom and bust). Factors unique to Florida may have contributed to the more robust gains.

This paper finds that while in the past, favorable migration trends—including international immigration, affordable home prices, and few housing policies detrimental to housing in Florida brought about a very dynamic market in the state, the state faces challenges in the aftermath of the housing bust. Affordability has returned, which is a positive factor that will hopefully renew Florida's reputation as a desirable destination among movers. Furthermore, as is the case nationally, despite the housing bust the housing market and homeownership make important contributions to Florida's economy

¹ Homeownership figures are from the Census:
<http://www.census.gov/hhes/www/housing/hvs/annual09/ann09t15.xls>

² Ibid.

and community. In 2008, \$134 billion was attributed to real estate related economic activity in the Sunshine State³. Property taxes levied by counties, cities, school boards and other taxing districts contributed \$25.9 billion to Florida’s local district coffers in 2005⁴ and \$30.5 billion in 2006⁵. Despite the housing bust, property taxes continued to support Florida’s local governments, contributing \$31.0 billion in 2007, and \$30.3 billion in 2008⁶. The recovery of the housing market will be key to restoring vibrancy to Florida’s economy. With that knowledge, this paper examines the effects of a select number of policy changes on the housing sector and homeownership so as to better highlight potential consequences of these policies, both direct and indirect. This policy analysis asks the question “what-if”—it is an analysis of policies that have been proposed in Florida and elsewhere in the past, but not a review of specific, pending proposals.

The paper begins by examining the critical role that housing and homeownership contributes to the economy and community. It then specifically focuses on housing’s impact on Florida’s economy. An examination of and the possible reasons for Florida’s housing market boom are then provided. The paper includes simulation results of various real estate related policy changes that impact homeownership. The impact analyses are simulated for the whole state as well as for several metro markets in Florida.

³ Figure from Gross Domestic Product by state data: <http://www.bea.gov/regional/index.htm>

⁴ <http://dor.myflorida.com/dor/property/infographic07.pdf>

⁵ Florida Legislative Office of Economic and Demographic Research

⁶ <http://dor.myflorida.com/dor/property/rp/databk.html> (2008, page 9)

Housing's Impact on the Economy

The housing sector is an integral part of Florida's economy. Home sales and home building provide jobs and incomes to real estate agents, construction workers, building contractors, mortgage service providers, home inspector, home appraisals, and many others—this is perhaps most clearly illustrated by the economy-wide effect of the housing slowdown. To begin, this section examines the scope of the housing market at the national level. It provides a frame of reference enabling comparison between Florida and the country as a whole. The linkages of housing and the economy are detailed to provide the reader with an understanding of the variety of channels through which housing interacts with the economy.

Size of the Housing Sector

One reason for real estate's significance to the overall economy is its size. It is a significant contributor to the U.S. economy, providing millions of Americans with jobs and generating hundreds of billions of dollars of economic output each year. It is an important source of wealth building, and homeownership is an integral part of the "American Dream." There are several different methods of measuring the economic impact of the real estate industry (see below). As large as the resulting numbers may be, many understate the true financial impact of the housing sector. Beyond economic measures, homeownership provides many intangible benefits to our society.

For an appreciation of the scope of the industry, consider the following:

- The housing sector directly accounts for about 15 percent of the nation's total production⁷;
- Indirect contribution from housing-related expenses such as furniture and household durables added another 1.8 – 2.0 percent in 2009 and have averaged 2.7 percent (1929 – 2009)⁸
- Home equity constitutes the largest share of household net worth for a vast number of Americans⁹;

⁷ Updated to Housing Services and Utilities plus Residential Fixed Investment as a share of GDP from BEA/Haver. This measure was 14.5 in 1970, 18.7 in 2005, and 15.7 in 2009; mean 15.3 (1929 – 2009)

⁸ Personal Consumption Expenditures: Furnishings & Durable Household Equip (Bil.\$) as share of GDP

- In 2009, 75 million households owned their own homes, for a national homeownership rate of 67.4 percent;
- Household holdings¹⁰ of real estate assets are worth nearly \$16.5 trillion as of the first quarter of 2010—more than one-year’s worth of U.S. GDP.
- About 40 percent of monthly consumer expenditures are housing related¹¹.

Housing’s Impact on the Economy

Economists measure the size of the overall economy by looking at all of the goods and services produced in the economy—the Gross Domestic Product (GDP). Examining the housing sector’s contribution to GDP—both directly and indirectly—gives an approximation of its importance to the overall economy. The two line items in GDP directly associated with the housing sector are residential fixed investment and housing and utilities service. Residential fixed investment consists of the value-put-in-place of new housing units, production of mobile homes, brokers’ commissions on the sale of existing residential properties, expenditures related to improvements and additions to existing units, and net purchases of used structures from government agencies. Housing and utilities service is a component of personal consumption expenditures, purchased by residents in the United States, usually in the form of rent for tenants or as rental equivalence for homeowners. Beginning in 2009, this major product category also includes spending on utilities such as electricity, gas, water and sewage¹². It is important to note that this approach measures the value to the homeowner of the daily *consumption* of the flow-of-services provided by a home (a place to fix meals, relax, entertain, garden, etc.) and not the value of an *investment* in a long-lived asset (home). Because implicit rent is not a market transaction, such as the payment to a landlord from a renter, it is estimated by measuring the change in market rents for rental housing units with similar

⁹ <http://federalreserve.gov/Pubs/oss/oss2/2004/bull0206.pdf> (page A23)
<http://www.federalreserve.gov/pubs/bulletin/2009/pdf/scf09.pdf> (page A32)

¹⁰ <http://www.federalreserve.gov/releases/z1/Current/z1r-5.pdf>

¹¹ ftp://ftp.bls.gov/pub/special_requests/cpi/cpiri05-06_2007.txt; <http://www.bls.gov/cpi/cpiri2009.pdf>

¹² Beginning with the 2009 National Income and Products Accounts, the Bureau of Economic Analysis (BEA) has included utilities in the “Housing and Utilities Services” category for quarterly releases. Utilities and housing are broken out separately in the annual data by type of product or function.

characteristics and in similar locations as the homeowner units. In 2009¹³, residential fixed investment totaled \$361 billion, down from its peak of \$775 billion in 2005. Housing and Utilities service expenditure was \$1,877 billion in 2009 and has not declined during the course of the economic cycle. The combined total of \$2.2 trillion represented 15.7 percent of GDP in 2009.

The construction and sale of new homes make a direct contribution to GDP, based on the value of construction put in place. However, the sales prices for existing homes do not enter into the calculation of the nation's domestic output, just as the sale price of a second-hand sofa is not included, because the transaction does not represent new production. However, purchases related to the sale of existing home sales do get included in GDP. For example, all payments for services rendered, such as real estate agent commissions, home inspector fees, attorney fees, and loan origination fees, are included. These activities involve actual labor hours for the service provided. However, in the GDP accounting payments, such as transfer taxes, escrows, title and other insurance premiums, interest payments, and loan points, are excluded.

In addition, all economic activity produces a multiplier effect. That is to say that the sale of a home generates additional consumer expenditures. Home sales naturally involve moving costs, whether through a professional moving company or via "self-move" from renting a moving van. Expenditures accompanying the moves may not show up in the housing sector category of the GDP accounts. Furthermore, many households purchase new furniture and spend more than usual for home improvement when moving to a new home. A typical home purchaser will spend \$5,205 on improvements within the first two years of a purchase in 2009 that they would not have spent otherwise¹⁴. The income earned in the other sectors of the economy is then re-circulated into the economy as it is spent, generating another round of income and purchases. The multiplier effects depend on the degree of monetary policy accommodation and the "crowding out" effect. The

¹³ Nominal Figures; Haver/BEA

¹⁴ Data reported by the Joint Center for Housing Studies at Harvard University (2003) adjusted for inflation. This number is similar to the \$8,900 that NAHB estimates new homeowners spend compared to \$4,000 spent by non-movers. <http://www.nahb.org/generic.aspx?sectionID=1309&genericContentID=93626>

National Association of Realtors®'s macroeconomic modeling suggests that the multiplier is between 1.34 and 1.62 in the first year or two after an autonomous increase in spending. This means that each dollar increase in direct housing activity will increase the overall GDP by \$1.34 to \$1.62.

Aside from economic activity generated as a result of home building and home sales, homeownership itself yields benefits. Homeownership provides individuals with a way to accumulate wealth for the future while at the same time enjoying the provision of shelter. The wealth that is derived from homeownership is in fact the largest source of wealth for many households. The Federal Reserve's 2007 Survey of Consumer Finances¹⁵ showed that the net worth for homeowners was \$234,200, while that of renters was \$5,100. Though the net worth figure includes financial stock wealth such as mutual funds and certificate of deposits, undoubtedly housing equity is a major contributor to the wealth differences between homeowners and renters given that median housing equity was \$105,000 per home-owning household in 2007.

The importance of the housing wealth effect has gained wide research attention. Research indicates that consumer spending and the real economy are affected by the rise and fall of equity whether derived from the stock market or from homeownership. The estimated stock market wealth effect is on the order of 3 to 7 cents for each one dollar change in the equity value of the stock market. By contrast, Case, Quigley, and Shiller (2001) have shown that each extra dollar of housing wealth has five times the impact of an extra dollar of stock market wealth. Furthermore, National Association of Realtors® funded research by the Joint Center for Housing Studies at Harvard showed a much speedier consumer spending response from a change in housing wealth compared to a change in stock market wealth¹⁶. Research into the response of consumer spending to a decline in housing wealth will certainly follow recent experience. In a 2008 paper, Case and Quigley discuss reasons to suspect that the wealth effect of a decline in housing prices is much smaller than that of an increase and may ultimately be zero. The primary

¹⁵ <http://www.federalreserve.gov/pubs/bulletin/2009/pdf/scf09.pdf>

¹⁶ http://www.realtor.org/wps/wcm/connect/5f3ea30048be3820b51cff0c8bc1f2ed/housing_wealth_effects_final.pdf?MOD=AJPERES&CACHEID=5f3ea30048be3820b51cff0c8bc1f2ed

driver of this fact is the “stickiness” of house prices, the tendency of sellers to avoid selling below a certain price for various reasons.

Given the importance of housing to the economy, it is not surprising that many people’s livelihoods depend on real estate. The Bureau of Labor Statistics produces monthly employment reports listing employees on payrolls by industry. The May 2010 report showed that 1.95 million workers were employed in the real estate industry. Furthermore, 2.1 million were employed in residential construction building or as residential specialty construction contractor. An additional 2.6 million were employed in the credit intermediation sector, which includes mortgage banking. The secondary employment generated by the multiplier effect and by the housing wealth effect further adds to the overall employment picture in the other sectors of the economy. It is also worth noting that many Realtors® are self employed and are not counted in the payroll survey. Realtor® membership at the end of May 2010¹⁷ was 1.1 million, down from a peak of 1.4 million in 2006-2007¹⁸.

¹⁷ http://www.realtor.org/library/virtual_library/membershipcount

¹⁸

<http://www.realtor.org/wps/wcm/connect/b77faa00419a32cdad15fda3819af93a/MembershipCountbyMonth-1970tocurrent.pdf?MOD=AJPERES&CACHEID=b77faa00419a32cdad15fda3819af93a>

Housing's Impact on Communities

Construction of new homes provides jobs and greater tax revenues for local, state, and federal governments. The National Association of Home Builders (NAHB) estimates¹⁹ that in 2008 the construction of 1,000 single-family homes generates 3,050 full-time jobs in construction and construction-related industries, \$145.4 million in wages, and \$89.2 million in combined federal, state and local revenues and fees. The construction of 1,000 multifamily units generates 1,160 full-time jobs in construction and construction-related industries, \$54.9 million in wages; and \$33.5 million in combined federal, state and local tax revenues and fees. Furthermore, it is estimated that roughly 30 percent of a new home occupant's income is spent on items produced by local businesses, such as hospitals, daycare centers, dry cleaners, and auto repair shops²⁰.

Florida saw a sharp decline in permits with only 39,788 single-family homes permitted in 2009 compared to 204,485 in 2005. The 9,074 single-family homes permitted through the first quarter of 2010 is an improvement over the 5,644 that were permitted through the first quarter of 2009.

Homeownership's Contribution to Positive Social Outcomes

Homeownership also generates positive social and political outcomes for American society. Research shows that homeownership raises the owners' sense of commitment to community and their willingness to invest in both the home as an asset and as a place to live. Furthermore, a higher overall quality of life among homeowners is believed to contribute to the well-being of both homeowners and their children in a number of ways. For example, children of homeowners tend to have higher levels of achievement in math and reading and fewer behavioral problems. These factors, as well as many others, help explain increased educational attainment and higher lifetime annual incomes of homeowners' children. (Dietz 2003, Haurin, Parcel and Haurin, 2001 and 2002; Green and White, 1997). Studies have attempted to determine the causality and have found evidence that there is a causal affect of homeownership on better outcomes for children. (Harkness and Newman 2003). In addition to being more satisfied with their own personal situation than renters (Rohe and Stegman, 1994, Diaz-Serrano 2009),

¹⁹ <http://www.nahb.org/generic.aspx?sectionID=734&genericContentID=103543&channelID=311>

homeowners also enjoy better physical and psychological health. (Rohe, Van Zandt and McCarthy, 2001).

Although the extent of community involvement and the benefits that accrue to society are hard to measure, several researchers have found that homeowners tend to be more involved in their communities than renters (DiPasquale and Glaeser, 1999). For example, owners participate in a greater number of non-professional organizations. They also have higher voter participation rates. In addition to higher civic participation, owners also tend to remain in their homes longer, adding a degree of stability to their neighborhood. Since homeowners reap the financial gains of any appreciation in the value of their home, they also tend to spend more time and money maintaining their residence, which also contributes to the overall quality of the surrounding community (Rossi and Weber, 1996; Rohe and Stewart, 1996).

Research confirms that adverse social outcomes are less frequent in neighborhoods with high rates of homeownership, community involvement, and access to economic and educational opportunities (Ellen and Turner, 1997). There is also some evidence that homeownership programs may result in increased property values near subsidized or locally assisted homeownership sites and can, under the right circumstances, draw other non-housing investment to the community (Ellen, Susin, Schwartz and Schill, 2001).

Housing in the Recent Business Cycle

Home sales set successive records each year from 2001 to 2005 (and from 1994 until 2005 with the exception of 2000). Since 2005, home sales fell precipitously through 2008 reaching a trough below 4.5 million annual sales, a level not seen since 1998. Through the summer 2010, home sales have returned to a level that would have been considered respectable were it not for the great boom in the earlier part of the decade. However, many of these sales are tax-credit related, and there will certainly be some period of give-back when the tax credit expires. While an active housing market buoyed

²⁰ <http://www.shimberg.ufl.edu/pdf/Newslett-June02.pdf>

the economy through the mild recession in 2001, the housing market is more likely to expand in step with the recovery than lead the current expansion.

Housing recovered somewhat in 2009 as a result of affordable prices, low mortgage rates, and the home buyer tax credit. Home sales were up 5 percent in 2009 following three years of decline. Whether sales continue this upward trajectory will depend significantly on the economic outlook going forward and most specifically on job creation. Lower prices and favorable mortgage rates will help prospective buyers purchase a home they can afford. Trouble still remains, particularly in states like Florida, where the homeowner vacancy rate rose to 5.1 percent in 2007 from its typical 2 to 3 percent level. While the homeowner vacancy rate has trended down since 2007, a rate of 4.3 percent in 2009 is still almost twice the norm. Further, the rental vacancy rate, typically in the 9 to 11 percent range, shot up from 13.7 percent in 2007 to 17.8 percent in 2009.

Another aspect of the housing cycle is its impact on owners' home equity. Home equity—the aggregate value of owner's homes minus the aggregate value of outstanding mortgage debt owed by owners—was \$6.2 trillion in 1999 which was 58.5 percent of the total value of household real estate. Equity accumulated during the housing boom, peaking in 2005 at a level of \$13.2 trillion which represented 59.9 percent of household real estate. Equity as a share of residential real estate was, in fact, fairly constant around the 60 percent mark from 1991 through 2006 after declining through the 1980s. In the course of the housing boom, the dollar value of equity more than doubled while the share of equity in residential real estate rose a slight 1.4 percent. This occurred because the total value of household real estate grew from \$10.6 trillion in 1999 to \$22.1 trillion in 2005, peaking at \$22.9 trillion the following year²¹.

