# URBAN REVITALIZATION AND NEIGHBORHOOD DYNAMICS IN HARRISBURG, PENNSYLVANIA, 2006 - 2011

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**ABSTRACT:** City-led revitalization efforts provide a unique and interesting study of neighborhood dynamics. Harrisburg, Pennsylvania lends itself as an appropriate study area as it demonstrates similar trends of urban decline and renewal as other major cities in the northeastern United States. South Allison Hill and Capitol Heights were selected as the focus of this study as each neighborhood reflects a different style of city-led revitalization. Where Capitol Heights has been the target neighborhood for block-scale redevelopments by private developers, South Allison Hill has witnessed change at the parcel-level through local revitalization projects. Parcel data were collected and analyzed for both neighborhoods and then compared to a similar study conducted by Jantz and Marr (2007). In both studies, vacancy rates of parcels, changing parcel data, and spatial estimates of land and structure values were collected. A comparison of these data will display trends in neighborhood dynamics over the past five years and will demonstrate the effects both types of city-led revitalization efforts have had on South Allison Hill and Capitol Heights. While large-scale revitalization efforts will continue to drive the dynamics in Capitol Heights, the effect parcel-level revitalization efforts have on South Allison Hill remain uncertain. This study will identify trends occurring within each neighborhood and will provide a framework for future studies.

Keywords: Urban, revitalization, neighborhoods, Harrisburg

## **INTRODUCTION**

Urban revitalization refers to the process of renewing and rebuilding aging neighborhoods and infrastructure in order to attract and retain city residents and commercial activity. As cities continue to age, revitalization becomes an increasingly important tool for urban change and development. A 2006 study by Jantz and Marr addressed that relationship by conducting a case study in Harrisburg, Pennsylvania, a city that demonstrates similar trends of urban decline and renewal as other major cities in the northeastern United States (Jantz and Marr 2007). Their study provided a preliminary comparison between two Harrisburg neighborhoods, Capitol Heights and South Allison Hill. Both neighborhoods are experiencing different forms of city-led revitalization efforts. Capitol Heights has been targeted by the city for broad-scale revitalization. After condemning blocks of deteriorated and substandard structures, Harrisburg was able to attract private developers to redevelop entire blocks. South Allison Hill, on the other hand, has been a target for multiple programs that work with individual landowners to revitalize their properties.

This study is meant to provide a follow-up analysis to Jantz and Marr's 2006 study. Maps created for both 2006 and 2011 will be used to compare land and structure prices per square foot. This comparison will indicate the effects the two different approaches to city-led revitalization had on Capitol Heights and South Allison Hill as well as the scale of change occurring in the two neighborhoods. Vacancy rates and parcels missing from the tax assessment database will also be compared to show the dynamics of each neighborhood. The results of this study will show how city-led revitalization efforts can affect neighborhoods and will provide a framework for future research.

# **STUDY AREA**

Harrisburg, the capital of Pennsylvania, is located on the eastern bank of the Susquehanna River. During the mid-1800s, Harrisburg became a regional leader in steel manufacturing and other industry as well as an important regional transportation center. At its peak in 1950, the city boasted a population of nearly 90,000 (U.S. Census Bureau 1950). Like many other northeastern industrial cities, Harrisburg felt the effects of deindustrialization and suburbanization. The city's population dropped 11% by 1960 (U.S. Census Bureau 1960) and today has fewer than 50,000 residents (U.S. Census Bureau 2010). Harrisburg's average income is \$40,049 with

18% of the population earning less than \$10,000. Unemployment for the city is 12% (U.S. Census Bureau 2010). African Americans make up a majority of the population followed by Whites at 52% and 31%, respectively. The dramatic loss of population and coincident socio-economic shifts over the past sixty years has affected Harrisburg neighborhoods. Aging structures have fallen into disrepair and blighted areas can be seen throughout the city. As a result, Harrisburg has implemented a housing plan that focuses on revitalizing selected neighborhoods (i.e. mitigation of blight) while stabilizing others (i.e. increasing homeownership) (City of Harrisburg 2010).

