An Analysis of Home Price Trends Near the Atlanta Beltline, 2011 to 2015

Dan Immergluck, PhD[1]
and
Tharunya Balan[2]

School of City and Regional Planning
Georgia Institute of Technology

February 9, 2017

Housing affordability in the City of Atlanta has become a growing concern in recent years. Various policy proposals, including inclusionary zoning and a housing trust fund capitalized with proceeds from a general obligation bond, have been put forward to address this concern. Some attention has been directed at the affordable housing activities of the Atlanta Beltline, the 22-mile ring of parks, trails, and development that continues to be built out. When the Beltline began, a goal of creating 5,600 units of affordable housing over the life of the tax allocation district (TAD) was established. Unfortunately, up until this point, less than 1,000 affordable units have been created, despite being close to one-half into the life of the Beltline.

The purpose of this study is to identify what has happened to housing prices during a period of broader housing market recovery across the country and the metropolitan area.[3] To do

[1] Corresponding author. Professor, School of City and Regional Planning, Georgia Institute of Technology. Contact at dan.immergluck@gatech.edu.

[2] Graduate student. School of City and Regional Planning, Georgia Institute of Technology.

[3] This study is similar to one conducted in 2007 by Immergluck, which was on home value trends around the Beltline before the housing crisis of 2007-2010. See Immergluck, D. 2007. *The Beltline and Rising Home Prices: Residential Appreciation Near the Beltline Tax Allocation District and Policy Recommendations to Minimize Displacement.* Georgia Stand-Up. September. At http://www.forworkingfamilies.org/sites/pwf/files/publications/archive/ga/TheBeltlineAndRisingHomePrices.pdf. Also see Immergluck, D. 2009.Large Redevelopment Initiatives, Housing Values and Gentrification: The Case of the Atlanta Beltline. *Urban Studies* 46: 1723–1745.At http://journals.sagepub.com/doi/pdf/10.1177/0042098009105500.

this, data on home sales from 2011 through 2015 were obtained from the Fulton County Tax Assessor, which uses such data to establish assessed valuations for generating tax bills for homeowners and other property owners. This study goes beyond measuring changes in average or median prices, however. It analyzes changes in home values due to being within one-half mile of the Beltline TAD, *controlling for* other housing characteristics (type and size of home, number of bathrooms, age of house, etc.) and other locational factors (school attendance area, distance to MARTA station, neighborhood demographics, etc.). In this way, the analysis controls for changes in the mix of characteristics of units sold over time, thereby isolating the effects of being located near different segments of the Beltline TAD on the trajectory of home values from 2011 through 2015.

The results of this analysis show that being located within one-half mile of the Beltline TAD is expected to have had a substantial and statistically significant effect on home values over the 2011 to 2015 period. Moreover, being near some segments of the Beltline (e.g., the southwest segment) appears to have had a larger effect on values than being near other segments.

These findings have implications for policymakers and planners concerned with housing affordability in the City of Atlanta and, particularly, for efforts aimed at preserving some level of affordability in communities around the Beltline, as the project continues to be built out.

Data

Data on sales that occurred in the City of Atlanta (excluding the small portion of the City located in DeKalb County) were obtained from the Fulton County Tax Assessor's office. Data on building attributes (age, number of bathrooms, exterior construction type, etc.) were also obtained from the County. The data was cleaned to address minor issues of duplicate records.

Data on neighborhood conditions were obtained from the American Community Survey and Neighborhood Nexus. Variables include poverty rate, race and ethnicity, median family income, owner-occupancy rate, violent and nonviolent crime rates, and the percent of properties in poor or worse condition. The high school attendance area for each sale was also incorporated into the analysis. Finally, various proximity variables were created, including distance from the property to downtown Atlanta, distance to the airport, and distance to Perimeter Mall. These are three well-known job centers in or near the City. Finally, time variables to indicate the quarter and the year of the sale were created.

