

Working Paper for Discussion at Boston University Social Welfare Analysis

Colloquium Series

Sunburnt Cities: Foreclosure, Abandonment and Hope for a Shrinking Sunbelt

Justin Hollander

Department of Urban and Environmental Policy and Planning

Tufts University

October 7, 2009

DRAFT: DO NOT CITE WITHOUT PERMISSION OF AUTHOR

Acknowledgements: This research was partially supported through a grant from the Faculty Research Award Committee at Tufts University. Research assistance was provided by Elizabeth Antin, Dan Zinder, and Durwood Marshall.

Introduction

In only the last few years, there has been a drastic change in the physical landscape of Sun Belt cities due to widespread foreclosures, a growing fiscal crisis, and a severe economic recession. This unprecedented change in the U.S.'s fastest growing regions has been met with disbelief and frustration by planners and policy makers. In the past, public policy and planning responses to decline have been widely seen as failures, particularly in the exemplary Rust Belt cities of Detroit, Buffalo, and St. Louis (Bradbury, et al. 1982; Logan & Molotch 1987; Beauregard 2003; Lucy & Phillips 2000). However, an emerging group of practitioners and scholars have found a new way to talk about population and economic decline and their work has a remarkable timeliness given the changes afoot in the Sun Belt. These proponents of “shrinking cities” reject the growth-based paradigm that feeds much of urban planning and local government intervention in North America (Oswalt 2006; Pallagst 2007; Hollander et al. 2009). Rather than trying to grow every declining city, the shrinking cities approach argues that not all cities must grow back to their former glory. Instead of chasing industry with hefty incentives and the other standard economic development tools, for some cities it might be prudent to just focus on improving the quality of life for those left behind. For much of the history of the Sun Belt, this approach was seen as heretical, but its message today is salient and holds the potential to transform disaster into hope and promise.

Over the last year, growing public attention has centered on the fall-out from the sub-prime lending debacle that has resulted in massive foreclosures and widespread housing

vacancy in what happened been the perennially growing Sunbelt (Goodman 2007; Leland 2007). From Atlanta, to Fort Meyers, to Phoenix, massive new housing developments sit largely unoccupied while older housing is emptied due to increased foreclosure rates. Many of these Sunbelt cities are facing depopulation and housing vacancy on a level matched by the depressed, former industrial Rustbelt cities. With economic conditions uncertain, employment levels unstable, and the high likelihood for greater population loss, can these cities plan for decline like cities in the Rustbelt? In my research, I ask how neighborhoods change in depopulating cities and whether a shrinking cities approach might offer possibilities for improved quality of life for remaining residents.

For this paper, I will present the results of an empirical study beginning to answer those questions. I collected residential delivery statistics data from the U.S. Postal Service for every zip code in the Sunbelt for February 2006 (roughly the peak of the real estate market) and February 2009 (the most recent available data). I analyzed the data to determine how housing unit density changed during this time period. Lastly, I studied how these depopulating neighborhoods might learn lessons from the shrinking cities movement to physically right-size for lower density.

Background

Hot, sunny places always grow, right? The deep and rich literature on the American Sunbelt tells the story of the attractive powers of these warm environs – where the introduction of air conditioning made them ideal for jobs, workers, and retirees. A 1926

cover story in *Liberty* magazine, suggested that there were no brakes on the Florida growth engine (Cave 2009). Cheap land and abundant amenities made Arizona, Texas, New Mexico, and South Carolina and other states desirable in the second half of the 20th century beyond any booster's wildest dreams. The new alignment of power, money, and people away from the Rustbelt to the Sunbelt was viewed by many scholars since the 1970s as largely permanent (see Perry and Watkins 1977; Weinstein 1978; Sawers and Tabb 1984; Schulman 1991; Pack 2005).

Except for the occasional boom-bust cycles, the Sunbelt has been viewed as a place of perpetual prosperity and limitless growth. Many Sunbelt cities are presently in a state of economic and population decline: they are shrinking. More importantly than demographic change, many of these declining Sunbelt cities are physically shrinking, presenting an unprecedented opportunity to reshape and retrofit urban neighborhoods in a positive way.