The Capitol Heights neighborhood (Figure 1) represents the city's strategic revitalization efforts. Consisting of only four city blocks, Capitol Heights is one of the smallest neighborhoods in Harrisburg. In terms of its current socio-economic make up, African Americans and Whites are the largest racial groups with 59% and 37% of the population, respectively. The median household income for the neighborhood is \$47,009 with approximately 18% of the population earning less than \$10,000. The unemployment rate is 10% (U.S. Census Bureau 2010). Once home to a large number of abandoned structures and vacant lots, the city identified Capitol Heights as a target area for urban revitalization in conjunction with private developers (Jantz and Marr 2007). Those private companies have since renovated much of the neighborhood for low- to middle-income use.



Figure 1. Location of Capitol Heights and South Allison Hill in Harrisburg, PA.

South Allison Hill (Figure1) consists of dozens of city blocks and is one of the largest and poorest neighborhoods in Harrisburg. Currently, the median household income is \$28,677 with nearly 27% of residents earning less than \$10,000. The unemployment rate is 13.6%. African Americans are the largest racial demographic in South Allison Hill, making up 52% of the population, followed by Whites at 27% (U.S. Census Bureau 2010). Structure deterioration and blight continues to be a major issue in the neighborhood today. Revitalization efforts, while not as sweeping as those in Capitol Heights, have been enacted in South Allison Hill at the parcel level. Cityled programs provide money to individual homeowners that allow them to renovate their properties (Possinger and Leppo 2009). While some assistance is provided, funds are limited, which in turn limits the number of structures that can be renovated. Much of Harrisburg's efforts in South Allison Hill have been located at the intersection of 13<sup>th</sup> and Derry Streets as well as along 17<sup>th</sup> Street, the neighborhood's major roads. While both Capitol Heights and South Allison Hill have been affected by decline, the revitalization efforts in each neighborhood vary dramatically.

### **METHODS**

For this study, our goal was to create maps displaying land and property values that could be compared to the 2006 study results. This began with a 2004 parcel data set for the City of Harrisburg, which was the same starting point for the 2006 study completed by Jantz and Marr (2007). In both the 2006 study and this one, tax assessment data were collected for a random sample of parcels. While the 2006 study generated a city-wide tax assessment sample, the sample in this study was limited to the South Allison Hill and Capitol Heights neighborhoods. We sampled 20% of the parcels in each neighborhood, resulting in a sample of 114 of 502 total parcels in Capitol Heights and 509 of 2,618 total parcels for South Allison Hill. Given the number of parcels within each neighborhood, a 20% sample was deemed appropriate to adequately understand the spatial distribution of property values.

Based on the property identification (PID) number, which has an original date of 2004, data concerning land and structure value of individual parcels were then collected from the Dauphin County Office of Tax Assessment's website. Other data collected from the tax assessment website include structure and land square footage and whether the parcel was used for commercial or residential purposes. Parcels not appearing in the tax assessment records were still noted and are considered an indicator of change. For example, the parcel may have been divided into two or more parcels or two parcels may have been combined. In these cases, the PID that existed in 2004 would have been eliminated or changed. In order to estimate the missing parcel rate, the number of missing parcels was subtracted from the total number of parcels. This metric was then compared with the 2006 study and would indicate change occurring within the parcels themselves.

Similarly, vacant parcels were recorded. The identification of vacant parcels in this study varies from the 2006 study, however, due to changes in the information available from the Dauphin County Office of Tax Assessment's website. In 2006, properties were marked in the assessment records with a "V" to indicate it to be vacant. The Office of Tax Assessment has since updated their records and no longer indicates whether the property is vacant or in use. In this study, we determined which parcels were vacant of structures. Any parcel with a land value but no structure value was subtracted from the total number of parcels in order to estimate the rate of empty lots in the neighborhoods. This number cannot be compared to the vacancy rate from the 2006 study but can be used as a baseline for future studies.

