

Essential Economy Workers and Housing Affordability in Georgia

A Case Study of Jobs-Housing Mismatch in Sandy Springs

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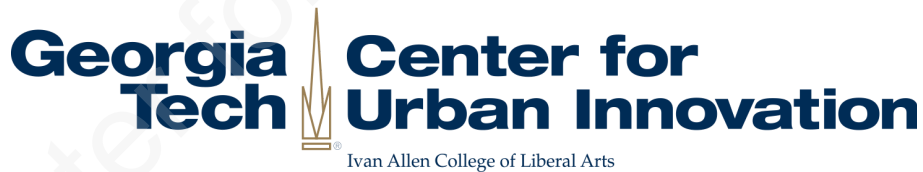


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Introduction

Sandy Springs has received national attention for its role in beginning what is often called the “cityhood” or “incorporation” movement in metro Atlanta (Dewan, 2006; Rosen, 2017), a trend that has resulted in ten new municipalities since 2005, many of which are in first-ring suburbs (Joyner, 2017). The cityhood movement refers to the practice of unincorporated suburban communities establishing themselves as small cities in response to a variety of possible dynamics: in order to avoid annexation by an adjacent larger city, to retain more tax income within the immediate vicinity of incorporating payers, to provide a higher quality of public services than the county currently offers, and more (Rosen, 2017). The push for incorporation presents a number of important questions for regional cooperation, equitable growth, and jobs-housing balance. These issues have historically received little research attention at the sub-metropolitan scale.¹

As the forefront of the cityhood movement, Sandy Springs is a particularly appropriate site to explore the effects of incorporation at a sub-metropolitan scale. The goal of this study is to understand the effects of cityhood on issues of equity, particularly in relation to jobs and housing. As opposite ends of the spectrum, together place of residence (housing) and place of work (jobs) offer a glimpse at how cityhood has ramifications for local economies and populations. Our particular concern are workers at the low-end of the wage spectrum, especially those within the so-called Essential Economy.² As previous research showed (Essential Economy Report 2013), the Essential Economy is vital to the health functioning of a local, regional, and state economy. These workers provide vital services and functions that are hard to export and required to support other economic clusters, such as the knowledge economy. In Georgia, the Essential Economy accounts for approximately 25% of all in-state workers³ (Essential Economy Council 2013, Clark et al. 2018). Areas, such as Sandy Springs, that have disproportionately high home values impact the ability of Essential Economy workers to reside near their place of work, leading to other local and regional complications, such as traffic congestion and labor market deficits (e.g. difficulty filling Essential Economy positions). As such, the jobs-housing mismatch for low-wage workers is a lens for policy recommendations for local, regional, and state officials to bolster economic activity at multiple scales.

¹By “sub-metropolitan” we mean at a unit of measure enclosed within a Metropolitan Statistical Area (MSA). The US Census Bureau’s Office of Management and Budget defines an MSA as: “A Core Based Statistical Area associated with at least one urbanized area that has a population of at least 50,000. The Metropolitan Statistical Area comprises the central county or counties containing the core, plus adjacent outlying counties having a high degree of social and economic integration with the central county or counties as measured through commuting.” (Sustein 2010) As such, sub-metropolitan refers to cities, counties, or other geographies (e.g. census tracts or congressional districts) that are enclosed within an MSA.

²According to a 2013 report (Essential Economy Council 2013), the Essential Economy is defined by 86 Standard Occupational Classification (SOC) codes. These occupations range from cooks, janitors, and landscapers to home healthcare aides and stock clerks, and are found across six industry sectors (Agriculture & Poultry; Hospitality & Restaurants; Light Construction & Landscaping; Personal Care & Assisted Living; Building Maintenance & Facilities Service; Distribution & Logistics). Though varied in many respects, the 2013 report explains that these occupations share four main features. As such, the Essential Economy is comprised of occupations that: 1) do not require specific degree or certification, 2) are primarily manual, 3) have average wages that are “indicative of easily interchangeable workers”, and 4) lack “a rigorous hiring process.” Given this definition, the report found the average yearly wages between 2003 – 2011 for the Essential Economy were \$21,718. According to more recent estimates (Clark et al. 2018), the employer-reported gross annual wages for the Essential Economy in 2016 are \$22,739. On a monthly basis, this annual wage estimate comes to \$1,895/month.

³A 2013 report (Essential Economy Council 2013) reports the the Essential Economy constitutes 25.5% of all workers in Georgia. Recent reporting (Clark et al. 2018) estimates that the Essential Economy constituted 25.1% of all workers in Georgia in 2016.

Definitions

The subsequent analysis relies on several key terms and concepts:

The Essential Economy: The Essential Economy is a labor market segment composed of workers with low or moderate skills performing mostly hands-on labor, in positions with low entry barriers and that are hard to offshore or automate (Essential Economy Council, 2013).⁴

Affordable Housing: Affordable housing is housing that costs no more than 30% of a family's income. Family's paying more than 30% are considered *cost burdened*. Those paying 50% or more are considered *severely cost burdened* (HUD, 2014a).

Jobs-Housing Balance: Jobs-housing balance refers to conditions where people can reside close to their place of work (Cervero 1989). A *jobs-housing mismatch (or imbalance)*, identified as corresponding to the even more established concept of *spatial mismatch* (Kain, 1968), often results in difficulty finding work, traffic snarls, regional congestion, and increased vehicular collision rates among other negative individual and social outcomes (The Economist, 2014; Schleith and Horner, 2014; Xu et al., 2017).

Methodology

Using these definitions, we focus on understanding where low-wage workers in Sandy Springs live. To perform this analysis, we collected publicly available datasets from the American Community Survey, OnTheMap, the Georgia Department of Community Affairs, the Georgia Department of Education, and private sources⁵ to examine demographic and financial traits of Sandy Springs and seven comparison geographies⁶—the United States, the State of Georgia, Atlanta-Sandy Springs-Roswell Metropolitan Statistical Area (or Atlanta MSA), Dunwoody, Roswell, City of Atlanta, and Acworth. These data were analyzed in terms of the demographic dynamics, housing characteristics, and housing affordability⁷ for all eight geographies to understand the job-housing mismatch for Sandy Springs, and its comparison to enclosing, proximal, and peer geographies.

The United States, the State of Georgia, and the Atlanta-Sandy Springs-Roswell Metropolitan Statistical Area (or Atlanta MSA) were selected as enclosing geographies. Insofar as each of these geographies contain Sandy Springs, they influence its jobs and housing characteristics to different degrees. Roswell, Dunwoody, and City of Atlanta were selected as proximal peer cities. Each of these cities are contiguous with Sandy Springs, and so are potential places of workers in Sandy Springs to reside. We used the US Census' OnTheMap⁸ tool to identify where workers in Sandy Spring lived from

⁴To read the original 2013 report, catch its forthcoming update, or learn more, visit <https://urbaninnovation.gatech.edu/projects/valuing-work-immigration-jobs-and-sustainable-cities>.

⁵ These sources include Google Maps for whole data sets, and a variety of data points from sources cited in-text.

⁶All data discussed are from 2015 unless marked otherwise.