The impact on economic activity from home price appreciation was large; the current consensus suggests a housing wealth effect of as much as 10 to 20 cents spent for each dollar increase in housing wealth. This implies that the housing wealth effect alone would have added as much as \$700 billion to \$1.4 trillion in additional spending to the

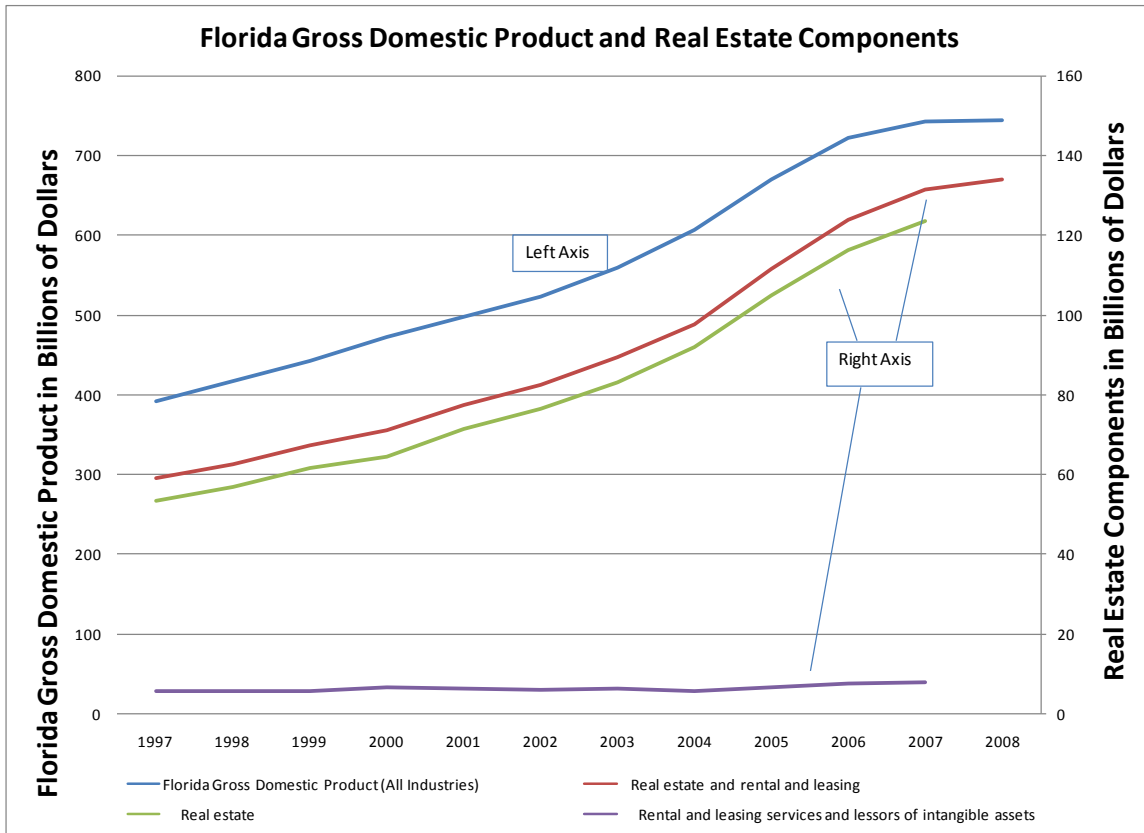
²¹ <http://www.federalreserve.gov/RELEASES/Z1/Current/z1r-5.pdf> (Data through 4th Quarter 2009)

economy over those six years—more than \$100 to \$200 billion per year. Home equity peaked in the first quarter of 2006, and estimates from the last quarter of 2009 show a decline of just over 50 percent to the current \$6.3 trillion level. At the same time, the value of household real estate has fallen to \$16.6 trillion. The degree to which the wealth effect operates on the downside is not yet known. To the extent that homeowners believed the increases in housing wealth in the previous years were permanent, the declines will come as a shock and will likely result in a reduction in spending that would be a reverse wealth effect. To the extent that households expected the gains in the earlier part of the decade to eventually slow and reverse, the impact will be smaller. Case and Quigley in a 2008 paper discuss an additional reason why the wealth effect may be asymmetrical and smaller on the downside. Evidence suggests that prices are “sticky” on the downside as sellers hold out for a buyer at a certain price rather than adjusting to the market-price and selling quickly. This tendency of sellers to hold out for a certain price, diminishes the dent to their wealth at the time of a transaction and may lead to a smaller decrease in spending in response to a loss in housing wealth.

Housing's Impact on Florida's Economy

Just as housing is a central part of the nation's economy, it is a pillar of Florida's economy. We can see this by looking at how it relates to the state's Gross Domestic Product. Gross Domestic Product by state (GDP), which is similar in spirit to the GDP accounting discussed earlier at the national level, provides an economic activity measure at the state level. GDP by state is the sum of the gross production of goods and services originating in all industries in a state. Florida's GDP and its components over time can be seen in Figure 1.

Figure 1.



The U.S. Department of Commerce estimated Florida's GDP (FLGDP) at \$721.4 billion in 2006 (in current dollars). The real estate sector (including leasing services) accounted for \$123.9 billion or 17.2 percent of this total in 2006. By 2008, real estate and rental and leasing accounted for \$134.0 billion or 18.0 percent of the state's \$744.1 billion FLGDP. The real estate sector can be further divided into a real estate component and a component for rental and leasing services. Over the period from 1998 to 2000, real

estate's share of total FLGDP ranged from 13.6 percent to 13.9 percent before climbing steadily upward. Data for 2007, the most recent year for which a categorical breakdown of real estate versus rental and leasing services is available (the green and purple lines in Figure 1), shows that real estate alone comprised 16.7 percent of FLGDP up from 16.2 percent of FLGDP among all industries the previous year.

We have data through 2008, the early stages of the housing crisis when the housing sector remained a pillar of the economy in Florida. Looking only at the private industries (after subtracting away value-added component from federal and local government employment), real estate's contribution in 2007 was 18.9 percent of total *private* industry output in 2007 up from 18.2 percent in 2006.²² Using the more recent, aggregated data for 2008, real estate and rental and leasing accounted for 20.5 percent, slightly more than one-fifth, of Florida's private economy, the economy excluding government activity²³.

Additionally, housing plays a key role in financing the government's contribution to the economy. Property taxes levied by counties, cities, school boards and other taxing districts contributed \$25.9 billion to Florida's local district coffers in 2005²⁴ and \$30.5 billion in 2006²⁵. Despite the housing bust, property taxes continued to support Florida's local governments, contributing \$31.0 billion in 2007, and \$30.3 billion in 2008²⁶.

Another economic measure, though not as in-depth as FLGDP, but more frequently published is personal income data. In 2009, total personal income among Florida residents was \$700 billion. Earnings from the real estate industry amounted to \$9.7 billion. A separate construction sector added another \$25.1 billion²⁷.

²² <http://www.bea.gov/regional/index.htm>

²³ BEA State GDP Figures

²⁴ <http://dor.myflorida.com/dor/property/infographic07.pdf>

²⁵ Florida Legislative Office of Economic and Demographic Research

²⁶ <http://dor.myflorida.com/dor/property/rp/databk.html> (2008, page 9)

²⁷ Ibid.

Real estate and construction employment are more important to Florida's economy than compared to the country as a whole²⁸. In 2009, 392,900 workers were employed in the construction sector and 155,000 were employed in the real estate sector. That represents 7.5 percent of all of the Florida's workers. This is down from a peak of 10.8 percent in 2006. In 2006, 677,900 were employed in construction and 182,500 were employed in real estate in Florida. For the country, the figure peaked at 7.2 percent in 2006 and in 2009 was 6.1 percent. Such a difference is not surprising and may be due in part to the need to accommodate many newly arriving residents from other parts of the country during the real estate boom that Florida experienced.

Impact Analysis on Homeownership

Because there are many benefits of homeownership to individuals and societies, Realtors®, governments, and non-profits worked to promote ownership. However, experience with the most recent business cycle has shown that sustainability of homeownership must be considered. Despite the housing downturn, Florida is still among the states with higher homeownership rates in the nation, ranking number 21 in 2009. Low interest rates helped to boost homeownership in Florida and other parts of the country during the boom, though Florida's homeownership grew more robustly than other parts of the country. Florida's homeownership²⁹ rate reached 72.4 percent in 2005 and 2006 compared to 68.4 percent in 2000 and 65.1 percent in 1990. It fell to 70.9 in 2009. By contrast the national homeownership rate, though reaching an all time high of 69.0 percent in 2004, was significantly lower than that in Florida. The national rate declined to 67.4 in 2009, comparable with the 67.4 percent ownership rate of 2000 but higher than the 63.9 percent ownership rate of 1990. The nation's homeownership rate is now unchanged since 2000 compared to a 2.5 percentage point gain for Florida over the same period. Therefore, factors aside from a uniform country-wide event, such as low interest rates, are likely to have played a role in bringing about more robust gains in Florida.

²⁸ Bureau of Labor and Statistics State and Area Employment, Hours, and Earnings Data and National Data from the Current Employment Statistics survey

²⁹ Homeownership figures are from the Census:

<http://www.census.gov/hhes/www/housing/hvs/annual09/ann09t15.xls>

Demographic and Migration Impact

One state specific reason for the faster rise in homeownership in Florida is the state's changing demographics. The anecdotes of retirees seeking to live out their golden years in Florida are supported by data. Florida has the highest percentage of persons who are 65 and over – shown in Figure 2³⁰. The next top ranking states are Pennsylvania and West Virginia, which both also have significantly higher homeownership rates compared to the rest of the nation.

Another factor is favorable population trends in the state. Florida's population grew by 2.5 million from 2000 to 2009. There were 18.5 million residents living in the state in 2009 compared to 16.0 million in 2000. The average annual growth rate of 2.0 percent nearly doubles the pace of population growth for the rest of the country. Population growth in Florida began to slow in 2006, and in 2008 and 2009, Florida's population grew at a slower rate than that in the US for the first time since 1946 according to Census data³¹. Florida's office for Economic and Demographic Research³² shows a slightly different projection pattern, with population growth slowing in 2007.

Early in the decade, Florida benefited from a very favorable *internal* migration trend (that is, the movements of U.S. residents between states, which therefore, excludes births and deaths and foreign immigration). As many U.S. retirees headed for the state, a higher homeownership rate naturally followed. That is because retirees—those who are 65 years old and over—have one of the highest homeownership rates among differing age groups. Table 1 shows the varying homeownership rate among different age groups³³.

³⁰ <http://www.census.gov/population/projections/PressTab3.xls>

³¹ http://www.census.gov/popest/archives/1980s/80s_st_totals.html

³² <http://edr.state.fl.us/population.htm>

³³ Source: <http://www.census.gov/hhes/www/housing/hvs/annual09/ann09t17.xls>

Figure 2.

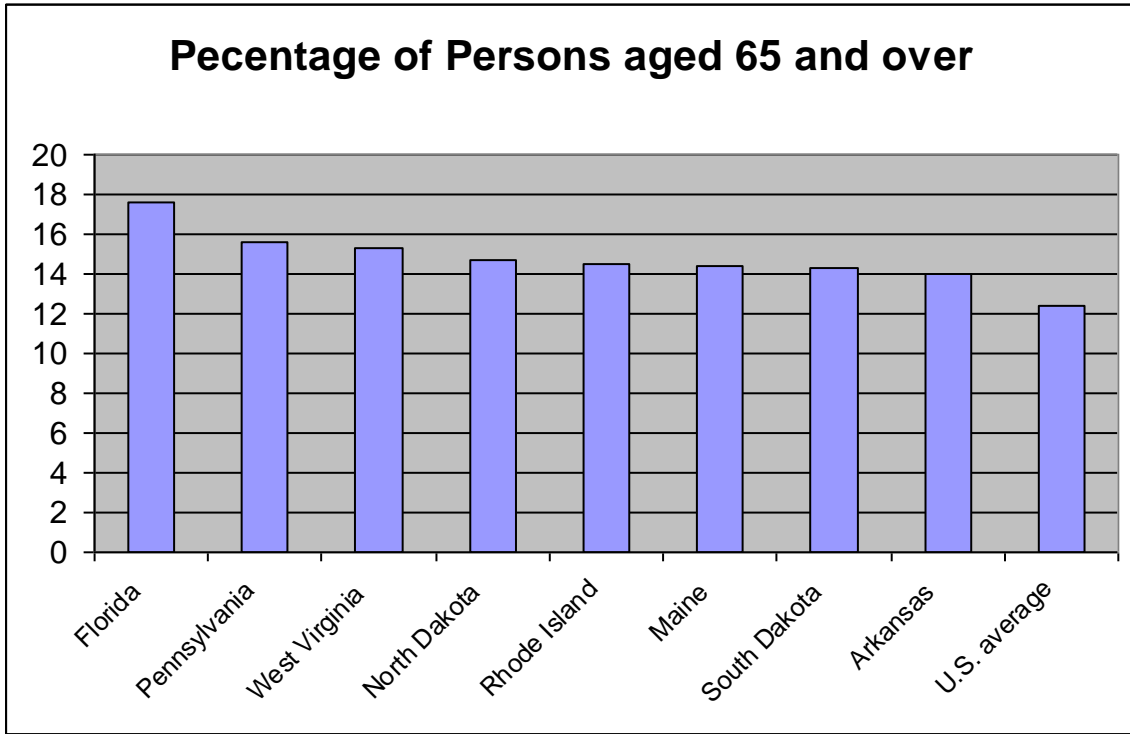


Table 1: Homeownership Rate by Age Group in 2009

Age Group	Homeownership Rate
Less than 35 years	39.7%
35 to 44 years	66.2%
45 to 54 years	74.4%
55 to 64 years	79.5%
65 years and over	80.5%

In another favorable trend, Florida led the nation in net internal migration with an estimated 1.2 million net gain in households in the past nine years as shown in Table 2³⁴. Texas was the second most popular destination, with a gain of nearly 850,000. New demographic trends may end Florida’s reign as a prime destination. On net, domestic

residents moved away from Florida in both 2008 and 2009. While Florida ranked eleventh in 2008 among states losing residents, it climbed to seventh in 2009. The draw of a favorable climate and lack of state income tax in Florida are at present insufficient to offset the effects of the housing bust and the challenges it presents for the state economy.

Table 2: Net Internal Migration

Rank (Top Five and Bottom Five)	State	Net Internal Migration 2000 to 2009
1	Florida	1,182,974
2	Texas	848,702
3	Arizona	714,354
4	North Carolina	675,016
5	Georgia	567,135
46	New Jersey	-459,803
47	Michigan	-540,750
48	Illinois	-632,866
49	California	-1,509,708
50	New York	-1,686,583

Finally, while U.S. migrants might be more likely to own a home, many international citizens also own or seek to own real estate in the U.S., and anecdotally, Florida seems to be a popular choice. From our 2009 survey of Florida Realtors® we find that 54 percent worked with an international client in the past year. We also find that the Top 3 countries of origin of international clients purchasing homes in Florida are Canada (26%), the United Kingdom (16%), and Germany (7%). According to this survey, only one-third of international clients used a mortgage to secure the property, and 67 percent paid cash. Detached single-family homes were the most common purchase at 52 percent. Condominium or apartment purchases comprised 34 percent, and only 7 percent of purchases were townhomes. The median price for the various homes purchased was \$250,000. The most frequent use for the property, cited by 46 percent of respondents, was “Vacation home for family and friends.” Only 14 percent cited the purpose as a “Rental property for investment,” but 24 percent cited “Both” as the reason for the purchase.

