The 2008 U.S. Housing Crisis and its Potential Impacts on Planning: A Comparison of Austin, Atlanta, and Miami

by

Abel Balwierz, Bachelor of Arts Degree in Economics

Report

Presented to the Faculty of the Graduate School of
The University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science in Community and Regional Planning

The University of Texas at Austin
December, 2008
The 2008 U.S. Housing Crisis and its Potential Impacts on Planning: A Comparison of Austin, Atlanta, and Miami

Approved by
Supervising Committee:
Abstract

The 2008 U.S. Housing Crisis and its Potential Impacts on Planning: A Comparison of Austin, Atlanta, and Miami

Abel Balwierz, MSCR

The University of Texas at Austin, 2008

Supervisor: Terry Kahn

The United States is in the midst of a rather severe housing crisis. Home prices have declined and foreclosures have increased in cities all over the country. The crisis began in 2007 and has continued into the fourth quarter of 2008. Some cities have been severely affected by the housing crisis while others have been able to maintain relatively healthy housing markets. This paper demonstrates the local nature of housing markets and the factors which shape them. Analyses of the local housing markets of Austin, TX, Atlanta, GA and Miami, FL comprise the bulk of this paper and demonstrate the broad spectrum of housing market conditions that exist today. The lessons learned from the three case studies finally lead to some recommendations for local planners which could prove effective for creating and maintaining healthy local housing markets.
# Table of Contents

List of Tables ........................................................................................................ vii

List of Figures ...................................................................................................... viii

Chapter 1: Introduction ............................................................................................1

Chapter 2: Housing Demand (Demographics and Income) .........................11
  Demographics .....................................................................................................11
    Austin Demographics ...........................................................................12
    Atlanta Demographics .................................................................14
    Miami Demographics ........................................................................16

Chapter 3: Housing Supply (Housing Starts and Housing Inventory) ..........19
  Housing Starts ...............................................................................................19
    Single-Family Housing Starts in Austin, TX 2003-Present .................20
    Single-Family Housing Starts in Atlanta, GA 2003-Present ...............22
    Single-Family Housing Starts in Miami, FL 2003-Present .................24
  Total Inventory and Inventory as a Percentage of Total Housing Stock ......26
    Housing Inventory in the Austin, TX MSA April, 2006-October, 2008 28
    Austin, TX MSA Housing Inventory as a Percentage of Housing Stock29
    Housing Inventory in the Atlanta, GA MSA April, 2006-October, 200831
    Atlanta, GA MSA Housing Inventory as a Percentage of Housing Stock32
    Housing Inventory in the Miami, FL MSA April, 2006-October, 200834
    Miami, FL MSA Housing Inventory as a Percentage of Housing Stock35

Chapter 4: Lending Practices .............................................................................37
  Subprime Mortgages .......................................................................................37

Chapter 5: Housing Prices (HPI, Median Prices and Foreclosures) ............42
  The Housing Price Index (HPI) .....................................................................43
  The Housing Price Index: Austin, Atlanta, Miami 1990-Present ............43
  Change in Median Sales Price 2000-2008 .................................................46
    Austin, TX Change in Median Sales Price 2000-2008 .......................46
List of Tables

Table 1: Foreclosure Rates for Austin, Atlanta, Miami MSA’s 2nd Quarter 2008 54
Table 2: Overview of Residential Housing Inputs and Outputs Austin, Atlanta, Miami .................................................................58
Table 3: Data Utilized in the Analysis.................................................................66
List of Figures

Figure 1: Dow Jones Performance Late 2007-October 24, 2008 .........................6
Figure 2: Austin, TX MSA Population Growth 1990-2007 .............................12
Figure 3: Austin, TX MSA Annual Percentage Increase 1990-2007 .................13
Figure 4: Atlanta, GA MSA Population Growth 1990-2007 .............................14
Figure 5: Atlanta, GA MSA Annual Percentage Population Increase 2000-2007 15
Figure 6: Miami, FL MSA Population Growth 1990-2007 ............................16
Figure 7: Miami, FL MSA Annual Percentage Population Increase 1990-2007..17
Figure 8: Austin, TX MSA Monthly Single-Family Building Permits 2003-August, 2008 .................................................................22
Figure 9: Atlanta, GA MSA Monthly Single-Family Building Permits 2003-August, 2008 .................................................................24
Figure 10: Miami, FL MSA Monthly Single-Family Building Permits 2003-Present .................................................................26
Figure 11: Austin, TX MSA Housing Inventory Levels Apr., 2006-Oct., 2008 ...29
Figure 12: Austin, TX MSA Percentage of SF Housing Stock for Sale ..........31
Figure 13: Atlanta, GA MSA Housing Inventory Levels April, 2006-October, 2008 .................................................................32
Figure 14: Atlanta, GA MSA Percentage of SF Housing Stock for Sale ............33
Figure 15: Miami, FL MSA Housing Inventory Levels April, 2006-October, 200834
Figure 16: Miami, FL MSA Percentage of SF Housing Stock for Sale ..........36
Figure 17: Percent of Mortgages Originated as Subprime 1997-2004 ..............38
Figure 18: Percentage of Subprime Refinancing Mortgages 1997-2004..........39
Figure 19: Four-Quarter Percentage Change in HPI: Austin, Atlanta, Miami MSA’s 1990-Present .................................................................45

Figure 21: Change in Median Sales Price Austin, TX 2000-2008 ..................47

Figure 22: Median Sales Price Austin, TX 2nd qtr, 2007-2\textsuperscript{nd} qtr, 2008 ..........48

Figure 23: Change in Median Sales Price Atlanta, GA 2000-2008...............49

Figure 24: Median Sales Price Atlanta, GA 2nd qtr, 2007-2\textsuperscript{nd} qtr, 2008........50

Figure 25: Change in Median Sales Price Miami, FL 2000-2008 ...............50

Figure 26: Median Sales Price Miami, FL 2nd qtr, 2007-2\textsuperscript{nd} qtr, 2008........51
Chapter 1: Introduction

A housing crisis has swept across the U.S., and its effect has been dramatically felt in many cities across the nation. The crisis is not limited to a certain area of the country and it is affecting some housing markets that had been relatively robust in the recent past. However, because of the local nature of housing markets the crisis is affecting every city in different ways and with different degrees of security. The purpose of this paper is to look at the 2007 and 2008 U.S. housing crisis and its uneven effect on the U.S. housing market. More specifically, this report will aim to compare the effect of the 2008 housing crisis on Austin, TX, Atlanta, GA, and Miami, FL. All three cities have been affected differently. Certain factors have contributed to the current health of each of the three local housing markets. These include housing demand factors, housing supply factors, mortgage finance changes, as well as local lending practices. These factors have implications for local planners, and as a result this paper will attempt to identify potential actions that local planners could take in order to limit foreclosures and residential home market crashes in the future.

According to a report by the Office of Federal Housing Enterprise Oversight, more than 100 of 292 local markets saw year-over-year price decreases from the first quarter of 2007 to the first quarter of 2008. In addition 164 metro areas saw price appreciation, while 128 saw price depreciation for the first quarter of 2008.\(^1\) One year appreciation was highest at 11.22 percent in the Houma-Bayou Cane-Thibodeaux, LA MSA, while Merced, CA saw the largest one year price depreciation rate of 24.6 percent over the same period. Austin, TX ranked fourth in home price appreciation over the

---

same one year time period as prices rose 7.74 percent. This demonstrates that the crisis has affected certain cities more dramatically than others, and its effects have been wide ranging.

The analysis will investigate how differences in demographics, demographic shifts, housing starts and housing supplies, and local lending policies may have contributed to the unevenness of the housing crisis. The goal is to uncover the differences between the aforementioned characteristics of Austin’s housing market with those of Atlanta and Miami in order to better understand why each city’s housing market has performed differently. The results of the analysis lead to some planning recommendations for cities that could help them to create and maintain healthier local housing markets.

This topic is important for a couple of reasons. First and foremost, increased homeownership has always been a goal of the United States government. The 1949 U.S. Housing Act stated that it was the goal of the federal government to make a “decent home and suitable living environment for every American.” In order to promote this goal, the federal government has allowed risky and irresponsible lending practices, such as subprime mortgages, to evolve over the last half century, especially since the early 1990’s. Unfortunately these practices have finally caught up with financial institutions and U.S. homeowners alike. On October 23, 2008 it was reported that former Federal Reserve Chairman Alan Greenspan conceded that “the (economic) meltdown had revealed a flaw in a lifetime of thinking and left him in a ‘state of shocked disbelief’, and went on to call the banking and housing chaos a ‘once-in-a-century credit tsunami’ that

3 1949 U.S. Housing Act
led to a breakdown in how the free market system functions.”4 Greenspan warned that employment and housing price conditions would get worse before they got better and proposed tougher government regulations including a requirement of financial firms that package mortgages into securities to keep a portion for quality control purposes and regulations aimed at limiting or preventing fraud.5

The explosion of subprime underwriting that started in the mid 1990’s and continued to increase through 2005 is one of the main culprits of the current housing crisis. In fact, according to the industry publication *Inside Mortgage Finance*, subprime lending itself grew from $35 billion in 1994 to $665 billion in 20056. Subprime mortgages are loans with relatively high interest rates and upfront fees as compared to traditional prime mortgages, and they are intended for higher risk borrowers whose credit is not strong enough to qualify for a traditional prime mortgage. The idea is that the higher rate is intended to compensate for the added risk of the borrower.

Another factor contributing to the crisis is the resetting of ARM mortgages. Though ARM mortgage data is excluded from the following analysis, it is important to mention their possible effect on current residential housing market conditions. ARM mortgages are those that are introduced at rates relatively low compared to the going market rate for a set amount of years in order to attract more homebuyers who otherwise couldn’t afford a mortgage. The idea is that the more loans made by financial institutions, the more money that can be earned. However, these mortgages then reset relative to the going market rate typically after one to seven years depending on the

---

4 Crutsinger, M., Gordon, M. October 23, 2008; *Greenspan denies blame for crisis, admits ‘flaw’*; Associated Press writers
5 Crutsinger, M., Gordon, M. October 23, 2008; *Greenspan denies blame for crisis, admits ‘flaw’*; Associated Press writers
specific terms of the mortgage. Thus, the reset is unpredictable and as a result the mortgage burden on those who hold an ARM mortgage oftentimes becomes very high and more than what the mortgage holder is able to afford. The increase in subprime and ARM mortgages has made it difficult for homebuyers to keep up with their monthly payments, and eventually foreclosures ensue.

In what has been historically seen as such a safe haven for protecting and growing one’s wealth, the housing sector is now responsible for jeopardizing the economic health of a growing number of U.S. households. The percentage of outstanding loans in foreclosure jumped from .31% in 1979 to 1.12% in 2003. However, despite this gradual increase, the foreclosure problem has exploded since 2003. In fact, as of June, 2008 the foreclosure rate on all mortgages in the United States was double the historic average. Adding to this, a report was released by RealtyTrac on October 23, 2008 showing that nationwide, nearly 766,000 homes received at least one foreclosure notice between July and September, 2008, up 71 percent from a year earlier. These statistics are an alarming indication of how widespread the foreclosure problem is, and just how vulnerable U.S. homeowners and lending institutions have become.