⁷ Demographic dynamics include characteristics such as the age balance of the population, household income levels, educational achievement, and so on. Housing characteristics studied include home values, monthly mortgage payments, rents, number of occupants, number of rooms, and more. Housing affordability is defined in the section above.

⁸The OnTheMap tool employs the Census' Longitudinal Employer-Household Dynamics dataset, and has been used by a variety of researchers (see for example Bradley, Holay and Wikle, 2015; Barth, Kerr, and Olivetti, 2017; Goetz, Hyatt, McEntarfer, and Sandusky, 2015; Zimmerman, 2017; Zhao, 2015; Mouw, 2016; Abowd, McKinney, and Schmutte, 2017; etc) to study spatial circumstances and trends related to employment. Origin-destination longitudinal data of this nature has been used in spatial

all income brackets, as well as specifically those within the lowest income bracket⁹ (see Appendix A, Figure 1), to substantiate our choice of these three cities. Finally, Acworth was selected to control for complicating factors. Given the disproportionately high housing values in Sandy Springs, the selection of Acworth controls for a jobs-housing mismatch due to other factors outside of housing cost. As such, Acworth provides an example of a city that is close to the Atlanta MSA's median home value, mortgage payment, and gross rent,¹⁰ but also employs low-wage workers.

Analysis

Demographics

We examined a number of demographic factors to understand the population dynamics in each of the selected geographies. Sandy Springs has slightly fewer children and youths (0-24) than most comparison geographies, and a relatively high share of people between 25 and 34. Its median age is 35.6, substantially younger than the national median of 37.6, despite its few children. Adults under the age of 35 make up 30% of Sandy Springs' population (about the same as references) and 29% of its householders, which is higher than most of its reference geographies (other than the City of Atlanta itself) and may hint at the area's ability to attract young professionals who are more able to establish their own households compared to lower-income workers of the same age.

Sandy Springs is extremely well-educated and wealthy compared to its reference regions, and roughly on par with the other wealthy first-ring suburbs studied. 60% of Sandy Springs residents have at least a Bachelor's degree, while only 30% of the US has that level of educational achievement. It is unsurprising, then, that Sandy Springs' median income is \$63,917, which dwarfs the US (\$53,889), Georgia (\$49,620), and City of Atlanta (\$47,527) medians and still overshadows the Atlanta MSA median (\$57,000). Fifteen percent of Sandy Springs households make over \$200,000 annually, but its median income is still substantially exceeded by Dunwoody (\$79,959) and Roswell (\$82,150). Based on their shares of each income bracket, poorer families are even less likely to live in Dunwoody or Roswell than in Sandy Springs – it is likely Atlanta and more far-flung places are housing Sandy Springs' Essential Economy workers.

In terms of commuting, initial OnTheMap analysis at the Place (city) level shows that only 7.2% of Sandy Springs' lower-income workforce lives within the city. Census Tract-level residence data does much more to show commuting patterns, as shown above. While a few lower-cost tracts in Sandy Springs house about half a percent of Sandy Springs' lower-income workforce each, most workers are forced to

mismatch studies since the first recorded such study was performed in 1964 (Kain, 2004) and continues to be used, including in Census-provided LEHD/LODES data form, in jobs-housing balance research such as Schleith and Horner (2014).

⁹OnTheMap allows users to analyze job-housing flows for workers making less than \$1,250 per month. With the definition and wage estimates of the Essential Economy in mind, this income level captures the lower end of workers within the Essential Economy. This measure provides a proxy for the Essential Economy in Sandy Springs and elsewhere—one that focuses especially on that portion of the Essential Economy most at susceptible to the effects of a jobs-housing mismatch.

¹⁰Based on 2015 data:

- Median Home Value (U.S. Census 2016ac): Georgia: \$171,600; Atlanta MSA: \$168,100; Acworth (GA): \$152,300.
- Median Mortgage Payment (U.S. Census 2016ad): Georgia: \$1,346; Atlanta MSA: \$1,466; Acworth (GA): \$1,466; Cumming (GA): \$1,500; Loganville (GA): \$1,433; Douglasville (GA) \$1,433.
- Median Gross Rent (U.S. Census 2016x): Georgia: \$879; Atlanta MSA: \$977; Loganville (GA): \$977; Acworth (GA): \$964.

In 2015, Acworth and Loganville are closest to the MSA median on two of the three metrics. We selected Acworth over Loganville due to its proximity to Sandy Spring. Acworth is located in Cobb County, which abuts Sandy Springs and is also a home base for many workers in Sandy Springs.

live elsewhere, particularly in the southern parts of Fulton and throughout Cobb. ACS commute data shows that Sandy Springs residents actually have slightly shorter commutes than its reference geographies, particularly for users of public transit, whose commutes tend to be nearly twice as long as those of driving their own vehicles.

Despite residents' mild commutes, Sandy Springs demonstrates considerable jobs-housing mismatch. The relative share of households making below \$25,000 per year is very small in Sandy Springs (only 17.8%, while the Atlanta MSA has 20.6% and the City of Atlanta 30.2%), while its share of households making over \$150,000 is disproportionately large (22.7%, compared with 11.5% of MSA and 10.4% of US households) as shown by Figure 2 (Appendix). These figures suggest that the lower-income workers that comprise the Essential Economy in Sandy Springs are likely living in more affordable Atlanta, as well as in unincorporated Cobb County and other lower-cost outlying regions, a hypothesis explorable through more detailed housing analysis.

Housing

The overall quality of the housing stock in Sandy Springs is very good. Sandy Springs does not have significantly more or fewer overcrowded (more than 1 person per room, 2.2%) or distressed (two or more Census conditions, 1.5%) units compared to its closest peers of Roswell and Dunwoody (the US rates are 3.3% and 2.1% respectively). Its stock is equivalent or superior to that of reference geographies, and its housing is much younger than that of the US or City of Atlanta, and on par with other first-ring suburbs. However, Sandy Springs' housing does have a more urban character than its wealthy suburb peers, due to its higher density of rental than owned units (which it shares with the City of Atlanta), possibly due to its "bedroom 'burb" history. Sandy Springs is relatively dense in terms of housing units because it doesn't contain any rural areas, which the MSA, state, and country obviously do. What's more, like the City of Atlanta, its rental-unit-per-mile density is higher than that of owned units. These patterns may be a product of Sandy Springs' history as a bedroom community for workers in Downtown Atlanta and beyond.

Sandy Springs' more urban character also appears in its statistics for home ownership frequency and type. While for the US as a whole 64% of housing units are owner-occupied, in Sandy Springs that figure is only 47%, unsurprising given the extremely high home values the city currently commands. What is surprising is that the only comparison geography with a similar figure, 44%, is the City of Atlanta itself – Sandy Springs' more usual peers Dunwoody and Roswell enjoy 54% and 66% homeownership respectively. Furthermore, the character of the housing offered is also more urban; 14% of owned units in Sandy Springs are 1-unit-attached, or townhouses. This figure is more than double the U.S. owned units' share of townhomes, 6%. Indeed, though 89% of owned units in Georgia are single-family detached, only 70% of Sandy Springs units are. Furthermore, in terms of rental housing, large multifamily apartment buildings are somewhat in keeping with the current urban form of Sandy Springs, as 85% of rented units are in buildings of 5 units or more, compared to only 18% nationwide. This is an encouraging sign for affordable housing, as slightly larger multifamily complexes are easier to fund and may be more efficient to build and operate.