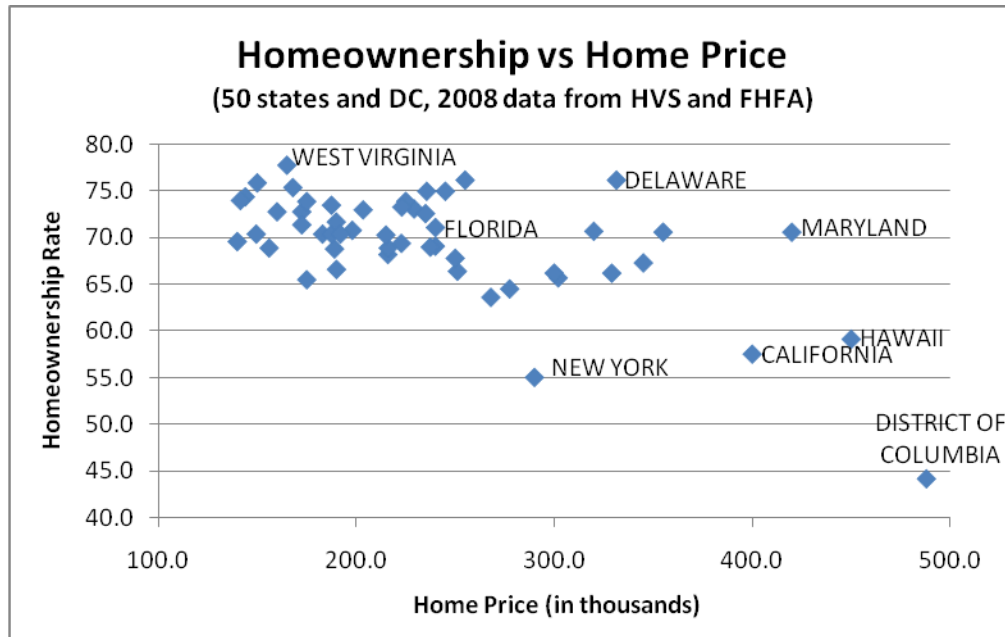
³⁴Source: <http://www.census.gov/popest/states/tables/NST-EST2009-04.xls>

Affordability Impact

One very obvious factor in the housing affordability debate is home prices—lower prices tend to go hand-in-hand with higher rates of homeownership. Figure 3 shows the relationship between state home prices and homeownership rates among fifty states and the District of Columbia. Not surprisingly, there is a negative correlation between home price and homeownership rate. The District of Columbia, for example, had the highest home price and a homeownership rate of only 44 percent. By contrast, West Virginia had the highest homeownership rate at 78 percent while having one of the lowest home prices in the country³⁵.

Florida was in the middle of the pack with the 19th highest home price in the country and the 21st highest homeownership rate. A full list of state home prices and state homeownership rates is shown in Appendix 1.

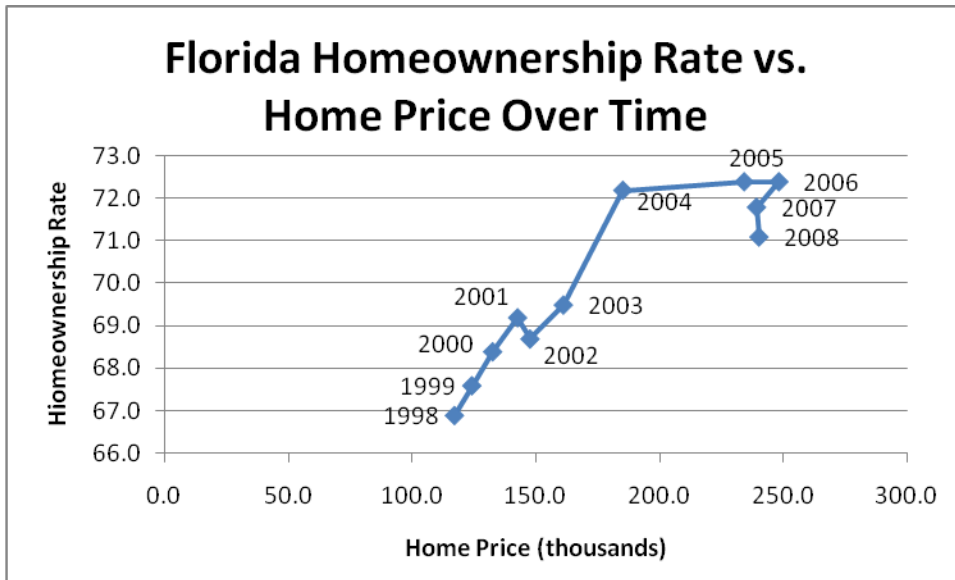
Figure 3.



In previous reports, we cautioned that the run-up in home prices could have an impact on homeownership due to decreased affordability. The subsequent housing boom and bust

³⁵ FHFA data on prices and HVS data on homeownership rates. Both 2008.

shows that as home prices rose in Florida, ownership rates rose until 2005 – 2006 when they were stable. As prices have fallen, homeownership rates have also fallen as homeowners with negative equity are unable to cope with economic shocks and may find themselves in default or foreclosure. While 32 percent of home owners across the nation own their homes without a mortgage, 34 percent of home owners own their homes free and clear in Florida³⁶. This fact has helped to dampen some of the fallout effects of the mortgage crisis. Still, the foreclosure rate of 12 percent in Florida compared to 9 percent nationally in 2009 means challenges are ahead for homeowners in the state.



http://www.fhfa.gov/webfiles/15296/MIRS_table27_2008_Median_Price_by_State.xls

<http://www.census.gov/hhes/www/housing/hvs/charts/index.html>

³⁶ NAR Research State Mortgage Conditions Report for Florida, 2009.

http://www.realtor.org/research/subscription_data/08statemortgageconditions

Figure 4.

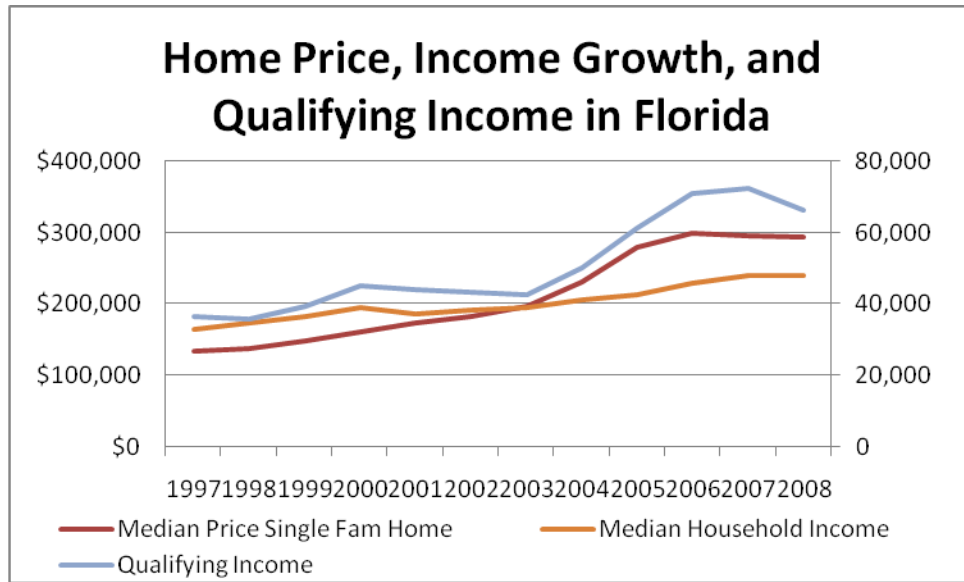
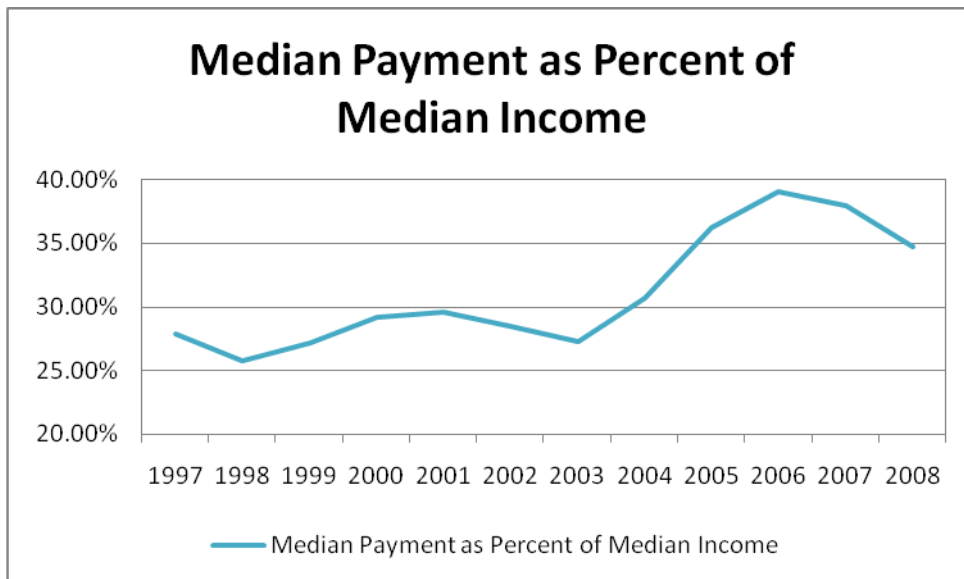


Figure 4 shows that the income needed to qualify for a mortgage on the median priced home has grown with the median price of a home, a rate much faster than the median household income has grown. Based on this relationship, we see in Figure 5 that a family at the median income level would need to devote a greater—likely unsustainable—portion of monthly income to a mortgage payment.

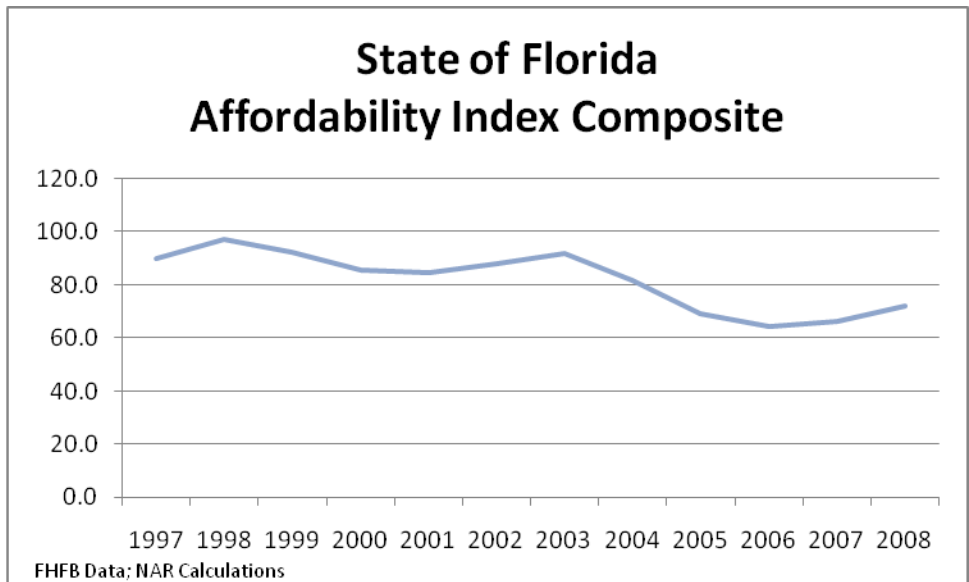
Figure 5.



Falling mortgage rates delayed the negative affordability impact of higher home prices for a time, but eventually, prices reached a temporary top and began to decline. Recent price declines have brought affordability back and low mortgage rates have accentuated

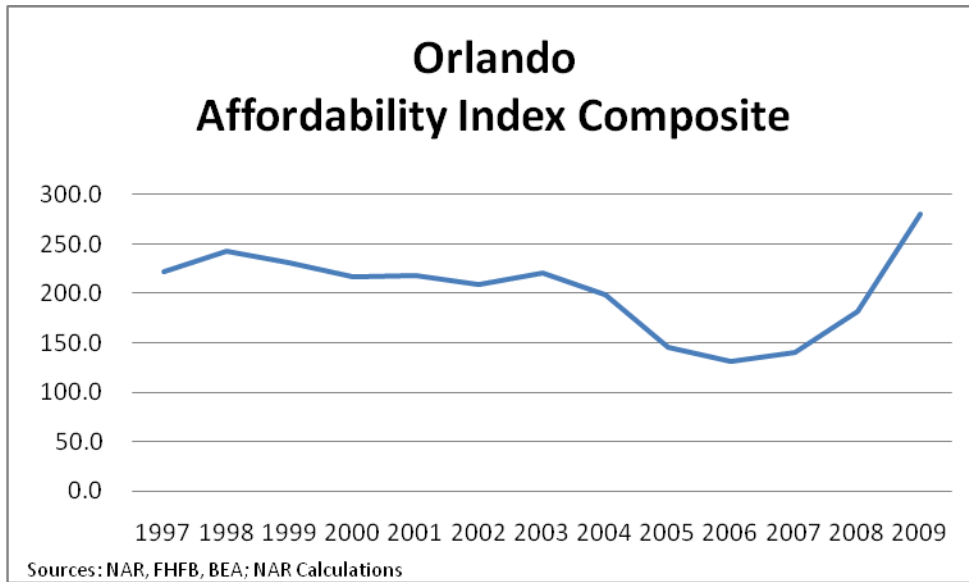
this trend. While forecasters expected mortgage rates to increase and possibly hamper affordability, extraordinary measures by the Fed have kept mortgage rates low and affordability high. The future performance of mortgage rates will affect affordability in Florida. As they gradually rise, affordability will gradually decline. Figure 6 is an affordability index constructed in the same manner as NAR’s national affordability index. As with the national index, a higher value indicates more affordable conditions; a lower value indicates less affordable conditions. Affordability declined during the housing boom, but as prices fell and interest rates remained low in the last few years, affordability began to pick up.

Figure 6.



In fact, we see this for affordability indexes that have been constructed for the major Metropolitan Statistical Areas in Florida. Because the data sources are different—and more recent—than the source for the state of Florida composite, in these series we can see a substantial improvement in affordability in 2008 and 2009. Figure 7 shows the index for the Orlando MSA, and figures for the other areas are available in Appendix 2.

Figure 7.



Potential Impacts from Changes in Real Estate Taxes

Another important impact on homeownership to consider is the effect of changes in government policy relating to housing. In an environment of declining federal aid and limited financing options, local governments are searching for alternative revenue sources. Transfer taxes, or more commonly known in Florida as documentary stamp taxes, are no longer only imposed at nominal rates to cover title and deed-recording costs. Nonetheless, Florida’s transfer tax rate of 0.7 percent is among the top half of states but must be considered in light of the fact that the state imposes no income tax. Coupling the transfer tax with the mortgage recording tax of 0.35 percent moves Florida into slightly more concerning territory, but the state is by no means the worst. Transfer tax rates of one percent or more are imposed in six states (Delaware, New Hampshire, New York, Vermont, Washington, and Pennsylvania) and in the District of Columbia.

It is important to consider the issues of equity and economic impact in regard to the transfer tax.

- Real estate transfer taxes are regressive because the tax burden is higher for lower income households.

- Real estate transfer taxes are discriminatory because they are assessed against one type of asset—real estate.
- A household that moves frequently, for whatever reason, does not derive additional benefits or place additional burdens on public services (except for minimal administrative costs) as compared to the household that does not move, and should therefore pay similar taxes.
- The narrow base of property transfer taxes places a larger burden on a small share of the population relative to more broadly based taxes.
- Transfer tax revenues are volatile.
- Increased closing costs on the transfer of existing residential property are likely to reduce the ability of potential homebuyers to purchase a home.

A property transfer tax in excess of the costs associated with the administration of property-ownership records is an arbitrary levy that is neither systematically related to a household's ability to pay nor to the benefits that movers derive from public services.

Whether as a general or earmarked revenue source, real estate transfer taxes and fees are a major burden to buyers and sellers, particularly at time of closing. Additionally, these taxes and fees have a negative impact on housing costs and, therefore, economic development. Finally, because of their volatility, these taxes and fees are a particularly poor revenue source for the general operating budgets of state and local governments.