Following the methods in Jantz and Marr (2007), the sample parcel polygons were converted to points based on an estimation of the parcel centroid. Using this distribution of points, we generated an inverse distance weighted (IDW) surface interpolation in order to show neighborhood-wide patterns of structure and land values. IDW interpolation takes into account the values of all measured locations and predicts the values for any unmeasured locations, assuming that locations near each other are more alike than those far apart (i.e. Tobler's first law of geography) (ESRI, 2007). We normalized tax assessment values by area in order to compare properties of different sizes and characteristics. A land value per square foot surface and structure value per square foot surface were created for both Capitol Heights and South Allison Hill. Mean, median, and standard deviation for both land and structure values per square foot in both neighborhoods were also calculated.

In this study, our sample points were limited to the Capitol Heights and South Alison Hill neighborhoods and surrounding adjacent blocks, in contrast to the 2006 study where Jantz and Marr (2007) generated a city-wide sample. For this reason, we had to be mindful of the influence of edge effects when generating the IDW surfaces for 2011. We used our entire data set to estimate the land and building values per square foot, but focus on the interior of the neighborhoods when comparing to the 2006 maps in order to minimize edge effects.

Parcels used for commercial purposes were not included in the analysis as structure and land values for commercial uses tend to be much greater than residential properties. By using only single-family residential parcel values, the IDW surface interpolation was smoother and minimized a large range of values and also made our results consistent with those of the earlier study. This decreased the sample size to 90 and 420 parcels for Capitol Heights and South Allison Hill, respectively. Two outliers were also removed from the South Allison Hill structure value data set. Those values were considerably higher than other values within the data set and represented multi-family residential structures.

Because of our reliance on the tax assessment data, we spoke with Steve Howe, Director of the Dauphin County Office of Tax Assessment and Tax Claim regarding tax assessment methods. We found that data gathered for both the 2006 study and this study were assessed using 2002 dollars which meant that the 2006 and 2011 data could be directly compared. Furthermore, we learned that properties only get reassessed if they have undergone a major change, such as a significant building renovation. This limitation to the data is important to note in that aspects of redevelopment, such as minor repairs to properties, would go unassessed. As a result, property values may not accurately reflect the current values of certain properties. Finally, we conducted informal visual surveys of the

neighborhoods themselves. During the survey we looked for demolished buildings, new structures, and any other indicators of revitalization as well as the scale of change occurring in each neighborhood.

### RESULTS

Results for the parcels with no corresponding tax information for the two neighborhoods are shown in Table1. The frequency of missing parcel data for Capitol Heights and South Allison Hill are 15.91% and .87%, respectively. The frequency of vacant properties as determined based on information from the tax assessment database are shown in Table 1. The frequency of vacant parcels in Capitol Heights is 27% while South Allison Hill has a vacancy rate of 16.7%.

Table 1. Frequency of Vacant Pa	arcels					
Total Number of						
Neighborhood	Sample Parcels		Percent of Vacant Parcels			
	2006	2011	2006	2011		
South Allison Hill	344	455	6.1	16.7		
Capitol Heights	69	74	11.59	27		

Structure values for the two neighborhoods are shown in Figures 2 and 3. The highest building values in South Allison Hill are along Berryhill Street and 17<sup>th</sup> Street. Portions of Derry Street and 13<sup>th</sup> Street also have higher structure values compared to other areas of the neighborhood. Many of the lowest structure values are located in central and southwest South Allison Hill. The highest structure values in Capitol Heights are found north of Hamilton Street. The lowest building values in the neighborhood are found between Clinton Street and Hamilton Street and along Fulton Street. Figure 4 and Figure 5 display the structure value frequency for each neighborhood. South Allison Hill exhibits a normal, bell-shaped histogram, peaking between \$39 and \$57 per square foot, indicating a stable dynamic within the neighborhood. The Capitol Heights histogram is bimodal, exhibiting two peaks, one on the low end at \$73 per square foot and the other on the high end at \$153 per square foot.

### South Allison Hill 2006

South Allison Hill 2011



Figure 2. Structure Value per Square Foot in South Allison Hill 2006-2011.

### Capitol Heights 2006

Capitol Heights 2011



Figure 3. Structure Value per Square Foot in Capitol Heights 2006-2011.