Change in Median Sale Prices by NPU, 2011 to 2015

Before examining the effects of being close to the Beltline on single-family home values, it is useful to simply identify the changes, from 2011 to 2015, in median sale price of such housing units in each of the City's neighborhood planning units (NPUs) in Fulton County. Figure 1 does this. It also shows the location of the Beltline TAD. The figure shows that median home prices rose by more than 5 percent in most NPUs. Moreover, the NPUs with the greatest percent increases in median prices (over 50 percent over the four-year period) were each touched by the Beltline, including NPUs on the southeast, southwest, and west sides of the City.

Change in Median Sale Prices by Proximity to Different Segments of the Beltline

Because different portions of the Beltline are being built out at different times, and for other reasons, it is helpful not to treat the Beltline as a monolithic geographic entity, but to partition it into sections. For computational reasons, we limit the sections to four segments, each divided by major expressways, as shown in Figure 2. The Northeast Segment runs north-northeast of I-75 and east of the connector down to I-20. The Southeast Segment is south of I-20 and east of I-75/I-85. The Southwest Segment is west of I-75/I-85 and south of I-20. The Northwest Segment is north of I-20 and west if I-75.

Figure 3 shows the cumulative changes in median sale price from 2011 to 2015 for sales within one-half mile of each of the four Beltline segments. Also shown (gray dashed line) is the cumulative change in median sale price for all homes in the City farther than a half mile from the Beltline. The figure shows that over the 2011 to 2015 period, the median sale price increased near each of the four segments of the Beltline at a substantially faster pace than did those of properties not near the Beltline. The increase in median sale price was the highest near the Southwest Segment, with a cumulative increase over the four years of 68 percent. The other three segments saw median prices rise by 40 to 51 percent. Meanwhile, the median sales price of homes more than a half-mile from the Beltline increased at a substantially smaller rate, just 17.7 percent over the four-year period. Again, these are simple changes in median sales prices, and do not control for differences in the types, ages, or other locational differences of the homes sold in 2015 versus those sold in 2011.

Figure 1. Change in Median Home Sale Price by Neighborhood Planning Unit, 2011 to 2015