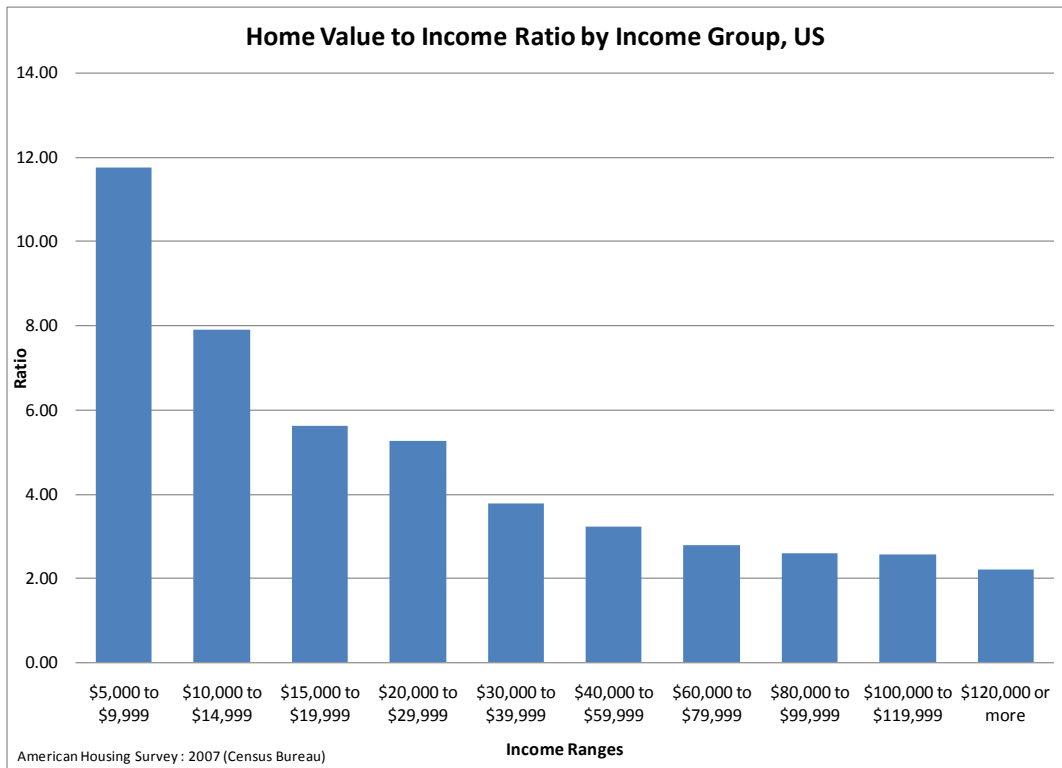
Transfer Taxes are Regressive and Discriminatory

A tax is regressive when its burden relative to income is greater on lower income people compared to higher income people. The real estate transfer tax clearly falls in the regressive category because people tend to spend a decreasing share of their total income on housing as income increases. Most state and local real estate transfer taxes are assessed as a uniform percentage of the value of the real property.

The ratio of home value to income for various income levels illustrates this point and is presented in Figure 8. The greater this ratio is, the greater the share of income that is

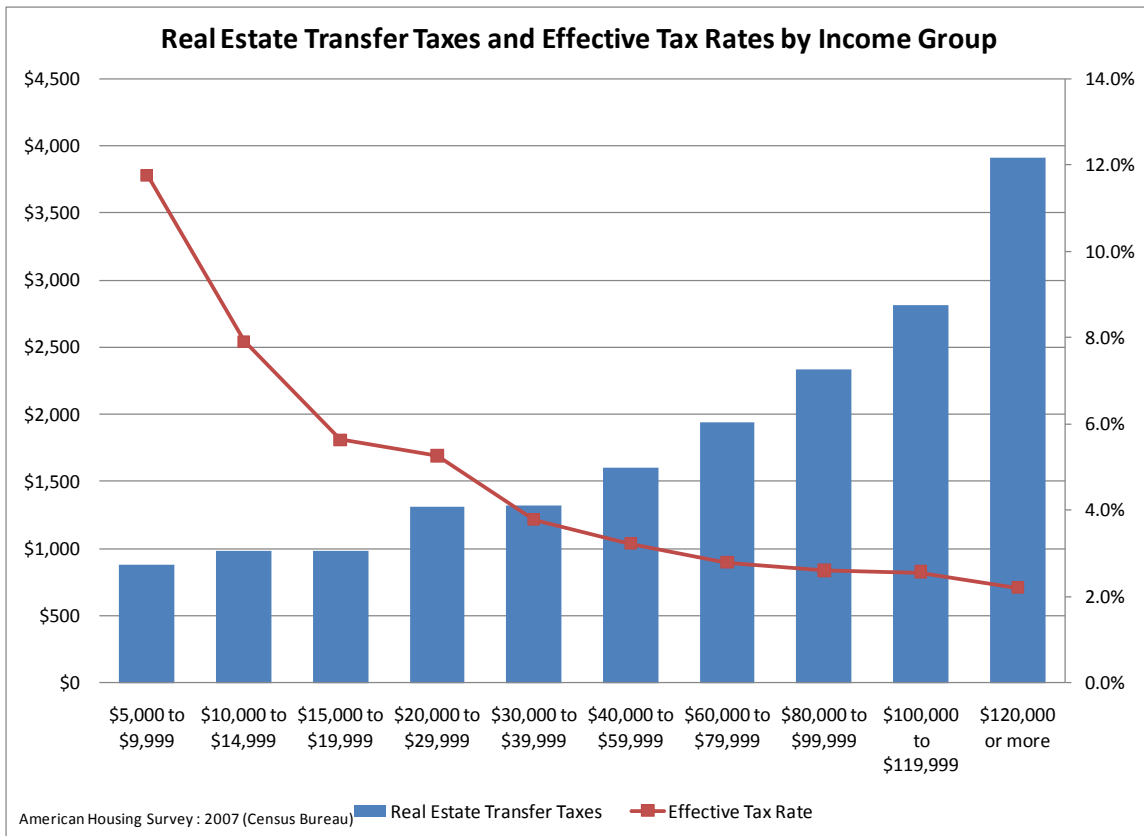
being spent on housing. According to this data on homeowners from the 2007 American Housing Survey, the home value/income ratio drops steadily from a level of 11.8 at an income level of \$7,500 to a ratio of 2.2 at an income of \$120,000 or more. The decline in the home value/income ratio as income increases is why a flat rate real estate transfer tax is regressive.

Figure 8.



The degree to which it is regressive is shown in Figure 9. For various income levels and their corresponding average home values, a 0.5 percent property transfer tax is calculated.

Figure 9.



The effective real estate transfer tax is then calculated. The effective tax rate is a relative measure of tax burden that relates taxes paid to ability to pay; in this case the ability to pay was proxied by income. At an income of \$12,500, the 1.0 percent transfer tax is \$990, which results in an effective tax rate of 7.9 percent. On the other hand, the average person making \$120,000 or more pays a much higher transfer tax of \$3,920, but relative to income, the effective rate is a much lower 2.2 percent. Therefore, relative to income, the real estate transfer tax burden decreases as income increases.

Another important characteristic of the real estate transfer tax that contributes to its regressive nature is that it is a tax on only one type of asset, i.e., real estate. Therefore, the transfer tax discriminates against buying a home versus buying some other type of asset such as stocks or bonds or buying other large ticket consumer durable goods. As can be seen in Table 3, housing equity is larger than stock holdings at all income levels, but especially the lower income levels. As incomes rise, stock holdings rise more quickly

than housing equity; for the highest income group, the value of stock holdings is still less than housing equity, but roughly half the size as opposed to less than one tenth the size for the lowest income group. Thus any tax applied to real estate assets such as housing would be regressive relative to taxes on other assets such as stock holdings. Table 4 shows the relationship between a real estate transfer tax and total assets. For the median family, a 1.0 percent real estate transfer tax equals 0.9 percent of the value of all assets. However, as income rises, an increasing share of income is used to purchase assets other than real estate, so the transfer tax comprises a decreasing share of total assets. Therefore, a 1.0 percent real estate transfer tax for households with the greatest value of assets represents less than half the tax burden of the median family – only 0.37 percent of total assets.

Table 3: Assets Held by Income Level: 2007

	Percent Homeowners	Median Value of Housing Equity	Percent Stock Owners	Median Value of Stock Holdings
All Families	68.6	\$105,000	51.1	\$35,000
Percentile of Income				
< 20	41.4	\$84,100	13.6	\$6,500
20 - 39.9	55.2	\$90,400	34.0	\$8,800
40 - 59.9	69.3	\$98,400	49.5	\$17,700
60 - 79.9	83.9	\$149,200	70.5	\$34,100
80 - 89.9	92.6	\$223,200	84.4	\$62,000
90 - 100	94.3	\$423,800	91.0	\$219,000

Source: *Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances*, Brian K. Bucks, Arthur B. Kennickell, Traci L. Mach and Kevin B. Moore Federal Reserve Bulletin, vol. 95 (February 2009), pp. A1-A55. NAR Calculations.

Table 4: Real Estate Transfer Tax Burden

	Value of Total Assets	Value of Primary Residence	Property Transfer Tax: 1.0%	Tax as a % of Total Assets
All Families	\$221,500	\$200,000	\$2,000	0.90%
<i>Percentile of Income</i>				
Less than 20	\$23,500	\$100,000	\$1,000	4.26%
20 - 39.9	\$84,900	\$120,000	\$1,200	1.41%
40 - 59.9	\$183,500	\$150,000	\$1,500	0.82%
60 - 79.9	\$342,800	\$215,000	\$2,150	0.63%
80 - 89.9	\$558,100	\$300,000	\$3,000	0.54%
90 - 100	\$1,358,400	\$500,000	\$5,000	0.37%

Source: Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances, Brian K. Bucks, Arthur B. Kennickell, Traci L. Mach and Kevin B. Moore Federal Reserve Bulletin, vol. 95 (February 2009), pp. A1-A55. NAR Calculations.

Narrow vs. Broad Based Taxes

One of the disadvantages of the property transfer tax is that it is a very narrowly based tax. It is a tax on a single item – the value of property when ownership is transferred from one party to another. When taxes are narrowly based, they tend to distort behavior because, all other things equal, taxes increase the cost of specific choices which rational actors will then seek to avoid.

What choice does a transfer tax punish? Here’s a simple thought experiment: let’s compare the tax burdens that a typical household would incur under a transfer tax or a property tax designed to raise identical amounts of revenue.

Replacing the transfer tax with an increase in a broad-based property tax would mean that a homebuyer would not face a high one-time payment at purchase, but would pay a higher property tax each year they owned real estate. If the transfer tax was replaced by a broad-based tax, over an extended period of time, people who move frequently would

pay less in taxes and people who live in one house for a long time would pay more in taxes. Therefore, the key factor as to whether a particular household ends up paying more over time under a transfer tax compared to a broad-based property tax is the frequency with which they purchase a new home. With a transfer tax, frequent moves are discouraged and staying in the same house is incentivized.

Volatility of Transfer Tax Revenue

Residential real estate is characterized by strong cycles as can be seen in Figures 10, 11, and 12. Existing single-family home sales volume declined by 50 percent from its peak in the late 1970s to its trough in the early 1980s. From 1988 to 1991, sales again fell by nearly 20 percent. Before the recent end of the slow steady increase in sales from 1991 through 2005, some conjectured that a new era had dawned. Unfortunately, the decline in sales from 2005 to 2008 of more than 30 percent nationally and more than 50 percent in Florida reminds us that sales growth has rarely been that prolonged, and thus, taxes on real estate services are not a stable source of revenue if longer-term history were our guide.

Specifically, relating to Florida, both existing home sales and new home sales (as proxied by new single-family construction permits) have experienced large swings in the past. Existing home sales fell 43% from 1980 to 1982. Sales then more than doubled from 1982 to 1989. Like the US, Florida saw sales climb from 1991 to 2005 increasing nearly threefold in fourteen years before falling back to a level not seen for a decade and a half in 2008.

A proxy for new home construction, new single-family home permits declined by 36% from 1980 to 1982. New home permits then recovered, nearly doubling in 1983. In the most recent business cycle, Florida single family home permits nearly doubled from 2000 to 2005 before plummeting to less than half the level of the lowest level on record. Because condominiums are a larger segment of multifamily construction in Florida, total housing permit (single-family plus multifamily) figures show even larger variations over time. The peak to trough cycles in total housing permits included a 40 percent decline

from 1980 to 1982, a 97 percent surge from 1982 to 1984, and of course the recent drop off of 88 percent from 2005 to 2009.

Figure 10.

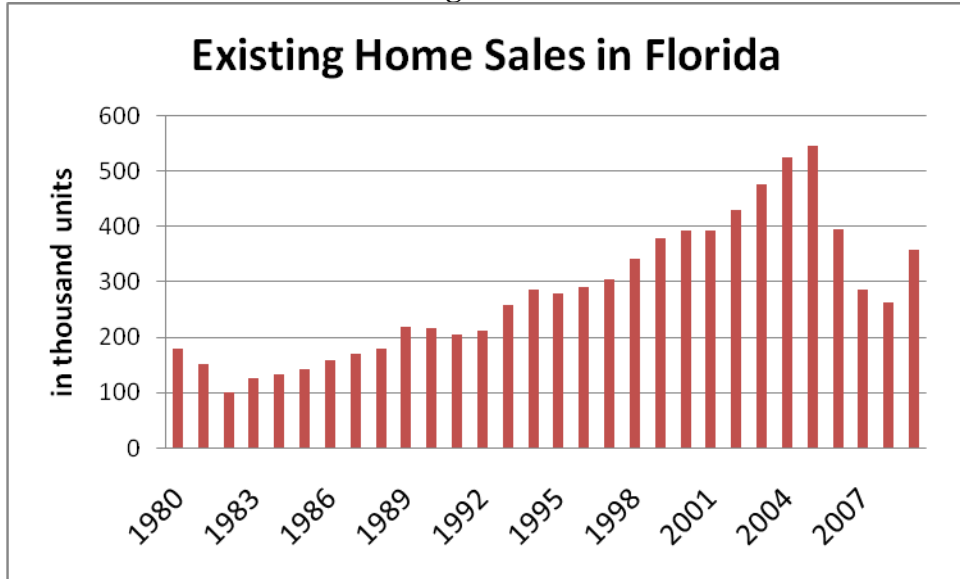


Figure 11.