Figure 4. Frequency of Structure Value per Square Foot in Capitol Heights. X-axis number represents the largest value for each bin (i.e. 19 represents \$0-\$19, 38 represents \$19.01-\$38, etc...).



Figure 5. Frequency of Structure Value per Square Foot in South Allison Hill. X-axis number represents the largest value for each bin (i.e. 19 represents \$0-\$19, 37

The IDW interpolated surfaces for land value in Capitol Heights and South Allison Hill are shown in Figure 6 and Figure 7. The highest land values in South Allison Hill are located along 17<sup>th</sup> Street and north of Derry Street. The lowest values are clustered throughout the central area of the neighborhood. A majority of high land values in Capitol Heights are found south of Granite Street while low land values are clustered to the north. Figures 8 and 9 display the histograms of land values in South Allison Hill and Capitol Heights. South Allison Hill displays a normal distribution of land values with a few samples being greater than \$13 per square foot. Capitol Heights again shows a more dynamic distribution with two peaks at \$7 and \$11 per square foot. Capitol Heights exhibited slightly higher land and structure values compared to South Allison Hill.



Figure 6. Land Value per Square Foot in South Allison Hill 2006-2011.

#### Capitol Heights 2006

Capitol Heights 2011



Figure 7. Land Value per Square Foot in Capitol Heights 2006-2011.



Figure 8. Frequency of Land Value per Square Foot in South Allison Hill 2011. Xaxis number represents the largest value for each bin (i.e. 3 represents \$0-\$3, 5 represents \$3.01-\$5, etc...).



Figure 9. Frequency of Land Value per Square Foot in Capitol Heights 2011. X-axis number represents the largest value for each bin (i.e. 3 represents \$0-\$3, 5 represents \$3.01-\$5, etc...).

### DISCUSSION

Compared to the results of the 2006 study, the parcels with no corresponding tax information have not changed dramatically over the past five years. Capitol Heights has the highest rate at 15.91% compared to 13.75% in 2006 (Table 2). The rate remains high because of the many public-private partnerships focusing on the neighborhood. The City of Harrisburg had identified Capitol Heights as a target area for revitalization and is working in cooperation with Struever Rouse Homes, a private redevelopment company, to demolish condemned structures and construct new houses. As redevelopment projects remain in Capitol Heights, high rates of parcel change can be expected. South Allison Hill, on the other hand, has seen very little parcel change, 0.87% down from 2.22% five years ago (Table 2). The decrease in missing parcel data hints that little redevelopment has been seen in South Allison Hill.

Table 2. Frequency of Parcels with No Tax Assessment Records							
	Total Number of		Percent of Parcels with No				
Neighborhood	Sample	Sample Parcels		Tax Record			
	2006	2011	2006	2011			
South Allison Hill	406	459	2.22	0.87			
Capitol Heights	80	88	13.75	15.91			

Table 2. Frequency of Parcels with No Tax Assessment Records

Vacancy rates also support the amount of change occurring in Capitol Heights, although we note that the numbers gathered in this study cannot be directly compared to the 2006 study. Vacancy rates in the previous study were based on structure occupancy. Those data were not available for this analysis so vacancy is instead based on parcels vacant of any structure. These results can still be used to compare neighborhoods and serve as a baseline for future studies. As seen in Table 2, both Capitol Heights and South Allison Hill have high vacancy rates, 27% and 16.7%, respectively. The high vacancy rates in Capitol Heights can be attributed to the development projects still in progress. South Allison Hill's vacancy rate is much higher than its frequency with no corresponding tax information. Since much of South Allison Hill has not been targeted for broad-scale city-led revitalization projects, many of these parcels may have once included structures which have since been condemned and razed. With few incentives or opportunities to redevelop the parcels, they have remained vacant.