Data and Methods for Population Study

In approaching the current shift afoot in the Sunbelt, I relied on two primary data sources that provide demographic and land use data at the neighborhood level. The first is the well known and popular U.S. Census, which enumerates population, employment, and housing levels at the city and, in some cases, zip code level. Census data collected on a decennial basis is also available at an even finer geographical level called the census tract (usually smaller than a zip code geography and comprising between 2,500 and 8,000

persons). I compiled this data for every Sunbelt city with over 100,000 in population in 2005. In defining the Sunbelt, I adapted boundaries employed by several demographers and geographers to include cities in those states that are located below the 37th Parallel.

This cities are in the following states:

CA
NV
AZ
NM
TX
LA
TN
MS
AL
GA
FL
SC
NC

Population Change in Sunbelt Cities

Due to data errors, seven cities were removed from the analysis, leaving a total of 140 cities in the above thirteen Sunbelt states.¹ Most (86%) of the 140 Sunbelt cities studied were growing rapidly just a few years prior to the housing crash. In total, these cities gained 2,372,033 persons between 2000 and 2005 (474,406 per year, on average). As the housing crash approached in 2006, many of these cities began to change course. But the Sunbelt, as a whole, did continue to grow (albeit at a slower pace). In total, these

¹ Cities removed were: Athens-Clarke, Augusta-Richmond, Greensboro city
Raleigh city
Wichita Falls city
Oceanside
Coral Springs

cities increased in population by 1,138,245 persons between 2006 and 2008. But a closer look reveals a crack in the sustained growth patterns. As housing prices began to sink in 2006, populations also began to dwindle in a select group of cities. Twenty-six Sunbelt cities lost population from 2006-2008, including cities in Florida, California, Louisiana, Georgia, Alabama, and Mississippi. In this group of losing cities, the mean loss was 1,660 people (with a standard deviation of 1,603), while the highest decline was 6,680 persons in Baton Rouge, Louisiana² (see Figure 1 for a list of the top losing cities).

<Figure 1 about here>

Data and Methods for Land Use Analysis

Because the impacts of depopulation can strike residential neighborhoods the hardest, this study is limited to exclusively examining residential land uses. Housing researchers have looked at changing patterns of housing density in urban neighborhoods as a proxy for land use changes from single-family to multi-family housing. For example, a neighborhood with 50 occupied housing units per acre in 1990 has a very different physical form than that same neighborhood ten years later with only 40 occupied housing units per acre.³

² Baton Rouge has continued to bleed population since being hit by Hurricane Gustav in 2008. But, interestingly, New Orleans was losing between 5,000 – 10,000 people annually from 2000 to 2005, when it was hit by Hurricane Katrina. In that one year, the city lost 245,000 people and has been growing steadily since.

³ It is important to note that I looked at occupied housing per acre as a coarse land use measure – indicating only whether the area has high, medium, or low residential density. While vacant and abandoned homes are a major physical feature of depopulated neighborhoods, tracking those changes over time can be

While population changes are surprising, a closer look at land use change within Sunbelt cities reveals more chilling statistics. Six days a week, every week of the year a postal worker walks up and down nearly every street in America. And they track what they see. I am not interested in how much mail people receive (but those numbers appear to be in decline, as well). I am interested in how many housing units are empty and no longer receiving mail. After 90 days of unoccupancy, the Postal Service removes an address from its active inventory.

For example, take my own street with four single-family homes and two multi-family homes (each with three units). When I moved here, all ten housing units were occupied and receiving mail. If the house across the street goes into foreclosure, and is left vacant for more than 90 days, then the Postal Service will begin tracking my street as having only nine housing units. This 10% decline can be both meaningful and misleading. By just looking at a 10% decline, an observer might not know if this meant fewer residents, if it meant an abandoned building, if the 10% decline occurred because one of the multi-family homes was converted from three units to two. An observer of the data would not know any of this, but the planner would know something: there is now a decrease in occupied housing unit density.

difficult. The statistic “occupied housing units per acre” allows for multi-year comparisons of the same neighborhoods and can reveal much about their changing physical form.