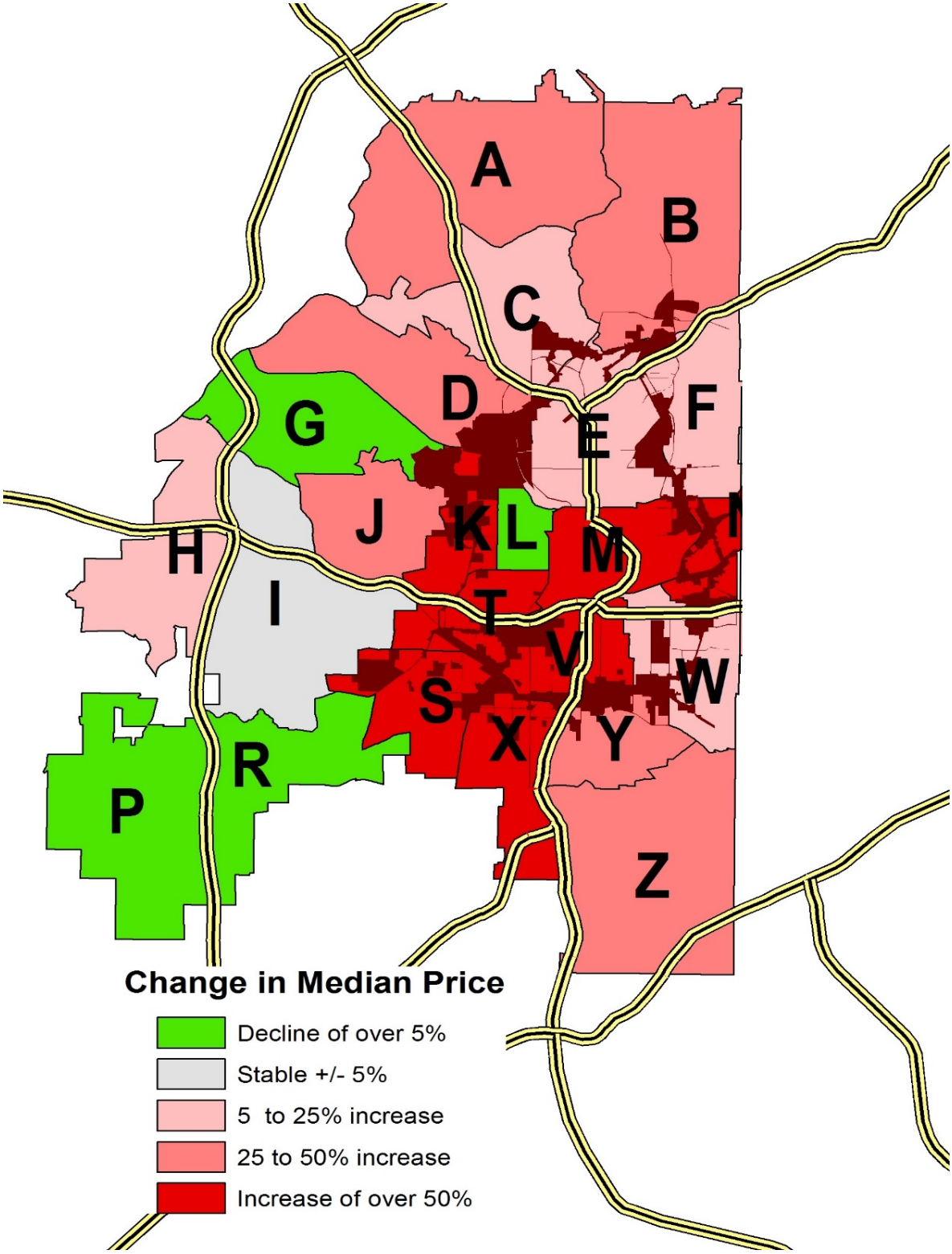


Figure 2. Beltline TAD Segments

