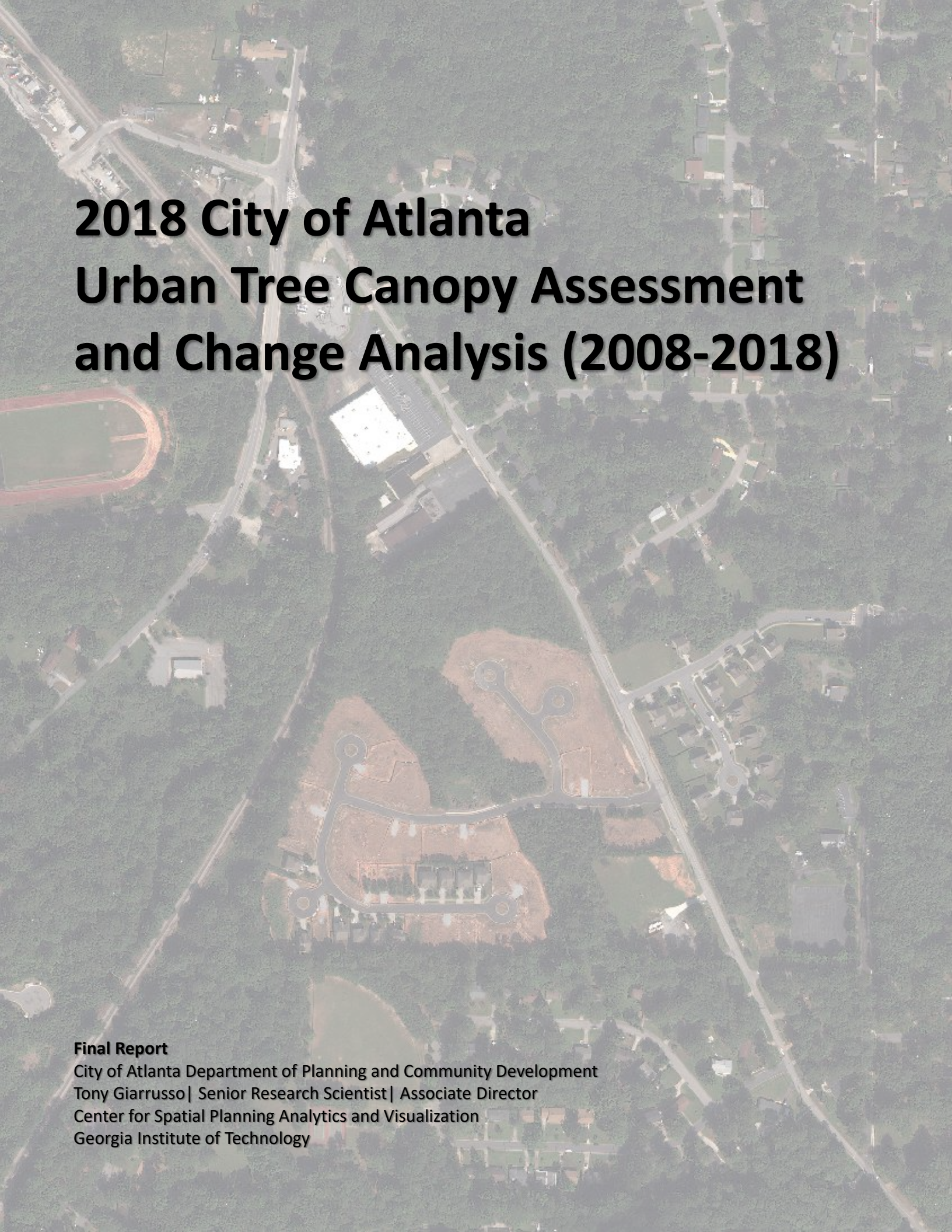

2018 City of Atlanta Urban Tree Canopy Assessment and Change Analysis (2008-2018)

Final Report

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Section 1: Introduction

1.1 Benefits of Urban Trees

Trees provide numerous well-documented environmental and ecological benefits. In urban areas, trees prevent or reduce flooding, erosion, and the "heat island effect" (which causes higher temperatures in cities than surrounding areas) by lowering temperatures and decreasing energy demands. Trees clean particulates and other pollutants from the air, provide critical habitat for native wildlife, enhance privacy, provide shade and beauty, and increase quality of life for residents. Studies demonstrate that the presence of trees in an urban environment also provides human health and social benefits such as quicker recovery time from illness and reduced crime rates.

All trees, and especially trees adjacent to rivers and waterways (riparian trees), play an important role in filtering runoff and sediment from slopes and in slowing floodwaters, both of which are necessary for maintaining water quality and a healthy ecosystem. Shade provided by riparian trees also helps moderate water temperature, which is critical to aquatic life. Forested areas in proximity to surface water also provide important habitat for birds and a variety of wildlife.

Riparian trees are particularly significant in Atlanta since the city developed at the intersection of ten stream drainage basins. Headwaters for several creeks in the Chattahoochee River and Ocmulgee River Basins originate within a fifteen-block radius of the downtown Five Points intersection. Tree cover therefore has a critical impact on water quality in Atlanta and downstream.

Watershed protection is especially important in Atlanta, where surface water provides ninety-eight percent of the region's drinking water. Healthy watersheds are also important for providing recreational opportunity for residents and habitat for aquatic and other wildlife. Non-point source pollution (caused by storm water runoff which transports oil and pollutants from impervious surfaces and particles associated with soil erosion) is one of the leading causes of water quality problems for surface water, even more than the point source pollution released by permitted industrial facilities. As the land in a watershed is deforested for development, and other natural areas are converted to impervious surfaces such as streets, sidewalks, and parking lots, storm water that would normally soak into the ground becomes runoff. Because land, and the water that runs over and through it, are interconnected, a watershed approach to managing water quality is important for maintaining and restoring healthy ecosystems.

1.2 History of the Project

The City obtained high resolution, multi-spectral satellite imagery in October 2008 and contracted Georgia Tech researchers from the Center for Geographic Information Systems (CGIS) and the Center for Quality Growth and Regional Development (CQGRD) to quantify existing tree cover within the City of Atlanta, establish an accurate baseline tree canopy estimate, and develop methodologies and procedures for

future studies. The project team determined that 47.9% of the city was covered by trees in 2008, making it one of the most tree-covered cities in the nation. However, the distribution of the tree cover in the city was uneven, with the majority of tree cover in single-family neighborhoods, far from the almost treeless city center.

In 2014, the City again contracted with Georgia Tech to perform a second urban tree canopy assessment to include canopy change analysis between 2008-2014. The project team determined that 47.1% of the city was covered by trees in 2014, a slight decrease from 2008. While this decrease seemed insignificant at the city scale, canopy change between 2008-2014, particularly canopy loss, was significant in many areas across the city, particularly in north Atlanta. Site visits affirmed that the majority of canopy loss was caused by mass redevelopment of single-family homes, where smaller houses were demolished and replaced with much larger homes built to the maximum allowable lot coverage. Other causes of canopy loss were new commercial, residential and industrial developments, though none were as significant as the loss caused by redevelopment of single-family homes.

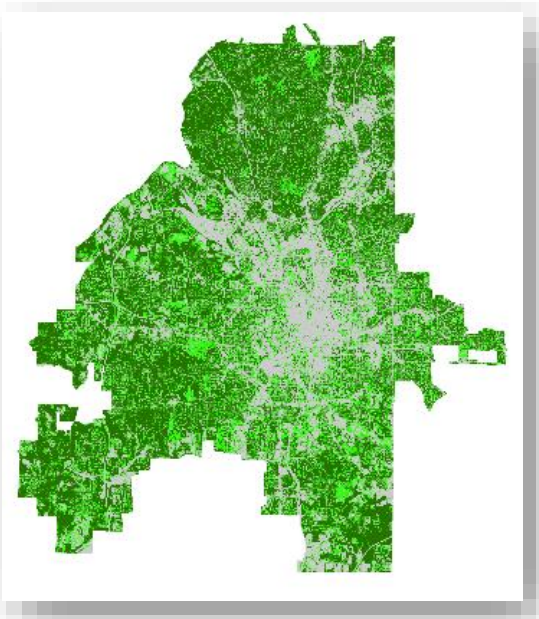


Figure 1. 2008 Land Cover

Canopy gain also occurred across the city between 2008-2014, and much of it seemed significant at first glance. However, site visits exposed a different reality. Areas showing significant growth (>5 acres) were areas that had been cleared for development sometime near 2008 and remained undeveloped or partially developed in 2014, with fast growing pines usually filling in the cleared, undeveloped land. The project team identified over 30 sites like this, all of which were south of interstate 20. This “growth” is almost certainly temporary, as many, if not all of these sites will be redeveloped or completed in the near future. The project team estimated this type of growth to equally approximately 1% of the city’s canopy.

Other types of observed canopy growth included street tree growth in subdivisions and/or new developments constructed near 2008, where juvenile trees were planted and quickly grew over the six-year period. Typical growth of older, mature trees was observed across the city.

In 2018, the city again contracted with Georgia Tech to conduct the third canopy assessment and change analysis for Atlanta, the results of which are presented in this report.

1.3 Research Objectives

The objective of the third urban tree canopy study was to update the 2008 and 2014 canopy numbers using 2018 satellite imagery and determine change in tree canopy from 2008 and 2018, which could be

used to help the City understand the pattern of tree loss and gain over time, and how to better manage this change through policy development and planning.

This report and associated data provide a comprehensive, updated calculation of 2018 tree cover and tree cover changes from 2008-2018 within Atlanta's city limits. The information will ultimately help the City make science-based policy decisions regarding Atlanta's forest cover. The new data provided by this research enables the City to accurately identify areas of tree loss and gain and to target efforts to minimize loss and maximize gain so that the city's trees will continue to provide the greatest benefits to water and air quality, and habitat protection, and support an enhanced quality of life for city residents.

1.4 Report Organization

This report describes the project objectives, methods, results, and recommendations, and is organized as follows. Section 1 summarizes the project's history, goals and objectives. Section 2 is the Executive Summary.; Section 3 provides a detailed explanation of the project research methodology; Section 4 presents city-wide and sub-city research findings in detail and includes 2018 canopy statistics as well as 2008-2018 change analyses; Section 5 presents conclusions, discusses possible policy implications of this research, and provides recommendations for further tree cover classification studies in the City of Atlanta. Finally, the Appendices contain full page maps and complete summary data tables with findings across all geographies.

Section 2: Executive Summary - Urban Tree Canopy in the City of Atlanta

Tree canopy is defined as the layer of leaves, branches, and stems of trees that cover the ground when viewed from above. Tree canopy is affected by local geography and climate, as well as land use patterns and development. Studying urban tree canopy helps cities better understand land cover and the distribution of trees which can inform policy decisions about forest resources to maximize benefits associated with a healthy urban forest.

FIGURE 2. LIVE OAK

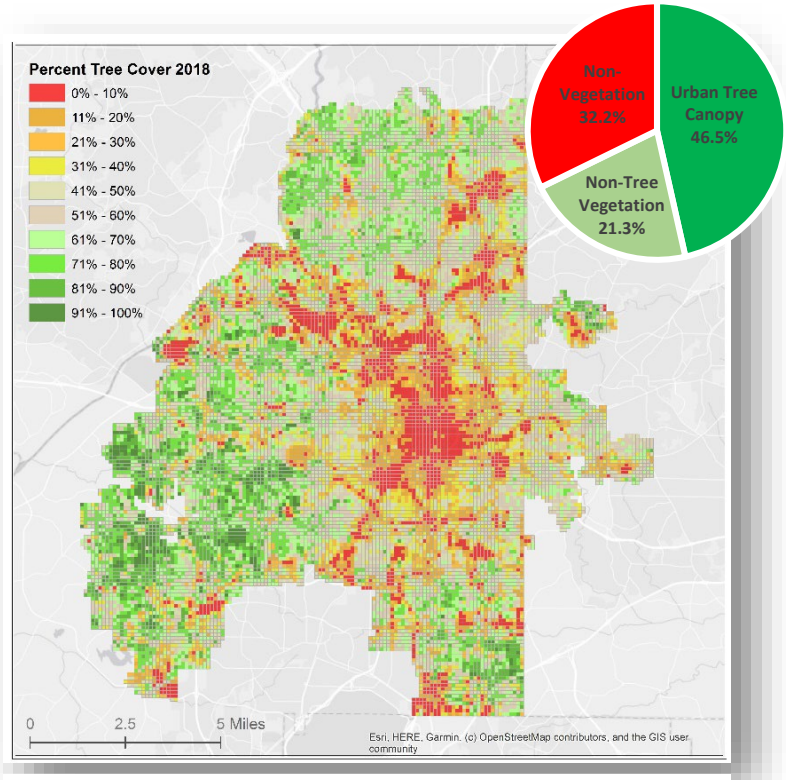


FIGURE 3. CANOPY DISTRIBUTION

Atlanta's Department of City Planning completed the first ever city-wide analysis of tree canopy utilizing 2008 satellite imagery. This baseline analysis revealed that Atlanta's overall tree canopy coverage in 2008 was 47.9% (40,524 acres) and that canopy coverage within the city varied tremendously, from less than 10% downtown and along transportation corridors to over 90% in nature preserves and along stream corridors. In 2014, the City completed a second tree canopy analysis and determined tree canopy coverage had decreased to approximately 47.1% (40,740 acres), which was not a significant change from the 2008 baseline, at least at the city-wide scale. However, a closer evaluation of the data, which included over 100 site visits, showed significant canopy gain and loss across the City and provided a greater understanding of patterns, trends, and underlying causes of the changes in the quantity and quality of tree canopy.