The most striking housing characteristic observed in Sandy Springs is its median home value, which at \$415,600 is nearly 3 times that of Georgia (\$148,100) or the Atlanta MSA (\$168,100), and more valuable than even the nearby affluent suburbs (Dunwoody: \$367,800, Roswell: \$297,000). What's more, this valuation is certainly not due to outliers—37% of homes in Sandy Springs are valued at \$500,000 or more, compared to only 11% of all US homes and 5% of all Georgia homes (see Appendix B, Figure 3). High home values can indicate a uniformly wealthy area, or can be driven by relatively few upscale neighborhoods, either of which informs all other housing analyses and policies. Given the very high

median home value Sandy Springs displays, we examined tract-level median home values for Sandy Springs to get a sense of whether the high values were being driven by a few very upscale neighborhoods, or if the valuation was more general to the geography. We found that while there are definitely areas of greater wealth (particularly near transit), high home values are common in many Sandy Springs neighborhoods, making it unlikely that the median value observed for the city is overly skewed by any one area.

Unsurprising for an area with such high home values, 23.2% of mortgage payment in Sandy Springs are at or above \$3,500 per month. Only 6.4% of mortgages nationwide and 3.1% of all Georgia mortgages have payments so high. Dunwoody and Roswell also have high median mortgage payments at \$2,280 and \$1,958 respectively, but not nearly so high as Sandy Springs' \$2,335, which is nearly \$1,000 greater than the US (\$1,492) or Atlanta MSA (\$1,466) monthly payments. Similarly, Dunwoody and Roswell's median gross rents (\$1,207 and \$1,032) are on par or higher than Sandy Springs, and greatly outweigh the US median of \$928 and Atlanta MSA's of \$977. Figure 4 in the Appendix displays monthly housing cost brackets for all eight geographies. When looking at rents with more detail, it is clear that while Dunwoody tends to be the highest, Sandy Springs' rents are close, and often exceed nearby Dunwoody's depending on unit size. Compared to the US and Atlanta MSA median figures for each bedroom size, Sandy Springs is significantly more expensive, particularly for the larger units necessary to accommodate a large family. Median rents by bedroom in Sandy Springs are greater than the US by an average of \$355, with bigger gaps for larger units, and its rents average \$301 higher than the MSA median for that unit size, also driven by the high relative cost of larger units. These factors mean that larger low-income families would find Sandy Springs particularly unaffordable, a problem only compounded by the gaps between median rents and Housing Choice Voucher ("Section 8") Fair Market Rents.

The Housing Choice Voucher is the largest affordable housing program in the nation, providing housing assistance for 4.5 million households each year, run by the US Department of Housing and Urban Development (HUD). The "Fair Market Rent" (FMR) is a cap set by HUD on rents for the Housing Choice Voucher program (HUD, 2014b). For each MSA and family size (number of bedrooms), HUD sets and publishes a maximum allowable rent annually. The program then operates as follows:

- Family A is deemed eligible for an available voucher.
- Family A finds a private rental housing unit where they would like to live and where the rent the landlord is asking is below the FMR amount set for that unit size.
- If the unit passes inspection, Family A moves in and pays 30% of whatever their income is every month in rent.
- Whatever the gap between that 30% amount and the contract rent (the amount the landlord asks for) is what HUD pays, up to the FMR limit.¹¹

Therefore, FMR essentially sets the cap on how much a voucher-holder can rent for, so that units with median rents above that cap are functionally unattainable for voucher-holding families. Sandy Springs rents are not affordable to Housing Choice Voucher holders, since median rents are well above acceptable FMRs at all unit sizes—on average \$276 per month (see Appendix B, Figure 5 for details on FMR-median rent disparities).¹² They're even less affordable in Dunwoody, less (but still) unaffordable in Roswell, and only affordable for very large families in the City of Atlanta or the Atlanta MSA. This

¹¹Technically, households could choose to live somewhere above the cap and pay the difference themselves, but for most voucher holders this is infeasible.

¹²All data in this study are from 2015 unless stated otherwise. American Community Survey data is not yet available for 2017, the first year for which Small-Area Fair Market Rents (SAMFR) are available, so the new values are not considered here.

means that, essentially, well over 50% of every kind of rental unit in Sandy Springs is out of reach for voucher-holders, including voucher-holding Essential Economy workers.

For households who can afford to live in Sandy Springs, housing cost burden for all units is actually slightly lower in Sandy Springs (38% of households) than Georgia (41%) or the MSA (40%), and about at parity with the other wealthy suburb cities nearby, which makes sense given their high median incomes. The housing burden that is present in Sandy Springs, however, is not evenly distributed. Most of the burden is borne by renters: 72% of all owning households are unburdened, while only 54.9% of renting household are not burdened. Furthermore, this burden is skewed by age: under-35 Households are 29.1% of the population, but represent only 27.7% of the non-burdened population, versus 32.0% of the burdened population (see Appendix B, Figure 6). Sandy Springs' and other wealthy suburbs' low housing cost burden figures are not surprising given the lower proportion of low- and moderate-income households living in them, particularly coupled with their wealthy reputations (and thus-far-uninvestigated possibly exclusionary practices), which would work together to drive out many lower-income households that might suffer burden from Sandy Springs' high rents and mortgages. Younger Sandy Springs adults have burden differentials that seem to be in keeping with the owner-renter skew (renters are much more likely to be cost burdened than owners), like the reference geographies. Unlike the reference geographies, however, Sandy Springs' All/Owning households' skew is 19.2 percentage points, compared to 9.7 (MSA) and 9.9 (Georgia) area percentage point skews, demonstrating the substantial degree to which younger households in the city are disproportionately cost burdened and unable to access home ownership, even when taking into account regional trends.

A Closer Look at Home Values

Using the standard underwriting practices and assumptions of the mainstream home lending field, it is possible to “back out” what an affordable home price would be for any particular income. We performed just such an analysis for two scenarios: a family making the median income in Sandy Springs, and a worker making the national average wage for an Essential Economy worker (Appendix A, Table 1). Both analyses share the following assumptions: Mortgage payment should be no more than 28% of pre-tax monthly income (Karaim, 2017), the mortgage's interest rate is 3.85% (Freddie Mac, 2018),¹³ a 20% down payment (Zillow, 2018),¹⁴ and a standard 30-year amortizing mortgage. Based on this analysis, it is clear that Sandy Springs' homes are unaffordable for many residents—Sandy Springs' median income is insufficient to purchase the median home in Sandy Springs, falling short by nearly \$18,000. What's more, an Essential Economy worker in Sandy Springs could only afford a home worth approximately \$141,000, roughly one-third of the city's median home value.