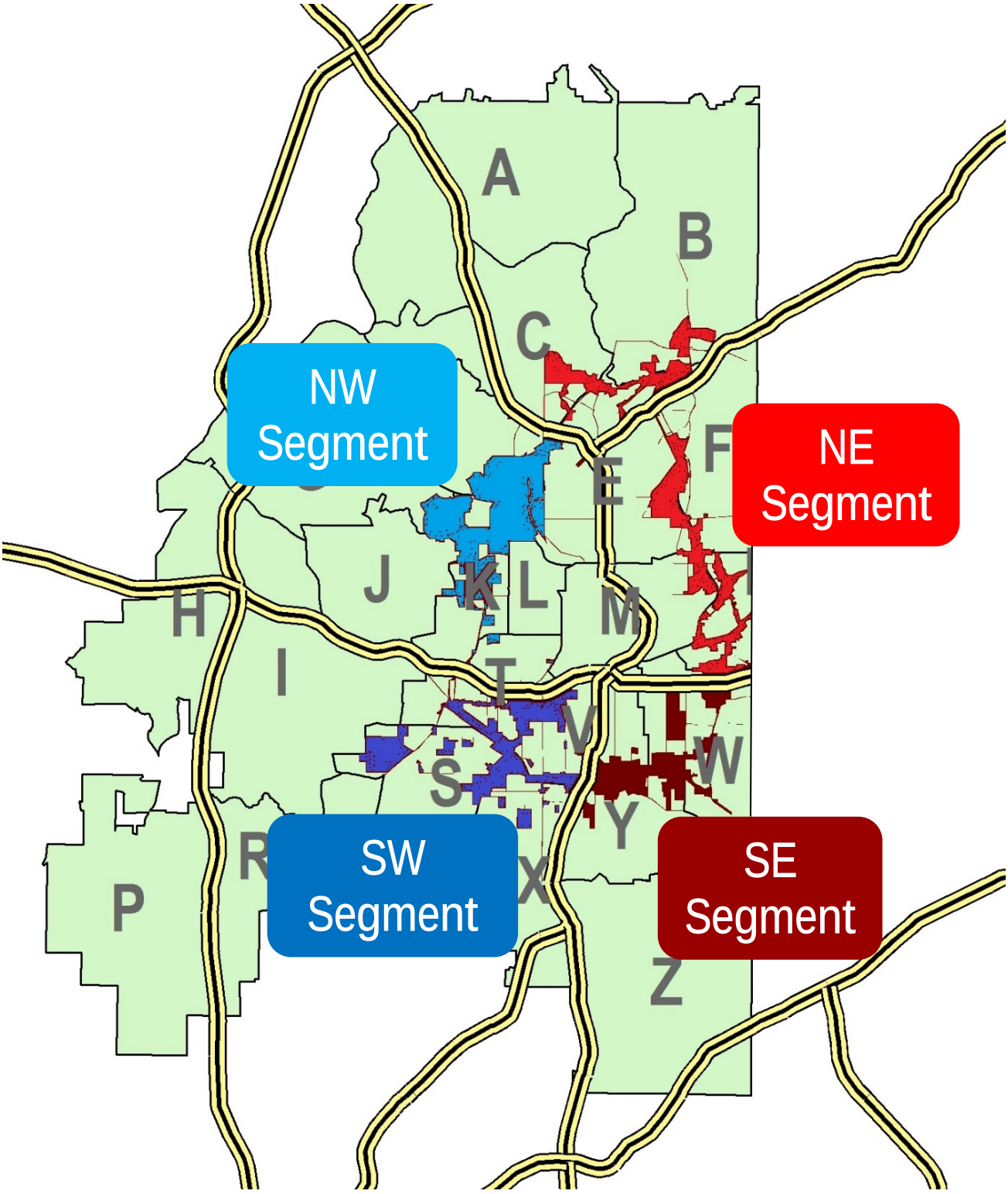
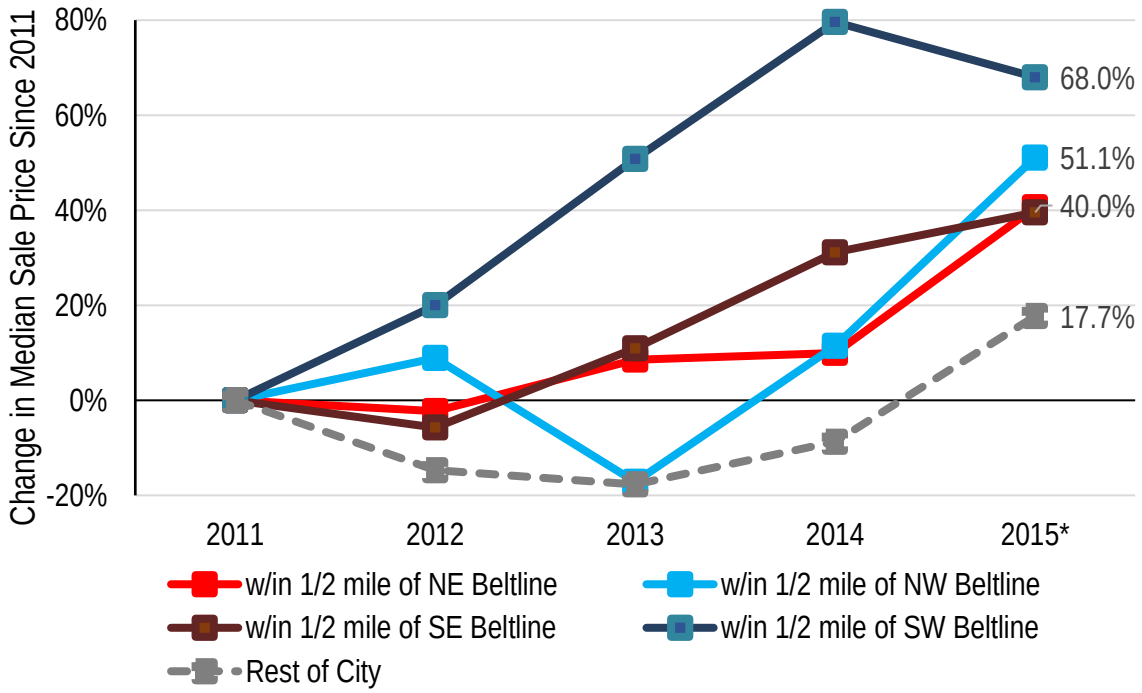