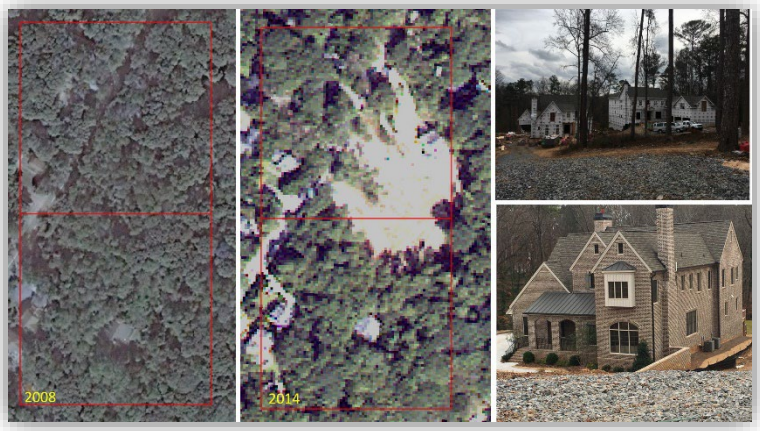


FIGURE 4. SINGLE-FAMILY REDEVELOPMENT

The majority of canopy loss between 2008 and 2014, which likely occurred after 2012 when intense development resumed in the post-2008 recession period, was primarily due to redevelopment of single-family homes, where smaller, older houses on large lots were replaced with much larger houses built-out to the maximum allowed

size (Figure 4). Often, several adjacent homes and small subdivisions were demolished and redeveloped with no increase in residential the number of residential units but substantial decreases in tree canopy. Other areas showing significant loss between 2008-2014 were new industrial developments, where clear-cutting is permitted. The remaining loss was attributed to other types of ongoing development and redevelopment for commercial, mixed-use, institutional, and multi-family residential uses.

As expected, there also were several areas across the City showing tree canopy gain between 2008 and 2014. New residential subdivisions and multi-family developments constructed just before or after 2008 showed substantial canopy gains as many of these new developments planted young, quick growing trees. Older neighborhoods with significant, older canopy cover also showed gains, though less dramatic than areas with younger trees. The most significant and substantial gains, however, were observed in areas that had been cleared for development circa 2008 but remained undeveloped in 2014 and were subsequently overgrown by fast growing, low quality trees in the interim. These sites, where pipes and other infrastructure were installed before construction was halted are commonly referred to as "pipe farms" (Figure 5). Over 25 of these sites (~ 500 acres) were identified between 2008 and 2014. Because canopy growth on a pipe farm is almost certainly temporary and these areas will eventually be developed, this canopy gain can be categorized as temporary or "false growth". With false growth taken into account, canopy coverage estimates fell to approximately 45% in 2014. While these recently graded areas, covered with quick-growing invasive species or dense young pines, appear as "tree canopy" when viewed by satellite, they cannot be categorized as canopy of the same quality and character as forested land.

FIGURE 5. PIPE FARMS IN THE CITY OF ATLANTA

In 2018, the City conducted the third canopy assessment and estimated overall tree canopy coverage to be 46.5% (40,609 acres), a slight decrease from 2014 and almost 1.5% less than 2008. It should be noted, however, that the City annexed almost 3,000 acres of land between 2008 and 2018 making change estimates of the overall city-wide canopy coverage difficult to interpret.

Researchers again conducted over 100 site visits to assess the pattern and causes of canopy change observed in the satellite imagery.


FIGURE 6. AERIAL VIEW OF THE CARTER CENTER

The patterns of change between 2014 and 2018 were similar to those observed between 2008 to 2014, with the majority of canopy loss associated with demolition and redevelopment of single-family homes. However, the pace and scale of redevelopment increased substantially between 2014 and 2018. During the 2018 site visits, many neighborhoods, especially north of I-20, showed extensive loss of canopy single-family redevelopment, often with multiple sites on the same street or same neighborhood (Figure 7). Trees planted on the redeveloped sites rarely represented the same species or diversity of trees that had been removed. The most commonly replanted trees were red maples, and many were non-native, ornamental species. Both the quantity and quality of the city's urban forest will change based on this pattern. Tree removal from redeveloped single-family sites, which is the most common source of canopy loss, often goes unnoticed because it occurs lot by lot and doesn't become apparent until an entire street or neighborhood has been redeveloped.

FIGURE 7. SINGLE-FAMILY REDEVELOPMENTS

While single-family redevelopment was the main, overall contributor to canopy loss between 2008 and 2018, industrial development may be the source of the greatest loss of large, contiguous tracts of forest because land zoned as industrial has few limits on tree clearing. For example, the largest contiguous areas of canopy loss between 2008 and 2018 were all industrial sites, with the largest clearing approximately 190 acres and several others clearing between 20 and 30 acres.

FIGURE 8. STALLED DEVELOPMENT SHOWING CANOPY GROWTH

Canopy gain trends observed between 2008 and 2018 were also similar to gains observed between 2008 and 2014, and were more pronounced, especially the tree growth detected from new developments circa 2008 and regrowth at pipe farms and other incomplete developments. Normal tree growth continued to occur and was substantial in some areas, but the most significant contiguous areas of growth were regrowth or "temporary/false growth" on land cleared sometime around 2008. These areas are covered with invasive vegetation or very dense small pines and have no resemblance to surrounding forests. These areas, where development stopped after curb and gutters, piping, and other infrastructure was installed, will likely be cleared again when development resumes

(Figure 8). With this false growth taken into account, canopy coverage estimates likely fell to approximately 45% in 2018. In essence, the change in the overall quantity of the City's canopy measured via satellite imagery was small but the change in quality of the canopy as it previously existed was substantially diminished.

2.1 Canopy Distribution Across the City - 2018

While Atlanta enjoys some of the highest tree canopy coverage within the city limits of a major US city, the canopy coverage varies widely across the city. Densely developed and urbanized ***neighborhoods*** such as Downtown (1,257 acres), Atlantic Station (163 acres), Lenox (152 acres), and Castleberry Hill (181) had less than 8% canopy coverage. Eighteen single-family residential neighborhoods outside the city's core had canopy coverage of 70% or greater. The highest canopy coverage was in the Boulder Park (84%) and Oakcliff (78%) neighborhoods of southwest and west Atlanta (Figure 9).

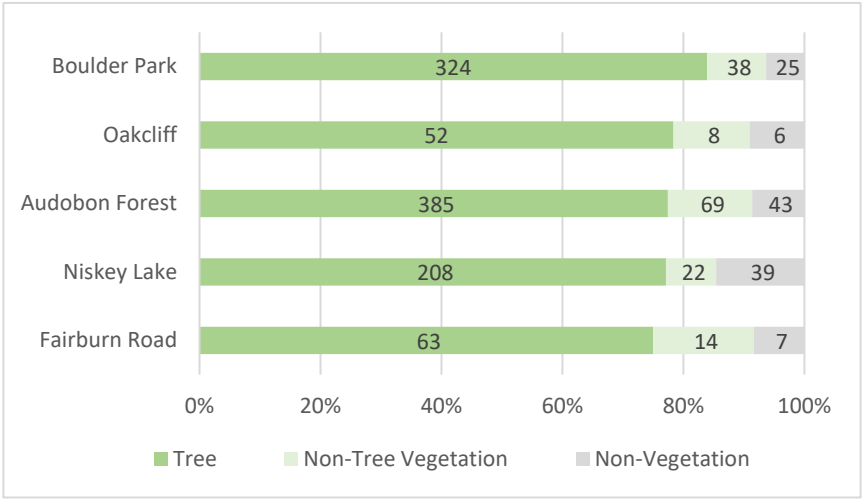


FIGURE 9. TOP 5 TREE COVERED NEIGHBORHOODS – 2018 – PERCENT TREE COVER – ACRES IN BARS)

City parks make up approximately 4.5% land in the city and contain approximately 5% of the city's tree canopy. The average tree canopy coverage on park land (54%) is slightly higher than the city's overall tree canopy coverage of 46.5%, reflecting the varied uses of Atlanta's parks, which range from open lawn to forested nature preserves. Among parks over 20 acres in size, canopy coverage ranges from a low of 12% at Boulevard Crossing to a high of 92% at Cascade Springs Nature Preserve.

FIGURE 10. SKYLINE VIEW FROM PIEDMONT PARK

Tree cover is very important to water quality and is a strong predictor of watershed health. Without adequate tree cover, water temperature rises, sediment and pollutants increase, and water quality diminishes. Atlanta contains 310 small-area ***watersheds*** (the area of land that drains into a common body of water). Average tree canopy cover for the city's small-area watersheds is 46.4%. Several watersheds feeding into Peachtree Creek and the South River have less than 10% canopy cover. Of the 26 small-area watersheds with tree canopy coverage over 70%, 18 are along Utoy Creek, possibly the most canopied stream network in the City.

2.2 Tree Canopy Distribution by Zoning Designation

Canopy coverage is strongly related to zoning and land use (Figures 11 and 12). The largest land use in Atlanta is single-family residential, making up 61% of the city's land area. The next largest zoning designations are industrial (11% of total land area), residential multi-family (9% of total land area), and special public interest (6% of total land area). Figure 11 below shows canopy coverage for several zoning categories, as well as the percentage that each area contributes to Atlanta's total tree canopy.

Tree Canopy Coverage by Zoning		
Zoning Category	**Canopy Coverage within Zoning Area**	**Contribution to Overall Tree Canopy**
Single-Family Residential	58%	76%
Multi-Family Residential	40%	8%
Industrial	24%	6%
Commercial	21%	2%
Office/Institutional	37%	2.3%

FIGURE 11. 2018 CANOPY COVER BY ZONING CATEGORY

It is important to note that some zoning categories (e.g. mixed-use and special public interest) allow several uses. In addition, underlying zoning may not reflect current land use such on undeveloped or vacant land. This may explain the relatively high canopy coverage on residential multi-family land (40%), industrial land (26%), and commercial land (23%), as much of the land in these zoning areas remain undeveloped. Furthermore, land zoned industrial, commercial or multi-family residential typically leaves little space for trees when fully developed to the maximum extent of impervious lot coverage allowable per zoning requirements. Given these facts, one can safely assume that at least 90% of the tree canopy on land zoned industrial, which totals approximately 2,100 acres, will eventually be lost to development, which would lower the City's overall canopy by 2%. Tree canopy on undeveloped land zoned residential multi-family or commercial will likely be similarly developed, which would potentially lower the city's canopy coverage by another 4%.

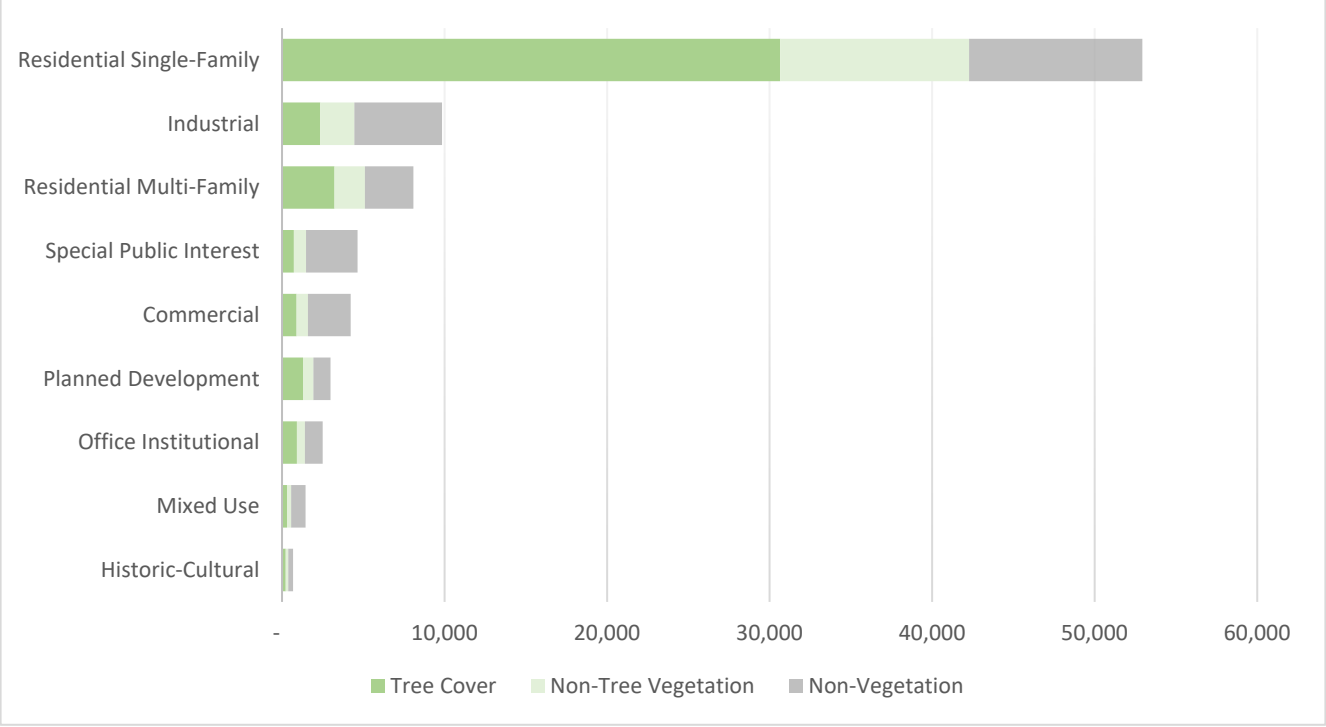


FIGURE 12. 2018 LAND COVER DISTRIBUTION IN ACRES BY ZONING CATEGORY

2.3 Urban Tree Canopy Change (2008-2018) - Qualifying the Results

A primary objective of the second and third canopy studies was to quantify and qualify canopy change occurring since the baseline assessment in 2008. At the city-wide scale, interpretation of overall change was complicated because the City annexed almost 3,000 acres of land during this time and changed its boundaries, making it difficult to measure *overall canopy change* precisely. The total *acreage* of the City's urban tree canopy (UTC) was higher in 2014 (40,740 acres) than it was in 2008 (40,524 acres) and in 2018 (40,609). However, because the physical boundaries of the City expanded, the observed *percentage* of tree canopy for the city as a whole decreased from 47.9% in 2008 to 47.1% in 2014 to 46.5% in 2018. If 2018 tree canopy is aggregated to 2008 city boundaries, the percentage of canopy on the land that comprised the City in 2008, the percentage dropped to 46.0%. The overall change equates to an estimated loss of approximately 1,500 acres of tree canopy between 2008 – 2018, or a loss of .43 acres per day. While the measurement of change is not statistically significant, it indicates an ongoing trend towards canopy loss at the city-scale.