This analysis will compare foreclosure rates in the Austin, Atlanta, and Miami metro areas between 2007 and 2008. Foreclosures have a big impact on local housing prices, and as will be shown can lead to problems in local, national, and world economies. Differences in foreclosure rates between the three cities may help to explain pricing trends in each of their housing markets. Additionally, lending practices in the

---

7 National Association of Realtors, Research Division, 2004. Rising foreclosure Rates in Indiana: An Exploratory Analysis of contributing Factors
8 Yun, Lawrence (2008, June 12)Chief Economist at the National Association of Realtors. After the Cleanup; Presentation at RAMB’s Real Estate Congress and Expo Miami FL.
9 RealtyTrac.com
three cities can be partially to blame for the foreclosure problem and the overall health of their housing markets. Foreclosures can also contribute to the general physical decline of neighborhoods and thus cause an increase in crime, discourage the formation of social capital, and lead to continued neighborhood disinvestment.\(^{10}\) Due to their highly negative effect on neighborhoods and cities, it is important for local planners to address factors which contribute to foreclosures.

The situation is not only a U.S. housing market crisis, but in fact it has also had far reaching effects on the global economy and financial markets. Furthermore, it is a crisis that many experts don’t expect to turnaround anytime soon. As of July, 2008, the world's biggest financial firms have posted about $400 billion in write downs and credit losses tied to the U.S. housing slump, according to data compiled by Bloomberg. In addition, the U.S. economy lost 49,000 jobs in May, 2008 as the unemployment rate rose to 5.5%, the biggest jump in two decades.\(^{11}\) The economy expanded at an annual rate of 1 percent in the first quarter, the Commerce Department reported earlier this summer. That caps the weakest six months of growth in five years.\(^{12}\) As of November, 2008 the U.S. is most likely in the midst of a recession according to many economic experts.

Even more recently, the United States government passed a $700 billion bailout bill on October 3, 2008 in order to aid struggling financial institutions. The bill in theory is intended to allow the Federal government to buy up troubled assets from financial institutions who hold risky mortgages in their portfolios. Thus, the foreclosure problem has spread to U.S. financial companies, and has now spilled over to U.S. and now world capital markets. Since late 2007, the Dow Jones Industrial Average has dropped from a

\(^{10}\) Immergluck, D., Smith, G., 2006: The External Costs of Foreclosure: The Impact of Single-Family Mortgage Foreclosures on Property Values, prepared for the Fannie Mae Foundation


level of around 14,000 to a level of 8,400 as of mid morning October 24, 2008. Additionally world capital markets also nosedived during October, 2008 out of fear of a worldwide recession. Although the crisis may not constitute a “sky is falling” scenario, it is an important topic that raises questions for how cities, states, or the federal government can better manage and monitor housing markets in order to better insulate the economy in the future.

Figure 1: Dow Jones Performance Late 2007-October 24, 2008

Understanding and comparing Austin’s housing market characteristics with those of Atlanta and Miami may help to uncover and identify why some U.S. cities have proved more vulnerable to the 2008 housing crisis than others. However, it is not to say that Austin isn’t vulnerable in the next few years. In fact, Georgia Tech City and Regional Planning professor Dan Immergluck argues “although foreclosures are less likely to be severe in very strong real estate markets, when prices in previously hot markets stagnate or decline, foreclosures can quickly follow”.

13 Marketwatch.com
14 Marketwatch.com
Austin, Atlanta, and Miami cover the wide ranging spectrum of the housing crisis’ effects. As mentioned earlier, between the first quarter of 2007 and the first quarter of 2008 Austin’s housing market ranked very high in home price appreciation, Atlanta more towards the middle, and Miami ranked as one of the worst markets of 292 metro areas ranked nationally. Even more important is that Austin foreclosures have remained low relative to national averages over the last two years, while Atlanta and especially Miami have experienced relatively high foreclosure rates over the same time span.

The analysis ties together input data leading up to the crisis (factors which can affect and influence local housing markets such as demographics and housing supplies), and output data (current condition of housing markets such as median home sale prices and foreclosure rates). An analysis of what lead to Austin’s, Atlanta’s, and Miami’s current housing market conditions will be followed by recommendations for what local planners can do to limit foreclosures and prevent severe price home price depreciation going forward. Academic literature, especially a handful of papers written by Dan Immergluck has been utilized to guide these recommendations. The paper will answer the following general questions.

1. How did housing demand factors influence Austin, Atlanta, and Miami’s housing markets?
2. How did housing supplies and supply changes affect the three local housing markets?
3. How did lending patterns differ between Austin, Atlanta, and Miami, and how did these lending patterns affect their local housing markets?
   a. How did past housing values affect speculation and risky lending practices?
4. What steps can local planners take to limit foreclosures and housing market collapses in the future?

An analysis of the demographics, demographic shifts, housing starts and housing supplies, housing prices, foreclosure rates, as well as each city’s lending climate has been

---

performed in the hopes of shedding some light on what is causing such glaring differences between each of the three housing markets. An important component of performing this analysis is the identification of each City’s population changes over time. Chapter 2 presents and analyzes demographic (demand-side) data for Austin, Atlanta, and Miami. Demographic trends and shifts in each of these cities give clues as to why local housing markets are performing the way that they are. For instance, Austin continues to grow quite dramatically as people move there from other parts of the country. According to data obtained from the Austin Chamber of Commerce, the Austin MSA’s population grew 27.9% between 2000 and 2007, and it ranks 7th among the top 50 U.S. metros based on net migration as a percent of total population (11%).17 As a result, the use of historical population totals and shifts of each city will be utilized. In-out migration data for the three cities will help to provide insight as to how the local populations of these cities have grown in the past and continue to evolve today.

The purpose of performing an in-out migration of these cities is to gain an understanding of the demand-side of the housing market for each city. Housing demand can best be measured by using a starting point in time, and looking at its changes over time. This analysis will use demographic population data from 1990 through 2007 to demonstrate how the demographics of each city have changed. It is important to examine the median income in each of the three cities as well to get an idea of the strength of each local economy.

However, the analysis must also look into the supply-side. New construction, housing starts, and existing homes for sale have an effect on the availability of houses in a city. In order to measure the housing inventories of each city, one must take stock of

17 Austin Chamber of Commerce website, Greater Austin Profile, Population, 2008.
the number of housing units at a starting point in time and incorporate the net new construction into the analysis. Chapter 3 of this paper analyzes housing starts and housing inventories in Austin, Atlanta, and Miami. For the purpose of this analysis, I have used 2003 as a starting point and investigated how the housing supplies of the three cities have changed over the last five years.

Chapter 4 of this paper considers the local lending policies of Austin, Atlanta, and Miami to uncover any differences in the risk level of home mortgages in each of the three cities. The mortgage lending climate differs from city to city based on past real estate performance, current housing market dynamics, pressures created by local speculation, and from local lending institutions’ willingness to offer risky loans. In fact, the lending climate can differ from neighborhood to neighborhood.

In order to analyze lending practices, subprime mortgage data for Austin, Atlanta, and Miami was collected to try and distinguish any obvious differences in the level of subprime lending between the three cities from 1997 through 2004. The data demonstrates a strong correlation between the level of subprime mortgages written in each of the three cities during those years and the current health of each city’s housing market.

In Chapter 5, housing price data and foreclosure rates for Austin, Atlanta, and Miami will be utilized in order to show the past and current health of these three cities’ housing markets. It is crucial to include this data in order to demonstrate the outcomes resulting from the previously mentioned contributing factors (demographic shifts, housing supply changes, and lending practices in each of the three cities). This section
proves extremely telling, and is important for showing how local housing market conditions are influenced and created by these contributing factors.

Chapter 6 of this paper examines possible steps that can be taken by local planners to limit foreclosures and maintain home prices. From an initial analysis, it appears there are a number of potential factors which have an effect on the overall health of a city’s local housing market. Many of these factors could potentially be addressed and affected by local policy makers, and city planners. Ultimately, the aim is to uncover any policies or actions that cities across the country could implement which in turn could help better protect their local housing markets from a future real estate crisis.

The three cases for this study were chosen since they represent and cover the broad spectrum of existing housing market conditions that have resulted from the current housing market crisis. Austin’s housing market has remained quite strong throughout the crisis, Atlanta’s housing market has been hit relatively hard, and Miami’s housing market has felt severe negative effects. The bulk of the study was created with the use of data collected from multiple sources such as the Census Bureau and the Office of Federal Housing Enterprise Oversight, news articles regarding the current state of housing markets as well as local and global economies, and academic papers addressing the changing landscape of mortgages and their effects on local housing markets. Table 3 in the appendix lists the data collected and utilized for the analysis and is meant to provide a quick reference for the reader.
Chapter 2: Housing Demand (Demographics and Income)

DEMOGRAPHICS

Population changes, which include births, deaths, and in-migration, play an important part in the health of local housing markets. As population increases, demand for housing units increases as well, all other factors remaining constant. This makes up the demand-side of the housing market. For the purposes of this study, net demographic changes are examined from the year 1990 through 2007. This time span provides a solid time frame for which to examine the growth trends in Austin, Atlanta, and Miami. The aim is to demonstrate how demographic shifts in these three metro areas have affected the demand side and overall health of each of the three residential housing markets.

These demographic calculations and estimates are important, because they help to demonstrate the differing strengths in the demand side of the three cities’ housing markets. The demand for housing units increases as the population increases, and all other factors remaining constant, creates an environment of rising housing costs. Thus, by simply focusing on the demographic shifts in Austin, Atlanta, and Miami over the last twenty years, it is clear that population changes partially coincide with the changes in their local residential housing costs.

It is also important to examine the median household incomes in each of the three cities in order to uncover any obvious connections between incomes and the prices of homes in the study areas. The amount of money available to purchase homes is an important factor for determining the amount of subprime loans which originated in each city, and ultimately affects the median sales price of residential homes.
Austin Demographics

The Austin, TX MSA has experienced explosive growth since 1990. Between 1990 and 2007, the population of the Austin, TX MSA increased from 846,227 to 1,598,161. That translates into a dramatic increase of 88.86% over that seventeen year time span. The one year time span of 2006-2007 saw Austin’s population increase to 1,598,161 which equates to an increase of 5.6%.

Figure 2: Austin, TX MSA Population Growth 1990-2007

Much of this explosive growth since 1990 can be attributed to a strong local economy and job growth. As a result strong domestic and international in-migration into the Austin, TX MSA has ensued. The Census Bureau reported that Austin, TX ranked 7th nationally in net migration as a percentage of total population between 2000 and 2006. In fact, since 1990, the Austin, TX MSA has averaged population increases of 3.69% annually.