Figure 3. Cumulative Change in Median Sale Price Since 2011; 2012 to 2015



The Effects of Proximity to Beltline Segments on Home Values; Hedonic Analysis

Because the properties sold in 2011 and those sold in later years are not the same properties and may have significantly different structural and locational characteristics, it is important to use a multivariate approach to control for the physical, temporal, and locational attributes of the property being sold to identify any effects of proximity to a Beltline segment on housing values. The extensive data set that we assembled allows us to do this. This hedonic analysis allows us to control for a wide variety of characteristics of a home being sold, including structural characteristics (size, age, bathrooms, exterior construction, e.g.), timing (year and quarter of sale), neighborhood characteristics (race, ethnicity, poverty rate, median income, crime rate, local school), and location (distance to downtown, airport, perimeter, and whether it is within one quarter of a mile to a MARTA station).

The full regression results for the hedonic analysis are presented in the Appendix. The focus here is on the results of interacting the year variables with the variables indicating that the home is within one-half mile of a Beltline segment. These results indicate how much cumulative

appreciation over time is due to a home being within a half of a mile of a particular Beltline segment compared to being more than a half-mile from any of the four segments.

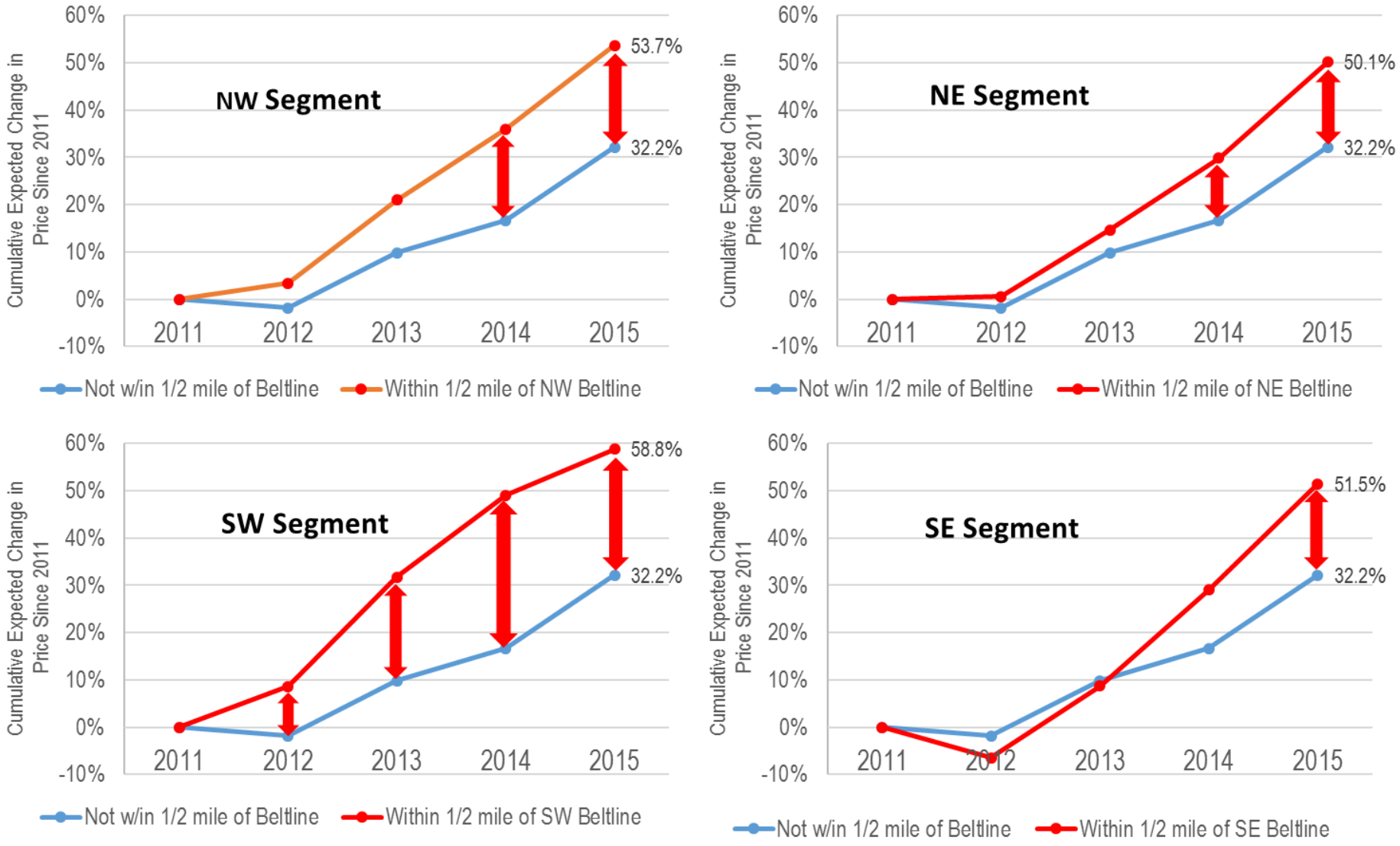
Figure 4 provides these results. It illustrates the higher cumulative appreciation rates for properties within one-half mile of the four Beltline segments, compared to being more than one-half-mile from any of the segments, controlling for a wide variety of structural and locational characteristics of the homes. By 2015, a home within a half-mile of the Northwest Segment are expected to have appreciated 21.5 (53.7% – 32.2%) percentage points more than an otherwise similar home not