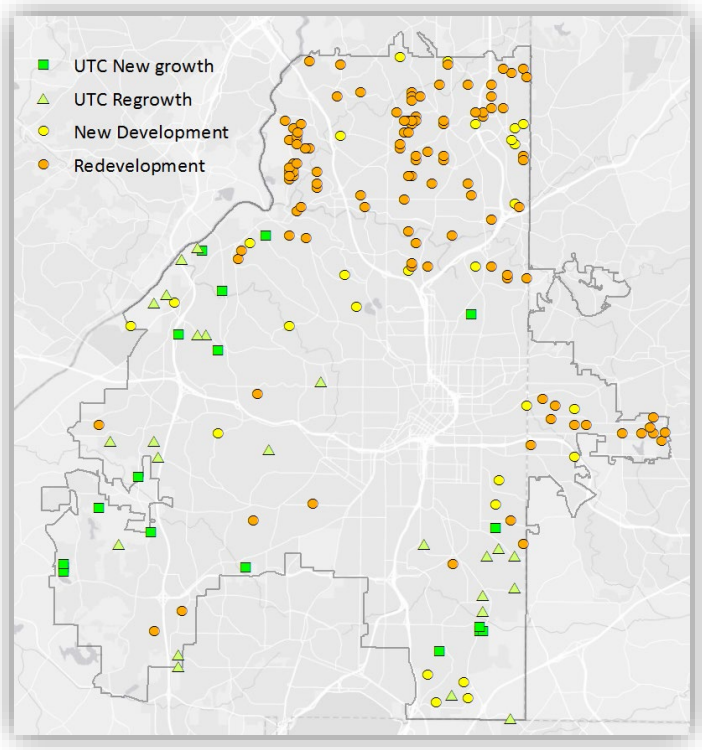


FIGURE 13. SITE INSPECTIONS

To better understand *where* the canopy change in the city occurred between 2008 and 2018 across the city, tree canopy values for each time period were aggregated to a city-wide grid of cells approximately 6 acres in size and analyzed. The 6-acre grid cell analysis yielded much more detailed and site-specific information about the City's canopy and its change over time. Researchers observed tree canopy *loss* greater than one acre in 939 cells, of which 809 were north of I-20, and tree canopy *gain* greater than one acre in 292 cells, of which 120 were north of I-20. The project team then visually inspected over 1,000 sites using the satellite photos from all years and subsequently visited 181 locations to verify site conditions (Figure 13). This detailed validation provided added confidence and revealed important trends. Most notable, the site visits revealed that numerous (169) cells detected on the imagery as "canopy gain" were in actuality, previously cleared sites with scrubby vegetation, invasive plant growth, and very dense stands of fast-growing pines. These sites equated to over 500 acres of land classified as tree canopy growth as measured by satellite imagery but had no canopy trees per se on site. These sites can arguably be classified as "false growth" and omitted from the calculation of overall all canopy coverage. While technically classified as tree canopy by satellite, the quality of the woody vegetation and young trees is low and many, if not most, of these site will be re-cleared when development restarts.

2.4 Areas Losing UTC: There were at least fifteen sites (10 acres or larger), across the city where the change results indicated noticeable (>50%) or complete loss of urban tree canopy, most of which had been cleared and graded for new industrial, commercial or institutional developments, which is not unexpected for a growing city.

The largest contiguous piece of canopy loss (190 acres) resulted from clearcutting a single new industrial/commercial development. More surprisingly the greatest observed loss of tree canopy was from the cumulative loss resulting from redevelopment of single-family houses. Overall, at the sites visited, the number of single-family residential units (density) did not appear to change much between 2008 and 2018, but the size of the single-family homes and the cleared area associated with each increased substantially.

The project team identified approximately 389 grid cells where single-family homes were rebuilt or renovated (Figure 14), resulting in a loss of tree cover and an increase in impervious surface area. Since the majority of the city's tree canopy is found on single-family land, this single-family redevelopment trend has a significant impact on the city's urban tree canopy. The loss may not be immediately apparent without assessing the cumulative pattern since it occurs lot by lot and becomes apparent from the ground only after several homes on a street or neighborhood have been redeveloped

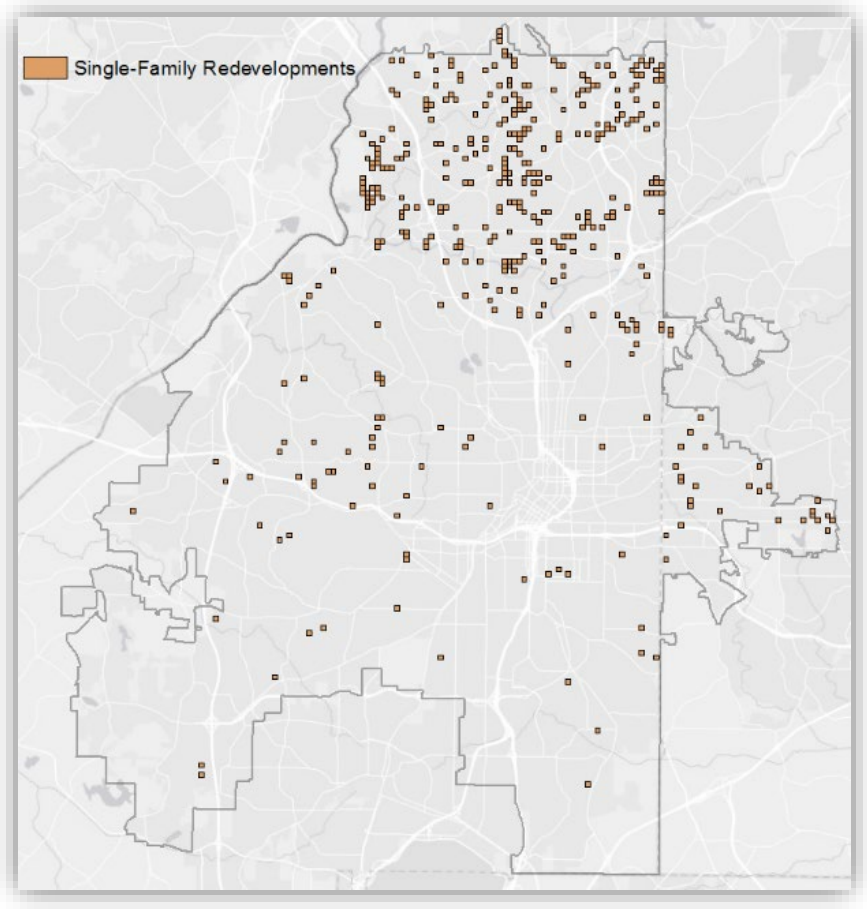


FIGURE 14. SINGLE FAMILY REDEVELOPMENTS

Fortunately, the City has recognized concerns about tree loss and has set a policy goal of achieving and maintaining a minimum of 50% tree canopy. While this may be difficult to achieve in the short-term, this goal can be accomplished with a multi-faceted approach. To increase canopy coverage from 46% to 50%, the City must both prevent loss of canopy and plant trees on roughly 5,000 acres of land. To minimize canopy loss or achieve no-net loss, the City needs to permanently protect Atlanta's few remaining large tracts of undisturbed forest and modify regulations to limit the loss of existing tree canopy in new developments and redevelopments.

2.5 Areas Gaining UTC: The project team also identified many areas showing an increase in canopy coverage between 2008 - 2018. Several locations showing canopy gain were the result of the rapid growth of

FIGURE 15. CANOPY GROWTH

trees planted in new subdivisions or on individual properties around 2008 (Figure 15). Sites that were cleared prior to 2008 and had almost no tree cover at that time had at least 25% canopy coverage in 2018. While this growth is positive, it should also be noted that many of these trees are quick growing and non-native or ornamental trees (such as cryptomeria, Chinese elms, and crape myrtles). As such, they do not provide the same long-term ecological benefits as native trees such as oaks, beeches, hickories, elms, and other diverse species that likely made up the mature hardwood forests that covered many of these sites prior to being cleared. Based on observations in the field, the diversity of replanted trees is limited and the most commonly planted species in the city by far is red maple.

It is important to note that numerous sites showing growth in tree canopy were unfinished or partially unfinished subdivisions (i.e., land cleared, roads and sewer constructed but no buildings), which are often referred to as "pipe farms". Of the 32 identified pipe farms, most of which were in the southeast and southwest corners of the city, fifteen were greater than 25 acres in size. The largest, which was cleared in 2004, was roughly 80 acres. Similar regrowth was observed at many former Atlanta Housing Authority sites, almost all of which were cleared pre-2008 and remain vacant today (Figure 16). The pipe farms and many former AHA sites are now overgrown,

FIGURE 16. FORMER AHA PROPERTY SHOWING CANOPY GROWTH

typically with small, tightly spaced volunteer pines or quick-growing invasive trees. The satellite imagery shows that some of these sites have grown to over 90% canopy since 2008. However, visits revealed that sites were populated with a monoculture of young pines or poor quality invasive trees with some growing in crumbling asphalt of former parking areas. These trees do not provide the ecosystem services of forested land. Almost certainly, they also represent temporary growth since the sites contain stalled developments that will be cleared again when development plans are implemented. Based on extensive site visits and review of the satellite imagery, the project team estimates that this "false" growth in areas where the land cover can be classified as "tree canopy" as measured by satellite (but is not comprised of mature canopy-providing individual trees), represents approximately 900 acres or 2.2% of the city's canopy, indicating a more accurate estimate of true canopy at approximately 45% in 2018.

2.6 Canopy Post 2018

The trends observed between 2008 and 2018 have likely continued, based on field observations in 2020 and permitting trends. New building permits in the city of Atlanta increased from approximately 491 in 2012 to over 1,320 in 2017. In the same period, building permits for single-family residential lots, where the highest canopy cover is found, grew from approximately 301 to just over 677 in this period, and was highest in 2016 at 695. Approximately 30% - 40% of new single-family residential permits in each given year were issued for building a new house on the site of a demolished single-family home.

2.7 Recommendations

The canopy change analysis provides documented, science-based data that can be used to inform decision-making related to urban trees and urban forest management in Atlanta. Information about canopy change between 2008 and 2018 provides a tool to help the City evaluate and quantify how the interaction of policy, land use, and the free market affect urban tree canopy in Atlanta over time.

Specific recommendations for consideration and discussion:

- Identify methods for reducing tree loss during redevelopment of single-family and other properties.
- Promote or require retention of existing trees on new developments and large redevelopments where feasible.
- Evaluate policy decisions related to land development, specifically as it relates to “pipe farms” (partially developed sites) and vacant former public housing properties.
- Identify measures to prevent clearing of large sites that will not be completed.
- Evaluate maximum allowable lot coverages for impervious surfaces, especially for residential land.
- Implement conservation measures for new subdivisions.
- Identify incentives for re-development of under-developed and cleared land, and incentives for protecting land with the highest ecological value.
- Permanently protect some of the few remaining large tracts of undisturbed mature forests.
- Consider expanding riparian buffers to increase tree cover along streams in impaired watersheds.
- Evaluate open space requirements for multi-family and other developments.
- Align replanting requirements with the species of trees that are removed or require replanting of native trees to ensure tree replacements are of similar quality to the removed trees.
- Require minimal ecological preservation or restoration plans for high-acreage redevelopment sites.
- Obtain high resolution satellite imagery and update canopy analysis every four to five years to facilitate the evaluation of tree canopy change and the impact of policies over time.

Section 3: Methods

3.1 Establishing the Workflow

Since the primary goal of this research is to quantify tree cover, the final methodology consists of a land cover classification process that differentiates the city into three distinct land cover classes (tree, non-tree vegetation and non-vegetation) using a combination of well-established "unsupervised" and "supervised" imagery classification techniques, followed by an accuracy assessment of the classification techniques, and numerous site visits to qualify the findings.

Unsupervised classification is computer driven and automatically segregates image pixels into groups of similar spectral signatures. Supervised classification is a manual intervention in which the user creates training sets (spectral signatures) for known classes and applies them to the entire image.

The finalized imagery classification process is described in further detail below.

3.2 Imagery Capture and Preparation

Imagery Capture

After review of the available imagery options, Digital Globe Inc.'s WorldView2 satellite imagery was selected as the best option, primarily due to its high spectral resolution. The satellite imagery was captured by the WorldView2 satellite on three separate dates in July, August and October 2018. Portions of the imagery contained cloud cover, especially in the SE. Overall, the imagery contained < 5% cloud cover. This extremely detailed 11-bit, 6-foot, pan-sharpened, 8-banded data (Red, Green, Blue and Near IR) served as the basis for all analyses except for cloud covered areas. 2017 NAIP imagery was used to classify areas covered by clouds in the WorldView 2 data (Figure 17).