18 US Bureau of the Census
19 US Bureau of the Census
20 Data obtained from US Bureau of the Census
21 US Bureau of the Census
Assuming the Austin, TX MSA grows at 3.69% in the current year, its population will grow to a total of 1,657,133 for the year 2008. That equates to an increase of just fewer than 59,000 new residents in the Austin, TX MSA this year. Strong annual increases in the number of residents in the Austin, TX MSA, especially those with relatively high incomes, have played a big part in the past strength of the housing market in the Austin region, and continued in-migration at this rate will keep demand for housing units strong, thus supporting growth in the median sales prices of homes.

The US Census American Community Survey estimated that the median annual household income in the Austin, TX MSA as of 2007 was $56,746.23 This is extremely strong as compared to the national median annual income of $50,740 during the same year.24 Strong median household income is significant for determining the strength of local housing markets, and thus partially explains the past and current strength in the residential housing market of the Austin, TX MSA.

From a demand-side perspective, Austin is extremely healthy. Strong and consistent in-migration combined with high median household incomes have played a key role in the strength of the Austin housing market. Although these demand-side

---

22 Data obtained from US Bureau of the Census
23 US Bureau of the Census
factors are extremely important for determining the health of local housing markets, they are not the only significant factors. As we will see in following chapters, supply-side factors as well as lending patterns also play important roles in the housing market equation.

**Atlanta Demographics**

The population of the Atlanta, GA increased from 2,959,500 in 1990 to 5,122,983 in 2007. This equates to a population increase of 73.10% over this time span. The one year increase in Atlanta’s population between 2006 and 2007 was 2.98% as the population of its metro area grew from 4,974,930 to 5,122,983.

Figure 4: Atlanta, GA MSA Population Growth 1990-2007

As has been the case in Austin, Atlanta has also experienced strong in-migration since 1990. In fact between 1990 and 2007 the Atlanta, GA MSA population has grown at an average rate of 3.2% annually, and it was ranked first among all metro areas in

---

24 US Bureau of the Census  
25 US Bureau of the Census  
26 US Bureau of the Census  
27 Data obtained from US Bureau of the Census  
28 US Bureau of the Census
the U.S. in total population gain from 2000 to 2006. The MSA grew by 890,211 people between 2000 and 2006 which equates to a 21% population increase during this time span.

Figure 5: Atlanta, GA MSA Annual Percentage Population Increase 2000-2007

If the Atlanta, GA MSA continues to grow at the 3.2% annual average growth rate it has experienced since 1990, its population will reach 5,286,918 in 2008. This translates into an increase of 163,935 people in one year which is quite substantial, and may help to provide solid support for Atlanta’s housing market going forward. An examination of the economic health of its residents shows that as of 2007, the Atlanta MSA’s median household income was $57,189 compared to the U.S. average of $50,740.

From a housing demand-side perspective the Atlanta metro area is extremely strong. Not only has its population grown at a strong pace, but median income is extremely strong compared to the national average. This data suggests that any problems the Atlanta, GA housing market is currently experiencing are not the result of demand-side issues. On the contrary, it appears that continued and consistent strength in

---

29 US Bureau of the Census
30 Data obtained from US Bureau of the Census
population growth has played a part in insulating Atlanta from a more severe housing downturn. While demand is a crucial component of the equation, as we will see in following chapters, there are many other factors which have offset Atlanta’s population growth and played a big part in the current weakness of its residential housing market.

**Miami Demographics**

Between 1990 and 2007 the population of the Miami, FL MSA grew from 1,937,194 to 2,387,170. This is a population increase of 23.23% which is much more modest than the increases in Austin and Atlanta during this same time frame. The one year change in Miami’s population between 2006 and 2007 was 10,827 or 0.46%. As a result of this data, it is easy to see that Miami’s population growth is significantly slower than that of Austin and Atlanta, and thus the ultimate demand for housing units much lower as well. This data may partially explain the much weaker housing market in Miami over the last two years.

![Figure 6: Miami, FL MSA Population Growth 1990-2007](image)

---

31 US Bureau of the Census  
32 US Bureau of the Census  
33 US Bureau of the Census
As demonstrated, Miami’s net in-migration, and thus its population growth, has been extremely modest as compared to Austin’s and Atlanta’s. Between 1990 and 2007, the Miami, FL MSA population averaged annual growth of only 1.26%, much lower than the two other study areas.\textsuperscript{35}

Figure 7: Miami, FL MSA Annual Percentage Population Increase 1990-2007

Assuming the population of the Miami, FL MSA continues to grow at the 1.26% annual average growth rate it has experienced since 1990, its population will reach 2,417,248 in 2008. This translates into an increase of only 30,078 people in one year which is rather small for such a large metropolitan area. As a result, the Miami, FL MSA

\textsuperscript{34} Data obtained from US Bureau of the Census

\textsuperscript{35} US Bureau of the Census
could very well continue to experience a challenging residential housing market going forward.

As of 2007, the Miami MSA’s median household income was $49,232 compared to the U.S. average of $50,740. This is a huge falloff from the median household incomes of both Atlanta and Austin, and proves to be a telling statistic. It demonstrates that much of Miami’s population is perhaps unable to afford the purchase or mortgage payment of a home, especially at the inflated price levels that homes have sold at in the last couple of years in Miami as we will see this in Chapter 5. In addition, the lower median income level in Miami as compared to Austin and Atlanta most likely explains the much higher level of subprime loans written there as explained in Chapter 4.

An analysis of the demographics of Miami make it clear that very low levels of in-migration into the metro area have played a strong part in the weakness of the local housing market. If demand levels don’t keep up with supply levels, then there can be some extremely negative effects on the local housing market. As we will see in the next chapter, the rate of growth in Miami’s housing supply has far outpaced its population growth which has spelled big trouble for its local housing market.

---

36 Data obtained from US Bureau of the Census
37 US Bureau of the Census
Chapter 3: Housing Supply (Housing Starts and Housing Inventory)

**HOUSING STARTS**

The age old saying “location, location, location” has been the typical explanation for what determines prices in a local housing market. However, in order to truly understand the trend of housing prices in a city, one also needs to examine the number of new homes coming to market. This can be thought of as the supply-side of the housing price equation, and along with the demand-side and other factors, is what helps drive the prices of homes in cities. All other factors remaining constant, as the number of housing starts of a city increases, the prices of homes declines. On the flip side, as the number of housing starts of a city decrease, the prices of homes increase.

In order to get the full picture of a local housing market, it is important to look at the production of new housing units. One way to do this is to look at the monthly number of housing starts in a city. A monthly report is generated by the US Census Bureau and the US Department of Housing and Urban Development which includes three important metrics. These are housing starts, building permits, and housing completions. This report is seen as a leading indicator on Wall Street, and helps paint a forward looking picture for real estate supply levels in the future.

In order to best gauge how housing starts have affected residential home prices in the three study areas, data from 2003 to the present will be analyzed in order to allow for the lag between housing starts and their eventual effects on housing supplies, and thus the price of homes in each city. In addition, examining the data over a five year period helps to downplay any month to month volatility, and thus enables the analysis to uncover the long term trends of a particular housing market. As a result, the five year time span from 2003 to the present will help to shed some light on the current housing supply levels of
each city. Building permit data, one of the aforementioned metrics, was collected from
the US Department of Housing and Urban Development for each of the three cities.\textsuperscript{38}
This data is useful for identifying significant patterns in the number of housing starts in
each of the three cities, and helps to shed some light on how changes in building starts
have contributed to changes in the median sales price of homes in the three study areas.

**Single-Family Housing Starts in Austin, TX 2003-Present**

As mentioned before, building permit data was collected from the US Department
of Housing and Urban Development for the purpose of tracking new single-family
housing starts in the Austin, TX MSA since 2003. The use of a five year time span
allows for a useful set of data which paints a picture of the current housing supply levels
today. Thus, rather than only taking a snapshot of the present number of building
permits, the five year analysis is useful for showing how the number of new building
permits in the Austin, TX MSA compares with historical levels over the last five years.
This is important due to the forward -looking nature of this particular metric.

By charting the monthly single-family building starts in the Austin, TX MSA over
the last five years, some rather obvious conclusions are drawn. New single-family
building permits grew rather steadily from the beginning of 2003 until early 2006, which
generally coincides with the strength of the Austin, TX housing market as well as the
nation during this time frame. Since 2006 however, there has been a general decline in
the number of single-family housing starts to a level more in line with those in 2003. In
essence the number of monthly new single-family building permits has come full circle
since 2003.

\textsuperscript{38} US Department of Housing and Urban Development website. *State of the Cities Datasystems*
It is safe to say that much of this decline can be associated with the slowdown in the national housing market. Lower supplies of credit have slowed the construction rate of new housing supplies since 2006. In a sense, this can be viewed as relatively healthy for the housing market in Austin, TX as builders appear to have been quicker to adapt to the current housing conditions than in many other parts of the country. Declining new single-family building permits, mixed with the strong population growth that Austin has experienced over the last two and a half years, are factors which can partially explain why Austin’s housing market has not been as adversely affected by the housing crisis as have many other U.S. cities. Growing demand in conjunction with slower increases in supply generally translate into rising prices. This has been the case in Austin, TX.

Since 2005, the median sales price of homes in the Austin, TX has continued to steadily rise in the midst of a national housing crisis, and the slowdown in new single-family construction over the last two and a half years creates the possibility that it could be better positioned than most other U.S. cities going forward. This point is supported by the fact that the median sales price of a single-family home has risen from $184,500 in the first quarter of 2008 to $194,200 in the second quarter after only two quarters of decline previous to this.39

---

Figure 8: Austin, TX MSA Monthly Single-Family Building Permits 2003-August, 2008

Single-Family Housing Starts in Atlanta, GA 2003-Present

Building permit data was also collected from 2003 to August, 2008 for the Atlanta, GA MSA. Similar to Austin, Atlanta’s population has grown steadily over the last twenty years, as well as the last five years. However, when you look at the building permit data, it is quite apparent that builders have not been as disciplined as those in Austin in the last five years. Where Austin saw a short-lived spike in new single-family building permits in 2006, Atlanta experienced high levels of single-family building permits for the duration of the 2003-2006 time span. Atlanta saw new construction of houses at extremely high levels for multiple years, and this appears to be very telling as far as the implications for Atlanta’s housing supply. Whereas Austin’s five year building permit chart demonstrates a healthier five year cycle of new housing supplies, Atlanta appears to have been overbuilding for multiple years.

40 Data obtained from US Department of Housing and Urban Development website. State of the Cities Datasyncs
Just as in Austin, the number of single-family building permits in Atlanta has continued to drop since 2006. This partially coincides with the tightening of credit which came about during this same time frame as a result of the national housing crisis. However, unlike Austin, single-family building permits dropped dramatically lower than 2003 levels in Atlanta. In fact, new single-family building permits in Atlanta totaled 4,189 in January, 2003. In August, 2008, single-family building permits were only 881 for the entire Atlanta, GA MSA. This demonstrates the severity of the housing supply correction in the Atlanta market versus the Austin market over the last two years. Years of overbuilding have led to an almost complete stall in new construction today as Atlanta’s local housing market is in the midst of a needed correction.