The unusually high home values in Sandy Springs are particularly striking compared to its wealthy-suburb peers, which enjoy even higher median household incomes, but exhibit lower home values. This called for a deeper investigation, started by comparing the ratio of incomes to home values, which shows that Sandy Springs (at 6.5) is well outside the norm even compared to similar cities, which average around 3.9 (the US figure is 3.3). Based on that imbalance, we then explored home size in Sandy Springs, to determine if the city's homes were meaningfully larger and therefore cost more. However, while the largest category of home (8 or more rooms or 4 or more bedrooms) in either measure is dominant in Sandy Springs, its figures for both home size metrics are smaller than its wealthy peers. Moreover, this difference was not exclusively explained by a better location; Sandy Springs is farther from the core city than Dunwoody or Roswell, and Dunwoody also shares MARTA rail access (another

¹³The average for 2015 per Freddie Mac; this presumes equally good credit for both households, which is somewhat unrealistic.

¹⁴A 20% downpayment allows the borrower to avoid paying Private Mortgage Insurance (PMI).

driver of value). Regardless of the precise causes of these disproportionately high home values and housing costs, their existence makes Sandy Springs unaffordable for its Essential Economy workforce.

There are a number of possible confounding factors in home values in addition to size and bedrooms. Two of the most important are transit availability and school quality. Transit, particularly rail transit, has been demonstrated to increase home values (Handley, 2013; Diaz, 1999). Accordingly, we evaluated transit availability for each of the cities selected and found that Sandy Springs does possess moderate bus access (39% coverage, beaten by Dunwoody's 75% but greater than even-wealthier Roswell's 19%) and solid rail transit access (6% coverage), which explains part of its high home values. However, this analysis also revealed that nearby Dunwoody has nearly equal (5%) rail and much better bus transit access but lower home values, despite its higher household incomes (see Figure 7). What's more, the most expensive neighborhood in Sandy Springs (southwest corner of the city, median home value \$865,300) is located far from its rail stops (Figure 8). Therefore, while transit is a possible factor supporting Sandy Springs' high home values, it does not explain them.

A second major factor that can influence home purchase decisions is school quality. Research shows that good public schools greatly increase home values, with some particularly elite districts creating a sort of parental bidding war for houses within their catchments (Pohlman, 2016; DeBord, 2016; Max, 2010). Therefore, we studied school quality in each of the reference cities through the Georgia Department of Education's College and Career Ready Performance Index Scores, or CCRPIs (GDoE, 2017).¹⁵ This analysis revealed that despite its higher home values, Sandy Springs' schools perform lower than Dunwoody or Roswell's, though better than the City of Atlanta's. What's more, moderately-priced Acworth demonstrates superior public schools to Sandy Springs (see Appendix B, Figure 9). Based on the percent receiving free lunches compared to the income bracket shares for Sandy Springs, it does appear that there may be a selection bias factor in these results—the wealthier students appear to be primarily receiving private education, resulting in the lower scores for Sandy Springs. Regardless, these results refute the potential confounding factor of schools: homebuyers shopping in the region would choose Dunwoody or Roswell above Sandy Springs if public schools are their priority, and private schools do not have catchments and so do not depend on precise home location, sending house-shopping families to less expensive nearby cities.

Comparison: Sandy Springs & Acworth

As a counterfactual to Sandy Springs' disproportionate statistics, we also studied Acworth, Georgia in detail, including its commuter flows and housing. Acworth is in Cobb County, to the northwest of Atlanta. Traditionally a transit-resistant, predominately white county (Emerson, 2017), Acworth is a product of a later wave of the same demographics-driven suburbanization that built Sandy Springs, Dunwoody, and Roswell (Segal, 2012). Acworth's employment base is much smaller at 10,749 currently working adults (10% unemployment) than Sandy Springs (55,353 employed adults, 6.2% unemployment), and the city lacks some of Sandy Springs' particular advantages, such as proximity to Atlanta (the MSA's core city), abundant job opportunities (including more corporate headquarters than Atlanta itself, (Rosen, 2017)) and connections to rail-based public transit. Indeed, Cobb County categorically rejected attempts to integrate the county into regional transit networks (Schmitt, 2017; Burns, 2014) until very recently, putting its cities at a considerable disadvantage (Galloway, 2017). Despite these disadvantages, Acworth enjoys strong schools and much lower income inequality; its Gini

¹⁵Note that attendance data are from 2016, and CCRPI scores from 2017 (that is, the 2016-2017 school year).

Income Inequality Index score is only 0.369, compared to Sandy Springs' 0.5598.¹⁶ Its demographic profile includes:

Income: Lower income inequality is apparent in Acworth's median household income of \$53,080 (very close to the MSA median of \$57,000) and income bracket breakdown. While Acworth only has 17.7% of its population making under \$25,000 per year (at parity with the 17.8% demonstrated by Sandy Springs), only 4.1% of Acworth household make more than \$150,000 per year, a stark contrast to Sandy Springs' 22.7%. This result shows that Acworth's strong median income is an expression of a much more general prosperity than the disproportionate, exclusionary income breakdowns Sandy Springs demonstrates.

Housing Quality: Acworth's housing quality is very good, with overcrowding and distress at parity with or better than national and regional values.

Ownership Balance, Frequency, and Type: Unsurprising for this type of primarily-suburban community, Acworth households are primarily (64%) homeowners, in mostly single-family detached units (93% of owned housing, 59% of all housing). The age balance tilts ownership towards older residents and burden towards younger, but not at nearly the extremes Sandy Springs demonstrates.

Housing Costs & Home Values: Monthly housing costs and the median home value (\$152,300) are much closer to the 30% of income standard for housing affordability.

In terms of commuting and traffic, we found that 6.2% of lower-income workers within Acworth also live there. While this is lower than Sandy Springs' figure of 7.2%, the level of economic activity in Acworth is also considerably lower, justifying more in- and out-commuting. What's more, while Acworth residents may report slightly longer (33 minutes, to Sandy Springs' 25) commutes due to its more remote location, they are less stressful when viewed through a traffic analysis. As discussed previously, jobs-housing mismatch like that seen in Sandy Springs can cause inefficiency and stressful traffic delays as workers must commute on clogged roads. A more balanced area like Acworth, by contrast, does not demonstrate the relatively intense traffic snarls that Sandy Springs displays. Sandy Springs' residents may report shorter commute times than most, but in-commuters, such as Essential Economy workers who cannot afford to live in the city, are not so fortunate.

The differences between Sandy Springs and a representative city like Acworth are particularly stark when it comes to incomes and housing costs. As mentioned above, Acworth demonstrates roughly equal brackets for a wide range of incomes, unlike Sandy Springs' upwards skew. Even more dramatic, over 72.5% of Sandy Springs' homes are valued at \$250,000 or more, compared to only 5.5% in Acworth. Naturally, this in turn shows up in monthly housing costs, for which Sandy Springs also demonstrates an intense upward bias. As demonstrated previously, confounding factors like school quality and transit access do not appear to be strongly driving this difference, as Acworth's schools are actually better than Sandy Springs' and the scarcity of its transit offerings only increased the average commute by eight minutes compared to Sandy Springs. Acworth is much more accessible to Essential Economy workers than Sandy Springs, and still retains many quality-of-life benefits.

¹⁶The scale runs from 0, complete equality, to 1, complete inequality, of income distribution across the population. The US's overall Gini index value is 0.4787.