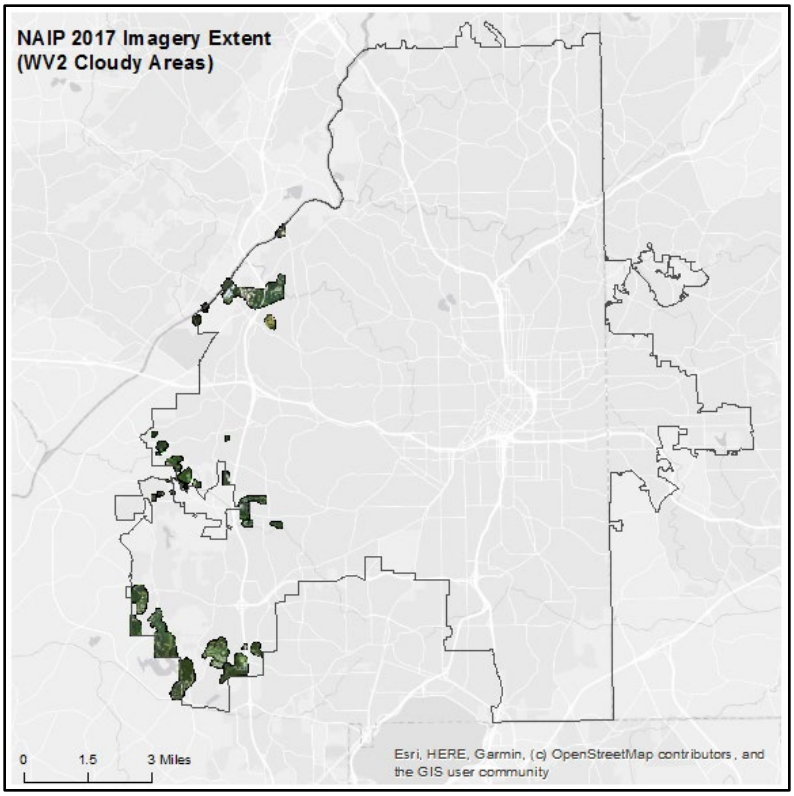


Figure 17. NAIP Imagery extent

3.3 Imagery Classification and Post Processing

Unsupervised Classification

The research team established the following land cover classes:

- **Tree Canopy:** the layer of leaves, branches and stems of trees that cover the ground when viewed from above.
- **Non-Tree Vegetation**: primarily lawn, grass, and low-lying vegetation such as shrubs, kudzu, and other plants.
- **Non-Vegetation**: pavement, buildings, impervious surfaces, and bare soil.
- **Shadow or Dark Areas**: shadows created by buildings and trees, certain dark pavements and buildings, and water bodies.

Researchers performed an unsupervised classification on each image using the Iterative Self-Organizing Data Analysis Technique (ISODATA) clustering tool in ERDAS IMAGINE 2016. The ISODATA clustering method uses the minimum spectral distance formula to form clusters or groups of pixels with similar spectral characteristics. The software user chooses the number of clusters or classes to be output. The process begins with either arbitrary cluster means or the means of an existing spectral signature set, and each time the clustering repeats, the means of these clusters are shifted. The new cluster means are used for the next iteration. The ISODATA method repeats the clustering of the image until either a maximum number of iterations has been performed or a maximum percentage of unchanged pixels have reached between two iterations.

In this study, a maximum of ten ISODATA iterations with 100 classes per output were run using arbitrarily generated cluster means derived from image statistic files and a convergence threshold of 0.95. The convergence threshold is the maximum percentage of pixels whose cluster assignments can go unchanged between iterations. By selecting a convergence threshold of 0.95, the user specifies when 95% or more of the pixels remain in the same cluster between one iteration and the

Figure 18. Recoding Unsupervised Land Cover Classification Results

next, the utility should stop processing. In other words, as soon as 5% or fewer of the pixels change clusters between iterations, the utility stops processing.

The resulting classification layers each contained 100 classes (figure above), which were then manually regrouped into one of the four defined cover classes. Special care was taken to ensure seamless class transition between images.

Shadow

One of the drawbacks of using satellite or aerial imagery alone for land cover classification is the difficulty caused by shadow. Since ISODATA classification is essentially image differentiations based on color, the areas without color (light), or in shadow, tend to remain unclassified or are lumped together with other dark areas of an image (e.g., certain pavement, and water bodies). Initially, almost 8% of the study area was classified as shadow/dark features. The majority of these areas were located downtown and consisted primarily of building and tree shadows, dark pavement and buildings, and some water bodies. To address this issue, the project team extracted and reclassified only the shadow/dark areas of each image into 250 classes and performed two iterations of the 250 class reclassifications. These reclassifications of shadow were combined with results from a Normalized Difference Vegetation Indice (NDVI) for each image. By combining these two techniques, the project team was able to reclassify the shadow/dark areas into one of the other three classes with confidence.

Post Processing

Once the shadow/dark areas were reclassified and the land cover classification was complete, the individual images were merged into one seamless image of the study area. Project team members visually inspected the composite image for any large, noticeable classification errors or omissions and made necessary updates through manual reclassification (i.e., user draws a polygon on the image and manually assigns a land cover class). Often with very high resolution data, land cover class results can be mixed, where small pixel clusters of one class are embedded in another class (i.e., mistakenly classified), causing a grainy or “salt and pepper” classification effect. To remove the granularity and smooth out the classes, a series of 7 pixel x 7 pixel neighborhood filters were run on the composite image. This helped reallocate stray pixels or small clusters of pixels into their appropriate classes.

3.4 Accuracy Assessment

Upon completion of the land cover classification, the project team conducted an accuracy assessment to validate the results. The accuracy assessment entailed comparison of the classification results with reference data on a category by category basis utilizing a stratified random sample of 250 points for the three classes (tree cover, non-tree vegetation, and non-vegetation) which resulted in a +/- 5% mean

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Tree	119	117	111	93.28%	94.87%
Non-Tree Vegetation	54	53	47	87.04%	88.68%
Non-Vegetation	77	80	75	97.40%	93.75%
Overall Classification Accuracy = 93.20%					
Overall Kappa Statistics = 84.18%					

Figure 19. Classification Accuracy Assessment Report

accuracy rate. The reference data consisted of Google Earth imagery from March and November 2018 and a limited number of site visits (< 25) for ground verification.

The graphic above depicts the accuracy assessment results, including overall and individual class accuracies and Kappa statistics. The Kappa coefficient expresses the proportionate reduction in errorgenerated by a classification process compared with the error of a completely random classification. For example, a value of 0.82 implies that the classification process is avoiding 82 percent of the errors that a completely random classification generates. K>0.80 represent strong agreement and good accuracy. 0.40-0.80 is the middle range, and <0.40 is poor.

The positive results of the accuracy assessment are likely due to several factors, including but not limited to excellent data quality; the classifiers' knowledge of the local area, both on the ground and as an image interpreter; and the low number of distinct land classes identified.

3.5 Site Inspections and Visits: Qualifying Canopy Coverage

In addition to a traditional accuracy assessment, the project team conducted computer-based visual inspections of canopy change for over 500 sites and in person visits to over 100 sites. The objective of both the visual inspections and in person site visits was to verify and validate observed change on sites with canopy change greater than 1 acre and to qualify or categorize the type of canopy change observed between 2008 – 2018. The project team categorized loss and gain into the following categories seen in Figure 20.

Change	Type	Description
Loss	Expansion	Loss due to expansion of exisiting development
Loss	Maintenance	Tree removal
Loss	Natural	Loss caused by flooding and/or high winds
Loss	New Development	Tree clearing for new development
Loss	Redevelopment	Tree clearing for redeveloped property
Gain	Growth	Normal tree growth
Gain	Regrowth	Regrowth on cleared land

Figure 20. Qualified Canopy Change Categories

3.6 Calculating Tree and Land Cover Statistics

2018 Tree canopy cover and other land cover percentages and areas were calculated City-wide and for the following geographic areas within the City of Atlanta:

- City-wide
- City-wide grid (500 ft. x 500 ft. grid cells; approx. 6 acres)
- Parks
- Watersheds
- Sub-watersheds
- Zoning categories
- Neighborhoods
- Neighborhood Planning Units (NPU)
- City Council Districts

These calculations were accomplished using ESRI's ArcGIS Desktop 10.8 to perform standard vector GIS overlay operations and/or raster zonal functions between the land cover data derived through the imagery classification process and geospatial data layers obtained publicly or from the City. The majority of land cover statistics were generated using ArcGIS 10.5 Zonal Statistics tool, which summarizes the values of a raster (in this case, land cover) within the zones of another dataset and reports the results to a data table. The results are then multiplied by the pixel dimensions to obtain the land cover area per zone. For example:

Sq. Ft. of Tree Cover per Zone = Pixel Dimensions [6.56 ft * 6.56 ft) * Sum of Tree Pixels in Zone

Results and subsequent interpretations of these calculations are presented in the following section.

3.7 Calculating Change between 2008-2018: Tree and Land Cover Statistics

Theoretically, calculating change in canopy area and percentages between 2008-2018 should be a simple equation. However, the city of Atlanta annexed almost 3,000 acres of land between 2008-2018. Additionally, the city updated most, if not all, of their GIS layers (zoning, neighborhoods, council districts, etc.) resulting in several boundary changes between 2008-2018. So, to assure that change over time was accurately calculated, the project team used various approaches to calculate change over time. For the city, change was calculated using 2008 city limits. For parks, neighborhoods, NPUS, and council districts, the 2018 boundaries were used and areas not classified in 2008 were omitted. For watersheds, 2014 boundaries were used as no updated watershed boundary has been released by the city since 2014. A detailed discussion of canopy change is presented in Sections 4 and 5.

Section 4: Land Cover Analysis and Change Findings

4.1 2018 City-Wide Tree and Land Cover Totals

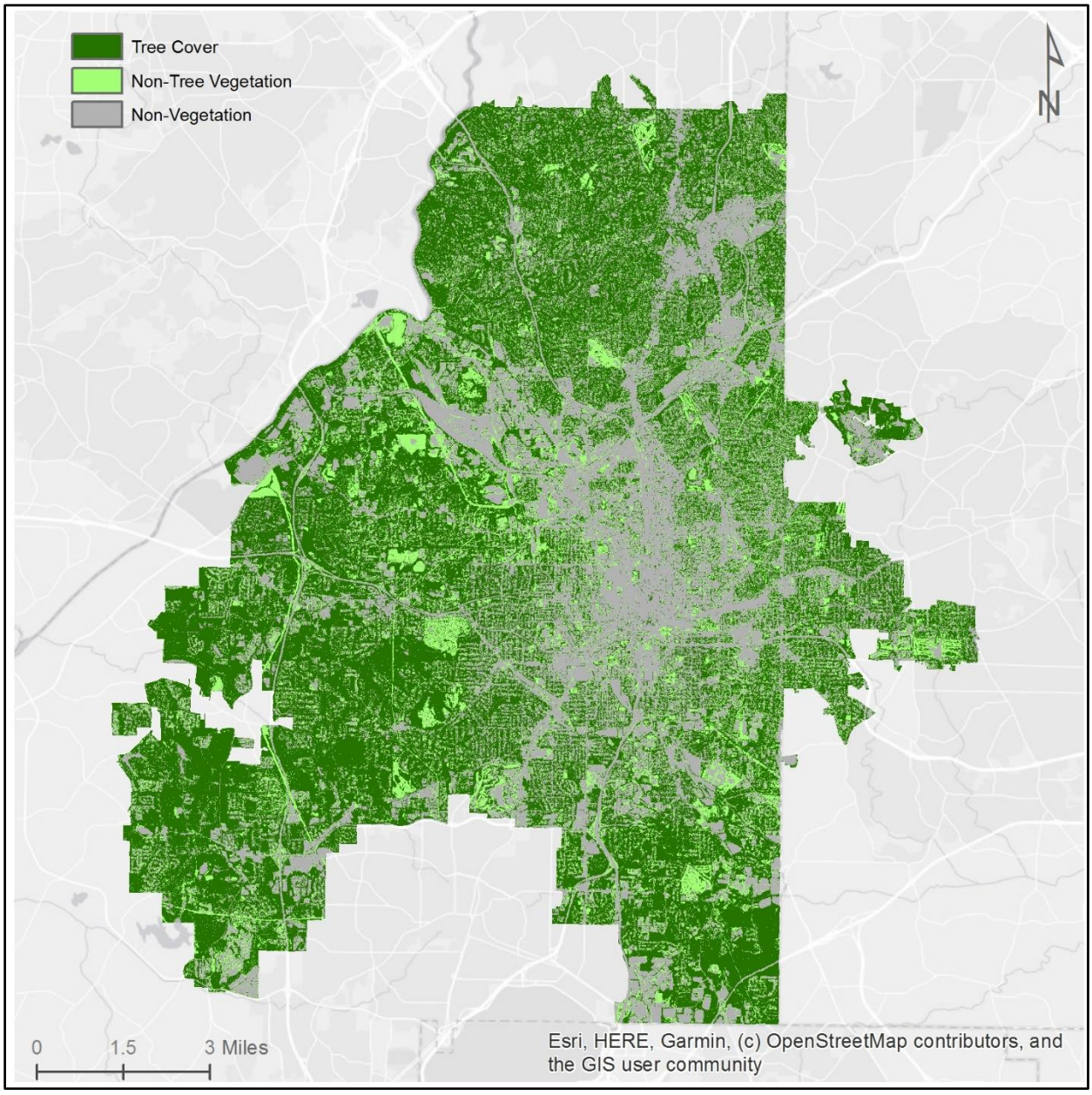


Figure 21. City of Atlanta 2018 Land Cover

Figure 21 depicts the city-wide results of the 2018 tree canopy assessment, with dark green representing tree canopy, light green representing non-tree vegetation, and gray representing non-vegetation. Table 1 shows the land cover values and percentages for 2018. In 2018, 46.5% (40,609 acres) of the city was tree-covered, 21.3% (18,595 acres) covered by non-tree vegetation (grass, shrubs, ground vegetation), and 32.2% (28,172 acres) covered by non-vegetation (impervious surfaces and water bodies).