Despite this, there is some encouraging data which has emerged during the second quarter of 2008. The median sales price of single-family homes has increased modestly from first quarter 2008 levels. As a result, there is some indication that Atlanta has already experienced the worst of its housing slump, and it may already be experiencing a turnaround in its single-family housing market. Thus, there may soon be an increase in new building permits and construction in Atlanta.

---

41 US Department of Housing and Urban Development website. State of the Cities Datasystems
Single-Family Housing Starts in Miami, FL 2003-Present

The data collected and analyzed for Miami’s single-family permits also paints a very telling picture on the status of its current housing market condition. This data also spans from 2003 to August, 2008. Miami’s five year building permit data is much like that of Atlanta’s, and shows that builders in Miami have not been as disciplined as those in Austin in the last five years. Whereas Austin saw a short-lived spike in new single-family building permits in 2006, Miami experienced single-family building permits at extremely high levels for the duration of the 2003-2006 timeframe. Thus, like Atlanta, Miami also experienced extremely high levels of new home construction for multiple years, and its housing supply looked to be overbuilt for multiple years. Overly inflated housing prices in the Miami region created an unhealthy level of speculation and overbuilding as developers looked for quick profits while at the same time ignored demand-side and supply-side indicators in the local residential housing market.
Miami, similar to Atlanta, has also experienced a dramatic decline in building permits over the last two and a half years, coinciding with the bursting housing bubble and the overall national housing slowdown. Building permits, and thus housing starts have dropped to levels today which are dramatically below 2003 levels. Miami’s housing slump has been much more dramatic than that of both Austin and Atlanta. In fact, prices have continued to drop through the second quarter of 2008. This means that median sales prices, unlike in Austin and Atlanta, may not be through declining in Miami.

As a result, the continued drop in single-family building permits may need to continue for the foreseeable future in Miami in order to get single-family housing supplies to a level which can support the slower population growth experienced in the Miami MSA. Much of Miami’s housing issues can be attributed partially to a combination of the oversupply and inflated home prices created between 2003 and 2006. As we will see in the next chapter subprime lending has also been a significant factor. Until Miami experiences median sales price increases for consecutive quarters, it will be difficult to determine if its housing market has hit a bottom and is turning around.

42 Data obtained from US Department of Housing and Urban Development website. State of the Cities Datasystems
The previous section focused on housing starts in the three study areas. Building starts are just one portion of the supply-side of the housing market, since they only take into account new units in a metropolitan region. They don’t take into account any existing homes which are for sale in the market. As a result, in order to perform a more well rounded analysis of the supply-side of each MSA’s housing market it is important to take the entire inventory of homes in a MSA into account. For the purpose of this paper, inventory refers to any home, whether vacant or not, that is for sale in a market. In actuality, these homes are technically the supply of homes on the market since inventory refers to all homes in a geographic area, whether for sale or not. However, since many sources of the data collected for this analysis termed the amount of homes for sale as inventory, this analysis uses inventory in order to maintain consistency.

It is important to note that the inventory of homes in a MSA remains fixed in the short-term, and there is generally a lag of about three months. There are some
externalities which can also have a dramatic effect on housing inventories and thus can dramatically affect the prices of homes in a locality. Examples of the externalities include white flight to the suburbs, or natural disasters which can create dramatic changes in the housing inventory of houses in an area over a relatively short period of time. However the use of these externalities is not included in this analysis.

The monthly housing inventory data collected for the analysis of all three MSAs spans from April, 2006 up through October, 2008. The data was collected from housingtracker.net, and includes both condominiums and single-family homes. This is important because condominiums have become more and more prevalent in Austin, Atlanta, and Miami, and thus they are included in the analysis.

Knowledge of the total inventory of homes for sale in a market is important, but in order to take the analysis further, I have also looked at how the number of homes for sale in the Austin, Atlanta, and Miami MSA’s compares the total housing stock for each MSA from April, 2006 up through October, 2008. Knowledge of the number of homes for sale in a local market (as a percentage of the total housing stock) helps to paint a better picture of just how saturated a market is with homes for sale. This may lead to a better idea of why median sales prices have trended in the manner they have in Austin, Atlanta, and Miami over the last two years.

In order to perform this analysis, 2003 Census data indicating the number of housing units which existed in each MSA was used. Next, housing starts data from the US Department of Housing and Urban Development utilized in the section above was added to incorporate any changes in the housing stock since the base year 2003 data. Finally, the housing data inventory data collected from housingtracker.net adds the

---

43Data obtained from US Department of Housing and Urban Development website. State of the Cities Datasystems
monthly number of existing homes for sale in each MSA into the equation. Excluded from this analysis is the number of conversions and demolitions which occurred in each of the three cities’ housing supplies over the same period. Nonetheless, new starts data and data showing existing homes for sale at a given point in time is useful for demonstrating general housing supply trends.

**Housing Inventory in the Austin, TX MSA April, 2006-October, 2008**

Since April, 2006, the number of single-family homes as well as condos for sale in the Austin, TX MSA has almost doubled. Much of this can be attributed to the slowdown in the housing markets across the country. As the pace of sales slows, this means that the inventory of homes for sale in the Austin, MSA has gradually increased. An interview conducted by the *Austin Real Estate Scene* newspaper with Residential Strategies Inc. explained what may be causing this trend. “In discussions with builders, it is clear that the negative national news regarding the housing and mortgage markets has crept into the psyche of the buyer, and that the buyer is generally more cautious today than he was a year ago,” RSI said. “This likely is the biggest reason that Austin buyer traffic has been off recently.” 44 Despite this, the report also went on to say that “while not without its challenges, the Austin housing market is ‘probably the brightest spot in the national housing market,’” 45 Figure 11 shows how the inventory of homes in the Austin, TX MSA has increased over the last two and a half years.

An examination of the change in Austin’s housing inventory on its own would paint a pretty gloomy picture for its residential housing market. When a local housing market sees its number of households for sale double within a two and a half year time

---

44 Fischer, Terrill Nov,6, 2007. *Austin Housing Market Outpacing the Nation*. Austin Real Estate Scene.
span it would be natural to speculate that median sales prices would drop rather dramatically. However, Austin’s housing market has been able to remain relatively healthy because housing supplies are only one component to the overall health of local housing markets. As demonstrated in the previous chapter, very strong increases in Austin’s population have proved extremely important in preserving home prices. After incorporating housing supply levels into the analysis, strong population increases have proved that much more significant to the health of Austin’s local housing market.

Figure 11: Austin, TX MSA Housing Inventory Levels Apr., 2006-Oct., 2008

Austin, TX MSA Housing Inventory as a Percentage of Housing Stock

Even more telling than just the total number of single-family homes and condos for sale each month in Austin, TX MSA is the percentage of homes for sale each month as a percentage of the total single-family housing stock in the MSA. Without knowing how many homes exist in the Austin, TX MSA the number of homes for sale each month doesn’t tell us much. However, when the number of single-family homes for sale in the

45 Fischer, Terrill Nov.6, 2007. Austin Housing Market Outpacing the Nation. Austin Real Estate Scene.
Austin, TX MSA is compared to the total single-family housing stock of the MSA during a point in time, it sheds more light as to why the Austin, TX MSA’s housing market has remained quite strong compared to those of Atlanta and Miami.

In April, 2006 the percentage of homes for sale in the Austin, TX MSA was only 1.96%. Since this time, the percentage has generally increased, with the peak percentage of 3.53% being reached in July, 2008. Despite the general increase in the percentage of homes for sale since April, 2006 in the Austin, TX MSA, these figures are quite healthy as compared to that of Atlanta and Miami as we will see in the next sections.

Although the number of homes for sale in the Austin, TX MSA has doubled since April, 2006, the percentage of homes for sale in the MSA has remained extremely small since the number of homes for sale was extremely low at the start of this timeframe. Thus, the doubling of homes on the market appears to be misleading. Rather the small percentage of the entire housing stock for sale proves more telling. This can be attributed to two important factors. The growing population coupled with the relatively disciplined actions of residential developers in Austin, TX. The data suggests that no dramatic overbuilding has occurred, and that prudent development has coincided with consistent population growth.

---

46 Data obtained from Housingtracker.net
Housing Inventory in the Atlanta, GA MSA April, 2006-October, 2008

Since April, 2006 the inventory of single-family homes and condos in the Atlanta, GA MSA has increased just as it has in Austin, TX. Most of this build up in the inventory can be blamed on the slowing sales pace of homes throughout the nation. Since it has taken longer for homes to sell in the last few years, the inventory of homes for sale has generally increased.

As of October, 2008 there were 106,944 homes for sale in the Atlanta, GA MSA. This number is up from the 85,011 homes for sale in the MSA in April, 2006. Although this is an increase of over 20,000 homes, it is a relatively small increase percentage wise. In fact, in percentage terms the increase is much lower than that of even Austin, TX. What Austin, TX and Atlanta, GA do have in common is that their inventory of houses has a cyclical look to them over the last two years. That is to say, despite the increase of homes for sale in each MSA, both MSA’s charts show time spans of consecutive months of decreases in the inventory of homes for sale in the market since April, 2006, which as we will soon see cannot be said for Miami, FL.

49 Housingtracker.net
Atlanta, GA MSA Housing Inventory as a Percentage of Housing Stock

The percentage of homes for sale in Atlanta, GA MSA as compared to the total housing stock was also gathered for the time period spanning from April, 2006 to October, 2008. As already demonstrated, the percentage of single-family homes for sale in the Austin, TX MSA was very low, and has not topped 3.53% in the last two years. The percentage of single-family homes for sale in Atlanta, GA however has been a little higher, and thus may help to explain why its housing market has fared more towards the middle of the road over the last two and a half years relative to all US metropolitan housing markets.

The percentage of single-family homes for sale in the Atlanta, GA MSA, including condos, was 6.01% in April, 2006. Just as is the case in the Austin, TX MSA, this percentage has steadily increased through October, 2008. The Atlanta, GA MSA saw the percentage of its homes for sale reach its peak in September, 2007 at 8.3%.

---

50 Data obtained from Housingtracker.net
51 Combined use of sources: US Department of Housing and Urban Development website. *State of the Cities Datasystems; Housingtracker.net; US Bureau of the Census*
Although the percentage has decreased since this time, it is still above 7% and much higher than that of the Austin, TX MSA.

As noted earlier, the increase in homes for sale in Atlanta, GA since April, 2006 has not been extremely dramatic. However what one notices is the relatively high rate of homes for sale as of April, 2006. Thus, residential housing supply levels have continued to grow over the last two and a half years despite relatively high inventory levels initially. In fact housing inventory levels in April, 2006 were almost twice that of levels currently existing in Austin, TX despite the fact that Austin’s inventory of homes for sale doubled during the two and a half year time frame. This can be attributed to a combination of factors. Less disciplined behavior by developers combined with the possible need to sell by mortgage holders unable to keep up with payments appears to have impacted the local housing market more so than increases in the population in the Atlanta, GA region. The types of mortgages held by homebuyers will be analyzed in Chapter 4, and prove to be another crucial component to the current health of local housing markets.