Policy Implications for Sandy Springs

As discussed above, demand-side affordable housing methods (Housing Choice Vouchers) have FMRs too low to make them usable for most Sandy Springs units. Sandy Springs does have a few rent-restricted multifamily affordable housing properties (supply-side affordable housing), but they are scarce. A survey of existing supply-side affordable housing resources—that is, operating multifamily rental properties with restricted rents—via Department of Community Affairs data reveals that Sandy Springs does have a few such properties benefitting its residents. However, comparison city Acworth has only one fewer such properties and *one-fifth* the population (see Appendix B, Figure 10), suggesting that the scarcity of affordable housing in Sandy Springs may be due to intentionally exclusionary behaviors, not just market forces.

To address housing unaffordability, the jobs-housing imbalance it promotes, and all of that mismatch's attendant problems, the municipality could consider a variety of possible affordable housing interventions. The following is a list of potential interventions that is organized by their feasibility:

Allow Creation of a Community Land Trust: Municipality approves a nonprofit's creation of a Community Land Trust, in which the Trust owns the land a home is built on. When the current owner moves, they sell only the home (and any improvements they made) with limited profit, keeping the home affordable and partially community-owned.

Approve & Support Affordable Housing Construction: On the milder end, city officials could provide approval letters for projects in the city applying for LIHTC credits, which would costlessly improve the likelihood of the proposed project receiving an award of funds and being constructed. On the more active end, city officials could offer a relatively small subsidy to go with the LIHTC funding, further increasing a project's likelihood of award.

Remove Exclusionary Zoning: Remove any explicitly exclusionary elements, such as bans on Accessory Dwelling Units, minimum home size and façade materials requirements, etc.

Pass Voluntary Inclusionary Zoning: Offer incentives such as greater height/density allowances or speedier permitting in exchange for affordable units in new multifamily construction.

Establish a Home Repair Fund: Home repairs are a major threat to stable low- and moderate-income (LMI) homeownership (Van Zandt and Rohe, 2011). A fund that offers LMI homeowners relatively small-value loans with interest and repayment delayed until sale, in exchange for a limit on home sale profit, could cool an overheating market and prevent displacement of the few LMI homeowners in the area.

Establish a Homeownership Assistance Program: A Homeownership Assistance Program features pre-purchase first-time homebuyer education by a nonprofit partner, down payment and mortgage process assistance by the same, and a repairs escrow fund in the mortgage. Homeownership has a number of benefits (Rohe and Basolo, 1997; Rappaport, 2010; Grinstein-Weiss et al., 2013) for LMI households, and pre-purchase education has been shown to reduce default by 29% (Avila, Nguyen, and Zorn, 2013) and improve budgeting (Shelton and Hill, 1995). What's more, the presence of a third-party expert during negotiations may dissuade lenders from race-based predatory lending (Badger, 2013) and similar practices.

Pass Source-of-Income Protections: Source-of-income protections prevent the common practice of private landlords in higher-rent areas refusing voucher-holders simply for using a voucher, which results in increased concentration of poverty and jobs-housing mismatch.

Pass Mandatory Inclusionary Zoning: Require that all new multifamily construction includes affordable units or pays in-lieu fees to construct affordable housing elsewhere in the city.

Enhance Section 8 Vouchers: The housing stock itself is older but seems to largely be in acceptable condition (able to pass inspection), making an enhanced Housing Choice Voucher a possible option. The recently reinstated¹⁷ Small Area Fair Market Rent (SAFMR) policy (NAHB, 2017) would help by raising the acceptable fair market rent in most parts of Sandy Springs by more than 10% (Stagg, 2017), making more-expensive units affordable to voucher holders, but an additional commitment by the city could improve on this development.

Establish Municipal Land Trust: Same as Community Land Trust above, but city-run, rather than by a nonprofit, and possibly using city-held land.

Sandy Springs is unaffordable for lower-income families, which means jobs-housing balance is a major issue for Sandy Springs. All the available evidence suggests that lower-income people, who tend to fill Essential Economy service jobs that are highly demanded by areas like Sandy Springs, may work within the city but are forced to live elsewhere such as Cobb County and the City of Atlanta, creating stress, traffic, and unnecessary hardships for everyone in Sandy Springs and the surrounding region.

¹⁷The district court ruling was announced December 23rd, 2017, and may still be reversed by a higher court (Shelburne, 2017).

About the Center for Urban Innovation

The Center for Urban Innovation (CUI) supports research that thinks globally, acts locally, and encourages researchers, students, and civic leaders to find innovative, interdisciplinary approaches to shaping sustainable cities. To meet these ends, CUI:

- Supports interdisciplinary, scholarly research on urban sustainability and the expanding role of intermediary institutions in the design and governance of resilient regional ecosystems. CUI incubates faculty research initiatives in this arena as they grow;
- Partners within Georgia Tech as well as with centers at other universities, nonprofits, and public agencies focused on strategies for building sustainable communities;
- Connects Georgia Tech's expertise and information to the broader stakeholder community locally, nationally, and internationally.

Faculty associated with CUI engage in research ranging from civic computing to urban design. CUI supports scholarly research on issues ranging from the planning and implementing linear parks like the Atlanta BeltLine to mapping innovative approaches to urban governance around the world.

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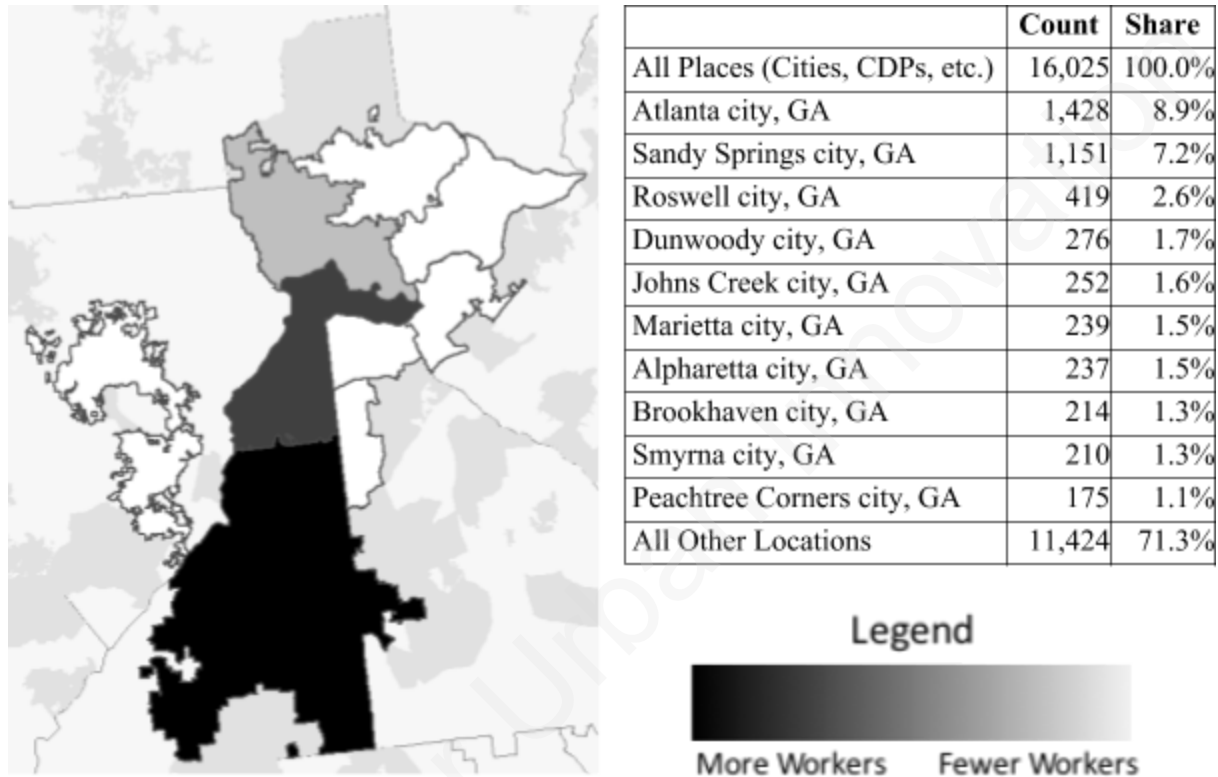
Appendix A: Tables