Structure values in South Allison Hill have changed dramatically over the past five years (Figure 2). In 2006, the highest structure values in South Allison Hill were seen east of 17<sup>th</sup> Street and south of Berryhill Street. There was also a small area of high structure prices in the northwest corner along 13<sup>th</sup> Street. The lowest values were concentrated in central and western areas of South Allison Hill. The cluster of high structure values in northeastern South Allison Hill has expanded since then. Many of the buildings between Derry Street and 15<sup>th</sup> Street are among

the highest value per square foot in the neighborhood. Another cluster of high structure values has grown along Berryhill Street and 17<sup>th</sup> Street in central South Allison Hill. Figure 4 suggests that the distribution of building values in the neighborhood is relatively stable with a normal distribution of parcel values per square foot.

An explanation for this level of change is that Harrisburg has introduced a number of programs to help residents acquire or maintain properties. The Homeownership Opportunities Program (HOP) allowed the city to "acquire blighted, single-family structures to rehabilitate and sell to low- and moderate-income owner occupants" (Possinger and Leppo 2009). Homebuyer assistance programs provided money to individuals interested in purchasing property but the initiatives that most likely spurred the most change in structure values for South Allison Hill were homeowner rehabilitation programs. The Home Improvement Program (HIP) provided loans and grants to owners of structures in major need of repair or updates in order to comply with regulations. Harrisburg allocated \$307,063 for HIP in 2009 which led to the rehabilitation of sixteen homes (Possinger and Leppo 2009). The Homeowners Emergency Loan Program (HELP) provided funds to homeowners in need of emergency repairs due to substandard housing conditions. HELP allowed twenty homes to be rehabilitated in 2009 (Possinger and Leppo 2009). While not all the structures rehabilitated from these programs were located in South Allison Hill, the neighborhood has become a major target area for the City of Harrisburg.

In 2006, Capitol Heights was split in half with high structure values to the north of Hamilton Street and low values to the south (Figure 3). The 2011 results show that the highest structure values are still located mostly to the north of Hamilton Street, but this cluster has also spread to the southern portion of the neighborhood since 2006. The area south of Clinton Street and west of 4<sup>th</sup> Street contains some of the highest structure values in Capitol Heights. The neighborhood, like South Allison Hill, has seen low value structures increase in value since 2006. Figure 5 displays an irregular distribution of structures in each value range. This distribution indicates the bimodal nature of structure values in Capitol Heights (Figure 5), indicating properties that have been refurbished compared to those that have not.

The change occurring in Capitol Heights is attributed to a major redevelopment project. Beginning in 2000, Struever Brothers, Eccles, and Rouse, a Baltimore-based real estate development company specializing in neighborhood revitalization projects, have redeveloped entire city blocks within Capitol Heights, razing condemned structures and constructing new homes as well as other neighborhood improvements. The project consists of four stages, the first three being completed in 2007. As of 2009, 74% of the planned units had been constructed at a cost of \$38.96 million for the private investors (Possinger and Leppo 2009). More than 25% of the planned units are yet to be completed or even begun due to Struever Brothers, Eccles, and Rouse going out of business during the recent real estate market collapse, resulting in the wide range of structure values in Capitol Heights as seen in Figure 5. Based on value patterns throughout the neighborhood, we are able to determine that structure values in Capitol Heights have remained relatively stable due the slow progress of redevelopment projects in the neighborhood.

Unlike structure values, land values have remained relatively stable over the past five years. South Allison Hill's land value range (Figure 6) was \$1.91 to \$20.29 in 2006 and decreased slightly to \$1.01 to \$17.46 in 2011. In 2006, many of the highest land values were seen north of Derry Street and west of 17<sup>th</sup> Street. Much of the neighborhood south of Swatara Street also contained high land values. The lowest values were mostly concentrated east of 17<sup>th</sup> Street and in patches scattered throughout central South Allison Hill. The neighborhood has since taken on a patchier pattern. In 2011, the lowest values were scattered throughout the neighborhood, mostly throughout central and eastern South Allison Hill. The highest values are still seen north of Derry Street and west of 17<sup>th</sup> Street and patches scattered throughout central South Allison Hill. The neighborhood has since taken on a patchier pattern. In 2011, the lowest values are still seen north of Derry Street and west of 17<sup>th</sup> Street has they were in 2006.