Figure 14: Atlanta, GA MSA Percentage of SF Housing Stock for Sale

---

52 Combined use of sources: US Department of Housing and Urban Development website. *State of the Cities Datasystems; Housingtracker.net; US Bureau of the Census*
Housing Inventory in the Miami, FL MSA April, 2006-October, 2008

The single-family and condo housing inventory in the Miami, FL MSA has grown quite dramatically since April, 2006. In fact, the amount of homes for sale in Miami, FL in April, 2006 was 76,857, and in October, 2008 the number had risen to 113,541 homes for sale. Although the increase in homes for sale has also occurred in Austin and Atlanta, their charts look much different.

Whereas Austin and Atlanta have seen some cyclicality in their inventories of homes for sale since 2006, Miami’s number of homes for sale has generally increased in every month. Although there have been some minor declines and flattening out of its inventory over the last few months, no real significant decrease in the number of homes for sale has occurred in any single month in the Miami, FL MSA since April, 2006. This demonstrates the severe slowdown that has occurred in the Miami housing market, and why the median sales prices for single-family homes have decreased so dramatically. Buyers, and thus transactions have dried up.

Figure 15: Miami, FL MSA Housing Inventory Levels April, 2006-October, 2008

---

53 Data obtained from Housingtracker.net
Miami, FL MSA Housing Inventory as a Percentage of Housing Stock

What is extremely telling is the percentage of single-family homes and condos for sale in the Miami, FL MSA since April, 2006. The number of homes for sale as a percentage of the total housing stock far exceeds those of both Austin and Atlanta. Austin reached a peak of 3.53% in July, 2008 and Atlanta a peak of 8.3% in September, 2007. Miami reached a peak of 22.07% in November, 2007 and since that percentage has only dropped to 20.87% as of October, 2008. This percentage is more than double the Atlanta MSA’s current percentage of single-family homes and condos for sale, and almost six times the current percentage in the Austin MSA.

This statistic appears quite telling as to why Miami’s housing market has been hit so much harder than Austin’s or even Atlanta’s. It demonstrates that there is a lack of existing buyers, and/or that buyers have continued to sit on the sidelines and wait until the overly inflated home prices correct themselves in the Miami, FL MSA. This can also be attributed to the high foreclosure rate in Miami, which we will see in Chapter 5. As a result, a relatively large percentage of Miami’s homes continue to sit on the market.

It appears that the artificially inflated prices of homes in Miami in the early portion of this decade spurred extremely irresponsible lending and speculative development in Miami. Whereas residential developers in Austin appeared relatively disciplined as a result of steady and healthy price appreciation, investors in Miami were quick to try and take advantage of the artificial spike in home prices by taking on too many new projects, unable to be supported by negligible population growth. The glut of new housing supplies combined with mortgage holders who were forced to sell has

54 Combined use of sources: US Department of Housing and Urban Development website. State of the Cities Datasystems; Housingtracker.net; US Bureau of the Census
created a huge spike in foreclosures as well as a downturn in the median sales price of homes which is equally as dramatic on the downside as Miami’s preceding housing bubble was on the upside. Chapter 5 will demonstrate the result of the speculation and overbuilding on Miami’s current local housing market.

Figure 16: Miami, FL MSA Percentage of SF Housing Stock for Sale

---

Chapter 4: Lending Practices

SUBPRIME MORTGAGES

Housing finance in the United States has changed dramatically since the mid 1990’s. Since 1990 there has been a dramatic increase in the number of subprime mortgages, dramatically affecting the health of residential housing markets over the last couple of years. This is true for both subprime mortgage origination as well subprime refinancing mortgages. As already mentioned, subprime mortgages are mortgages with higher interest rates relative to the going market rate in order to attract a new wave of homebuyers who would otherwise be unable to take out a home mortgage due to their riskier credit ratings.

In order to conduct the analysis of subprime mortgage lending trends in Austin, Atlanta, and Miami, data was collected from Dataplace.org. The subprime data was obtained by Dataplace.org via the 2004 Federal Home Mortgage Disclosure Act, and contains mortgage data from 1997 through 2004. The subprime mortgage statistics prepared by Dataplace.org include all mortgages originated by lenders who HUD recognizes as subprime lenders, despite the fact that some of these lenders may do prime lending as well. According to Dataplace.org, it is not possible to determine if an individual loan is subprime, but these statistics are useful for approximating the level of subprime lending nonetheless. The following statistics demonstrate and compare subprime mortgage levels in the three MSA’s between 1997 and 2004.

An examination of Figure 17 shows the percentage of subprime mortgages originating in each of the three MSA’s as well as the United States as a whole. While the rate of subprime mortgage origination in Austin has been generally lower than the United States as a whole, Atlanta’s rate of subprime mortgages has closely mirrored U.S. levels,

56 Dataplace.org
and Miami’s rate of subprime mortgage origination has far outpaced the national average. By 2004, subprime mortgages accounted for more than 30% of Miami’s mortgages written that year.\textsuperscript{57}

This is extremely interesting considering the fact that of the three cities, Miami’s housing market has been the most dramatically affected by the current housing crisis. It is quite apparent that the abundance of subprime loans has had a substantial effect on the Miami residential housing market. Another telling feature of the data is that subprime mortgages have increased as a percentage of mortgages written in all three cities as well as the United States. Subprime mortgages were at their highest levels in 2004, the last year included in this analysis. 2004 was the last year in which data was used for this analysis in order to allow for a reasonable time span for which to let the subprime mortgage scenario to play itself out, because the effects of subprime mortgage underwriting are not sudden.

Figure 17: Percent of Mortgages Originated as Subprime 1997-2004

However, subprime mortgage origination is not solely to blame for the subprime mess currently being experienced across the country. A major contributor to the problem is the large amount of subprime refinancing deals that occurred between 1997 and 2004. In fact, the Consumer Federation of America conducted a study on refinancing subprime

\textsuperscript{57} Dataplace.org
\textsuperscript{58} Data obtained from Dataplace.org
loans in 2005 due to the fact that this segment has been the most concentrated in terms of subprime lending. In fact, based on their study of more than six million loans, the Consumer Federation of America found that refinance loans made up 59% of all subprime conventional loans, 9% were home improvement loans, and 32% of the subprime loans were home purchase mortgages. Thus, increases in subprime loans have not only resulted solely for the purpose of home purchase, but also to consolidate more expensive forms of debt as well.

As Figure 18 demonstrates, the trend in subprime refinancing mirrored the trend in subprime mortgage origination between 1997 and 2004. Miami’s rate of subprime mortgage refinancing (as a percentage of total mortgage refinancing) far outpaced that of Atlanta, Austin, and the United States during that time span. As a result, one can conclude that subprime mortgage refinancing in Miami through 2004 has had a lot to do with the current rate of foreclosures and house price declines being experienced today.

Figure 18: Percentage of Subprime Refinancing Mortgages 1997-2004

---

59 Fishbein, A., Woodall, P., September 8, 2005; Subprime Cities: Patterns of Geographic Disparity in Subprime Lending, Consumer Federation of America
60 Fishbein, A., Woodall, P., September 8, 2005; Subprime Cities: Patterns of Geographic Disparity in Subprime Lending, Consumer Federation of America
61 Data obtained from Dataplace.org
Due to the increase in subprime mortgages, many homebuyers who wouldn’t have been able afford to purchase homes otherwise have done so. In addition, those already strapped with outstanding debt have taken out more debt in order to keep up with finances. This increase of predatory lending has had extremely negative ramifications for United States residential housing markets. Most notably, the increase in subprime mortgages has helped to create artificial housing bubbles, and most recently has caused an increase in the foreclosure rates in cities across the nation. As argued by Dan Immergluck, when prices in previously hot housing markets stagnate or decline, foreclosures can quickly follow.62

The extremely high level of subprime mortgages written between 1997 and 2004 in Miami stands out in this analysis. Strong increases in subprime loans being written in Miami coincided with the artificial bubble in housing prices. Potential homebuyers looked for creative new ways to take part in the highly speculative real estate game. It is ironic that an extremely hot market spurred increases in subprime lending, and this has ultimately led to a depressed Miami housing market as a result. What is frightening is that homebuyers as well as lenders ignored the possible ramifications. The results of these practices echoed the argument of Immergluck. Once the overheated real estate market of Miami stagnated, severe price declines and an abundance of foreclosures ensued.

Borrowers overextended themselves and took on mortgage burdens that they couldn’t maintain. More disturbing is the fact that lenders acted as if median sales price appreciation was permanent. Once a large amount of subprime mortgage holders were forced to sell in conjunction with the dramatic decline in median prices, lenders were forced to foreclose on many homes in Miami. Lenders in Miami have been left holding many properties whose value has fallen below the remaining value of many of the mortgages they wrote. As a result, the decline in home prices has been compounded and

---

the real estate crisis more severe. The effects of this on home prices will be demonstrated in Chapter 5.

Austin and Atlanta saw less subprime mortgages written between 1997 and 2004. Although these two metro areas did see general growth in subprime mortgage activity over this time span, Austin’s rate remained below that of the national average while Atlanta’s generally mirrored the national average. As a result, Austin and Atlanta have been far less dramatically affected by the subprime mortgage crisis than Miami.
Chapter 5: Housing Prices (HPI, Median Prices and Foreclosures)

This paper has focused on factors which contribute to the overall health of local housing markets up to this point. This chapter looks at the overall health of each of the three local housing markets. That is the outcome of each of the contributing factors already discussed. This includes both the historical and current health of the local housing markets in Austin, Atlanta, and Miami. To better understand what has happened to each of the three local housing markets between the beginning of 2007 and the second quarter of 2008, it is important to gain an understanding of the historical health of these three cities’ residential housing markets. The residential housing market trends in these three metropolitan areas since 1990 will provide a gauge for how each city’s housing market has performed historically, and thus provide a solid backdrop for which to compare what has happened to each city’s residential housing market since the housing crisis began in 2007. Additionally, a focus on the median price trends of homes since 2005 will help demonstrate what has happened to each housing market over the last three years.

Also included is an examination of the foreclosure rates in each of the three cities since the second quarter of 2007. This time period is extremely important for the fact that foreclosures have exploded across the country since this time. Including and comparing foreclosure rates between Austin, Atlanta, and Miami provides an additional and extremely important measure of the health for each of the three residential housing markets.
THE HOUSING PRICE INDEX (HPI)

An excellent way to analyze historical trends in housing prices, and the overall health of housing markets in metropolitan areas, is to look at the four-quarter changes in the Housing Price Index. This is a monthly report produced by the Office of Federal Housing Enterprise Oversight. This report on the four-quarter percent change of the HPI is a broad measure of the movement of single-family house prices, and helps to provide an accurate gauge of house price trends in various geographic regions.63

The HPI itself is comprised of transactions involving conforming, conventional mortgages purchased or securitized by Fannie Mae or Freddie Mac, the Federal National Mortgage Association and Federal Home Mortgage Corporation respectively. The HPI is a weighted, repeat-sales index, measuring average price changes in repeat sales or refinancings on the same properties.64 Although the HPI doesn’t capture the sales price of every transaction, and no sales on new properties, it does provide a very solid gauge of housing market trends over time, and thus an analysis of the four-quarter percent change in the HPI will prove to be a useful tool for the purpose of this analysis. Comparing HPI values to past and future time periods enables one to measure appreciation or depreciation rates from one time period to the next. Thus, it is useful for demonstrating price changes and trends over time, and helps demonstrate inflated housing bubbles as well as significant housing slowdowns.