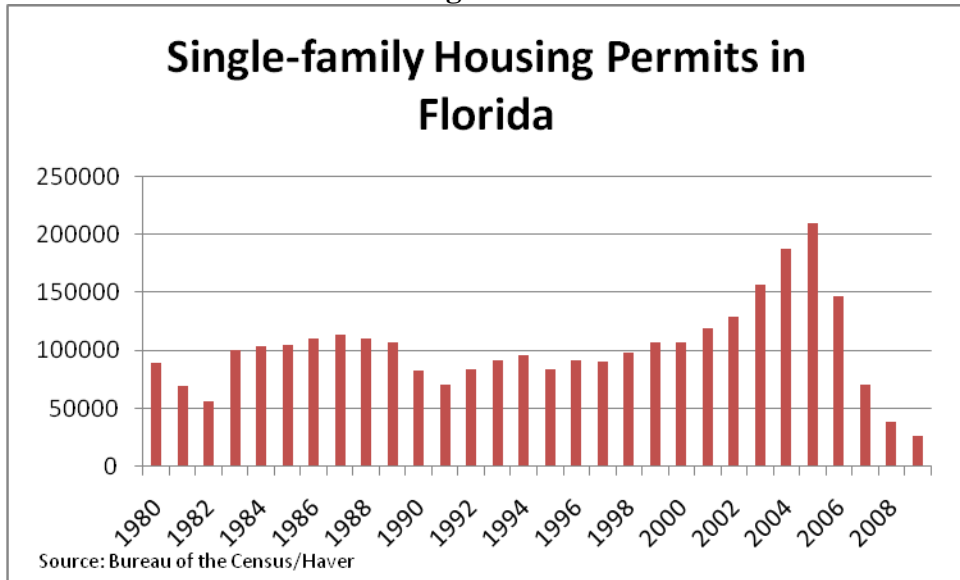
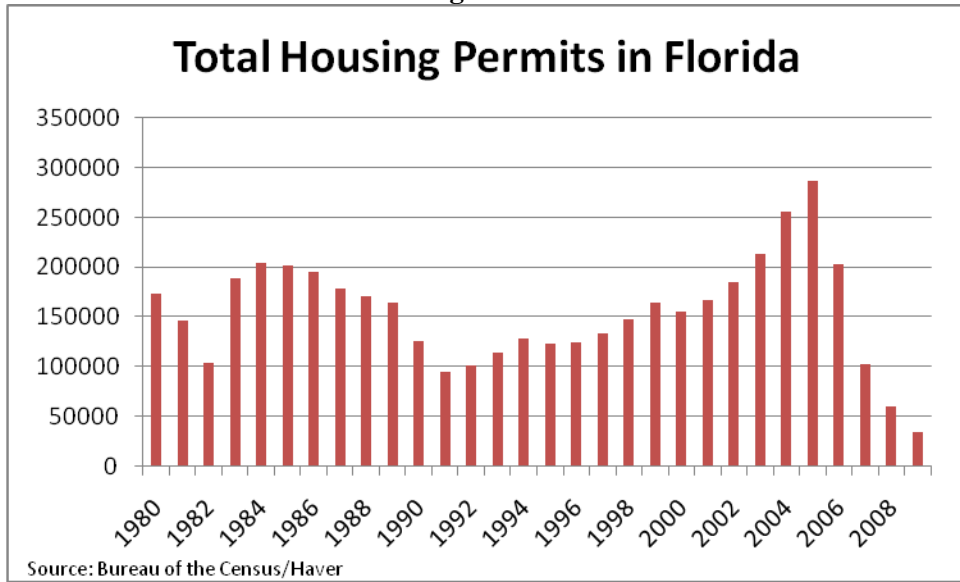
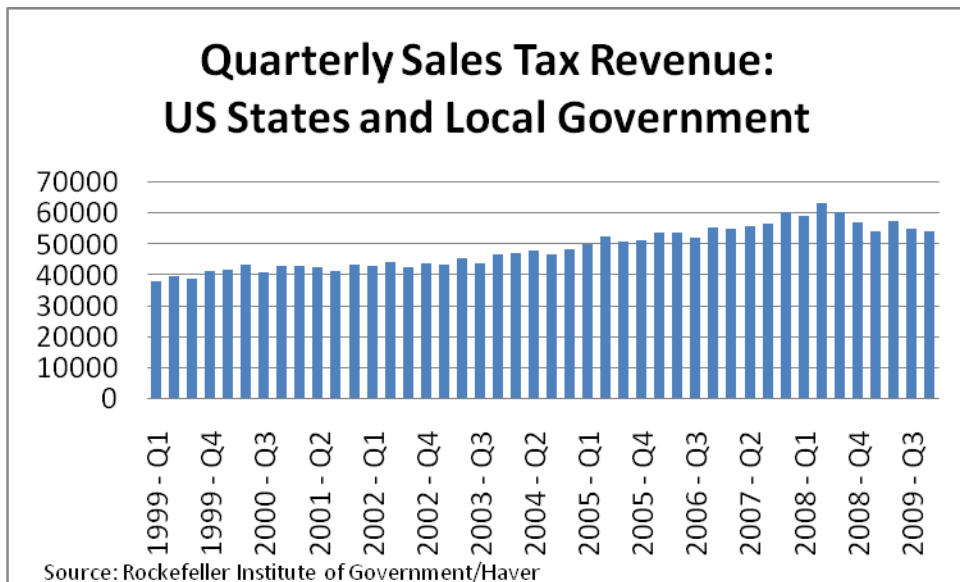


Figure 12.



By contrast, retail sales receipts and personal income tax receipts have historically shown much more stable patterns. Figure 13 shows that retail sales taxes collected by all state and local governments have remained fairly steady despite various downturns. Even in the recent “Great Recession,” annual collections are down only 8 percent

Figure 13.



In summary, transfer taxes are regressive and narrowly based, that is, they apply only to a small number of payers who undertake a specific behavior, namely buying or selling a home. As a result, transfer taxes are highly volatile and not a good source of revenue.

Impact Analysis of Transfer Tax

Regardless of the party paying the real estate transfer tax—in Florida responsibility is not assigned by law—it increases the cost of buying or selling a home, and all parties in the transaction are affected. To simplify the modeling, it makes sense to assume that one party—in this case the buyer—pays the entire tax. The economic modeling suggest an increase in transfer tax by one percentage point (from 0.7 percent rate to 1.7 percent rate³⁷) will reduce the number of eligible homebuyers in Florida by 32,570. Miami will see a fall in eligible homebuyers by nearly 9,500 while a smaller market, Gainesville, will see a drop of about 500. In reality, the number of eligible homebuyers may not fall by these amounts if sellers chip in to help pay for the real estate transfer tax. Whether this reduces “observed” sales prices or not, the extra cash put forward by the seller increases the cost of the home sale for them.

The logic behind the impact figures works as follows, using the Orlando market as an example. In Orlando, the median home price was \$150,375 in 2009. Raising the transfer tax by 1 percentage point would result in an increase in the transfer tax bill by \$1,504. Therefore, the cash needed at settlement increases by that amount. A homebuyer would be forced to use their savings (planned originally for down payment) to cover the increased closing cost. In turn, the homebuyer would need to take out a larger mortgage loan to make up the deficit. But taking out a larger loan is not feasible for many households. Lending institutions have certain lending criteria and income requirement before a mortgage loan is approved³⁸. Therefore, a higher loan requirement prevents many households who would have been qualified at a lower loan requirement before the transfer tax increase from purchasing a home. Calculations, which are detailed in Appendix 4, show that nearly 3,500 households are pushed out of the home buying market in Orlando as a result of raising the transfer tax by one percentage point.

³⁷ <http://www.legalebook.com/ebook/eBookFrame.asp> (NAR State Issues Tracker)
<http://www.taxadmin.org/fta/rate/Realtytransfer.html> (Tax Administrators)

³⁸ <http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

Table 5 shows the impact result for all major Florida metro markets. The full step-by-step computation methodology for each of the markets is shown in Appendix 3.

Table 5: Reduction in the Number of Home Buying Households From Raising Transfer Tax by 1% point (Mortgage rate at 5.5%)

Metro Market	Households Affected
Daytona Beach MSA	827
Cape Coral-Fort Myers MSA	679
Gainesville MSA	526
Jacksonville MSA	2,387
Palm Bay-Melbourne-Titusville MSA	845
Miami-Fort Lauderdale-Miami Beach MSA	9,454
Ocala MSA	536
Orlando MSA	3,496
Pensacola-Ferry Pass-Brent MSA	839
Sarasota-Bradenton-Venice MSA	1,350
Tallahassee MSA	764
Tampa-St. Petersburg-Clearwater MSA	5,201
Florida – State Total	32,570

If the original assumptions are modified then a different set of results are obtained. For example, in the table above, the market conditions were such that the prevailing mortgage rates averaged 5.5 percent. If the market conditions are different, say with the mortgage rates at 6.0 percent, the impact is modestly more pronounced. It should be noted that the greater impact of the transfer tax at a 6.0 percent mortgage rate is in addition to reduced affordability resulting from the increase in required income due to higher mortgage rates. Assuming a 6.0 percent mortgage rate, Florida as a whole will see a decline in the number of eligible home-buying households of nearly 34,400 as a result of an increase in the transfer tax rather than 32,570 as stated above. It is important to keep in mind that this decline would be in addition to the decline in eligible home-buying households as a result of the higher mortgage rate. In Orlando the number of affected households increases to 5,100 from 4,600.

Table 6 shows the impact of a 1 percent increase in transfer taxes on households in major metro markets in Florida assuming a 6 percent mortgage rate. Full calculations are available in Appendix 5.

Table 6: Reduction in the Number of Home Buying Households From Raising Transfer Tax by 1% point (Mortgage rate at 6.0%)

Metro Market	Households Affected
Daytona Beach MSA	873
Cape Coral-Fort Myers MSA	710
Gainesville MSA	556
Jacksonville MSA	2,520
Palm Bay-Melbourne-Titusville MSA	892
Miami-Fort Lauderdale-Miami Beach MSA	9,982
Ocala MSA	566
Orlando MSA	3,700
Pensacola-Ferry Pass-Brent MSA	886
Sarasota-Bradenton-Venice MSA	1,587
Tallahassee MSA	795
Tampa-St. Petersburg-Clearwater MSA	5,492
Florida – State Total	34,392

Policymakers need to consider the consequences of the increased cost of purchasing a home resulting from a higher transfer tax. Results suggest a significantly lower number of eligible homebuyers. Moreover, there will surely be a decline in mobility that is likely to create negative momentum in transfer tax revenues. Higher transfer taxes discourage mobility among current homeowners and discourage frequent movers from becoming home owners. With fewer households moving, the revenue generated from the transfer tax is not likely to meet expectations based on current mobility rates. If the lower tax yield leads to further increases in the transfer tax rate, mobility could decline again, repeating the cycle. The results of the impact analyses considered here all show that the imposition of these hypothetical tax changes would place heavier burdens on would-be home buyers. As a result, home sales will be lower and first-time homebuyers will be hit especially hard.

Impact Analysis of Tax on Business Receipt

Another possible target for government revenue includes a surcharge on business receipts. Some states have already imposed such a tax. The impact of this tax will be such that consumers (i.e., homebuyers) will likely bear the full burden of the tax.

Any new tax on business receipts will directly reduce real estate agents' commissions. In the short-term, real estate agents' incomes will suffer. Over time, though, the lower average income will drive many agents into other professions until commensurate economic gains are re-established, through higher commission rates and higher fees imposed on consumers.

Economic textbooks stress that any tax will be shifted to buyers if the supply side is considered to be competitive. In modeling the impact of placing a tax on business receipts, it is reasonable to believe that the tax will eventually be shifted to homebuyers. This is because the real estate transaction occurs in a competitive environment that meets the important required criteria for a perfectly competitive market. First, there are many real estate licensees, about half of whom are one of 1.1 million Realtor® members. Second, the entry and exit into and out of the real estate profession is relatively easy. The number of training hours is relatively few, and the number of new real estate agents entering and older agents exiting the market is evidence that the field is quite dynamic. For example, in 2007 25 percent of Realtors® surveyed had 2 years or less of experience. By 2010, the share of Realtors® with 2 years or less of experience declined to 10 percent. Additionally, in 2007 5 percent of those surveyed were not certain that they would remain active as real estate professionals during the next two years. The share notched up by one percentage point each year to 8 percent in 2010, indicating a fairly healthy rate of exit from the market, even in a challenging job market offering relatively few alternatives.

Therefore, it is a reasonable expectation that the impact in the early years will be primarily borne by real estate agents since career change is not an instantaneous decision. However, one can expect fewer people in the real estate profession over time from the imposition of new business receipts taxes because the real estate profession meets competitive labor market conditions. Fewer suppliers, or in this case fewer agents, will mean a less competitive business environment and, hence, commission rates will be pushed higher. Higher commission rates and fees, in turn, would impact homebuyers.

Impact Analysis of Property Tax

Property taxes are not new; they have existed since 1839 when Florida was a territory. Recently, property taxes in Florida have received a great amount of attention from the legislature, the governor, and the press. In 2006 no fewer than fourteen proposed constitutional amendments concerning property taxes were filed for consideration by the Florida Legislature. The governor, Charlie Crist, has an often quoted desire to see property taxes “drop like a rock³⁹.” The desire to reduce property taxes is not new; Floridians have been successful at doing so in the past. In fact, there is already a limitation in the millage rate of 10 mills (one percent) for taxes levied by counties, schools, and municipalities and limitations on special districts that are set when the districts are established. These and other limitations have prompted government officials to creatively try to raise revenue in other ways. The result is a complicated system.

Properties in Florida are appraised at just or fair market value. An adjustment is then made in accordance with “Save Our Homes⁴⁰” and agricultural use to arrive at what is called the “Assessed Value.” The assessed value is then further reduced by a homestead

³⁹ *Orlando Sentinel, Sun Sentinel, St. Petersburg Times* and others.

⁴⁰ Save Our Homes is the common term for a constitutional amendment approved in 1992 that limits the growth in assessed value for homesteaded property to the lesser of three percent or the growth in the Consumer Price Index (CPI) and provides that assessed value cannot exceed just value. The limitation first applied to properties on the 1995 tax roll. Prior to the passage of Amendment 1 in January 2008, a home was reassessed at just value on January 1 following a sale. Amendment 1 provided for “portability” of the assessment cap so that a

exemption⁴¹ and other exemptions to arrive at the taxable value. The taxable value is then multiplied by the millage rate, the result is the property tax.

According to economic theory, a higher property tax rate will reduce the value of a home through a process known in the economic literature as “tax capitalization.” Just as a stock price is said to reflect future earnings, a home price also reflects future costs/benefits associated with home ownership. The higher costs (as would occur with higher property tax rates) will result in lower home prices through capitalization. Tax capitalization is a well accepted concept in economic analysis.

In theory, the home price will immediately adjust to capture all of the changes in future costs and benefits (after applying a future discount rate) from the day of the announcement of the new tax. For example, if the tax were to increase by \$1,000 and it was not spent in ways consistent with increasing the value of a home (i.e. additional government services) the price of a home could fall by as much as \$13,000⁴².

Of course the resulting capitalization is somewhat sensitive to assumptions made about the discount rate, time horizon and ratio of capitalization. In a 2006 paper titled, “Fiscal Policy and Property Values,” Drs William Hoyt and John Garen summarize the research on capitalization of property taxes. They note that studies tend to assume a discount rate of three to eight percent and a time horizon of forty years or more. For smaller (larger) discount rates, longer (shorter) time horizons, and greater (smaller) capitalization ratios, the reduction in property value as a result of a tax increase is greater (smaller) *ceteris paribus*. In their study, Drs Hoyt and Garen use a three percent discount rate and infinite time horizon to compare the conclusions of various research. They find that while capitalization rates vary, “the vast majority of estimates seem to indicate capitalization rates for property taxes in the range of 40% - 65%.” The earlier \$13,000 estimated loss is consistent with the lesser of these new assumptions (infinite time horizon, three percent discount rate, and forty percent capitalization ratio). If the capitalization ratio is as high

⁴¹ The Homestead Exemption was proposed in 1934 and applies to the individual’s permanent residence. The exemption was \$25,000 until January 2008 when voters passed Amendment 1 which provided for an additional \$25,000 in homestead exemption though it does not apply to school taxable value.

⁴² Assumes a 30 year time horizon for 100% capitalization of \$1000 annual payments at 6.6% discount rate

as sixty-five percent and the other assumptions hold, the loss could be as great as \$21,667.

In practice, market dynamics between home buyer (willing to bid lower prices given the extra cost burden of higher property taxes) and home seller (settling for a lower price) will work over time to bring about full realization of the tax capitalization. The end result will be lower home prices—a loss for all homeowners (72 percent of Florida households).

Impact Analysis of General Housing Fees

In general, any imposition of fees that raise the cost of homeownership will have negative consequences often leading to fewer eligible homebuyers. What happens if an impact fee or other real estate related tax is placed on a home sale that raises the purchase price? To answer this more general question, several simulations where home price rose were analyzed. Table 7 shows the range of results from a higher home price. For example, a policy change that results in a \$500 increase in home prices will impact 276 households in the Daytona Beach metro market. While a \$3,000 price increase will impact 9,520 households in the Tampa-St. Petersburg-Clearwater metro market. Appendixes 4 to 7 show the detailed computations behind these results.

Table 7: Reduction in the Number of Home Buying Households From Home Price Increases

Metro Market	Price rise by \$500	Price rise by \$1000	Price rise by \$2000	Price rise by \$3000
Daytona Beach MSA	276	553	1,106	1,659
Cape Coral-Fort Myers MSA	316	632	1,265	1,897
Gainesville MSA	132	263	526	789
Jacksonville MSA	679	1,358	2,716	4,074
Palm Bay-Melbourne-Titusville MSA	333	667	1,312	1,969
Miami-Fort Lauderdale-Miami Beach MSA	1,925	3,850	7,700	11,550
Ocala MSA	218	437	873	1,310
Orlando MSA	982	1,964	3,936	5,904
Pensacola-Ferry Pass-Brent MSA	245	490	979	1,469
Sarasota-Bradenton-Venice MSA	332	664	1,477	2,216
Tallahassee MSA	214	428	843	1,265
Tampa-St. Petersburg-Clearwater MSA	1,587	3,173	6,347	9,520
Florida – State Total	9,647	19,294	38,588	57,882

Conclusion

The housing sector is very important for both the local and national economy. About 15 percent of national economic activity is directly attributed to housing market activity. In Florida, housing's contribution to state GDP is estimated to be over \$134 billion in 2008, more than 20 percent of the economy. Further, property taxes added \$30.3 billion as measured by fiscal year 2008 tax revenue. In addition to undergirding the economy, homeownership provides many intangible values. Homeowners do not move as frequently as renters, providing a source of neighborhood stability. Neighborhood stability in turn confers benefits of higher social and community involvement such as crime prevention programs. Homeowners have a stake in their neighborhoods and communities, and so are likely to behave in ways that benefit everyone in the community.