Occupied housing unit density was introduced in the paper as an essential concept in smart decline practice, as it is already an essential concept in smart growth planning practice. The Postal Service data provides a window into changing occupied housing unit density, but only a window. I will present the findings from three in-depth case studies on Sunbelt cities to check the accuracy of the findings here.

The bounds of this study necessitate a narrow time window to study neighborhood change in Sunbelt cities. My own review of housing sales data from Zillow.com and a general consensus in the popular media suggest that the housing boom peaked on or about the beginning of 2006 in most parts of the Sunbelt (Associated Press 2009). I obtained complete raw data from the Postal Service from February 2006 through February 2009.⁴ The data was difficult to work with, but I was successful in matching zip codes in the Postal Service database with the U.S. Census Bureau's Zip Code Tabulation Area files. Then, I filtered out only those zip codes located within each of the 140 Sunbelt cities in the study. I did this by conducting searches on USPS.gov to obtain a list of each zip code in each city – for a total of 2,241 zip codes. Lastly, I needed to attend to the fact that the Postal Service regularly changes zip code boundaries. Working with a research assistant, I read through all issues of the Postal Gazette (an online Postal Service newsletter) for announcements of changes or eliminations of zip codes. As a result, I removed 594 zip codes from the study, leaving 1,647 remaining.

⁴ It is worth noting that just as I was beginning to acquire the Postal Service data, the U.S. Department of Housing and Urban Development was starting to publish their own adapted version of vacancy data. Unfortunately, that data was not presented in a format that could be used in this study. I am currently undertaking a separate research project using the HUD/USPS data and it is proving to be valuable.

Such a vast loss of information might be seen as potentially damaging to the results. But that would only be true if those zip code with changing boundaries are systematically different from the typical zip code. In fact, they probably are different in that they are generally the growing neighborhoods, with new homes and businesses demanding expansion of zip code boundaries into unincorporated areas. Zip codes also change in growing areas when a zip code splits into two. While I might expect those zip codes that were removed are more of the high growth zip codes, this is a study about decline. All conclusions and generalizations drawn from this analysis will be limited by this bias in the data.

Land Use Change in Sunbelt Cities

At the city level, most Sunbelt cities fared well during the foreclosure crisis. Among 140 Sunbelt cities with populations over 100,000 in 2005, 28 have experienced a net loss in housing units between 2006-2009. For those 28 shrinking cities, the mean loss in housing units was 3%. This loss was generally not highly concentrated either, the average shrinking city had five zip codes that lost housing units, with many having ten or more distinct neighborhoods losing units (see Figure 2 for the ten Sunbelt cities with the greatest net loss in occupied housing units).

<Figure 2 about here>

But this is a study about neighborhoods more than anything else and a close look at sub-city scale reveals a more striking picture. For those 140 cities, there are a total of 1634 total zip codes where data was available from USPS for both 2006 and 2009⁵ - 564 (more than 1/3) of these zip codes lost housing units, 1070 of these zips grew in size. More than one-third of all neighborhoods in the Sunbelt lost housing units from 2006 to 2009 – the finding is an astounding one. In addition, 80% of all the Sunbelt cities (n=111) had at least one zip code which lost housing units during the time period.

The prevalence of this physical shrinkage is impressive, but what about the severity? Using the variable occupied housing unit density, it is clear that there has been real change afoot in Sunbelt cities from 2006-2009. Among the 564 shrinking zip codes in the region, the mean decline in occupied housing unit density was 4%, with a standard deviation of 10%. To translate these results, take the example of a neighborhood of twenty two-family homes on five acres. In 2006, suppose these units are all occupied (that is, they have received mail within the last 90 days). The neighborhood has 40 units divided by five acres, for a total of eight occupied housing units per acre (in planning practice this is a typical medium/high density urban neighborhood). For this neighborhood, a reduction in 10% of occupied housing unit density mean a decline from eight units per acre to 7.2 units per acre, or only 36 housing units (7.2 X 5 acres). What happened to the missing four housing units? Some are still there, but vacant. Some have suffered from neglect and vandalism and may be in derelict condition. Some may have

⁵ That is, the zip code boundaries did not change during the time period, according to records reviewed from the Postal Gazette. In addition, I excluded 42 zip codes from the analysis where there was no Census equivalent Zip Code listed from the 2000 census.

even been demolished. And even some may have been combined with adjacent units (in the case of a duplex, this would mean a conversion to a single-family home).