Land Cover Category	Square Miles 2018	Acres 2018	% Land Area 2018
Urban Tree Canopy	63.5	40,609	46.5%
Non-Tree Vegetation	29.1	18,595	21.3%
Non-Vegetation	44.0	28,172	32.2%
City Area - Excludes Airport	136.5	87,376	

Figure 22. 2018 Land Cover Values

As seen in Figures 21 and 22, trees dominate the landscape of the city at 46.5% particularly in single-family residential areas located on the city's periphery, especially in the northwest and southwest. Downtown and the surrounding neighborhoods have very limited tree cover (Figure 23).

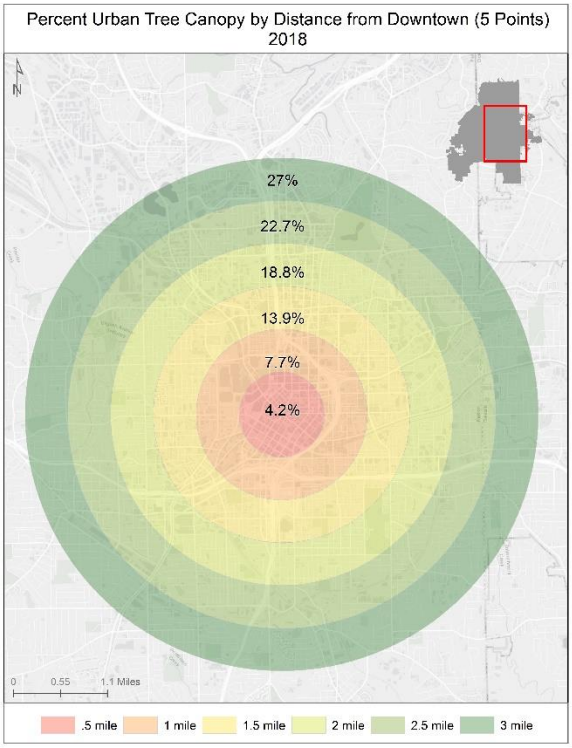


Figure 23. Percent Canopy by Distance from Downtown

Non-tree vegetation represents 21.3% of the city land and is distributed evenly throughout the city. Non-vegetation includes grass, shrubs and other low-lying vegetation. Major concentrations of non-vegetation are found in municipal parks with large open spaces, golf courses, cemeteries, and utility easements. A significant number of smaller vegetated areas without trees are scattered throughout the city, though many of these are underestimated to some extent since tree canopy can shade other vegetated and non-vegetated surfaces.

Non-vegetated areas represent 32.2% of the city land and includes buildings, roads, bare earth, water bodies, and other impervious surface. Non-vegetated areas dominate the transportation corridors, business districts and industrial areas. These non-vegetated areas have limited planting potential.

Figure 14. 2018 Tree, Non-Tree Vegetation and Vegetation

4.2 City-Wide Canopy Change 2008 - 2018

Figure 25 shows raw land cover values and percentages for 2008, 2014, 2018. While it appears that the total amount of tree canopy has increased over time, this is extremely misleading as the city has grown

	Square Miles 2008	Square Miles 2014	Square Miles 2018	Acres 2008	Acres 2014	Acres 2018	% Land Area 2008	% Land Area 2014	% Land Area 2018
Urban Tree Canopy	63.3	63.7	63.5	40,524	40,740	40,609	47.9%	47.1%	46.5%
Non-Tree Vegetation	29.3	30.9	29.1	18,722	19,758	18,595	22.1%	22.9%	21.3%
Non-Vegetation	39.7	40.5	44.0	25,386	25,921	28,172	30.0%	30.0%	32.2%
City Area - Excludes Airport	132.0	135.0	136.5	84,648	86,419	87,376			

Figure 25. Land Cover Values for Canopy Assessments

by 4.5 square miles due to multiple annexations between 2008 - 2018. Despite the increase in city area, there has been a 1.5% decrease in percent canopy cover between 2008 - 2018. However, even this number, 1.5% canopy loss, is misleading and does not accurately represent the change in canopy over this 10 year period. A more accurate measurement of canopy change between 2008-2018 is a comparison of the 2018 and 2008 canopy values using the 2008 city boundary. This is necessary because the extent of the 2008 imagery does not cover the 2018 city limits and subsequently, the project team is unable to aggregate 2008 canopy values to the 2018 city limits. By using the 2008 city boundary as the unit of analysis for city-wide canopy change, the project team eliminates the effects on annexation on the canopy change values, ensuring a more realistic comparison of canopy change in the City of Atlanta between 2008 and 2018.

Figure 26 shows the results of aggregating the 2018 canopy values to the 2008 city boundary. As expected, 2018 canopy values change more significantly, with an estimated loss of approximately 2% of the city's canopy, or ~1,550 acres, between 2008 - 2018. This equates to approximately .43 acres of canopy lost per day between 2008 – 2018. This amount of loss is likely still an underestimate as many areas across the city that experienced canopy gains between 2008 – 2018 are likely temporary gains due to rapid tree growth on lands cleared for development circa 2008, most of which will be (or are being) re-cleared once development restarts. This is discussed in more depth later in this report.

Land Cover Category	Square Miles 2008	Acres 2008	Acres 2018	% Land Area 2008	% Land Area 2018
Urban Tree Canopy	63.3	40,524	38,970	47.9%	46.0%
Non-Tree Vegetation	29.3	18,722	18,180	22.1%	21.5%
Non-Vegetation	39.7	25,386	27,497	30.0%	32.5%
2008 City Area - Excludes Airport	**132.0**	84,648			

Figure 26. 2018 Canopy Aggregated to 2008 City Limits

4.3 City-Wide Grid

Figure 27 illustrates tree cover aggregated to a city-wide grid comprised of 500 ft. x 500 ft. (approximately 5.75 acre) cells. This aggregated grid helps illustrate the density of tree cover across the city, not simply total cover area. Areas in red, orange, or yellow have less tree cover than the city average. Tan represents areas just above or below the city tree cover average of 46.5%. Areas in green have higher than average tree cover percentages and represent the most densely tree-covered areas in the city. Many of these densely forested areas are residential neighborhoods along the city's primary stream tributaries (Peachtree, Nancy, Utoy, and Proctor Creeks). The mid-range or average tree cover grid cells (tan) include residential neighborhoods scattered between some of the stream corridors, with a majority of these areas running along an east-west mid-city band. The least densely forested areas are at the center of the city, radiating out along highways, industrial corridors (rail yards) and around commercial districts including Downtown, Midtown, Buckhead, and Lenox.

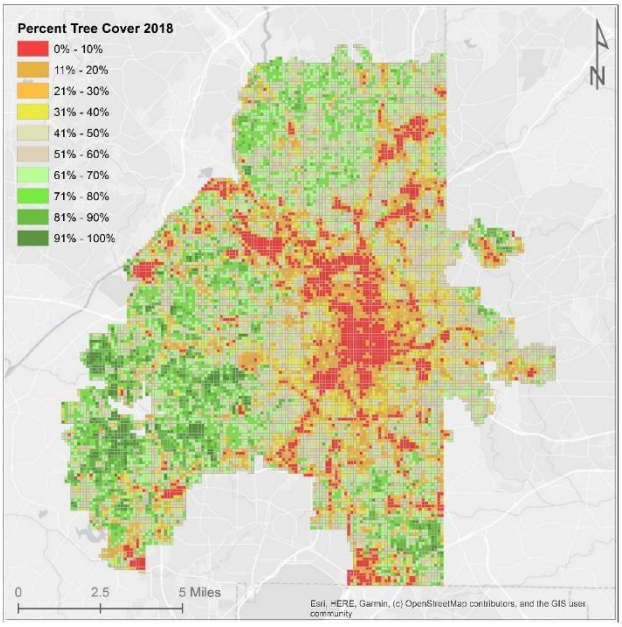


Figure 27. 2018 Percent Tree Cover Grid

4.3 Canopy Change using the City-Wide Grid 2008 - 2018

In order to effectively examine canopy change for small areas across the city, 2008, 2014, and 2018 land cover values were aggregated to the city-wide grid. This aggregation allowed the project team to compare and inspect land cover change results for many areas across the city. The project team also used the change grid as the basis for identifying areas for site visits. Since there are approximately 15,800 5.75-acre grid cells in the city, only grid cells showing canopy change greater than 1 acre were examined.

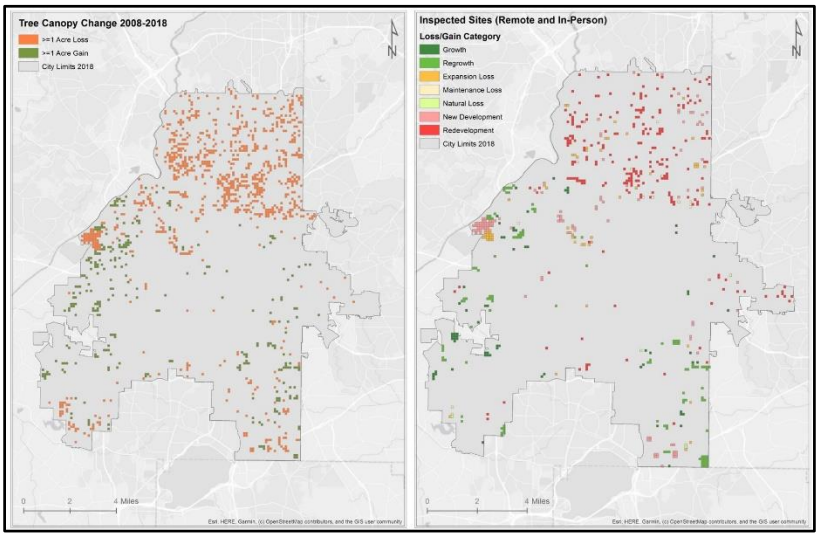


Figure 28. Inspected Canopy Change Sites

There were 1,231 grid cells across the city with canopy loss or gain greater than or equal to 1 acre, 648 of which were inspected (remotely on the computer and in person) to validate and qualify the cause of canopy change (Figure 28). Canopy change was for the 648 grid cells was categorized into two main categories, Loss and Gain, and six subcategories (Figure 29).

Change	Type	Description
Loss	Expansion	Loss due to expansion of exisiting development
Loss	Maintenance	Tree removal
Loss	Natural	Loss caused by flooding and/or high winds
Loss	New Development	Tree clearing for new development
Loss	Redevelopment	Tree clearing for redeveloped property
Gain	Growth	Normal tree growth
Gain	Regrowth	Regrowth on cleared land

Figure 29. Canopy Change Categories

It is evident in Figure 5 that most small area canopy loss is concentrated in northern parts of the city while gain is observed in the west, southwest and southeast. Of the 1,231 grid cells with canopy change greater than 1 acre, 939 or 76% were areas losing canopy (Figure 30A). Since there were so many grid cells with canopy loss >= 1 acre, only grid cells with loss >= 1.25 acres (410) were qualified based on observed change (Figure 30B). The majority (53%)

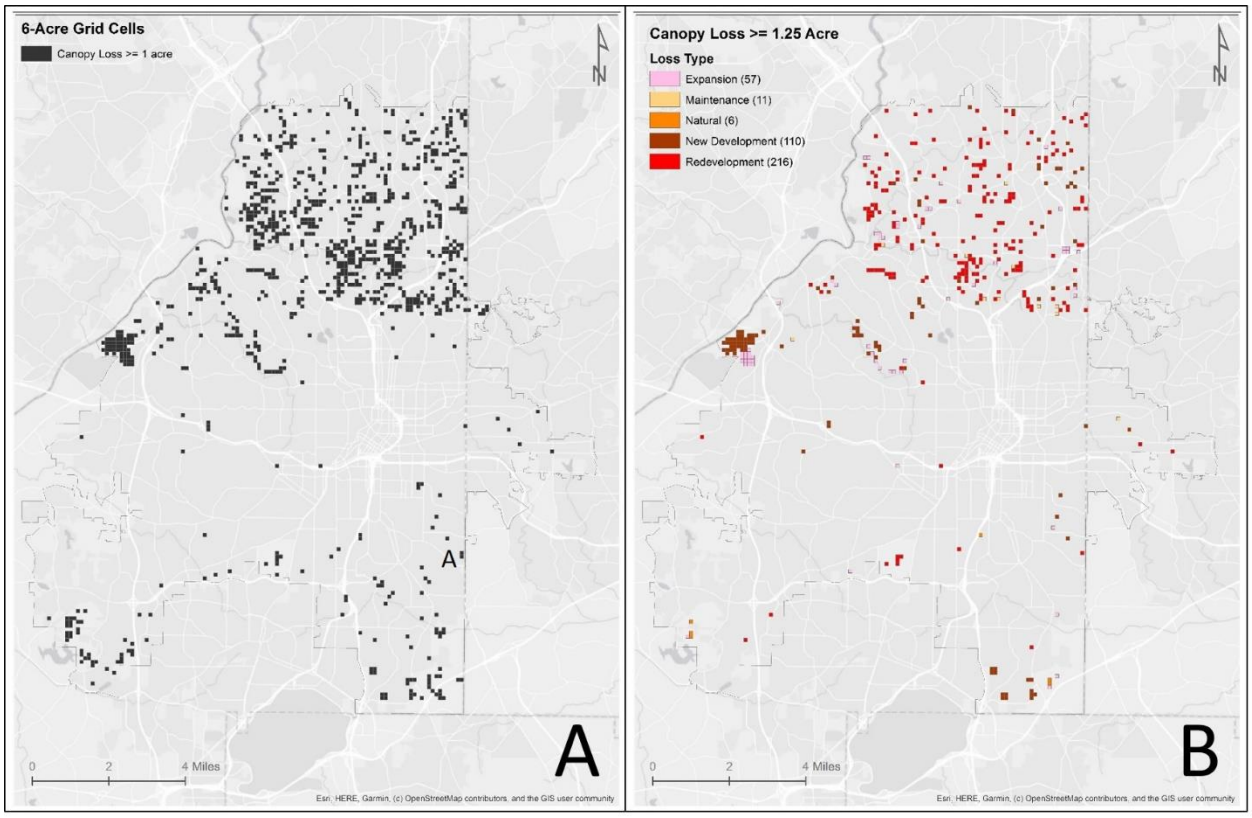


Figure 30. Canopy Loss Sites

of loss observed in these areas was due to redevelopment, primarily single-family redevelopment. Another significant cause of canopy loss was new development activity, which was observed in 27% of the 410 grid cells. With an average loss of 1.6 acres per grid cell, approximately 1,500 acres of canopy were lost in these areas. New developments averaged 2.6 acres (45%) of canopy loss per grid cell while redevelopments averaged 1.5 acres (25%) of loss per grid cell. It should be noted that many areas of loss spanned multiple grid cells and subsequently were missed in these inspections where each grid cell contained loss less than 1 acre.