THE HOUSING PRICE INDEX: AUSTIN, ATLANTA, MIAMI 1990-PRESENT

Comparing the four-quarter percent change in the Housing Price Index for each of the three MSA’s since 1990 is important for recognizing past trends in each housing market, which in turn will help to illustrate what effect the current housing market crisis has had on each city as compared to past performance. Thus, it will provide better insight into the magnitude of the crisis on each of the three metropolitan areas.

In 1990, the four-quarter percent change in the Housing Price Index for each of the three cities was relatively similar. Austin’s HPI was 0.27, Atlanta’s -1.79, and Miami’s 2.39\(^65\), meaning home price changes were relatively similar in each of the three cities. These 1990 numbers prove useful as starting points in time in order to measure the magnitude of changes in home prices moving forward to the present day. A look at Figure 19 gives one an idea of the changes in home prices in each of the three cities over time. What you notice between 1990 and 2000 is that all three cities experience solid and healthy home price appreciation over the course of the decade.

It is what has happened since 2000 that is interesting. The timeframe between 2000 and 2008 is quite telling as to the current health of each of the three cities’ residential housing markets. What one notices most are the dramatic and severe swings Miami has experienced in residential housing prices as compared to Austin and Atlanta. Though all three cities have seen residential price appreciation since 2000, Austin and Atlanta have experienced less dramatic price swings.

Between 2000 and 2005, Miami’s four-quarter percent change in HPI increased by 247.72% demonstrating the extreme bubble in its residential housing market. Comparatively, Austin and Atlanta saw four-quarter percent changes in HPI fall 47.21% and 23.79% respectively\(^66\). It is important to understand these numbers, because they demonstrate the reduced magnitude of Austin’s and Atlanta’s residential home price changes as compared to that of Miami’s. This sets the stage for what has ensued since 2005 in each of the three residential markets.

Miami, FL has seen its four-quarter percent change in HPI fall dramatically from 28.2 in the fourth quarter of 2005 to -10.6 in the second quarter of 2008, a rather dramatic change. Austin and Atlanta on the other hand saw more modest declines in their four-

---


quarter percent change in HPI over the same time span. Austin’s fell from 6.44 to 4.98, and Atlanta’s from 5.03 to 0.02. Even more important is that the four-quarter percent change in HPI during the second quarter of 2008 remained positive in Austin and Atlanta while Miami’s changed to negative. This proves useful for demonstrating the overpricing in the Miami residential housing market between 2000 and 2005, and the severe correction which has ensued.

Figure 19: Four-Quarter Percentage Change in HPI: Austin, Atlanta, Miami MSA’s 1990-Present

---

Figure 20: Four-Quarter Percentage Change in HPI: Austin, Atlanta, Miami MSA’s 2005-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>HPI</th>
<th>Austin, TX MSA</th>
<th>Atlanta, GA MSA</th>
<th>Miami, FL MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>10</td>
<td>8.5</td>
<td>12.3</td>
<td>-1.2</td>
</tr>
<tr>
<td>2006</td>
<td>20</td>
<td>10.2</td>
<td>14.8</td>
<td>0.1</td>
</tr>
<tr>
<td>2007</td>
<td>30</td>
<td>12.0</td>
<td>17.5</td>
<td>2.0</td>
</tr>
<tr>
<td>2008</td>
<td>40</td>
<td>13.8</td>
<td>19.2</td>
<td>3.8</td>
</tr>
</tbody>
</table>

**CHANGE IN MEDIAN SALES PRICE 2000-2008**

The four-quarter change in HPI in Austin, Atlanta, and Miami proved very effective for demonstrating general housing price trends throughout this timeframe. This section focuses on the actual median sales price changes between 2000 and 2008 as well as the change between the 2nd quarter of 2007 and the second quarter of 2008 for each of the three MSAs. Showing both timeframes is important for recognizing the trend in median prices leading up to the crisis, and also since the crisis began.

**Austin, TX Change in Median Sales Price 2000-2008**

In 2000, the median sales price of an existing residential home in the city of Austin, TX was $142,800. The median sales price is the price at which half of the homes sold above and half of the homes sold below, and thus proves to be a solid gauge for the sales price trends in a city at a given time. During the time span between 2000 and the second quarter of 2008, the median price of a home in the Austin, TX MSA

---


increased dramatically to $194,200.\textsuperscript{70}, or a 36% increase between these years. Though there was a slight decrease in the median sales price between 2003 and 2004 the general trend has been steady and consistent growth in median sales prices.

Figure 21: Change in Median Sales Price Austin, TX 2000-2008

Though residential properties greatly appreciated in the Austin, TX MSA between 2000 and the second quarter of 2008, it is important to examine the trend of existing single-family home sales in the time frame between the second quarter of 2007 and the second quarter of 2008 in order to get a better idea of the real estate market in Austin as it relates to the current national housing crisis which began in 2007. This will help to shed some light on how the current housing crisis has affected the Austin residential real estate market.

Between the second quarters of 2007 and 2008, the median sales price rose from $186,600 to $194,200, an increase of 4.1%.\textsuperscript{72} This demonstrates some continued strength

\textsuperscript{70} National Association of Realtors. \textit{Median Sales Price of Existing Single-Family Homes for Metropolitan Areas}. Report created August 14, 2008.

\textsuperscript{71} Data obtained from National Association of Realtors. \textit{Median Sales Price of Existing Single-Family Homes for Metropolitan Areas}. Report created August 14, 2008.
of Austin’s housing market into 2008, despite the housing crisis that has spread through the majority of cities across the nation. To get a better relative perspective of this, the national median sales price of existing single-family homes dropped 7.6% between the second quarter of 2007 and 2008. In addition, prices declined 4.1% in the southern region of the U.S. during this same time span.\(^73\) Austin has clearly outperformed national and regional housing markets between 2007 and 2008, and this can be attributed to a combination of strong in-migration, relatively low levels of housing inventories, and low levels of risky lending practices.

Figure 22: Median Sales Price Austin, TX 2nd qtr, 2007-2\(^{nd}\) qtr, 2008

![Median Sales Price Austin, TX 2nd qtr, 2007-2\(^{nd}\) qtr, 2008](image)

**Atlanta, GA Change in Median Sales Price 2000-2008**

In 2000, the median sales price of an existing residential home in the Atlanta, GA MSA was $131,200. Between 2000 and the second quarter of 2008, the median price of

---


a home in the Atlanta, GA MSA had increased to $158,300.\textsuperscript{75} This is a 21% increase over that time span. Though this increase in median sales prices over the eight year timeframe is less than that of Austin, it is still a very strong increase and demonstrates the long-term strength of Atlanta’s local housing market.

Figure 23: Change in Median Sales Price Atlanta, GA 2000-2008

However, 2007 marked the beginning of a decrease in the prices of homes in the Atlanta metro area. Between the second quarter of 2007 and the second quarter of 2008, the median sales price declined from $175,500 to $158,300, a decline of 9.8%.\textsuperscript{77} This decline outpaced the national average decline of 7.6% during this same time span.

The current housing crisis has affected Atlanta much more severely than in Austin. Atlanta has performed towards the middle of all metro areas in the United States. Despite continued strength in in-migration numbers, Atlanta has been less disciplined in

\textsuperscript{75} National Association of Realtors. Median Sales Price of Existing Single-Family Homes for Metropolitan Areas. Report created August 14, 2008.

\textsuperscript{76} Data obtained from National Association of Realtors. Median Sales Price of Existing Single-Family Homes for Metropolitan Areas. Report created August 14, 2008.

controlling its supply of new residential development in the region, and lending practices in Atlanta have been riskier than Austin’s leading up to the crisis. As a result, Atlanta’s residential housing market has been less insulated from the national housing crisis than Austin’s.

Figure 24: Median Sales Price Atlanta, GA 2nd qtr, 2007-2nd qtr, 2008

![Median Sales Price Atlanta, GA 2nd qtr, 2007-2nd qtr, 2008](image)

**Miami, FL Change in Median Sales Price 2000-2008**

In 2000, the median sales price of an existing residential home in the Miami, FL MSA was $144,600. Between 2000 and the second quarter of 2008, the median sales price of an existing home in the Miami, FL MSA grew to $310,100. This is a 114% decrease over the eight year time span, and demonstrates the dramatic increase of home prices in Miami in the early part of this decade.

Figure 25: Change in Median Sales Price Miami, FL 2000-2008

---


However, the euphoria present in the early part of the decade has been replaced by an extremely severe housing crisis currently taking place in Miami. Between the second quarters of 2007 and 2008, sales prices for existing single-family homes in the Miami, FL MSA have dropped dramatically. In the second quarter of 2007, the median sales price of an existing single-family home was $384,400.82 By the second quarter of 2008 the median sales price of an existing single-family home had dropped to $310,100, or an astonishing 19.3%.83 This dramatic decrease far outpaced the national average decrease of 7.6% during this time span.

Figure 26: Median Sales Price Miami, FL 2nd qtr, 2007-2nd qtr, 2008

The severe downturn in Miami’s residential housing market since 2005 gives an excellent demonstration of the effects created by the fragility of Miami’s residential housing market. A combination of negligible population growth, speculation and overbuilding, large residential inventories, and risky lending practices have created a severe housing crisis in the Miami region. From past chapters it is apparent that unhealthy dynamics in each component of the housing market equation have led to the problem, and the resulting condition of Miami’s housing market comes as no surprise. It is also difficult to estimate when Miami’s local housing market will stabilize. The huge disparity between demand and supply levels indicates that the market must continue to correct itself for the foreseeable future.

FORECLOSURES

A major aspect of the housing market which must be examined is the number of foreclosures occurring in each of the three metro areas. As mentioned earlier, foreclosures have been increasing quite dramatically across the nation. This has been

---

especially true in the last couple of years as subprime and ARM mortgage payments have caught up with some borrowers. This has major implications for pricing trends in residential housing markets, and is also an excellent gauge of the relative health of residential housing markets. Using data provided by RealtyTrac.com, this analysis compares the foreclosure rates of the three cities.