This report also found the real estate transfer tax to be particularly harmful in many respects. A transfer tax in excess of the costs associated with the administration of property-ownership records is an arbitrary levy that is not related to a household's ability to pay or to the benefits that movers derive from public services. Real estate transfer taxes and fees are a major burden to buyers and sellers, particularly at time of closing. As a result, these taxes have a negative impact on housing purchases and therefore economic development. Real estate transfer taxes are a poor choice for local governments because the volatility of the revenue stream makes the funding unreliable and because the regressivity of the tax places a disproportionate burden on lower income homebuyers and those who move frequently.

Given the importance of housing, policy makers should be cognizant of potential consequences of any housing related policy changes. This report finds that changes in government policies will affect homeownership, sometimes in a very negative manner.

List of Tables and Figures

Figures

Figure 1. Florida Gross Domestic Product and Real Estate Components.....	(14)
Figure 2. Percent of Persons Aged 65 and Over (select states)	(18)
Figure 3. Homeownership vs. Home Price (50 States and DC)	(20)
Figure 4. Home Price, Income Growth, and Qualifying Income in Florida	(22)
Figure 5. Median Payment as Percent of Median Income in Florida	(22)
Figure 6. State of Florida Affordability Index Composite	(23)
Figure 7. Orlando Affordability Index Composite (for others see appendix).....	(24)
Figure 8. Value to Income Ratio by Income Group, US	(26)
Figure 9. Real Estate Transfer Taxes and Effective Tax Rates by Income Group.....	(27)
Figure 10. Existing Home Sales in Florida.....	(31)
Figure 11. Single-family Housing Permits in Florida	(31)
Figure 12. Total Housing Permits in Florida.....	(32)
Figure 13. Quarterly Sales Tax Revenues: US States and Local Government	(32)

Tables

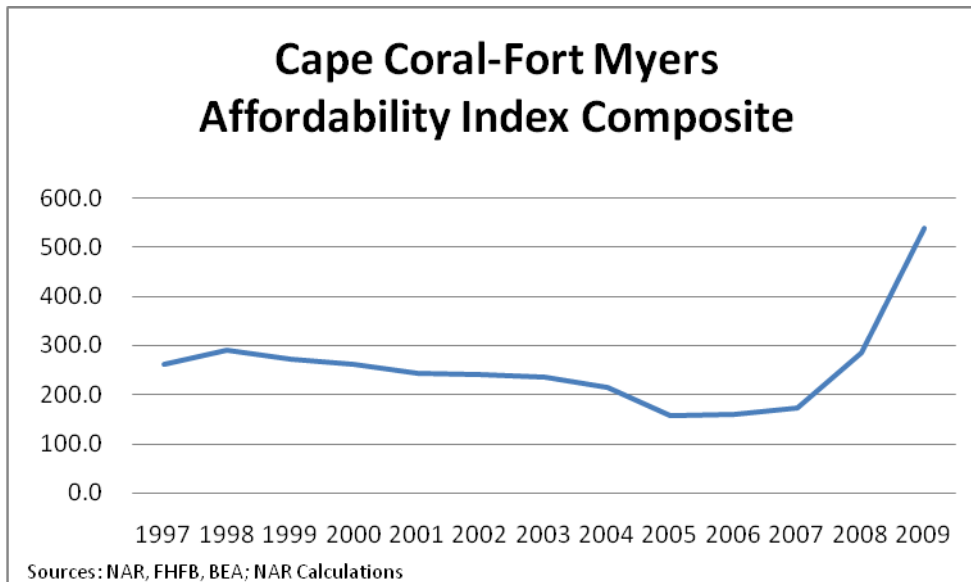
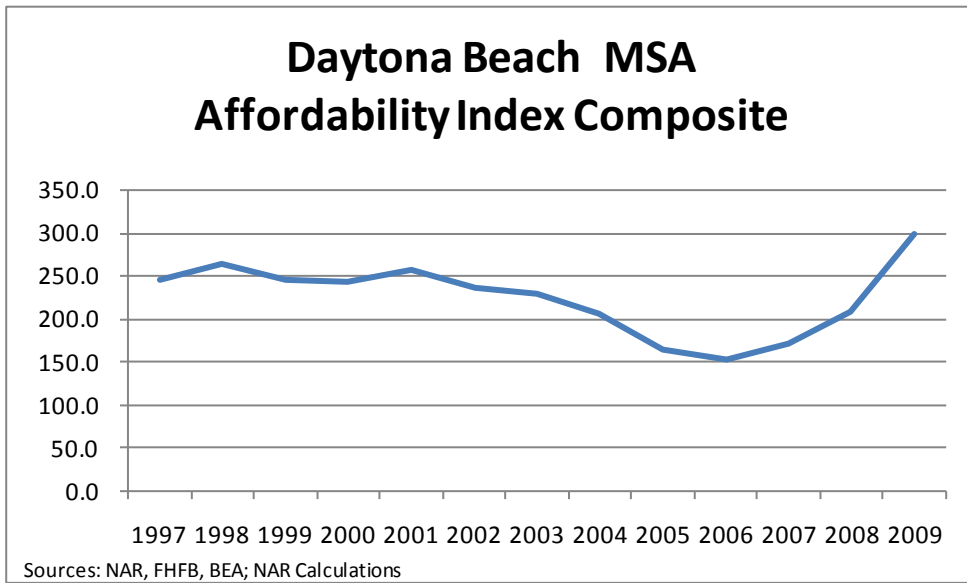
Table 1: Homeownership Rate by Age Group in 2009	(18)
Table 2: Net Internal Migration.....	(19)
Table 3: Assets Held by Income Level: 2007	(28)
Table 4: Real Estate Transfer Tax Burden	(29)
Table 5: Reduction in the Number of Home Buying Households From Raising Transfer Tax by 1% point (Mortgage rate at 5.5%).....	(34)
Table 6: Reduction in the Number of Home Buying Households From Raising Transfer Tax by 1% point (Mortgage rate at 6.0%).....	(35)
Table 8: Reduction in the Number of Home Buying Households From Home Price Increases	(39)

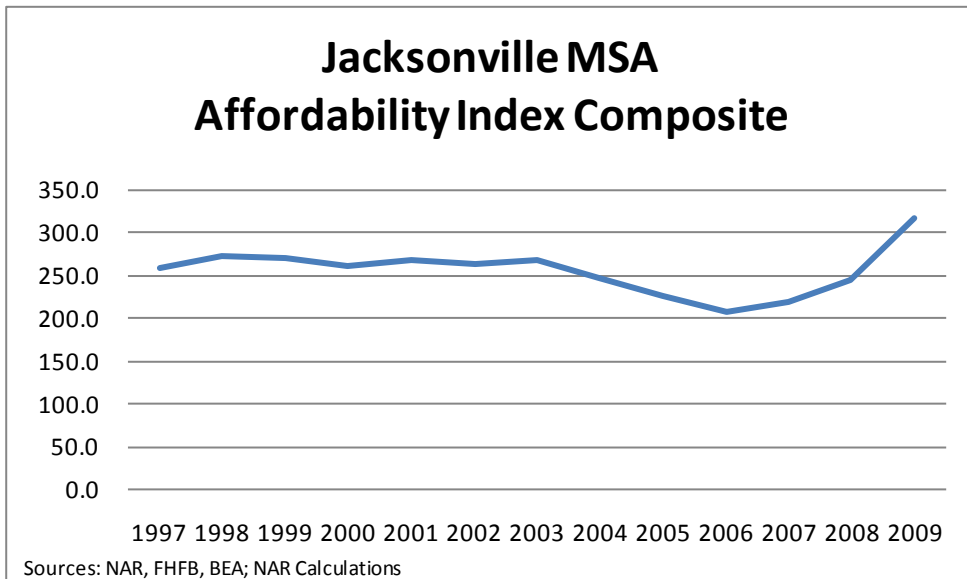
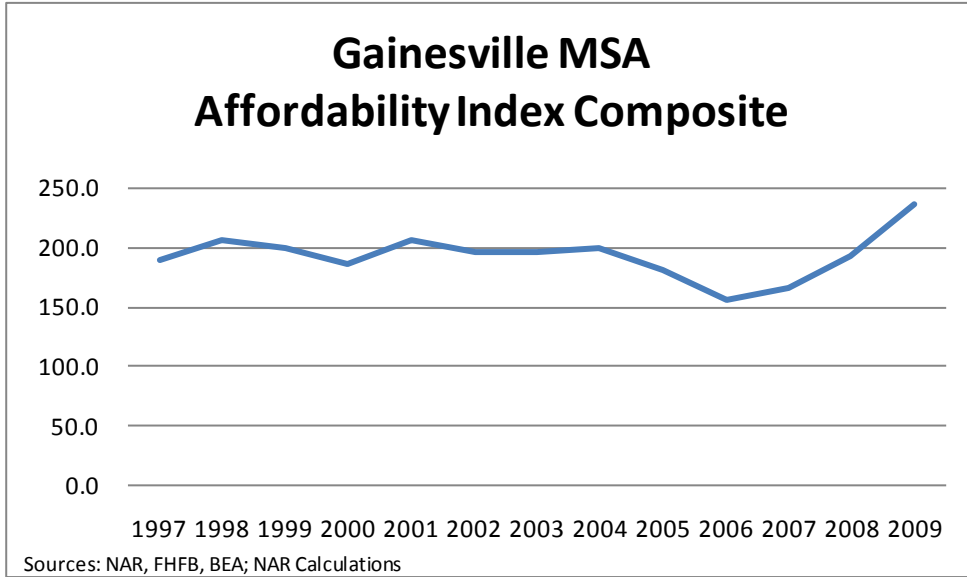
Appendix 1: State Level Home Price and Homeownership Rate

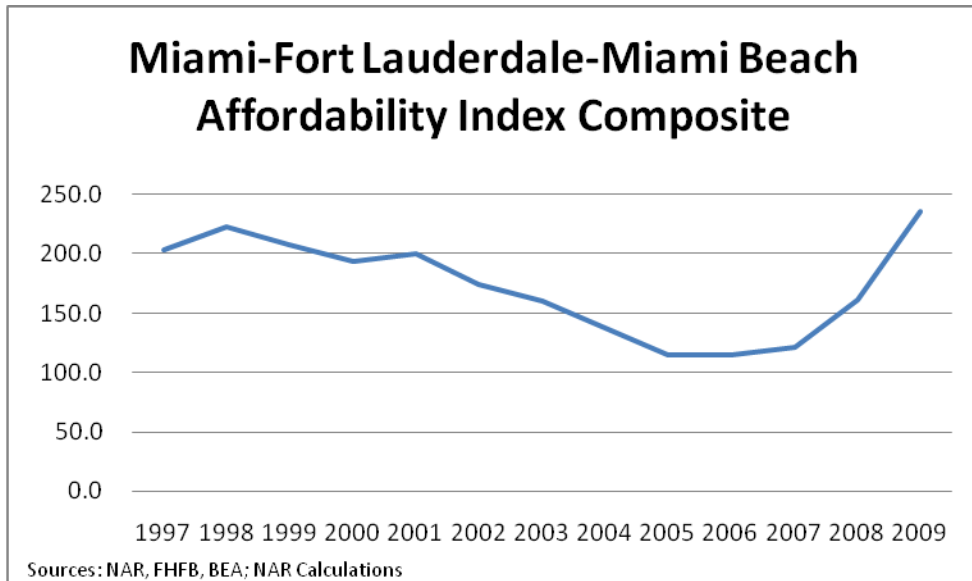
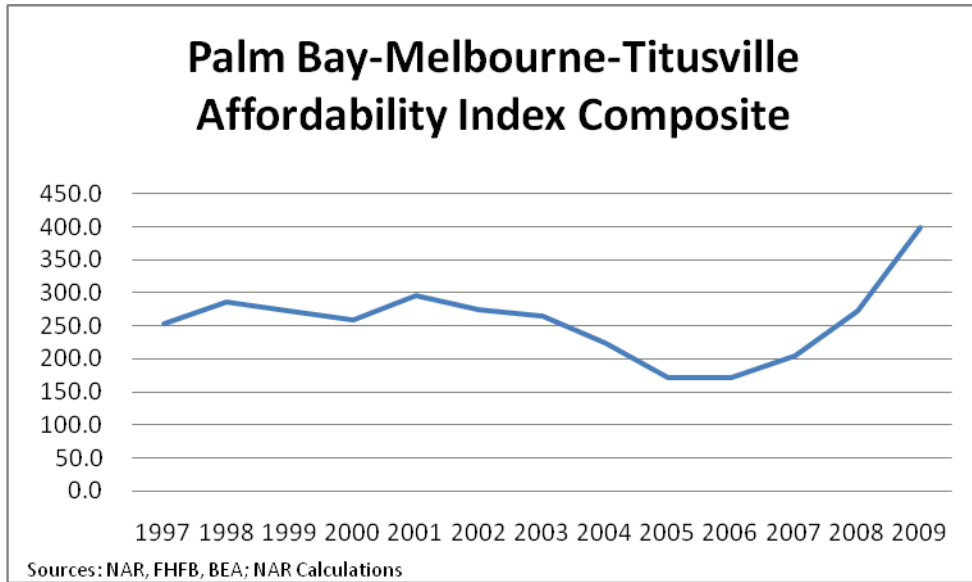
State	Median Single Family Home Price	Homeownership Rate
UNITED STATES	250.0	67.8
ALABAMA	203.5	73.0
ALASKA	251.1	66.4
ARIZONA	240.0	69.1
ARKANSAS	156.0	68.9
CALIFORNIA	400.0	57.5
COLORADO	237.4	69.0
CONNECTICUT	320.0	70.7
DELAWARE	331.4	76.2
DISTRICT OF COLUMBIA	488.0	44.1
FLORIDA	240.0	71.1
GEORGIA	216.0	68.2
HAWAII	450.0	59.1
IDAHO	235.6	75.0
ILLINOIS	216.1	68.9
INDIANA	144.0	74.4
IOWA	141.5	74.0
KANSAS	189.0	68.8
KENTUCKY	172.5	72.8
LOUISIANA	187.5	73.5
MAINE	175.0	73.9
MARYLAND	420.0	70.6
MASSACHUSETTS	302.0	65.7
MICHIGAN	150.0	75.9
MINNESOTA	229.3	73.1
MISSISSIPPI	168.0	75.4
MISSOURI	172.5	71.4
MONTANA	215.0	70.3
NEBRASKA	139.9	69.6
NEVADA	268.0	63.6
NEW HAMPSHIRE	245.0	75.0
NEW JERSEY	345.0	67.3
NEW MEXICO	183.0	70.4
NEW YORK	290.0	55.0
NORTH CAROLINA	222.8	69.4
NORTH DAKOTA	190.0	66.6
OHIO	198.0	70.8
OKLAHOMA	149.5	70.4
OREGON	300.0	66.2
PENNSYLVANIA	235.0	72.6
RHODE ISLAND	277.5	64.5
SOUTH CAROLINA	225.0	73.9
SOUTH DAKOTA	187.5	70.4
TENNESSEE	189.9	71.7
TEXAS	175.0	65.5
UTAH	255.0	76.2
VERMONT	160.0	72.8
VIRGINIA	355.0	70.6
WASHINGTON	329.1	66.2
WEST VIRGINIA	165.0	77.8
WISCONSIN	192.0	70.4
WYOMING	223.0	73.3