Table 1. “Backout” Mortgage Home Price Affordability Analysis

	Sandy Springs Median Household	Average Essential Economy Worker
Annual Income	\$63,917	\$22,739
Monthly Income	\$5,326	\$1,895
Maximum Mortgage Payment	\$1,491	\$531
Maximum Mortgage Amount	\$318,125	\$113,176
Down Payment Amount	\$79,531	\$28,294
Maximum Home Price	\$397,656	\$141,470
Difference From Median Home Value	<u>(\$17,944)</u>	<u>(\$274,130)</u>

Appendix B: Figures

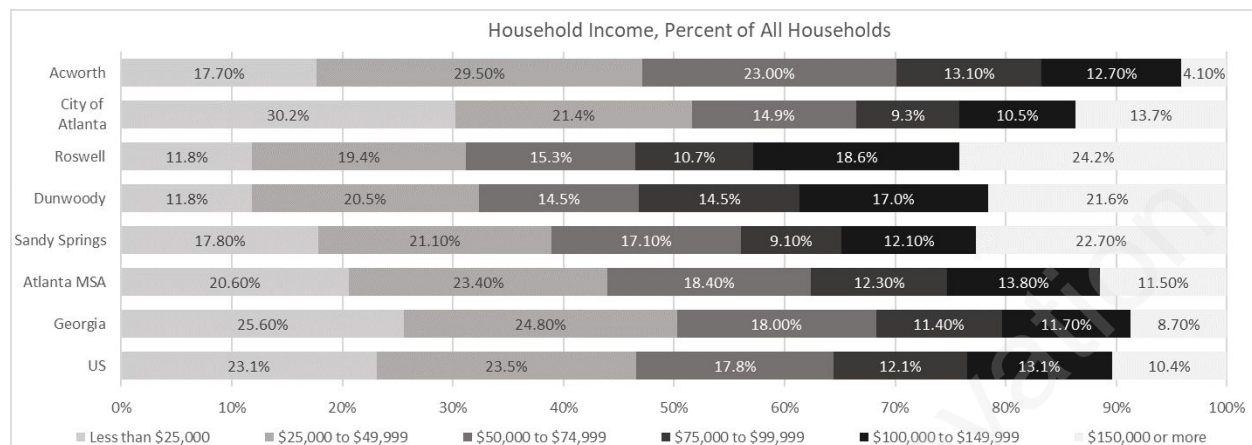
Figure 1. Low-Income Workers' Place of Residence (Sandy Springs)



U.S. Census Bureau. (2016a). American Community Survey 5-Year estimates - Geodatabase format: 2011-2015 Detailed Tables. *TIGER/Line® with Selected Demographic and Economic Data*. Retrieved from <https://www.census.gov/geo/maps-data/data/tiger-data.html>

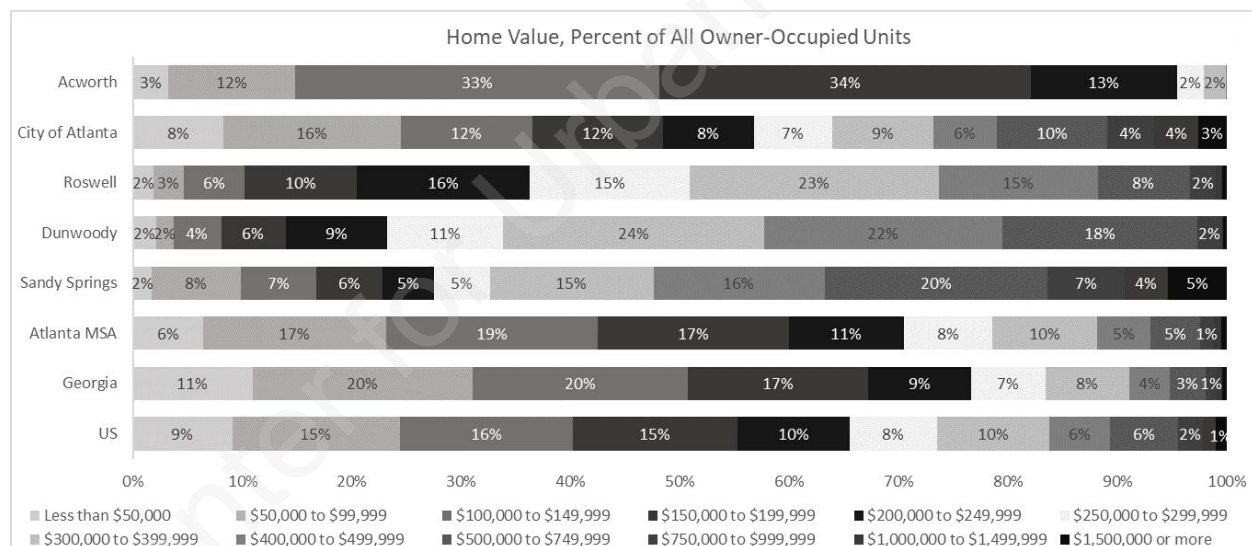
---. (2017). OnTheMap Application. *Longitudinal-Employer Household Dynamics Program*. 2015 data. Retrieved from <https://onthemap.ces.census.gov>

Figure 2. Household Income Brackets (Comparison)