There were 292 grid cells with canopy gain greater than or equal to 1 acre, with an average gain of 1.3 acres per grid cell (Figure 31A). As seen in Figure 31A, most areas with observed gains were located in the western and southeastern part of the city, with some pockets of gain occurring close to downtown.

Canopy gain was qualified or categorized through site visits for areas showing with 1.25 acres or more of gain (Figure 31B). Growth in these 121 grid cells was categorized into two categories, growth and regrowth, with the large majority (69%) being areas of regrowth. Growth was usually typified by areas that experienced rapid growth of young trees likely planted in 2008 or earlier, usually in apartment complexes or small single-family developments. Areas experiencing regrowth were almost always sites where lands were cleared for development before 2008, development ceased or was not completed, and subsequently fast growing pines and invasives filled the cleared lands. Other areas experiencing regrowth were former Atlanta Housing Authority properties that were demolished prior to 2008 and have yet to be redeveloped.

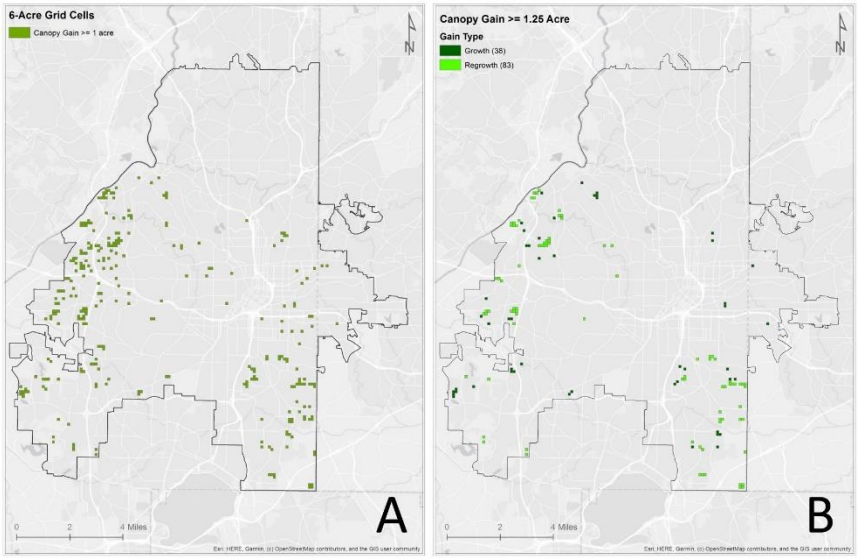


Figure 31. Canopy Gain Sites

Figure 32. Cycle of Canopy Loss-Gain-Loss on a Single Site

Many if not all of these areas are likely to be recleared and developed. This “reclearing” phenomenon was observed during site visits at two sites, both of which were cleared before 2008, then experienced significant regrowth, and are now either completely developed or development is coming soon (Figure 32).

4.5 City Council Districts - Tree Canopy 2018

The City of Atlanta contains 12 City Council Districts, ranging in size from 4.3 square miles (District 2) to 18.9 square miles (District 8), with an average council district size of 11.3 square miles.

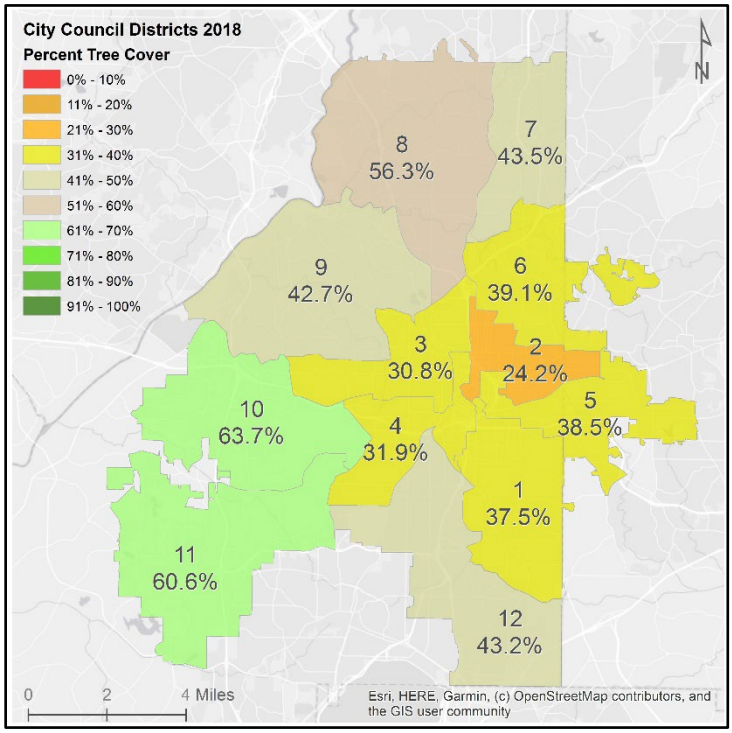


Figure 33. 2018 Canopy Percentage by City Council District

Figure 33 is a map of the 2018 canopy distribution for the 12 city council districts. The 2018 average percent canopy cover by council district is 42.7%, with a low of 24.2% in District 2 and a high of 63.7% in District 10. Three council districts have percent canopy coverage above the City average of 46.5%, with these neighborhoods located in the southwest and northwest, and are comprised primarily of single-family residential land. The 9 council districts below the City average are located in the northeast, southeast, west, east, and downtown, in central business districts, and along the major transportation corridors. Figure 3426 shows the percent land cover distribution of the 12 council districts, with acres noted in the bars.

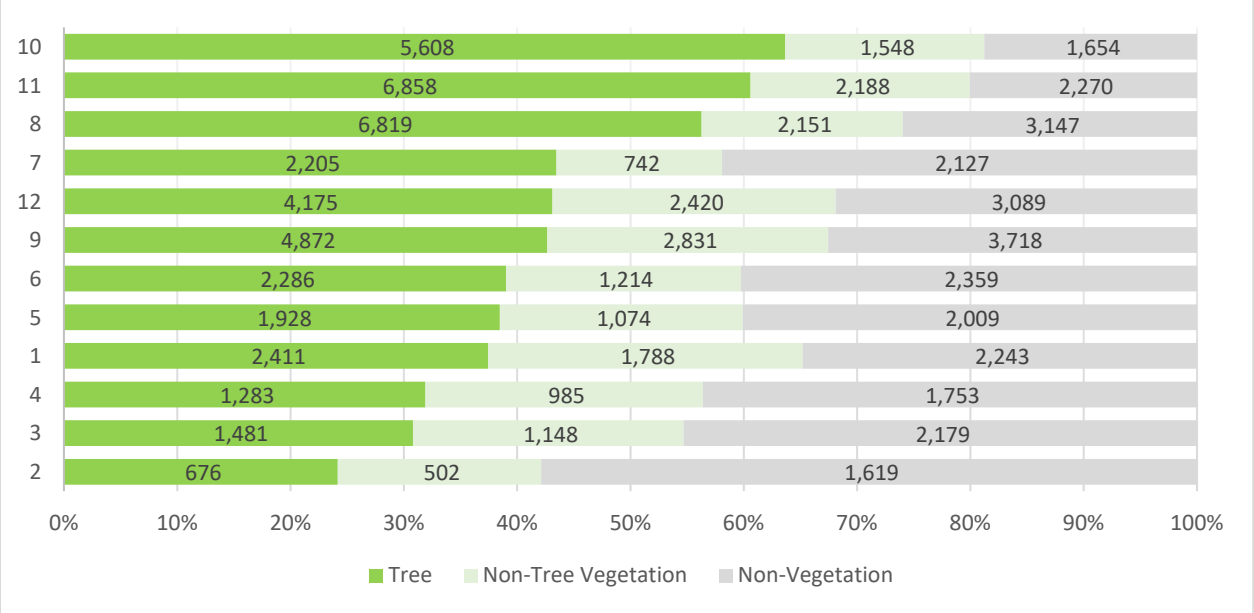


Figure 34. 2018 Land Cover Distribution by City Council District

Figure 35 shows the 2018 acreage and percent tree cover by city council district. As expected, the centrally located council districts have significantly lower tree cover percentages than council districts outside of downtown. The council districts with above city-average tree cover percentages are dominated by low density, single-family residential development while the council districts with below city-average percentage tree cover are overwhelmingly high density, urbanized areas.

The council districts vary significantly in size and composition. Council District 8 is the largest (12,108 acres) in size and has the 2nd most tree cover by acres (6,819) and the 3rd highest percentage of tree cover (56%) in the city. By contrast, Council District 1 is the smallest (2,795 acres), has the lowest total tree canopy area (676 acres), and has the lowest percentage of tree canopy (24%).

District	Acres	Acres UTC	% UTC
10	8,804	5,608	64%
11	11,309	6,858	61%
8	12,108	6,819	56%
7	5,069	2,205	44%
12	9,675	4,175	43%
9	11,413	4,872	43%
6	5,855	2,286	39%
5	5,007	1,928	39%
1	6,436	2,411	38%
4	4,017	1,283	32%
3	4,805	1,481	31%
2	2,795	676	24%

Figure 35. Tree Canopy by Council District

4.6 City Council District Change[1] 2008 – 2018

Between 2008 – 2018, the change in tree canopy across the City's Council Districts varied greatly. Figure 36 is a map of the percent tree canopy change by Council District. Figure 37 shows the percent canopy in each Council District, with acres changed noted in the bar. Figure 38 shows land cover change statistics for each Council District. The average percent canopy change by Council District was -.7% with the most percent canopy loss (-10.6%) occurring in District 8 and the most percent canopy gain (4.9 %) found in District 10. District 8 also lost the most acres (1,291) of canopy while District 10 gained the most acres (427). The three districts with significant decreases (>=5%) in canopy coverage are all located in north Atlanta where the majority of new development and

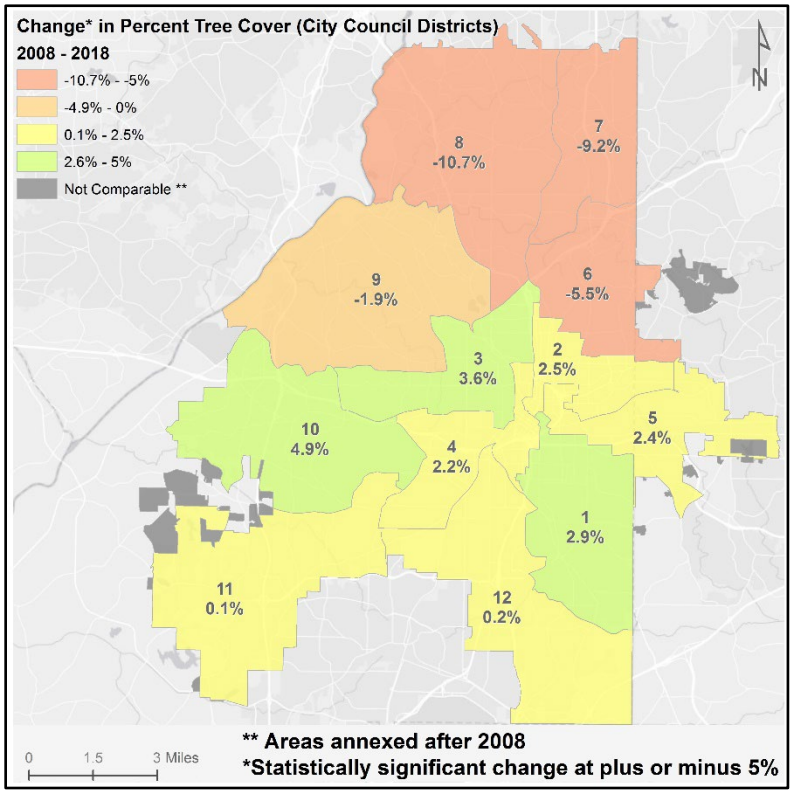


Figure 16. 2008-2018 Canopy Change by Council District

[1] 2008 Tree canopy data does not exist for areas annexed after 2008. Subsequently, Council District change between 2008 - 2018 was calculated using 2008 Council District boundaries.

redevelopment occurred between 2008 – 2018.