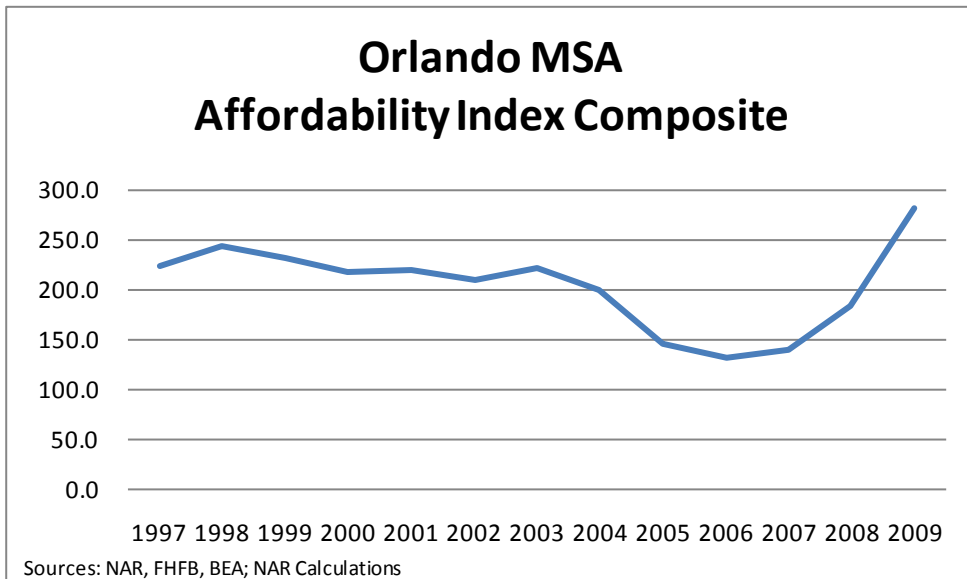
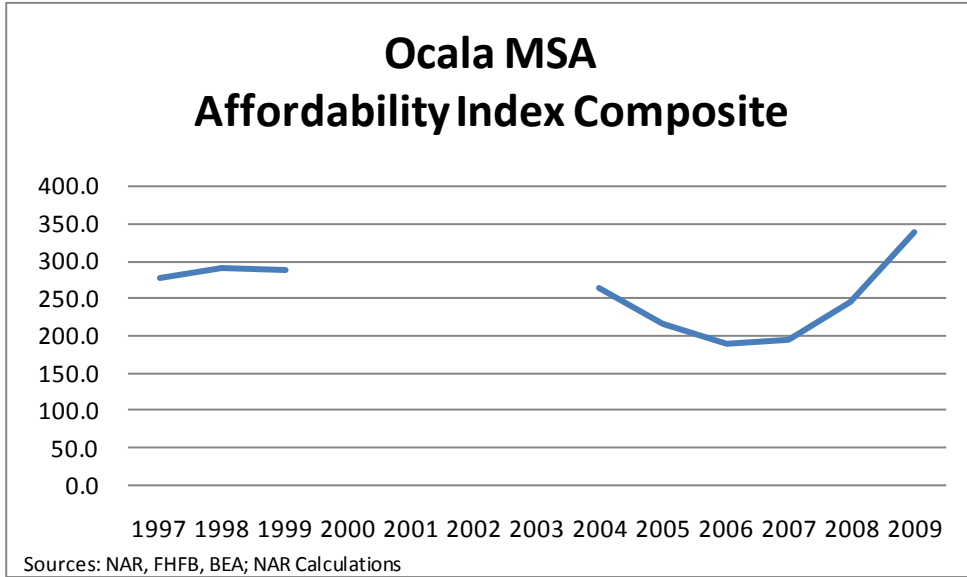
FHFA data on prices and HVS data on homeownership rates. Both 2008.
http://www.fhfa.gov/webfiles/15296/MIRS_table27_2008_Median_Price_by_State.xls
<http://www.census.gov/hhes/www/housing/hvs/charts/index.html>

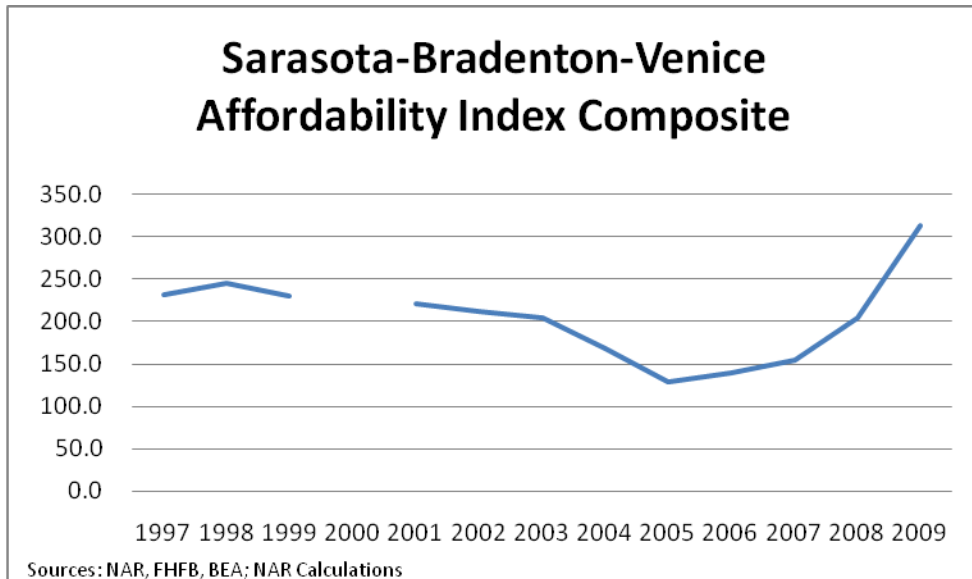
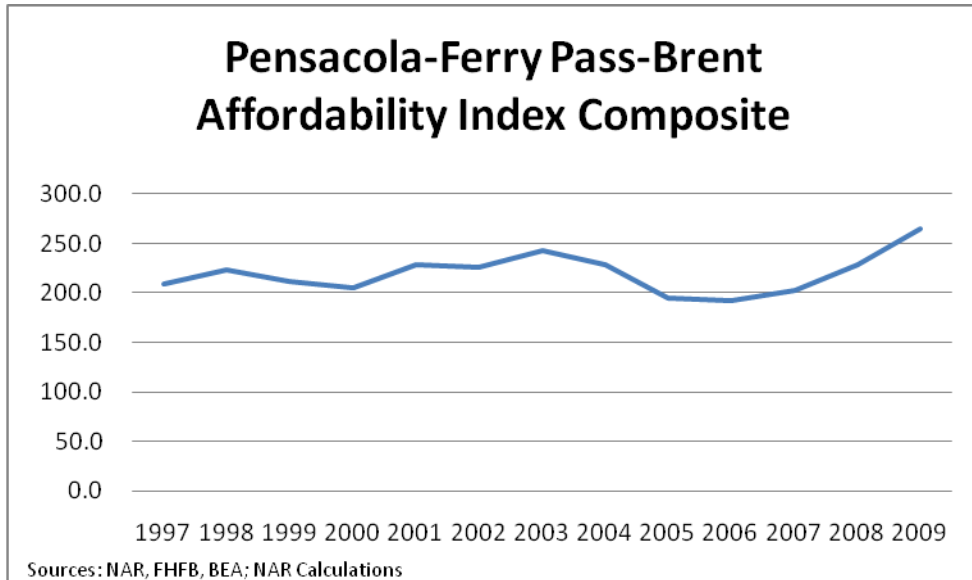
**Appendix 2: Affordability Index Composite
Graphs for Metropolitan Statistical Areas**

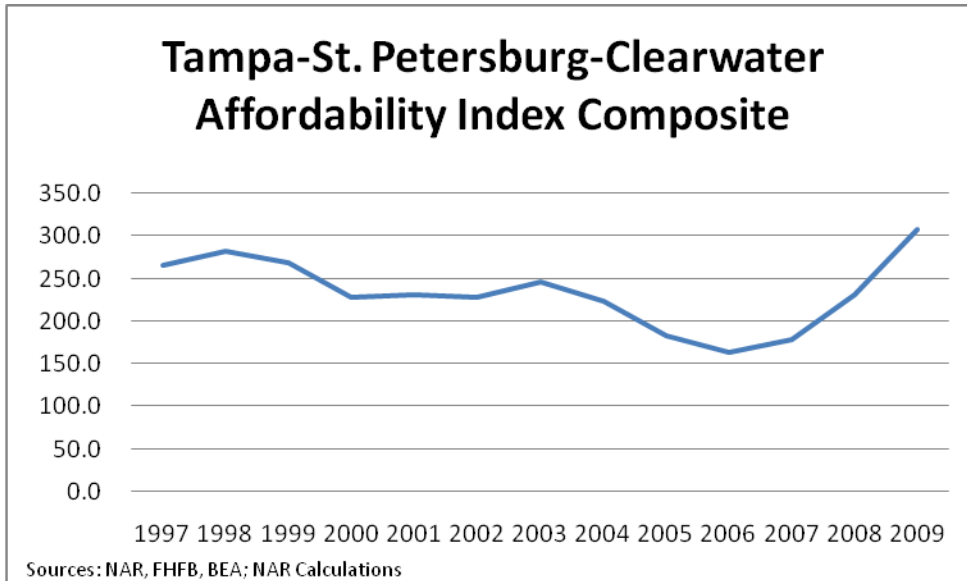
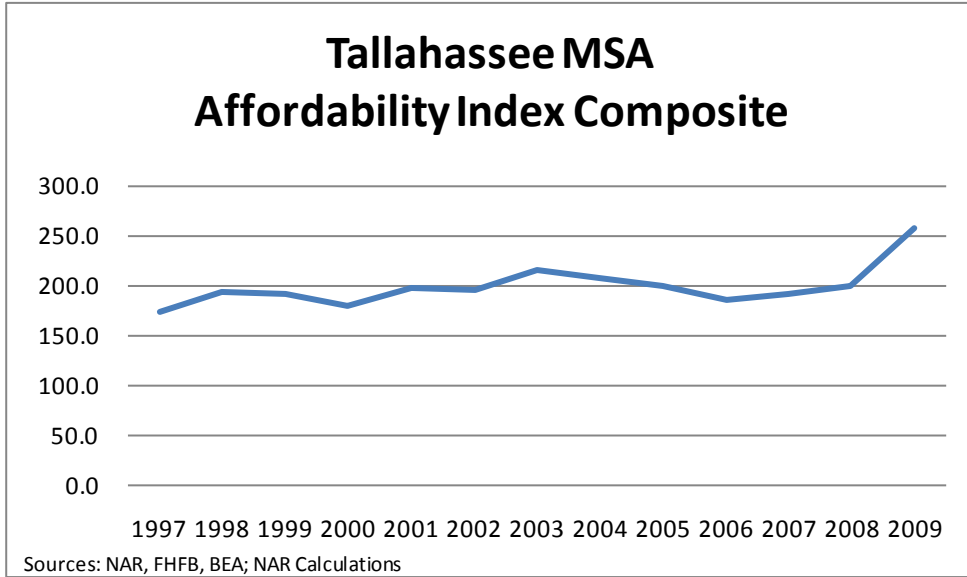












Appendix 3: Transfer Tax Impact in Orlando MSA - Methodology

1. The residential real estate market is a competitive market because there many buyers and sellers and there exists easy entry and exit into the real estate profession.
2. The transfer tax will result in higher closing costs at settlement.
3. The median home price in the Orlando metro market was \$150,375 in 2009 (NAR).
4. Raising the transfer tax will require taking out a larger mortgage loan as a larger part of a homebuyer's savings will go toward the transfer tax and less for a down payment. An increase in the transfer tax by 1 percentage point will result in increased closing costs of \$1,504.
5. Homebuyers with savings (and intended down payment) of 20 percent of home price, will have to set 1 percent aside for the closing cost with the new higher transfer tax rate. Therefore, a higher mortgage loan will need to be taken out (81 percent Loan-To-Value LTV with the new tax rather than 80 percent LTV).
6. Assume other things, such as interest rate, income, and employment, as constant. This is the standard method for analyzing impacts of policy changes.
7. The 30-year fixed mortgage rate in assumed at 5.5 percent.
8. Traditional lending standards call for mortgage payment to be 28 percent of income including property taxes and insurance payments. Because we do not consider property taxes and insurance, we assume a 25 percent ratio of payment to income.
9. To borrow \$120,300 (at 80 percent LTV), the required monthly payment is \$683.05. To borrow \$121,804 (at 81 percent LTV), the required monthly payment is \$691.59.
10. The required annual gross income to obtain the loan is \$32,786 at 80 percent LTV and \$33,196 at 81 percent LTV.
11. The number of households in the Orlando metropolitan area who can no longer buy a home due to a higher income requirement are those households in the income range from \$32,786 to \$33,196.
12. Assuming a linear distribution of households in an income range, there are 3,500 households (rounded figure) who meet those criteria based on the Census Bureau's 2008 American Community Survey.
13. Though several factors were assumed in this analysis, such as a 80 percent LTV ratio (based on FHFB data for FL) or a 5.5 percent mortgage rate (based on national rates), the end result would vary minimally had the initial assumptions been different. The impact analysis is driven dominantly by the changes in LTV resulting from higher closing fees and not from the initial LTVs. If a 6.0 percent mortgage rate is assumed then the final impact is 3,700 and not 3,500.

Appendix 4: Metro level impact analysis results of 1% increase in transfer tax assuming 5.5% rate

	Median Home Price (2009)	Loan amount (80% LTV)	Monthly mortgage payment at 5.5%	Required annual income (monthly payment is 25% gross income)*	1% transfer tax	New Loan amount	New mortgage payment at 5.5%	Required Income	Income Increase	Affected Households per \$1	Total Households Affected
Daytona Beach MSA	\$ 126,300	\$ 101,040	\$573.69	\$ 27,537	\$ 1,263	\$ 102,303	\$580.87	\$ 27,882	\$ 344	2.40	827
Cape Coral-Fort Myers MSA	\$ 89,850	\$ 71,880	\$408.13	\$ 19,590	\$ 899	\$ 72,779	\$413.23	\$ 19,835	\$ 245	2.77	679
Gainesville MSA	\$ 169,025	\$ 135,220	\$767.76	\$ 36,853	\$ 1,690	\$ 136,910	\$777.36	\$ 37,313	\$ 461	1.14	526
Jacksonville MSA	\$ 148,450	\$ 118,760	\$674.31	\$ 32,367	\$ 1,485	\$ 120,245	\$682.74	\$ 32,771	\$ 405	5.90	2,387
Palm Bay-Melbourne-Titusville MSA	\$ 107,025	\$ 85,620	\$486.14	\$ 23,335	\$ 1,070	\$ 86,690	\$492.22	\$ 23,626	\$ 292	2.90	845
Miami-Fort Lauderdale-Miami Beach MSA	\$ 207,425	\$ 165,940	\$942.19	\$ 45,225	\$ 2,074	\$ 168,014	\$953.97	\$ 45,790	\$ 565	16.72	9,454
Ocala MSA	\$ 103,675	\$ 82,940	\$470.92	\$ 22,604	\$ 1,037	\$ 83,977	\$476.81	\$ 22,887	\$ 283	1.90	536
Orlando MSA	\$ 150,375	\$ 120,300	\$683.05	\$ 32,786	\$ 1,504	\$ 121,804	\$691.59	\$ 33,196	\$ 410	8.53	3,496
Pensacola-Ferry Pass-Brent MSA	\$ 144,800	\$ 115,840	\$657.73	\$ 31,571	\$ 1,448	\$ 117,288	\$665.95	\$ 31,966	\$ 395	2.13	839
Sarasota-Bradenton-Venice MSA	\$ 171,875	\$ 137,500	\$780.71	\$ 37,474	\$ 1,719	\$ 139,219	\$790.47	\$ 37,943	\$ 468	2.88	1,350
Tallahassee MSA	\$ 150,875	\$ 120,700	\$685.32	\$ 32,895	\$ 1,509	\$ 122,209	\$693.89	\$ 33,307	\$ 411	1.86	764
Tampa-St. Petersburg-Clearwater MSA	\$ 138,450	\$ 110,760	\$628.88	\$ 30,186	\$ 1,385	\$ 112,145	\$636.74	\$ 30,564	\$ 377	13.78	5,201
Florida State Total	\$ 142,600	\$ 114,080	\$647.73	\$ 31,091	\$ 1,426	\$ 115,506	\$655.83	\$ 31,480	\$ 389	83.80	32,570

* MBA recommends a home payment including insurance and taxes not exceed 28% monthly gross income. This analysis does not account for property taxes and insurance payments, so the figure has been adjusted to 25%.