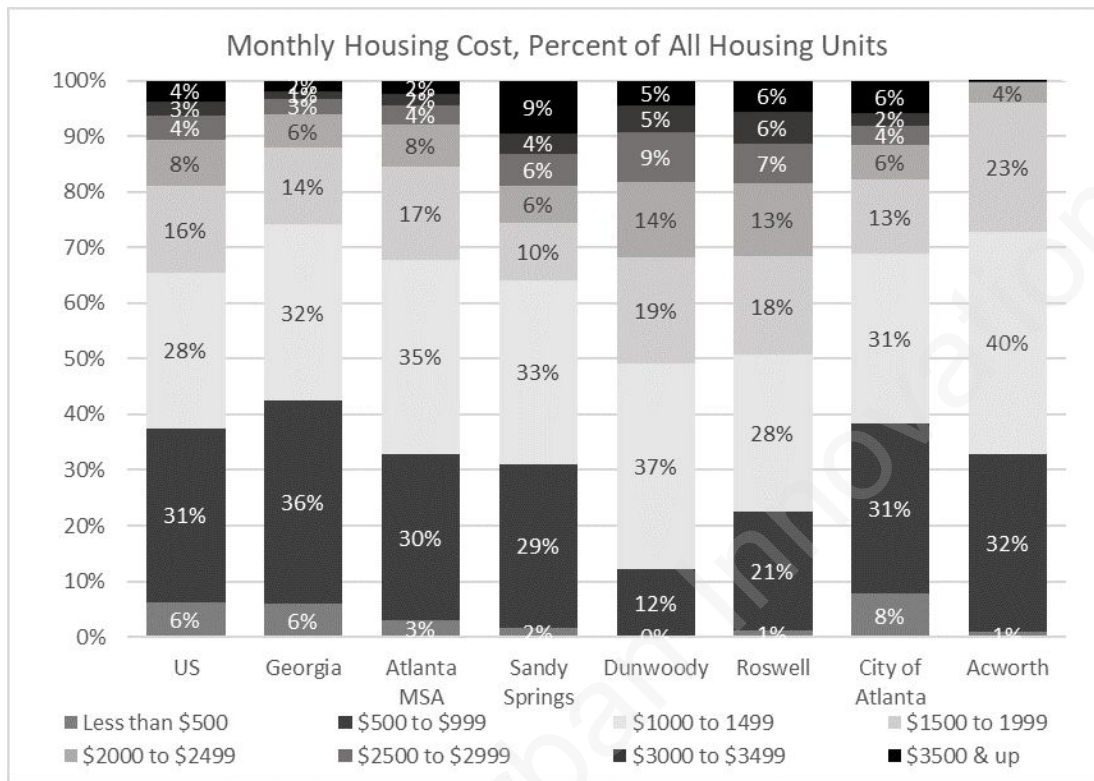
U.S. Census Bureau. (2016f). Table B19001: Household income in the past 12 months (in 2015 inflation-adjusted dollars), 2011-2015. *American Community Survey 5-Year Estimates*. <http://factfinder.census.gov>

Figure 3. Owned Housing Unit Value Brackets (Comparison)



U.S. Census Bureau. (2016ab). Table B25075: Value, 2011-2015. *American Community Survey 5-Year Estimates*. Retrieved from <http://factfinder.census.gov>

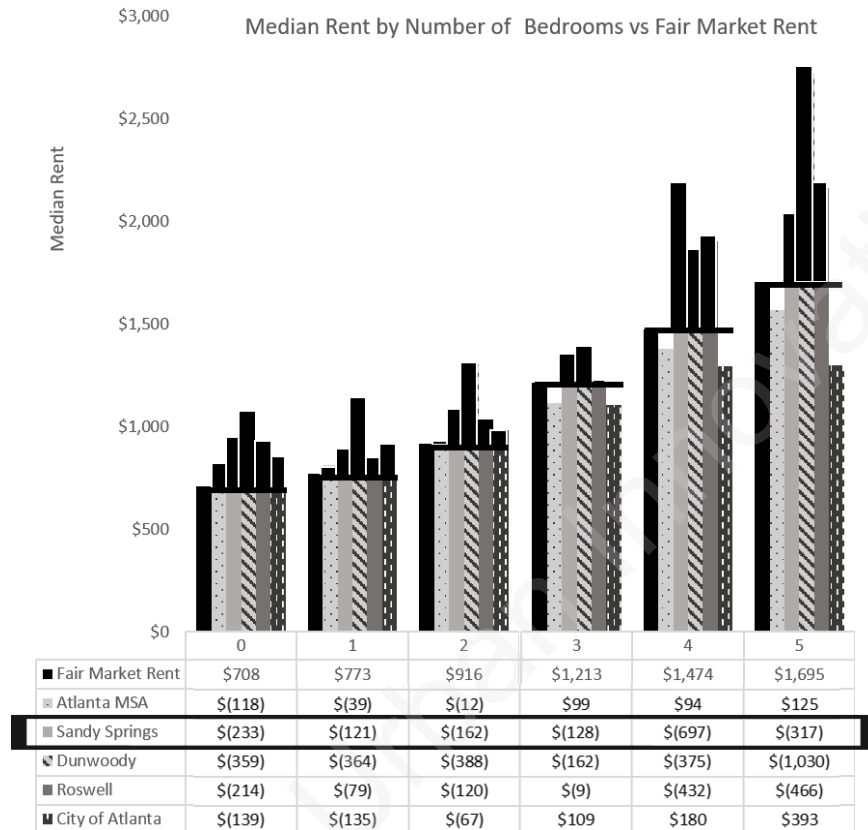
Figure 4. Monthly Housing Cost Brackets (Comparison)



U.S. Census Bureau. (2016q). Table B25063: Gross rent, 2011-2015. *American Community Survey 5-Year Estimates*. Retrieved from <http://factfinder.census.gov>

---. (2016ac). Table B25087: Mortgage status and selected monthly owner costs, 2011-2015. *American Community Survey 5-Year Estimates*. Retrieved from <http://factfinder.census.gov>

Figure 5. Fair Market Rent as Compared to Median Rent by Bedrooms (Comparison)



HUD. (2014b). Fair market rents. *HUD User*. Retrieved from <https://www.huduser.gov/portal/datasets/fmr.html#2015>

U.S. Census Bureau. (2016o). Table B25031: Median gross rent by bedrooms, 2011-2015. *American Community Survey 5-Year Estimates*. Retrieved from <http://factfinder.census.gov>

Figure 6. All Households, Ownership, & Housing Burden by Age (Sandy Springs)