near the Beltline. The corresponding premium in appreciation for homes near the Northeast Segment is 17.9 percent, 19.2 percent near the Southeast Segment, and 26.6 percent near the Southwest Segment. These are substantial differentials in cumulative appreciation rates due solely to the homes' locations near the different Beltline segments.

Impacts of Rising Home Values on Property Tax Burdens

Rising home values can bring many benefits to homeowners near the Beltline. If they are interested in moving, they can sell their homes and realize sizeable capital gains. Rising home values can also increase the overall tax base of the City. At the same time, many affected homeowners, including those with limited incomes, may prefer to remain in their homes and in their neighborhoods. Likewise, many renters may prefer to stay in their homes, but will likely see rents increase as gentrification pressures rise and as building owners are forced to pass on their rising tax bills to their tenants.

Low-income homeowners may see the greatest shock in their housing costs, due to the structure of property taxes for owner-occupied homes, which are eligible for homestead exemptions. The typical homeowner receives a $30,000 homestead exemption. This means that the millage rate is not applied to the first $30,000 of assessed valuation. If a homeowner owns a home worth $100,000, for example, the assessed valuation is 40 percent of the value, or $40,000. However, the taxable value is then further reduced by the $30,000 exemption, resulting in only $10,000 of taxable value. Table 1 shows what is likely to happen to a homeowners' tax bill when the value of her home increases from $100,000 to $150,000, or 50 percent. In this example, while the home has appreciated only 50 percent over the four-year period, property taxes would have tripled. The percent increase for properties that begin the period at higher prices will be

Figure 4. The Effect of Being Within a Half-Mile of a Beltline Segment on Cumulative Home Value Appreciation, 2011 to 2015*