As of the second quarter of 2008, Miami ranked tenth among US metro areas in its rate of residential foreclosures at 1.61%. This translates into one in every sixty-two households being foreclosed on in the Miami metro area during the second quarter of 2008.\textsuperscript{85} More alarming is that the foreclosure rate in Miami in the second quarter of 2008 was 112.86\% higher than it was in the same quarter of 2007.\textsuperscript{86}

During the second quarter of 2008, Atlanta ranked twentieth among US metro areas in its rate of residential foreclosures at 1.1\%. That is one foreclosure in every ninety-one households in the Atlanta region.\textsuperscript{87} Foreclosures increased 77.05\% in Atlanta from the second quarter of 2007 to the same period in 2008.\textsuperscript{88}

Table 1 on the following page shows that Austin’s foreclosure rate as of the second quarter of 2008 was much lower than those of Miami or Atlanta. Austin ranked seventy-eight among US metro areas at 0.26\%, or one in every three hundred and eighty-one households.\textsuperscript{89} Austin’s foreclosure rate increased only 12.42\% between the second quarter of 2007 and the second quarter of 2008, a modest change compared to Miami, Atlanta, as well as the U.S. as a whole.\textsuperscript{90}

Interesting is the fact that significant increases in foreclosure rates in Atlanta and Miami since the second quarter of 2007 coincide with the negative changes in the median sales prices of homes in those two cities. Austin’s foreclosure rate increase
has been relatively negligible during this timeframe, and thus hasn’t had a significant
effect on local housing prices. Foreclosures can be seen as both an outcome of the
factors analyzed in previous chapters, as well as another contributing factor to the trend
in median sales prices. Increases in foreclosure rates translate into a larger supply of
homes for sale, and add to the downward pressure on median sales prices.

Table 1: Foreclosure Rates for Austin, Atlanta, Miami MSA’s 2nd Quarter 2008

<table>
<thead>
<tr>
<th>Rate Rank</th>
<th>State</th>
<th>Metro Name</th>
<th>Props with Filings</th>
<th>Foreclosure Rate</th>
<th>%Change from Q1 08</th>
<th>%Change from Q2 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>FL</td>
<td>MIAMI</td>
<td>15,260</td>
<td>1.61%</td>
<td>30.39</td>
<td>112.86</td>
</tr>
<tr>
<td>20</td>
<td>GA</td>
<td>ATLANTA/SANDY SPRINGS/MARIETTA</td>
<td>22,484</td>
<td>1.10%</td>
<td>-0.31</td>
<td>77.05</td>
</tr>
<tr>
<td>78</td>
<td>TX</td>
<td>AUSTIN/Round ROCK</td>
<td>1,611</td>
<td>0.26%</td>
<td>-3.19</td>
<td>12.42</td>
</tr>
</tbody>
</table>

A study on foreclosure performed by Dan Immergluck and Geoff Smith has lead
to some interesting results. In a study of over 9,600 property transactions in Chicago in
1999 combined with 1997 and 1998 foreclosure data revealed that in their most
conservative estimate, each foreclosure within an eight of a mile of a single-family home
results in a 0.9 percent decline in the value of that home. Data also suggests that the
large increase in foreclosures nationwide can be attributed in large part to subprime
lending. In fact, for the first three quarters of 2006, over 60% of loans entering

---

91 Data obtained from RealtyTrac.com
foreclosure in the United States were subprime, up from approximately 30% in 2003, despite the fact that less than 13% of outstanding mortgages were subprime.93

These findings support the foreclosure and housing price data for Austin, Atlanta, and Miami. Miami and Atlanta have not only been hit hardest during the housing crisis in terms of price declines, but also in terms of its number of foreclosures. The rate of foreclosures in Miami and Atlanta has spiked since the beginning of 2007. Homeowners having trouble making their monthly mortgage payments are unable to refinance at more favorable rates due to much lower property values present today. Foreclosures have increased in number and have caused substantial home price depreciation in the two cities.

**SUMMARY OF THE CAUSES AND EFFECTS**

The data presented in this analysis demonstrates the differences in the input factors between Austin, Atlanta, and Miami and the resulting output measures or current overall health of each city’s local housing market. Table 2 on page 59 lays out an overview of the results of the analysis and provides a quick and easy reference for the reader.

It is quite apparent that Austin’s relatively strong housing market in the midst of the 2007 and 2008 housing crisis can be attributed to a combination of strong housing inputs. Strong and steady population growth from 1990 to 2007 coupled with relatively high median annual incomes has supported strong demand for housing units. In addition, housing supply has remained quite low as compared to Atlanta and Miami as a result of

---

more disciplined behavior by residential developers and much lower foreclosure rates. The low foreclosure rate in Austin can be attributed to the low levels of subprime mortgage origination and refinancing that occurred between 1997 and 2004. Lower levels of risky lending have kept foreclosure rates low, and as a result housing inventories have remained healthy due to a small number of mortgage holders being forced to sell. If Austin continues to experience strong population increases, remains disciplined in its development of new residential housing units, and continues to foster a prudent lending environment, its housing market will continue to experience strength relative to the majority of U.S. metropolitan areas.

Atlanta has also experienced strong population growth since 1990 and its residents have relatively high median annual incomes. However, its housing market has been more negatively affected by the current housing crisis due to a large inventory of homes, risky lending, and a high foreclosure rate. New housing starts were at extremely high levels for multiple years leading up to the housing crisis. Residential developers in Atlanta were far less disciplined than in Austin, and housing inventories grew to unhealthy levels as a result. In addition, subprime mortgage origination and refinancing mirrored the rate of the entire U.S. between 1997 and 2004, leading to an extremely high foreclosure rate by the 2nd Quarter of 2008. The result has been downward pressure on home prices as many mortgage holders have been forced to sell. This has added to the already high inventory of homes in Atlanta. As of August, 2008 new residential development had all but stalled in response to median sales price depreciation and the large inventory of homes.

Miami has felt the brunt of the current U.S. residential market crisis. The data presented in this paper demonstrates a combination of a low level of in-migration, a
lower median income, extremely high levels of new residential construction leading up to
the crisis as a result of undisciplined development, and extremely high levels of risky
subprime mortgage lending in Miami between 1997 and 2004. Speculation resulting
from overly inflated home prices in Miami in the late 1990’s and the early parts of this
decade created these dynamics. Lenders, developers, and mortgage holders behaved as if
home price appreciation was permanent and looked to take advantage of potential profits.
When the U.S. housing crisis came about, the fragility of Miami’s residential housing
market was exposed. Foreclosures have skyrocketed as a result of risky lending practices
and housing price depreciation. As of August, 2008 new housing starts had fallen to
extremely low levels in response to the dramatic increases in housing inventories and the
dramatic decreases in median home prices.
Table 2: Overview of Residential Housing Inputs and Outputs Austin, Atlanta, Miami

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Austin</th>
<th>Atlanta</th>
<th>Miami</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing Demand</strong> (Chapter 2)</td>
<td>High population growth/high demand</td>
<td>High population growth/high demand</td>
<td>Low Population growth/modest demand</td>
</tr>
<tr>
<td>Income (Chapter 2)</td>
<td>Higher than the U.S. average</td>
<td>Higher than the U.S. average</td>
<td>Significantly Lower than the U.S. average</td>
</tr>
<tr>
<td><strong>Housing Supply</strong> (Chapter 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lending Practices</strong> (Chapter 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Housing Prices</strong> (Chapter 5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPI change (Chapter 5)</td>
<td>2000-2005 (-47.2%)</td>
<td>2000-2005 (-23.79%)</td>
<td>2000-2005 (+247.7%) 2005-2008 Severe decline</td>
</tr>
<tr>
<td>Foreclosure rates (Chapter 5)</td>
<td>Low as compared to U.S. average 2007-2008</td>
<td>High as compared to U.S. average 2007-2008</td>
<td>Extremely high as compared to U.S. average 2007-2008</td>
</tr>
</tbody>
</table>
Chapter 6: Recommendations for Local Planners

Up to this point housing market data has been presented and analyzed for Austin, Atlanta, and Miami. The input data explains the differences in housing demand, housing supply, as well as lending patterns in each of the three cities leading up to the 2007 and 2008 housing crisis. Next outcomes of these factors were analyzed to help explain the differing magnitude of the 2008 housing crisis on each of the three metro areas. Differences in the characteristics of the local housing markets of Austin, Atlanta, and Miami have helped demonstrate what contributes to the health of a local housing market. There have been some important lessons learned as a result of this analysis and several possible tools and policies could be used by local planners to mitigate severe local housing crises in the future. These recommendations will address the demand-side, supply-side, and lending-side of the housing market equation.

Addressing Housing Demand

As explained in Chapter 2, the demographic make-up of a city is an important component of local housing markets. Strong population growth helps foster demand for housing units, and this helps to support local housing prices. Though housing demand remains largely out of the control of local governments, cities can help foster local housing demand by encouraging and promoting continued job growth in their region. Consistent and continued job growth helps to attract and maintain workers, thus promoting strong in-migration, and strong housing demand as a result.

Though local governments have limited control over job growth in their region, they do have the ability to identify potential strengths in their local economies. Austin, for example, has been effective in attracting major employers to the region by leveraging its intellectual capital and university-based research as major selling points. Major employers such as Dell, IBM, AMD, and Apple have established major offices in the region which provide significant and quality employment opportunities in addition to
those already made possible by large existing employers such as the University of Texas as well as the State of Texas.

It is apparent that solid job growth has spurred the continual population increases in Austin, TX has helped to keep the Austin housing market healthy as compared to many other metro areas nationally. From 1991 through 2007 Austin averaged annual job growth of 3.55%.94 This is a very telling statistic for explaining the strong and consistent in-migration to the region, and the resulting strength of the local housing market.

**ADDRESSING HOUSING SUPPLY**

Similar to housing demand, local policy makers also have limited control over the supply of homes in their cities. Speculation increases as home prices increase to overly inflated levels. Increasing levels of new homes are built as home builders look to take advantage of hot markets. Unfortunately, oftentimes these new home builders ignore the warning signs of overheated markets in an attempt to cash in on overly inflated home prices. As a result, local planners, lenders, and new home builders must work together to recognize the warning signs of overly heated housing markets so that home builders and lenders make more prudent business decisions. The benefits of better informed decisions would be felt not only by these businesses, but also by the residents of the cities they serve.

It is my recommendation that local planners create task forces which work with local home developers, real estate agents, and lenders to continually monitor the contributing factors of housing markets. These task forces could meet on a regular basis (whether monthly or quarterly) to discuss the current state of their local housing markets. In-migration, current housing supplies and prices, as well as lending patterns would be

---

94 Austin Chamber of Commerce website, Historical Data from Economic Indicators, 2008, [http://www.austin-chamber.org/DoBusiness/MediaCenter/Indicators.html](http://www.austin-chamber.org/DoBusiness/MediaCenter/Indicators.html)
continually monitored, discussed, and compared to conditions in the past in order to keep local home builders, real estate agents, and lenders well informed.

Though home builders and lenders would still have the ultimate decision on what types of strategies their businesses implement going forward, the use of information presented and discussed by an inter-disciplinary panel of local experts would be extremely beneficial. Data analyzed from differing angles, and by a mixture of real estate professionals could lead to better informed decisions by local businesses involved in residential real estate. The result would be more prudent business decisions that ultimately lead to reduced levels of speculation and healthier local housing markets.