The patchiness of land values may be partially due to the number of parcel-scale revitalization programs the City of Harrisburg is instituting. Programs such as the Home Improvement Program and Homeowners Emergency Loan Program allow homeowners to revitalize their homes which would increase the land value as well. Harrisburg has also adopted a number of neighborhood improvement initiatives. The Weed and Seed program, an initiative that allows residents, businesses, and agencies to work together to rid their community of crime and social deterioration, has focused on South Allison Hill. Since 2002, more than \$2.25 million has been invested in South Allison Hill through this program (Possinger and Leppo 2009) and has helped create a safer and cleaner neighborhood. Other programs initiated in South Allison Hill include the Adopt-a-Block program which provides for neighborhood cleanup days and beautification projects, the Adopt-a-Lot program which allows groups or individuals to lease a publicly owned lot for \$1 per year for urban gardening, and Keep Harrisburg Beautiful that focuses on litter prevention, beautification, and community improvement (Possinger and Leppo 2009). Given the size of South Allison Hill, these programs are not able to be implemented in all areas. Since they are focused on certain areas throughout the neighborhood such as the intersection of 13<sup>th</sup> and Derry Streets and along 17<sup>th</sup> Street, land values would tend to be higher in those locales. This would explain, in part, the patchiness of high and low land values in South Allison Hill.

#### Revitalization and Neighborhood Dynamics in Harrisburg

The frequency distribution of land values in South Allison Hill (Figure 8) confirm the type of change occurring in the neighborhood. The highest frequency values are between \$5.00 and \$7.00 and taper out evenly to lower and higher values. Only 19 of 501 parcels had a land value of more than \$11.00 per square foot. Those parcels may have been included in many of the city's revitalization projects discussed earlier and have most likely been modified by the property owners to increase the land value. Based on the results in Figure 8, we can determine that many of the land values in South Allison Hill have remained stable, with revitalization occurring in isolated areas throughout the neighborhood.

Capitol Heights, like South Allison Hill, had a much more stable land value range compared to building values. The amount of change in Capitol Heights was expected as well. In 2006, a majority of the parcels with the lowest land values could be found north of Hamilton Street while the higher values were seen to the south (Figure 7). In 2011, the lowest values were even more concentrated north of Granite Street, one block north of Hamilton. A pattern worth noting is the relationship between land and structure values. The high structure values are located north of Hamilton Street while the high land values are located to the south. This can be accredited to the redevelopment taking place in Capitol Heights. Because redevelopment is now concentrated in central Capitol Heights, land prices have increased. In areas where redevelopment has been completed, the land values have decreased and leveled out. The difference in value between vacant parcels and parcels with a structure may be due to Harrisburg's two-tier tax rate, where land is taxed at a higher rate than buildings and improvements (Center for the Study of Economics, 2005).

Another indication of the amount of change occurring in Capitol Heights is the frequency of land value per square foot. Figure 9 shows an irregular pattern of land values. A majority of the sampled parcels fall into the \$5.00 to \$7.00 range or the \$9.00 to \$11.00 range. Both the average land value of \$7.24 and median value of \$7.20 fall into the \$7.00 to \$9.00 range. These results show that the parcels in Capitol Heights are, for the most part, evenly distributed throughout the mid-value ranges that indicate the degree of change occurring in the neighborhood.

### CONCLUSION

The scale of revitalization efforts influence the level of change that occurs within neighborhoods. Harrisburg has adopted two different strategies of city-led revitalization. In Capitol Heights, entire city blocks have been razed to make way for private developers to construct new middle-class dwellings. This process creates a very dynamic neighborhood with change occurring on a larger scale. A smaller scale approach has been implemented in South Allison Hill. Many programs have been created to work with individual land owners. While funds are available for revitalization projects from the city, money is limited. As a result, revitalization occurs on a much smaller scale in South Allison Hill and is patchier.

While this study shows revitalization trends in Capitol Heights and South Allison Hill, the results should be carefully interpreted. Edge effect was accounted for by narrowing the focus from the entirety of South Allison Hill to the central, most populated area. While the comparison of central South Allison Hill is more reliable, additional data points are needed to more accurately determine trends occurring toward the edges of the neighborhood. While edge effect limits the ability to understand the dynamics of the entire neighborhood, we are still able to analyze patterns occurring within it.