District	Acres	Acres UTC Change	Acres NTV Change	Acres NV Change	% UTC Change	% NTV Change	% NV Change
10	8,804	427	-540	174	4.9%	-6.2%	2.0%
3	4,805	172	-19	-153	3.6%	-0.4%	-3.2%
5	5,007	186	-121	-65	2.9%	-1.9%	-1.0%
2	2,795	69	-100	31	2.5%	-3.6%	1.1%
6	5,855	114	-213	223	2.4%	-4.5%	4.7%
4	4,017	88	4	-92	2.2%	0.1%	-2.3%
12	9,675	18	9	10	0.2%	0.1%	0.1%
11	11,309	13	-126	241	0.1%	-1.3%	2.4%
9	11,413	-217	366	-77	-1.9%	3.2%	-0.7%
1	6,436	-274	24	270	-5.5%	0.5%	5.4%
7	5,069	-468	-25	525	-9.2%	-0.5%	10.3%
8	12,108	-1291	204	1155	-10.7%	1.7%	9.5%

Figure 37. 2008-2018 Canopy and Land Cover Change by Council District

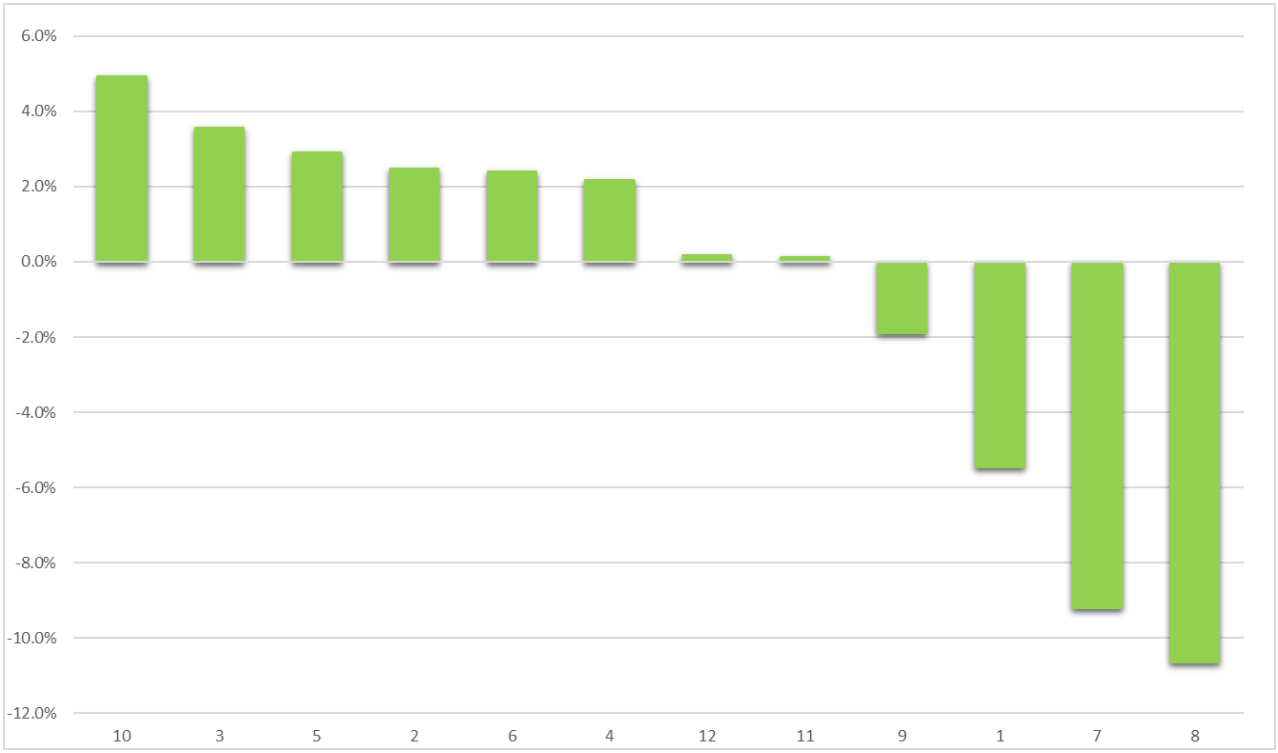


Figure 38. 2008-2018 Percent Canopy Change by Council District

Figure 39. Canopy Loss Due to New Multi-Family Development in Council District 7

Figure 40. Canopy Gain at Half-Completed Development in Council District 11

4. 7 Neighborhood Canopy 2018

The City of Atlanta contains approximately 244 neighborhoods, ranging in size from sixteen acres (Harvel Homes) to over 1,900 acres (Paces), with an average neighborhood size of 333 acres. Many areas in the City of Atlanta are undesignated as neighborhoods and are subsequently left out of neighborhood-level canopy calculations or analysis (Figure 41).

Figure 41 shows the 2018 canopy distribution for all neighborhoods in the City. The average 2018 percent canopy cover by neighborhood was 47.5%, with a low of 3.2% in the Oakland neighborhood and a high of 83.9% in Boulder park. One hundred and forty neighborhoods were above the City average of 46.5% tree canopy, with these neighborhoods located primarily in the north, west, southwest and southeast. The 144 neighborhoods below the City average are located primarily downtown, in central business districts, and along the major transportation corridors.

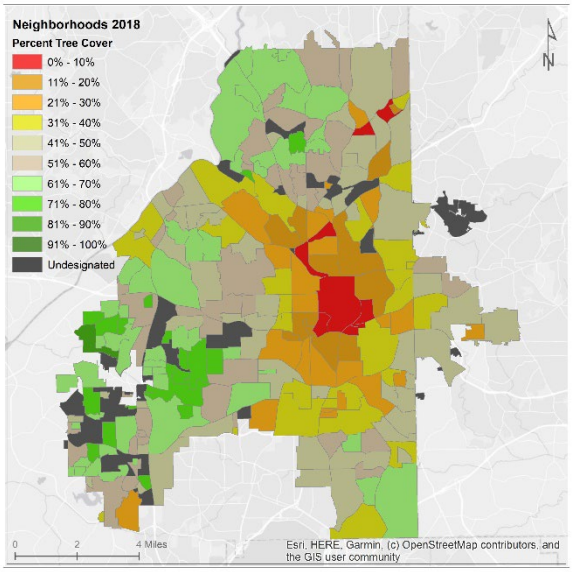


Figure 41. 2018 Percent Canopy Cover by Neighborhood

4.8 Top 12 Neighborhoods (2018 Canopy Percentage)

Figure 42 shows the land cover distribution of these twelve neighborhoods, with acres noted in the bars. Figure 43 shows the top 12 neighborhoods having the highest percentage of tree canopy in 2018. All twelve of these neighborhoods are located in southwest Atlanta,

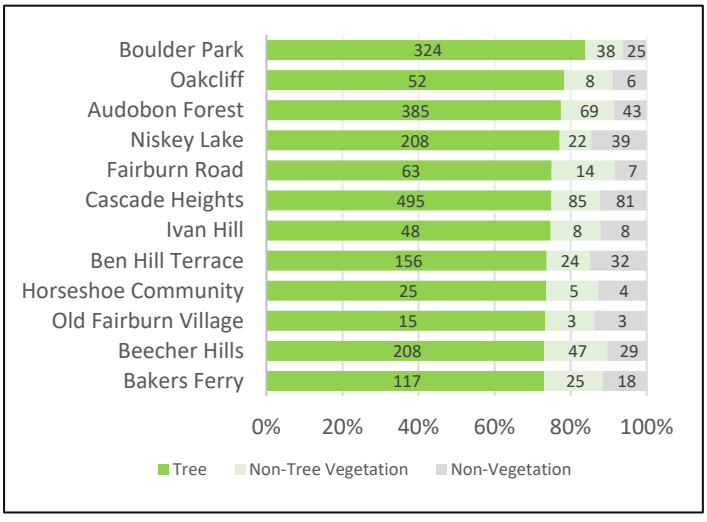


Figure 42. 2018 % Land Cover Distribution - Top 12 Neighborhoods Acres shown in bars

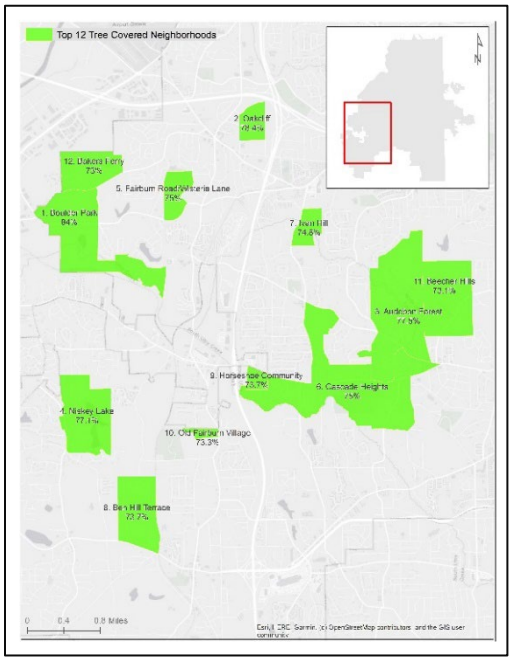


Figure 43. Top 12 Neighborhoods % UTC 2018

primarily along Utoy creek, and have canopy coverage ranging from a low of 73% in Bakers Ferry to a high of 84% in Boulder Park.

4.9 Top 12 Neighborhoods (2018 Canopy Acres)

Figure 45 shows the land cover distribution of these 12 neighborhoods, with acres noted in the bars. Figure 44 shows the top 12 neighborhoods having the greatest total area of tree canopy in 2018. These large, single-family residential neighborhoods are located across the City, primarily on its periphery, and account for 22% of the City's total tree canopy, ranging from a high of 1,168 acres (2.9% of the City) in Paces to 459 acres (1.13% of the City) in East Atlanta. The percent canopy coverage for these neighborhoods ranges from a high of 75.0% in Cascade Heights (SW) to a low of 45.6% in Morningside/Lenox.

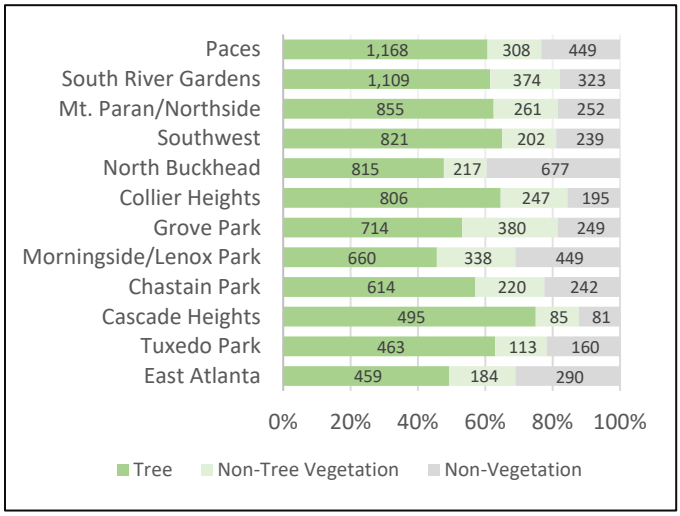


Figure 44. Landcover Distribution–Top 12 Neighborhoods (canopy acres)

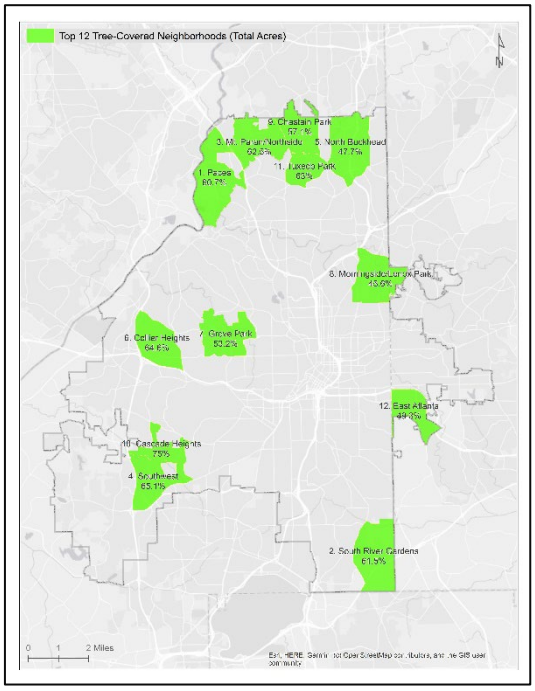


Figure 45. Top 12 Neighborhoods-2018 Canopy Acres

Due to the large number of neighborhoods, only 2018 canopy statistics and maps for the top and bottom 12 neighborhoods are highlighted in this section. For complete 2018 neighborhood canopy statistics, see Appendices 2 and 3.

4.10 Bottom 12 Neighborhoods (% Canopy)

Figure 46 shows the land cover distribution of bottom 12 tree-covered neighborhoods in 2018, with acres noted in the bars. Figure 47 is a map of the. The bottom 12 tree-covered neighborhoods are located in very high-density areas of the City, predominantly downtown and Buckhead, and have canopy coverage ranging from low of 3.2% in Oakland to 15.2% in Summerhill.