<http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

Appendix 5: Metro level impact analysis results of 1% increase in transfer tax assuming 6.0% rate

	Median Home Price (2009)	Loan amount (80% LTV)	Monthly mortgage payment at 6.0%	Required annual income (monthly payment is 25% gross income)*	1% transfer tax	New Loan amount	New mortgage payment at 6.0%	Required Income	Income Increase	Affected Households per \$1	Total Households Affected
Daytona Beach MSA	\$ 126,300	\$ 101,040	\$605.79	\$ 29,078	\$ 1,263	\$ 102,303	\$613.36	\$ 29,441	\$ 363	2.40	873
Cape Coral-Fort Myers MSA	\$ 89,850	\$ 71,880	\$430.96	\$ 20,686	\$ 899	\$ 72,779	\$436.34	\$ 20,945	\$ 259	2.75	710
Gainesville MSA	\$ 169,025	\$ 135,220	\$810.71	\$ 38,914	\$ 1,690	\$ 136,910	\$820.85	\$ 39,401	\$ 486	1.14	556
Jacksonville MSA	\$ 148,450	\$ 118,760	\$712.03	\$ 34,177	\$ 1,485	\$ 120,245	\$720.93	\$ 34,604	\$ 427	5.90	2,520
Palm Bay-Melbourne-Titusville MSA	\$ 107,025	\$ 85,620	\$513.34	\$ 24,640	\$ 1,070	\$ 86,690	\$519.75	\$ 24,948	\$ 308	2.90	892
Miami-Fort Lauderdale-Miami Beach MSA	\$ 207,425	\$ 165,940	\$994.89	\$ 47,755	\$ 2,074	\$ 168,014	\$1,007.33	\$ 48,352	\$ 597	16.72	9,982
Ocala MSA	\$ 103,675	\$ 82,940	\$497.27	\$ 23,869	\$ 1,037	\$ 83,977	\$503.48	\$ 24,167	\$ 298	1.90	566
Orlando MSA	\$ 150,375	\$ 120,300	\$721.26	\$ 34,620	\$ 1,504	\$ 121,804	\$730.28	\$ 35,053	\$ 433	8.55	3,700
Pensacola-Ferry Pass-Brent MSA	\$ 144,800	\$ 115,840	\$694.52	\$ 33,337	\$ 1,448	\$ 117,288	\$703.20	\$ 33,754	\$ 417	2.13	886
Sarasota-Bradenton-Venice MSA	\$ 171,875	\$ 137,500	\$824.38	\$ 39,570	\$ 1,719	\$ 139,219	\$834.69	\$ 40,065	\$ 495	3.21	1,587
Tallahassee MSA	\$ 150,875	\$ 120,700	\$723.66	\$ 34,736	\$ 1,509	\$ 122,209	\$732.70	\$ 35,170	\$ 434	1.83	795
Tampa-St. Petersburg-Clearwater MSA	\$ 138,450	\$ 110,760	\$664.06	\$ 31,875	\$ 1,385	\$ 112,145	\$672.36	\$ 32,273	\$ 398	13.78	5,492
Florida State Total	\$ 142,600	\$ 114,080	\$683.97	\$ 32,830	\$ 1,426	\$ 115,506	\$692.52	\$ 33,241	\$ 410	83.80	34,392

* MBA recommends a home payment including insurance and taxes not exceed 28% monthly gross income. This analysis does not account for property taxes and insurance payments, so the figure has been adjusted to 25%.

<http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

Appendix 6: Metro level impact analysis results of \$500 house price increase assuming 6.0% mortgage rate

	Median Home Price (2009)	Loan amount (80% LTV)	Monthly mortgage payment at 6.0%	Required annual income (monthly payment is 25% gross income)*	With \$500 price increase	New Loan amount	New mortgage payment at 6.0%	Required Income	Income Increase	Affected Households per \$1	Total Households Affected
Daytona Beach MSA	\$ 126,300	\$ 101,040	\$605.79	\$ 29,078	\$ 126,800	\$ 101,440	\$608.18	\$ 29,193	\$ 115	2.40	276
Cape Coral-Fort Myers MSA	\$ 89,850	\$ 71,880	\$430.96	\$ 20,686	\$ 90,350	\$ 72,280	\$433.36	\$ 20,801	\$ 115	2.75	316
Gainesville MSA	\$ 169,025	\$ 135,220	\$810.71	\$ 38,914	\$ 169,525	\$ 135,620	\$813.11	\$ 39,029	\$ 115	1.14	132
Jacksonville MSA	\$ 148,450	\$ 118,760	\$712.03	\$ 34,177	\$ 148,950	\$ 119,160	\$714.42	\$ 34,292	\$ 115	5.90	679
Palm Bay-Melbourne-Titusville MSA	\$ 107,025	\$ 85,620	\$513.34	\$ 24,640	\$ 107,525	\$ 86,020	\$515.73	\$ 24,755	\$ 115	2.90	333
Miami-Fort Lauderdale-Miami Beach MSA	\$ 207,425	\$ 165,940	\$994.89	\$ 47,755	\$ 207,925	\$ 166,340	\$997.29	\$ 47,870	\$ 115	16.72	1,925
Ocala MSA	\$ 103,675	\$ 82,940	\$497.27	\$ 23,869	\$ 104,175	\$ 83,340	\$499.67	\$ 23,984	\$ 115	1.90	218
Orlando MSA	\$ 150,375	\$ 120,300	\$721.26	\$ 34,620	\$ 150,875	\$ 120,700	\$723.66	\$ 34,736	\$ 115	8.53	982
Pensacola-Ferry Pass-Brent MSA	\$ 144,800	\$ 115,840	\$694.52	\$ 33,337	\$ 145,300	\$ 116,240	\$696.92	\$ 33,452	\$ 115	2.13	245
Sarasota-Bradenton-Venice MSA	\$ 171,875	\$ 137,500	\$824.38	\$ 39,570	\$ 172,375	\$ 137,900	\$826.78	\$ 39,685	\$ 115	2.88	332
Tallahassee MSA	\$ 150,875	\$ 120,700	\$723.66	\$ 34,736	\$ 151,375	\$ 121,100	\$726.06	\$ 34,851	\$ 115	1.86	214
Tampa-St. Petersburg-Clearwater MSA	\$ 138,450	\$ 110,760	\$664.06	\$ 31,875	\$ 138,950	\$ 111,160	\$666.46	\$ 31,990	\$ 115	13.78	1,587
Florida State Total	\$ 142,600	\$ 114,080	\$683.97	\$ 32,830	\$ 143,100	\$ 114,480	\$686.37	\$ 32,946	\$ 115	83.80	9,647

* MBA recommends a home payment including insurance and taxes not exceed 28% monthly gross income. This analysis does not account for property taxes and insurance payments, so the figure has been adjusted to 25%.
<http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

Appendix 7: Metro level impact analysis results of \$1,000 house price increase assuming 6.0% mortgage rate

	Median Home Price (2009)	Loan amount (80% LTV)	Monthly mortgage payment at 6.0%	Required annual income (monthly payment is 25% gross income)*	With \$1000 price increase	New Loan amount	New mortgage payment at 6.0%	Required Income	Income Increase	Affected Households per \$1	Total Households Affected
Daytona Beach MSA	\$ 126,300	\$ 101,040	\$605.79	\$ 29,078	\$ 127,300	\$ 101,840	\$611	\$ 29,308	\$ 230	2.40	553
Cape Coral-Fort Myers MSA	\$ 89,850	\$ 71,880	\$430.96	\$ 20,686	\$ 90,850	\$ 72,680	\$436	\$ 20,916	\$ 230	2.75	632
Gainesville MSA	\$ 169,025	\$ 135,220	\$810.71	\$ 38,914	\$ 170,025	\$ 136,020	\$816	\$ 39,144	\$ 230	1.14	263
Jacksonville MSA	\$ 148,450	\$ 118,760	\$712.03	\$ 34,177	\$ 149,450	\$ 119,560	\$717	\$ 34,407	\$ 230	5.90	1,358
Palm Bay-Melbourne-Titusville MSA	\$ 107,025	\$ 85,620	\$513.34	\$ 24,640	\$ 108,025	\$ 86,420	\$518	\$ 24,870	\$ 230	2.90	667
Miami-Fort Lauderdale-Miami Beach MSA	\$ 207,425	\$ 165,940	\$994.89	\$ 47,755	\$ 208,425	\$ 166,740	\$1,000	\$ 47,985	\$ 230	16.72	3,850
Ocala MSA	\$ 103,675	\$ 82,940	\$497.27	\$ 23,869	\$ 104,675	\$ 83,740	\$502	\$ 24,099	\$ 230	1.90	437
Orlando MSA	\$ 150,375	\$ 120,300	\$721.26	\$ 34,620	\$ 151,375	\$ 121,100	\$726	\$ 34,851	\$ 230	8.53	1,964
Pensacola-Ferry Pass-Brent MSA	\$ 144,800	\$ 115,840	\$694.52	\$ 33,337	\$ 145,800	\$ 116,640	\$699	\$ 33,567	\$ 230	2.13	490
Sarasota-Bradenton-Venice MSA	\$ 171,875	\$ 137,500	\$824.38	\$ 39,570	\$ 172,875	\$ 138,300	\$829	\$ 39,801	\$ 230	2.88	664
Tallahassee MSA	\$ 150,875	\$ 120,700	\$723.66	\$ 34,736	\$ 151,875	\$ 121,500	\$728	\$ 34,966	\$ 230	1.86	428
Tampa-St. Petersburg-Clearwater MSA	\$ 138,450	\$ 110,760	\$664.06	\$ 31,875	\$ 139,450	\$ 111,560	\$669	\$ 32,105	\$ 230	13.78	3,173
Florida State Total	\$ 142,600	\$ 114,080	\$683.97	\$ 32,830	\$ 143,600	\$ 114,880	\$689	\$ 33,061	\$ 230	83.80	19,294

* MBA recommends a home payment including insurance and taxes not exceed 28% monthly gross income. This analysis does not account for property taxes and insurance payments, so the figure has been adjusted to 25%.

<http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

Appendix 8: Metro level impact analysis results of \$2,000 house price increase assuming 6.0% mortgage rate

	Median Home Price (2009)	Loan amount (80% LTV)	Monthly mortgage payment at 6.0%	Required annual income (monthly payment is 25% gross income)*	With \$2000 price increase	New Loan amount	New mortgage payment at 6.0%	Required Income	Income Increase	Affected Households per \$1	Total Households Affected
Daytona Beach MSA	\$ 126,300	\$ 101,040	\$605.79	\$ 29,078	\$ 128,300	\$ 102,640	\$615.38	\$ 29,538	\$ 460	2.40	1,106
Cape Coral-Fort Myers MSA	\$ 89,850	\$ 71,880	\$430.96	\$ 20,686	\$ 91,850	\$ 73,480	\$440.55	\$ 21,146	\$ 460	2.75	1,265
Gainesville MSA	\$ 169,025	\$ 135,220	\$810.71	\$ 38,914	\$ 171,025	\$ 136,820	\$820.31	\$ 39,375	\$ 460	1.14	526
Jacksonville MSA	\$ 148,450	\$ 118,760	\$712.03	\$ 34,177	\$ 150,450	\$ 120,360	\$722	\$ 34,638	\$ 460	5.90	2,716
Palm Bay-Melbourne-Titusville MSA	\$ 107,025	\$ 85,620	\$513.34	\$ 24,640	\$ 109,025	\$ 87,220	\$523	\$ 25,101	\$ 460	2.85	1,312
Miami-Fort Lauderdale-Miami Beach MSA	\$ 207,425	\$ 165,940	\$994.89	\$ 47,755	\$ 209,425	\$ 167,540	\$1,004	\$ 48,215	\$ 460	16.72	7,700
Ocala MSA	\$ 103,675	\$ 82,940	\$497.27	\$ 23,869	\$ 105,675	\$ 84,540	\$507	\$ 24,329	\$ 460	1.90	873
Orlando MSA	\$ 150,375	\$ 120,300	\$721.26	\$ 34,620	\$ 152,375	\$ 121,900	\$731	\$ 35,081	\$ 460	8.55	3,936
Pensacola-Ferry Pass-Brent MSA	\$ 144,800	\$ 115,840	\$694.52	\$ 33,337	\$ 146,800	\$ 117,440	\$704	\$ 33,797	\$ 460	2.13	979
Sarasota-Bradenton-Venice MSA	\$ 171,875	\$ 137,500	\$824.38	\$ 39,570	\$ 173,875	\$ 139,100	\$834	\$ 40,031	\$ 460	3.21	1,477
Tallahassee MSA	\$ 150,875	\$ 120,700	\$723.66	\$ 34,736	\$ 152,875	\$ 122,300	\$733	\$ 35,196	\$ 460	1.83	843
Tampa-St. Petersburg-Clearwater MSA	\$ 138,450	\$ 110,760	\$664.06	\$ 31,875	\$ 140,450	\$ 112,360	\$674	\$ 32,335	\$ 460	13.78	6,347
Florida State Total	\$ 142,600	\$ 114,080	\$683.97	\$ 32,830	\$ 144,600	\$ 115,680	\$694	\$ 33,291	\$ 460	83.80	38,588

* MBA recommends a home payment including insurance and taxes not exceed 28% monthly gross income. This analysis does not account for property taxes and insurance payments, so the figure has been adjusted to 25%.

<http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

Appendix 9: Metro level impact analysis results of \$3,000 house price increase assuming 6.0% mortgage rate

	Median Home Price (2009)	Loan amount (80% LTV)	Monthly mortgage payment at 6.0%	Required annual income (monthly payment is 25% gross income)*	With \$3000 price increase	New Loan amount	New mortgage payment at 6.0%	Required Income	Income Increase	Affected Households per \$1	Total Households Affected
Daytona Beach MSA	\$ 126,300	\$ 101,040	\$606	\$ 29,078	\$ 129,300	\$ 103,440	\$620	\$ 29,768	\$ 691	2.40	1,659
Cape Coral-Fort Myers MSA	\$ 89,850	\$ 71,880	\$431	\$ 20,686	\$ 92,850	\$ 74,280	\$445	\$ 21,377	\$ 691	2.75	1,897
Gainesville MSA	\$ 169,025	\$ 135,220	\$811	\$ 38,914	\$ 172,025	\$ 137,620	\$825	\$ 39,605	\$ 691	1.14	789
Jacksonville MSA	\$ 148,450	\$ 118,760	\$712	\$ 34,177	\$ 151,450	\$ 121,160	\$726	\$ 34,868	\$ 691	5.90	4,074
Palm Bay-Melbourne-Titusville MSA	\$ 107,025	\$ 85,620	\$513	\$ 24,640	\$ 110,025	\$ 88,020	\$528	\$ 25,331	\$ 691	2.85	1,969
Miami-Fort Lauderdale-Miami Beach MSA	\$ 207,425	\$ 165,940	\$995	\$ 47,755	\$ 210,425	\$ 168,340	\$1,009	\$ 48,446	\$ 691	16.72	11,550
Ocala MSA	\$ 103,675	\$ 82,940	\$497	\$ 23,869	\$ 106,675	\$ 85,340	\$512	\$ 24,560	\$ 691	1.90	1,310
Orlando MSA	\$ 150,375	\$ 120,300	\$721	\$ 34,620	\$ 153,375	\$ 122,700	\$736	\$ 35,311	\$ 691	8.55	5,904
Pensacola-Ferry Pass-Brent MSA	\$ 144,800	\$ 115,840	\$695	\$ 33,337	\$ 147,800	\$ 118,240	\$709	\$ 34,028	\$ 691	2.13	1,469
Sarasota-Bradenton-Venice MSA	\$ 171,875	\$ 137,500	\$824	\$ 39,570	\$ 174,875	\$ 139,900	\$839	\$ 40,261	\$ 691	3.21	2,216
Tallahassee MSA	\$ 150,875	\$ 120,700	\$724	\$ 34,736	\$ 153,875	\$ 123,100	\$738	\$ 35,426	\$ 691	1.83	1,265
Tampa-St. Petersburg-Clearwater MSA	\$ 138,450	\$ 110,760	\$664	\$ 31,875	\$ 141,450	\$ 113,160	\$678	\$ 32,566	\$ 691	13.78	9,520
Florida State Total	\$ 142,600	\$ 114,080	\$684	\$ 32,830	\$ 145,600	\$ 116,480	\$698	\$ 33,521	\$ 691	83.80	57,882

* MBA recommends a home payment including insurance and taxes not exceed 28% monthly gross income. This analysis does not account for property taxes and insurance payments, so the figure has been adjusted to 25%.
<http://www.homeloanlearningcenter.com/MortgageBasics/QualifyingforaMortgage.htm>

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