These case studies can assist in understanding the larger context of urban revitalization in deindustrialized cities. With high vacancy and unemployment rates, Capitol Heights and South Allison Hill reflect similar characteristics found in many post-World War II neighborhoods of major industrial cities. Governments recognize that the aging housing stock is an issue that needs addressed in order to create safe living conditions for residents. Two different revitalization strategies were discussed in these case studies: the large-scale redevelopment of Capitol Heights which involved a public-private relationship and a small-scale, parcel-level approach in South Allison Hill. On the face of it, the efforts in Capitol Heights may be viewed as more successful; they are certainly more dramatic. However, we note that the Capitol Heights efforts have been capital intensive and thus have been implemented over a relatively small area. The risk of relying heavily on private funds is also apparent here, since the redevelopment progress was delayed when Streuver Brothers, Eccles, and Rouse went out of business. The Harrisburg Redevelopment Authority recently re-assigned the undeveloped portion of Captitol Heights to a new company, GreenWorks (Miller, 2010). In South Allison Hill, on the other hand, scarce public funds are having a minimal impact in stabilizing the neighborhood. We note, however, that targeted anchor locations for investing public funds may be paying off in South Allison Hill. Based on the comparison of these two neighborhoods, a well-planned strategy that balances both public and private funding sources would minimize the risks. A city-wide study using the same methods would indicate structure and land value trends in all Harrisburg neighborhoods, providing increased validity to the results. The methodology applied to these case studies can also be applied to other neighborhoods in

the United States to better understand the approaches to urban revitalization and how they may differ among national regions.

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# REFERENCES

Center for the Study of Economics. 2005. City of Harrisburg Two-Tier Tax Rate. Harrisburg, PA. <a href="http://www.urbantoolsconsult.org/upload/City%20of%20Harrisburg%202%20tier%20tax%20rate.pdf">http://www.urbantoolsconsult.org/upload/City%20of%20Harrisburg%202%20tier%20tax%20rate.pdf</a>. (last accessed April 2012).

City of Harrisburg Bureau of Housing. 2010. FY 2010-2014 Consolidated Plan. Harrisburg, PA. <a href="http://www.harrisburgpa.gov/Downloads/DBHD/Con\_Plan\_2010-2014.pdf">http://www.harrisburgpa.gov/Downloads/DBHD/Con\_Plan\_2010-2014.pdf</a>> (last accessed February 2011).

Dauphin County Office of Tax Assessment. 2011. Property & Taxes. Harrisburg, PA. <a href="http://www.dauphincounty.org/property-taxes/">http://www.dauphincounty.org/property-taxes/</a> (last accessed February 2011).

Howe, S. 2011. Telephone interview.

ESRI. 2007. Implementing Inverse Distance Weighted (IDW). <http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=Implementing\_Inverse\_Distance\_Weighted\_(IDW).> (last accessed September 2011).

Jantz, C. and Marr, P. 2007. Planned Gentrification and Neighborhood Dynamics in Harrisburg, Pennsylvania. *Middle States Geographer* 40: 68-77.

Lees, L. 2000. A Reappraisal of Gentrification: Towards a 'Geography of Gentrification. *Progress in Human Geography* 24(3):389-408.

Miller, D. 2010. GreenWorks to acquire part of Capitol Heights townhouse development in midtown Harrisburg. *The Patriot News* February 16, 2010. http://www.pennlive.com/midstate/index.ssf/2010/02/post\_62.html.

Possinger, K.A., and Leppo, D.C. 2009. 2009 Annual Report. Department of Building and Housing Development, Harrisburg, PA. http://www.harrisburgpa.gov/Downloads/Annual\_Reports/10/2009\_DBHD\_Annual\_Report.pdf

United States Census Bureau. 1950. American Fact Finder. http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

United States Census Bureau. 1960. American Fact Finder. http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

United States Census Bureau. 2010. American Fact Finder. http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.