*Note: Red arrows indicate statistically significant differences in cumulative appreciation

Table 1. Expected Impact of $100,000 Home Appreciating by 50 Percent on Property Tax

	2011	2015
Fair Market Value of Home	$100,000	$150,000
Assessment ratio	40%	40%
	$40,000	$60,000
less homestead exemption ($30,000)	($30,000)	($30,000)
Taxed Amount	$10,000	$30,000
Tax (millage) rate, all units of government	0.0430	0.0430
Estimated Annual Tax bill	**$430**	**$1,290**

somewhat lower. The shock of the property tax increase will fall heaviest on those with lower-valued homes.

Renters Affected

While the magnifying effect of homestead exemptions affect owner-occupied properties, large increases in property values will be passed onto to renters, making housing costs rise for many lower-income renters. Most lower-income residents near the Beltline are likely to be renters, and rising housing costs will have a large impact on their housing cost-burden (the percentage of income that goes toward housing costs) on lower-income renters. Moreover, renters are less likely to have access to savings or credit that can help them absorb a sudden increase in rent, so are more likely to be displaced by rising housing costs.

.

Conclusion

Besides the effects on the property taxes paid by existing residents, rapidly rising housing costs may make it harder for a diverse mix of renters or homeowners to move into communities near the Beltline, so that the driver of neighborhood change – in-movers – become increasingly affluent and less diverse. This will increase the overall economic segregation of the city and the metropolitan area.

The Beltline is likely to be judged successful as a tool to build the City's overall property tax base and to help bring more people into the City to recreate. At the same time, its net consequences for housing and economic opportunity among lower-income Atlantans are far from clear. Just as concentrated affluence in exclusionary suburbs and economic segregation have been detrimental to the economic prospects of lower-income families, a scenario in which exclusionary areas are simply shifted from one part of the metropolitan area to another is unlikely to improve these prospects. Moreover, the Beltline represents a massive investment by the City of Atlanta and, arguably, should be beneficial and available to all sorts of Atlantans. As the remainder of the Beltline is built out, stronger efforts are needed to provide for housing options that are accessible to lower-income households and to help existing residents remain in these neighborhoods if they want to.

APPENDIX

Regression Results

Dependent variable = Ln (Sale Price of Home)

	coefficient	S.E. clustered*	t	Sig.
Constant	**6.3294**	**0.7096**	**8.92**	**0.000**
Ln_Land-Acres	**0.1653**	**0.0203**	**8.16**	**0.000**
Ln_Living Space-Sq. Feet	**0.8464**	**0.0417**	**20.3**	**0.000**
Age of House	**-0.0180**	**0.0024**	**-7.49**	**0.000**
Age of House, Squared	**1.46E-04**	**2.04E-05**	**7.13**	**0.000**
Number of Stories	-0.0593	0.0311	-1.91	0.059
Number of Bedrooms	**-0.0525**	**0.0145**	**-3.63**	**0.000**
Number of Baths	**0.0903**	**0.0137**	**6.59**	**0.000**
Full Basement	0.0134	0.0211	0.64	0.525
Exterior Brick	**0.1274**	**0.0214**	**5.96**	**0.000**
Validated by Assessor	**0.1571**	**0.0252**	**6.23**	**0.000**
Poverty Rate	0.0022	0.0026	0.83	0.407
Percent Black	**-0.0069**	**0.0016**	**-4.42**	**0.000**
Percent_Hispanic	-0.0035	0.0030	-1.16	0.249
Median Family Income	**1.15E-06**	**4.94E-07**	**2.33**	**0.021**
Percent Owner-Occupied	-3.66E-04	1.48E-03	-0.25	0.805
Percent in Poor Condition	**-0.0179**	**0.0062**	**-2.88**	**0.005**
Violent Crime Rate	**-17.6205**	**4.9846**	**-3.53**	**0.001**
Nonviolent Crime Rate	**1.7602**	**0.6909**	**2.55**	**0.012**
MARTA within Quarter Mile	0.0883	0.0741	1.19	0.236
Distance to CBD	**-0.0708**	**0.0269**	**-2.63**	**0.010**
Distance to Perimeter	-0.0107	0.0308	-0.35	0.728
Distance to Airport	0.0643	0.0383	1.68	0.096
HS-Carver	**-0.6751**	**0.1696**	**-3.98**	**0.000**
HS-Douglass	**-0.8461**	**0.2083**	**-4.06**	**0.000**
HS-Maynard Jackson	-0.1137	0.0657	-1.73	0.086
HS-Mays	**-0.5740**	**0.2206**	**-2.60**	**0.010**
HS-North Atlanta	**-0.1351**	**0.0599**	**-2.26**	**0.026**
HS-South Atlanta	**-0.5579**	**0.2128**	**-2.62**	**0.010**
HS-Therrel	-0.0714	0.2633	-0.27	0.787
HS-Washington	**-0.5802**	**0.2081**	**-2.79**	**0.006**
Sale in Quarter 2	**0.0467**	**0.0105**	**4.46**	**0.000**
Sale in Quarter 3	**0.0609**	**0.0104**	**5.85**	**0.000**
Sale in Quarter 4	**0.0568**	**0.0101**	**5.62**	**0.000**