Conclusion

The big question is what have all these changes meant for the people who live in these neighborhoods and for the planners who are responsible for managing land use change? Future research should test these findings further through ground-truthing of actual neighborhoods, as well as through interviews with residents and local officials. Until such research is complete, the policy and theoretical implications of this study are limited. Fortunately, I am in the midst of conducting that work and will have preliminary results later in the year.

REFERENCES:

Associated Press. 2009. Study: Housing more affordable for “move-up” buyers. *The Baltimore Sun*. October 4. <<http://www.baltimoresun.com/business/real-estate/bal-re.affordable04oct04,0,1176498.story>>.

Beauregard, Robert A. 2003. *Voices of decline: The Postwar fate of U.S. cities*. 2nd ed. New York: Routledge.

Bradbury, K.L., A. Downs, and K.A. Sall. 1982. *Urban decline and the future of American cities*. Washington, DC: Brookings Institution.

Cave, Damien. 2009. After century of growth, tide turns in Florida. *The New York Times*. August 30.

Goodman, Peter S. 2007. This is the sound of a bubble bursting. *The New York Times*, December 23.

Hollander, Justin B., Karina Pallagst, Terry Schwarz, and Frank Popper. 2009 – in press. Planning shrinking cities. *Progress in Planning* 72, 1 (special issue: Emerging Research Areas).

Leland, John. 2007. Officials say they are falling behind on mortgage fraud cases. *The New York Times*, December 25.

Logan, J.R., and H.L. Molotch. 1987. *Urban fortunes: The political economy of place*. Berkeley, CA: University of California Press.

Lucy, William H. and David L. Phillips. 2000. *Confronting suburban decline: Strategic planning for metropolitan renewal*. Washington, DC: Island Press

Oswalt, Philipp, ed. 2006. *Shrinking cities, volume 2: Interventions*. Ostfildern, Germany: Hatje Cantz Verlag.

Pack, Janet Rothenberg, ed. 2005. *Sunbelt/Frostbelt Public Policies and Market Forces in Metropolitan Development*. Washington, DC: Brookings Institution Press.

Pallagst, Karina. 2007. Patterns of shrinking cities in the USA. In *The future of shrinking cities: Problems, patterns, & strategies of urban transformation in a global context*. Berkeley, CA..

Perry, David C. and Alfred Watkins. 1977. *The rise of the Sunbelt cities*. Beverley Hills, CA: Sage.

Weinstein, Bernard L. and Robert E. Firestone. 1978. *Regional growth and decline in the United States : the rise of the Sunbelt and the decline of the Northeast*. New York : Praeger Publishers, 1978

Figure 1: Ten Most Declining Sunbelt Cities from 2006-2008

City	State	Jul 08	Jul 06	Change 06-08
Baton Rouge city	Louisiana	223,689	230,369	-6,680
Columbus city	Georgia	186,984	191,578	-4,594
Jackson city	Mississippi	173,861	177,999	-4,138
Hialeah city	Florida	210,542	213,854	-3,312
Long Beach city	California	463,789	466,751	-2,962
Pembroke Pines city	Florida	145,661	148,069	-2,408
Coral Springs city	Florida	125,783	128,023	-2,240
St. Petersburg city	Florida	245,314	247,515	-2,201
Hollywood city	Florida	141,740	143,853	-2,113
Birmingham city	Alabama	228,798	230,733	-1,935
<i>source: US Census Bureau (2009)</i>				

Figure 2: Ten Most Declining Sunbelt Cities by Change in Occupied Housing Units (Feb. 2006 – Feb. 2009)

City	Ch_06_09 in occup h.
New Orleans Total	-52253
Chandler Total	-9751
Scottsdale Total	-6157
Fort Lauderdale Total	-5541
Gilbert Total	-4678
Glendale Total	-4140
St. Petersburg Total	-3122
Pompano Beach Total	-3047
Clearwater Total	-1758
Mesa Total	-961

Source: U.S. Postal Service, Residential Delivery Statistics (2009)