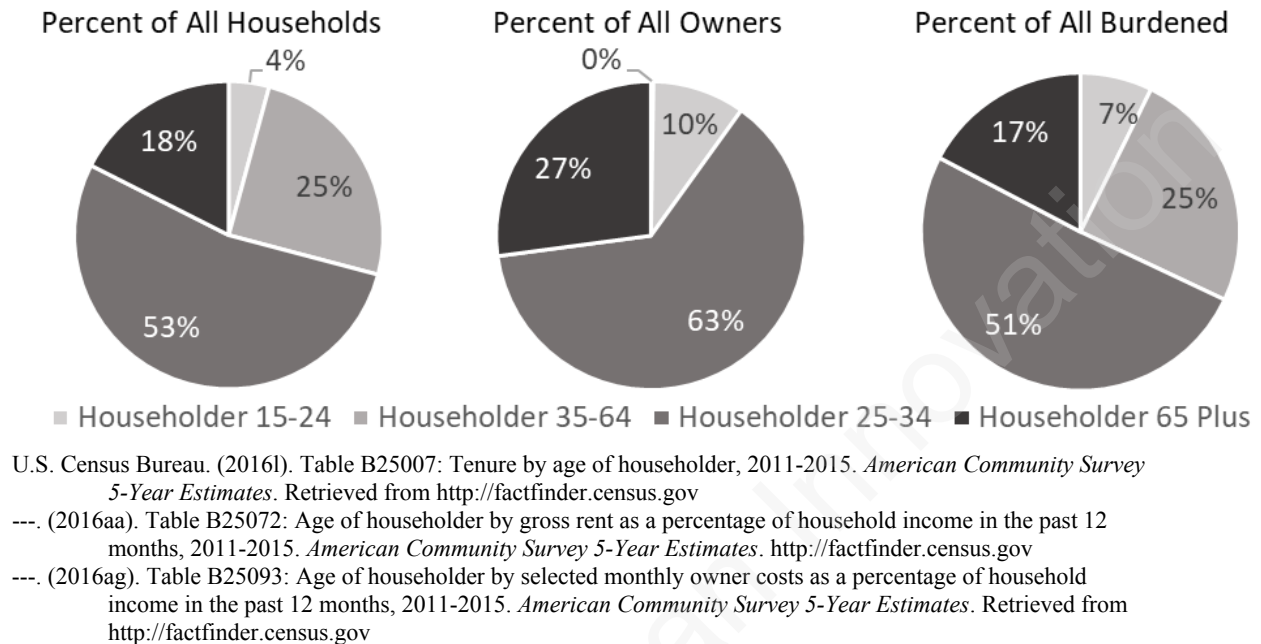
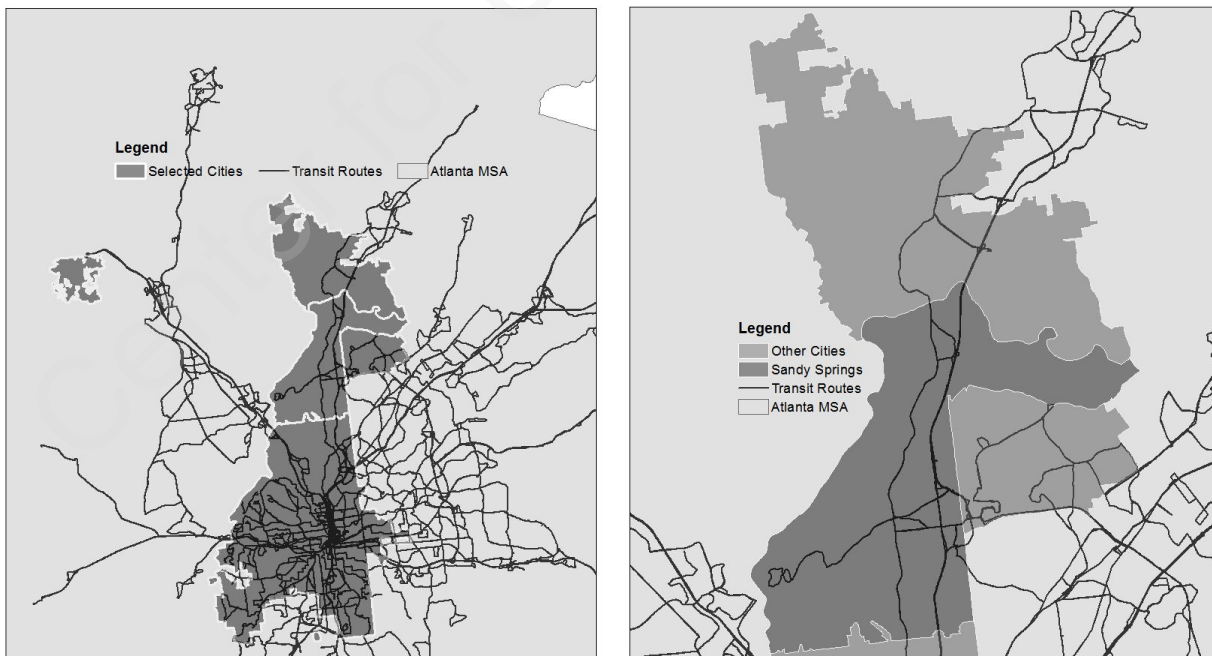


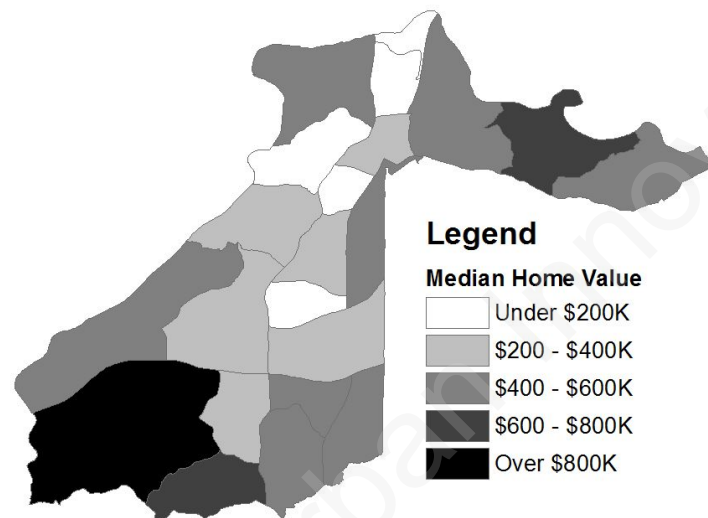
Figure 7. Transit Coverage (Regional)



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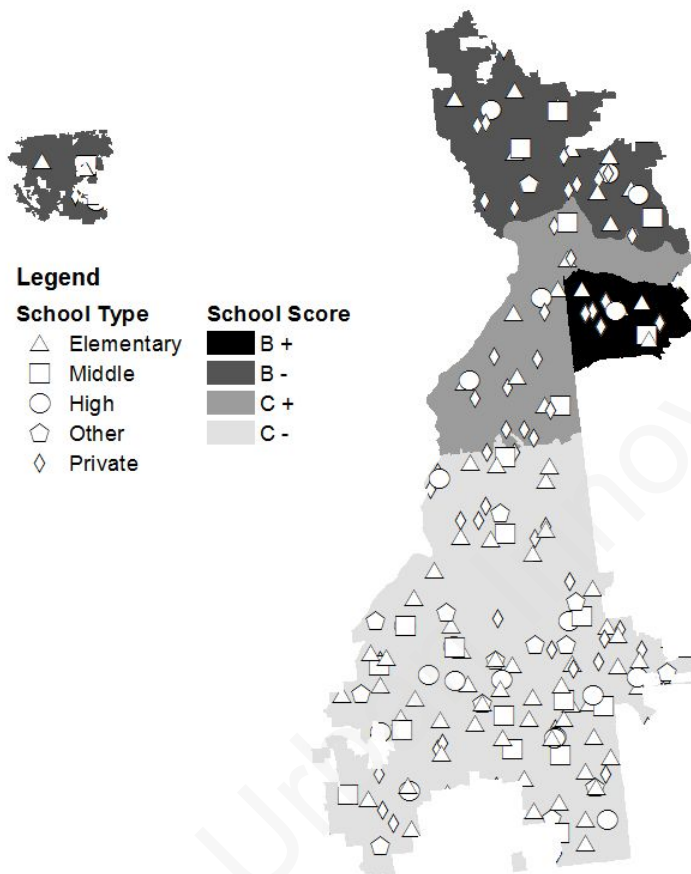
Figure 8. Median Home Value by Census Tract (Sandy Springs)



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Figure 9. School Performance (Comparison)



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Figure 10. Supply-Side Rent-Restricted Multifamily Housing Resources (Sandy Springs)



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<http://georgia-dca.maps.arcgis.com/apps/webappviewer/index.html?id=7556775c875a4cfcb372997cd9baa882>

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