Regression Results, continued

	coefficient	S.E. clustered*	t	Sig.
Sale in 2012	-0.0185	0.0253	-0.73	0.466
Sale in 2013	**0.0979**	**0.0242**	**4.04**	**0.000**
Sale in 2014	**0.1664**	**0.0252**	**6.60**	**0.000**
Sale in 2015	**0.3217**	**0.0286**	**11.23**	**0.000**
BELTLINE_TO_HALF_NE	0.0776	0.0558	1.39	0.167
BELTLINE_TO_HALF_NW	-0.1484	0.1038	-1.43	0.155
BELTLINE_TO_HALF_SW	-0.1837	0.1363	-1.35	0.180
BELTLINE_TO_HALF_SE	0.0666	0.1014	0.66	0.513
BELTLINE_TO_HALF_NE_2012	0.0246	0.0322	0.76	0.447
BELTLINE_TO_HALF_NE_2013	0.0445	0.0321	1.39	0.169
BELTLINE_TO_HALF_NE_2014	**0.1129**	**0.0347**	**3.25**	**0.002**
BELTLINE_TO_HALF_NE_2015	**0.1359**	**0.0423**	**3.21**	**0.002**
BELTLINE_TO_HALF_SE_2012	-0.0473	0.0494	-0.96	0.340
BELTLINE_TO_HALF_SE_2013	-0.0097	0.0777	-0.13	0.900
BELTLINE_TO_HALF_SE_2014	0.1061	0.0758	1.40	0.164
BELTLINE_TO_HALF_SE_2015	**0.1462**	**0.0543**	**2.69**	**0.008**
BELTLINE_TO_HALF_NW_2012	0.0539	0.0579	0.93	0.354
BELTLINE_TO_HALF_NW_2013	0.1023	0.0628	1.63	0.106
BELTLINE_TO_HALF_NW_2014	0.1663	0.0920	1.81	0.073
BELTLINE_TO_HALF_NW_2015	**0.1626**	**0.0796**	**2.04**	**0.043**
BELTLINE_TO_HALF_SW_2012	0.1069	0.0548	1.95	0.054
BELTLINE_TO_HALF_SW_2013	**0.2004**	**0.0668**	**3.00**	**0.003**
BELTLINE_TO_HALF_SW_2014	**0.2784**	**0.0863**	**3.23**	**0.002**
BELTLINE_TO_HALF_SW_2015	**0.2015**	**0.0975**	**2.07**	**0.041**

Bold and underline = significant at below p=0.01
Bold = significant at below p=0.05
Underline = significant at below p=0.10

R-square = 0.8344

N = 27,213

*Standard errors are clustered at the census-tract level