For instance, local planners in Miami could create this type of task force in order to prevent future housing collapses similar to the one that exists today. Continually monitoring important housing metrics such as the ones presented in Chapters 2 through 4, and comparing them to past conditions would keep local businesses aware of potential warning signs. By keeping local real estate players up to date and well informed, speculation may be more easily discouraged. The result would be healthier supplies of new homes which are more in line with demand, and thus less severe housing cycles. This could potentially alleviate future over-building in Miami similar to that which occurred as a result of the artificially inflated housing prices in the early part of this decade.

**ADDRESSING RISKY LENDING PRACTICES**

The subprime lending data presented in Chapter 4 proves extremely telling as to the current health of Austin, Atlanta, and Miami’s local housing markets. The data suggests a strong and direct correlation between the risky lending patterns which occurred from 1997 through 2004, and the resulting effects on the current housing markets of Austin, Atlanta, and Miami. Dan Immergluck has written several articles addressing the effects of exotic and subprime mortgages, and their negative effects on
local housing markets. He has come up with a number of recommendations for local policy makers which could help address the problem. Immergluck argues that an important goal of planning is sustainable homeownership. However, he suggests that exotic mortgage lending, particularly subprime lending, not only creates added risks and costs for the borrowers themselves, but also for the communities in which those individuals reside. This paper highlights some of his recommendations as potential tools for local planners across the nation to better recognize and manage the potential implications resulting from risky lending practices.

Immergluck first recommends that local planners track local lending and foreclosure patterns. Tracking these patterns would help alert policy makers of potential hotspots within their cities. This would include tracking the activities of local lenders, as well as those areas within cities that are experiencing high levels of subprime lending.

Planners could track these patterns in a number of different ways. Immergluck suggests that planners map local lending patterns by utilizing data made available through the Home Mortgage Disclosure Act. This would entail the use of GIS technology to map the quantity and quality of loans made by recognized subprime lenders in each census tract of a city. This would help to spatially demonstrate areas that are potentially at risk of widespread predatory lending and a higher foreclosure rates. In addition, it would be prudent for local planners to continually map foreclosures occurring in their city. Mapping predatory lending and foreclosure patterns would provide a clear geographic account of neighborhoods that must be focused upon.

---

Immergluck also recommends that planners encourage responsible lenders to promote their products more aggressively in areas that have been dominated by subprime lenders.\textsuperscript{99} Thus, subprime lending patterns identified through the use of mapping could be utilized to notify responsible lenders of those potential problem areas that they could focus more of their resources and energies on. It may be prudent for some subprime borrowers to refinance with standard mortgages that are cheaper and thus less risky. Immergluck suggests that planners better utilize the Community Reinvestment Act (CRA) which encourages banks to meet the credit needs of their neighborhoods.\textsuperscript{100} Local planners should demonstrate the positive effects the CRA can have on both local neighborhoods, as well as on local lending institutions themselves. This includes opportunities for increased profitability and positive public relations and media coverage.

Immergluck suggests that banks can be rewarded for participating in anti-predatory lending programs such as the NORMAL program of Chicago’s Neighborhood Housing Service. This program ensures that borrowers who are at severe risk of foreclosure are provided with more affordable loans to refinance a predatory loan.\textsuperscript{101} The resulting loan payoff to the original lender is less than the outstanding loan balance to compensate for predatory terms or fees.\textsuperscript{102} He also suggests that banks have the opportunity to receive credit under the CRA for post purchase counseling or other programs aimed at preventing foreclosures.\textsuperscript{103} These actions would promote proactive actions by lenders aimed at protecting themselves as well as the communities they serve from large and concentrated areas of foreclosures.

The use of resources to target foreclosure prevention and counseling are other tools that Immergluck suggests for local planners. Most notably, he suggests allocating resources that allow for more access to low-cost or free legal assistance.\textsuperscript{104} He argues that lenders are more likely to be responsive to potential borrowers who are represented by attorneys. In addition, attorneys are more likely to recognize abusive and predatory features of loans, and thus provide borrowers with key information that will allow them to make better and more informed decisions.

The development of local refinancing and restructuring programs for mortgage holders is another recommendation mentioned by Immergluck. He argues that localities experiencing high foreclosure rates should create agencies that develop programs aimed at restructuring loans for at risk borrowers.\textsuperscript{105} These programs could help reduce mortgage burdens using two potential strategies. The first strategy involves lenders and local agencies working together to develop processes which enable borrowers to more easily obtain affordable modifications to their loans including term extensions, and rate reductions.\textsuperscript{106} The second strategy involves the use of mortgage revenue bonds, federal funds, and community development funds to restructure unaffordable mortgage loans.\textsuperscript{107}

Getting foreclosure properties reoccupied quickly is also recommended by Immergluck.\textsuperscript{108} Since social costs to neighborhoods which experience high foreclosure rates can occur, it is important for local planners to create programs which provide lenders with alternative options to abandonment. Many lenders avoid repossessing foreclosed properties, because of the increased liability these properties can bring about. By providing lenders with alternatives to property abandonment there is an increased


\textsuperscript{105} Immergluck, Dan (2007, Dec. 12). From the Subprime to the Exotic: Excessive Mortgage Market Risk and Foreclosure. Georgia Tech City and Regional Planning

\textsuperscript{106} Immergluck, Dan (2007, Dec. 12). From the Subprime to the Exotic: Excessive Mortgage Market Risk and Foreclosure. Georgia Tech City and Regional Planning

\textsuperscript{107} Immergluck, Dan (2007, Dec. 12). From the Subprime to the Exotic: Excessive Mortgage Market Risk and Foreclosure. Georgia Tech City and Regional Planning

potential that foreclosed properties will be occupied, thus reducing negative costs to these high risk neighborhoods.

Lastly, there is some growing but inconclusive evidence that speeding up the foreclosure process may help to alleviate some of the negative externalities associated with foreclosures. A study by Apgar and Duda finds that streamlining the foreclosure process may reduce some of the negative externalities associated with foreclosures, such as property deterioration and vandalism.\textsuperscript{109} Immergluck points out that the foreclosure process varies greatly across states. He goes on to say that foreclosure periods can be as short as twenty-five to thirty days in Texas and Georgia, while they can last for over a year in other states.\textsuperscript{110} Although this research is inconclusive, it warrants mentioning and further investigation into the correlation between the speed of the foreclosure process, and the potential cost of foreclosures on local governments.

The data presented in prior chapters suggests a very strong correlation between risky lending practices, most notably subprime lending, and the foreclosure rates in Austin, Atlanta, and Miami. In addition, foreclosure rates in Austin, Atlanta, and Miami correspond with higher levels of residential home depreciation experienced during the current housing market crisis. The recommendations provided in this section could act as effective tools for local planners and assist them in recognizing, monitoring, addressing, and limiting foreclosures and their negative effects on local communities nationwide.


\textsuperscript{110} Immergluck, D., Smith, G., 2006: The External Costs of Foreclosure: \textit{The Impact of Single-Family Mortgage Foreclosures on Property Values}, prepared for the Fannie Mae Foundation
Appendix

Table 3: Data Utilized in the Analysis

Factors Affecting Housing Demand

- Population Change in Austin, TX 1990-2007
- Population Growth Rate in Austin, TX 1990-2007
- 2008 in-migration estimate for Austin, TX
- 2007 Median Annual Income in Austin, TX
- Population Change in Atlanta, GA 1990-2007
- Population Growth Rate in Atlanta, GA 1990-2007
- 2008 in-migration estimate for Atlanta, GA
- 2007 Median Annual Income in Atlanta, GA
- Population Change in Miami, FL 1990-2007
- Population Growth Rate in Miami, FL 1990-2007
- 2008 in-migration estimate for Miami, FL
- 2007 Median Annual Income in Miami, FL

Factors Affecting Housing Supply

- Single-family Building Permits in Austin, TX 2003-August, 2008
- Total Housing Inventory Austin, TX April, 2006-October, 2008
- Inventory as a percentage of Total Housing Stock Austin, TX April, 2006-October, 2008
- Single-family Building Permits in Atlanta, GA 2003-August, 2008
- Total Housing Inventory Atlanta, GA April, 2006-October, 2008
- Inventory as a percentage of Total Housing Stock Atlanta, GA April, 2006-October, 2008
- Total Housing Inventory Miami, FL April, 2006-October, 2008
- Inventory as a percentage of Total Housing Stock Miami, FL April, 2006-October, 2008

Lending Practices

- Subprime Mortgage Origination Austin, TX 1997-2004
- Subprime Mortgage Refinancing Deals Austin, TX 1997-2004
- Subprime Mortgage Origination Atlanta, GA 1997-2004
- Subprime Mortgage Refinancing Deals Atlanta, GA 1997-2004
- Subprime Mortgage Origination Miami, FL 1997-2004
- Subprime Mortgage Refinancing Deals Miami, FL 1997-2004

Housing Prices

- Four-Quarter Change in Housing Price Index Austin, Atlanta, Miami 1990-2nd Qtr 2008
- Four-Quarter Change in Housing Price Index Austin, Atlanta, Miami 2005-2nd Qtr 2008
- Median Sales Price of Home in Austin, TX 2000-2nd Qtr 2008
- Median Sales Price of Home in Austin, TX 2nd Qtr 2007-2nd Qtr 2008
- Median Sales Price of Home in Atlanta, GA 2000-2nd Qtr 2008
- Median Sales Price of Home in Atlanta, GA 2nd Qtr 2007-2nd Qtr 2008
• Median Sales Price of Home in Miami, FL 2000-2nd Qtr 2008
• Median Sales Price of Home in Miami, FL 2nd Qtr 2007-2nd Qtr 2008

Foreclosures
• Change in Foreclosure Rate Austin, Atlanta, Miami 2nd Qtr 2007-2nd Qtr 2008
Bibliography

1. 1949 U.S. Housing Act


6. Dataplace.org

7. Fischer, Terrill Nov.6 2007. *Austin Housing Market Outpacing the Nation*. Austin Real Estate Scene

8. Fishbein, A., Woodall, P., September 8, 2005; Subprime Cities: *Patterns of Geographic Disparity in Subprime Lending*, Consumer Federation of America

9. Housingtracker.net


11. Immergluck, D., January, 2008; Large Scale Redevelopment Initiatives, Housing Values, and Gentrification: *The Case of the Atlanta Beltline, under review*, Georgia Tech City and Regional Planning


14. Marketwatch.com;  


20. RealtyTrac.com


22. US Bureau of the Census; American Factfinder
Vita

Abel Isaac Balwierz was born in Highland Park, Illinois on January 16, 1974, the son of Margie Jean Balwierz and Gary Stanley Balwierz. After graduating from Washburn High School, Minneapolis, MN, in 1992, he attended The University of Wisconsin in Madison, Wisconsin where he earned a bachelor of arts degree in economics in 1997. He worked for eight years in the securities industry at RBC Dain Rauscher. In September, 2006, he entered the Graduate Program in Community and Regional Planning at the University of Texas at Austin.

Permanent Address: 1781 Spyglass Drive #335
Austin, Texas 78746

This professional report was typed by the author.