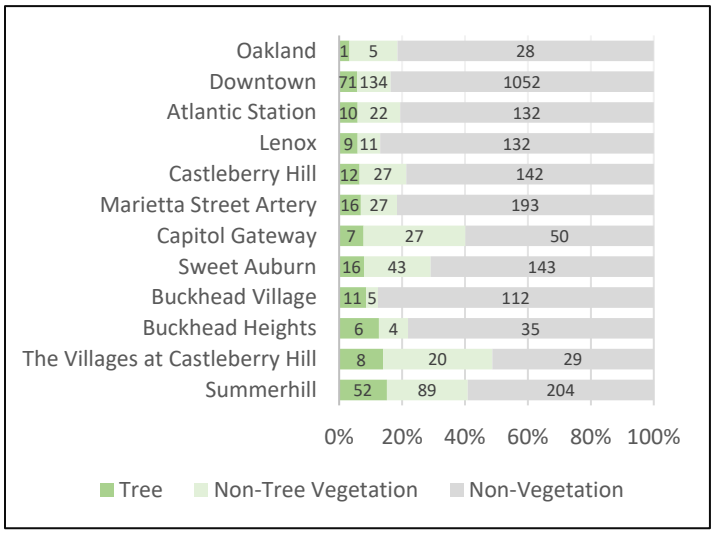


Figure 46. 2018 % Landcover Distribution Bottom 12 Neighborhoods Acres shown in bars

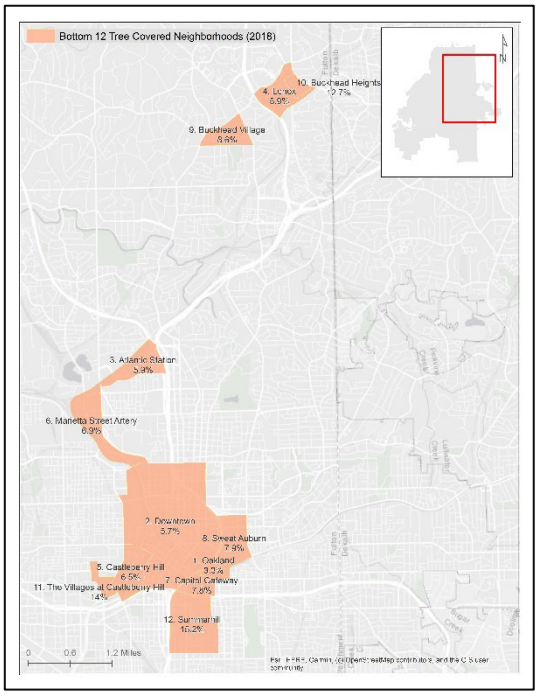


Figure 47. Bottom 12 Neighborhoods % UTC 2018

4.11 Bottom 12 Neighborhoods (Total Acres)

Figure 48 shows the land cover distribution of these 12 neighborhoods, with acres noted in the bars. Figure 49 is a map of the 12 neighborhoods having the least amount of tree canopy in 2018. These neighborhoods, all well under the average neighborhood size of 333 acres,

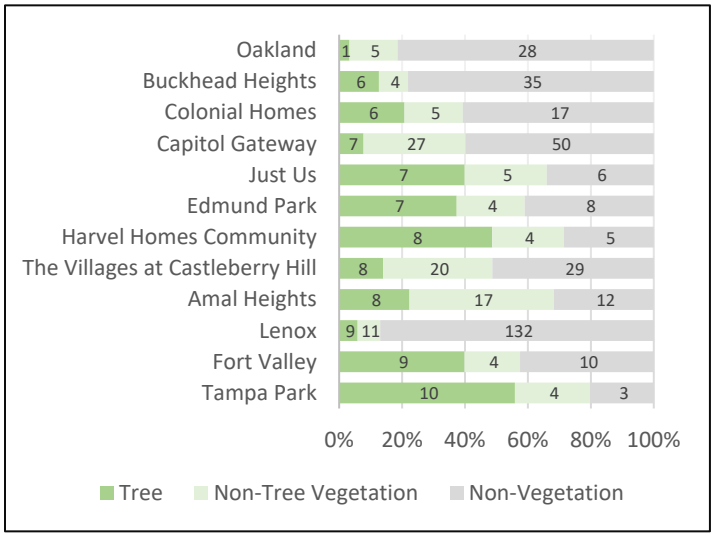


Figure 48. 2018 % Landcover distribution Bottom 12 Neighborhoods Acres shown in bars

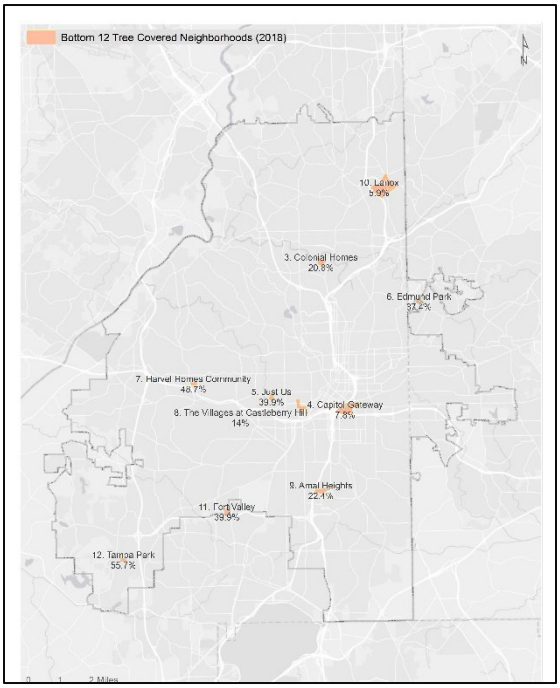


Figure 49. Bottom 12 Neighborhoods UTC Acres 2018

have very little canopy, ranging from a low of 1 acre in Oakland to 10 in Tampa Park. Almost all of these neighborhoods are residential. Two of these neighborhoods have above the City average percent tree cover of 46.5% but the majority fall well below the average, with six of these neighborhoods at 20% or less canopy cover.

4.12 Neighborhood Canopy Change[1]

Between 2008 – 2018, the change in tree canopy across the City's neighborhood varied greatly. Figure 50 shows the percent tree canopy change by neighborhood. The average percent canopy change by neighborhood was -2% with the most loss (-25%) occurring in Bankhead/Bolton (west) and the most gain (34%) found in Bankhead Courts. The majority of neighborhoods with decreasing canopy are located in the north, and extremes SW and SE of the city. The neighborhoods gaining canopy are located primarily across the middle of the city.

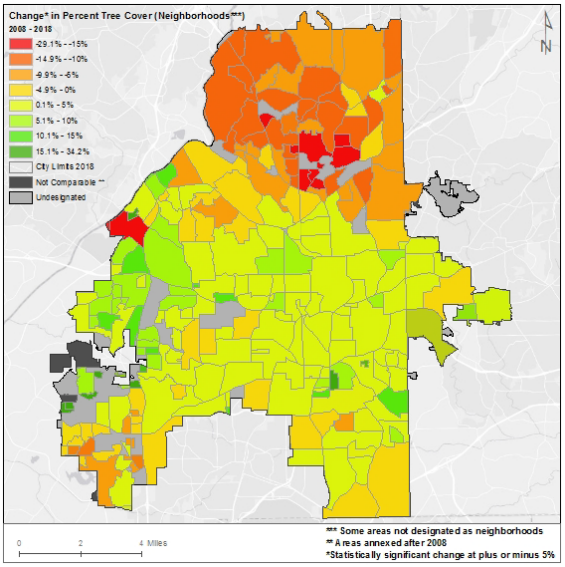


Figure 50. % Canopy Change 2008 -2018

Due to the large number of neighborhoods, only 2008 -2018 canopy change statistics and maps for the top and bottom 12 neighborhoods will be highlighted in this section. For complete 2008-2018 neighborhood canopy change statistics, see Appendices 5 and 6.

4.13 Canopy Increase by Percentage for Top 12 Neighborhoods

Figure 51 shows the percent increase in these neighborhoods, with acres gained in the bars. Figure 52 shows the top 12 neighborhoods increasing in percent canopy between 2008-2018. These twelve

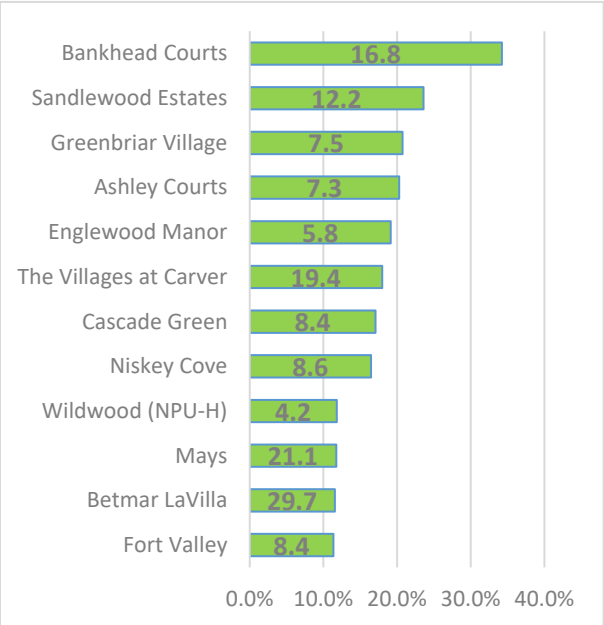


Figure 51. Top 12 Neighborhoods % UTC Change 2008-2018

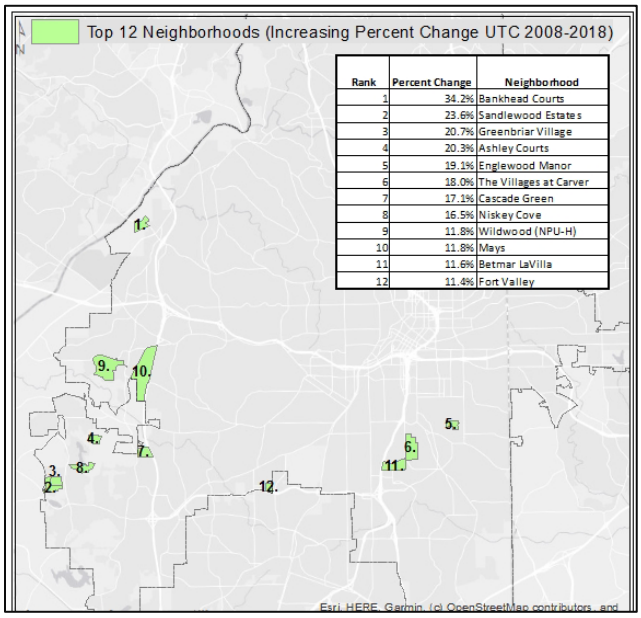


Figure 52. Top 12 Neighborhoods % UTC Change 2008-2018

[1] 2008 Tree canopy data does not exist for areas annexed after 2008. Subsequently, neighborhood change between 2008 - 2018 was calculated using 2008 neighborhood boundaries.

neighborhoods, ranging in size from a high of 252 acres (Mays) to a low of 36 acres (Ashley Courts), experienced increases in canopy percentage ranging from an 11.4% increase in Fort Valley to 34.3% increase Bankhead Courts.

Since these canopy percentage increases were significant, the changes in each of these neighborhoods were *qualified* through visual inspections of these neighborhoods using the satellite images from 2008 and 2018.

Growth in many of these neighborhoods was actually regrowth on land previously cleared for development that never materialized. Bankhead Courts' increase was significant regrowth on land cleared when the former Atlanta Housing Authority (AHA) development was demolished pre-2008. Regrowth on previously cleared land also occurred in Greenbriar Village, Mays, and Wildwood (NPU-H) neighborhoods. This type of growth can be thought of as "false growth" as the regrowth that occurs on these sites is often temporary as these areas will likely be developed in time. More importantly, this type of growth is much lower quality than the forest that was originally removed, comprised primarily of fast growing, dense pines and scrubby vegetation.

Growth in several of the other neighborhoods was true growth of street trees or other trees planted just prior to 2008. Young trees planted in the early 2000s in Betmar LaVilla showed significant growth as did street trees in The Villages at Carver, The Villages at East Lake, Sandlewood Estates, Cascade Green and Ashley Courts, all new developments occurring pre-2008, showed significant growth, though much of it attributed to ornamental trees and non-native trees. Canopy growth in many of the smaller neighborhoods like Niskey Cove and Fort Valley was typical growth occurring in older stands of trees. Figure 53 shows the categorization of these 12 neighborhoods.

Neighborhood	Change Observations
Bankhead Courts	Former AHA - regrowth
Sandlewood Estates	New neighborhood - 2008 - growth
Greenbriar Village	Some cleared land in neighborhood - regrowth
Ashley Courts	Newer Subdivision - growth
Englewood Manor	Former AHA - regrowth
The Villages at Carver	New development - growth and cleared land regrowth
Cascade Green	Growth - small - development 2003
Niskey Cove	Growth - small neighborhood
Wildwood (NPU-H)	Regrowth on cleared development - normal growth
Mays	Regrowth on half completed development
Betmar LaVilla	Growth - street trees
Fort Valley	Very small neighborhood - growth

Figure 53. Observations for Neighborhoods Showing Increased % UTC 2008 - 2018

4.14 Canopy Increase by Acres for Top 12 Neighborhoods

Figure 54 shows the top 12 neighborhoods gaining canopy area between 2008 – 2018. Figure 55 shows the acres of canopy gained for these neighborhoods, with percent canopy increase in the bars.

These 12 neighborhoods, ranging in size from 87 acres in The Villages at East Lake to 1,256 acres in Downtown, experienced increases in canopy area ranging from 23 acres in Sylvan Hills to 80 acres in Collier Heights.

As with the top 12 neighborhoods increasing in percent canopy cover between 2008-2018, the changes in these neighborhoods were verified and qualified through visual inspection of the satellite imagery. Figure 56 shows the categorization of canopy growth in these neighborhoods.

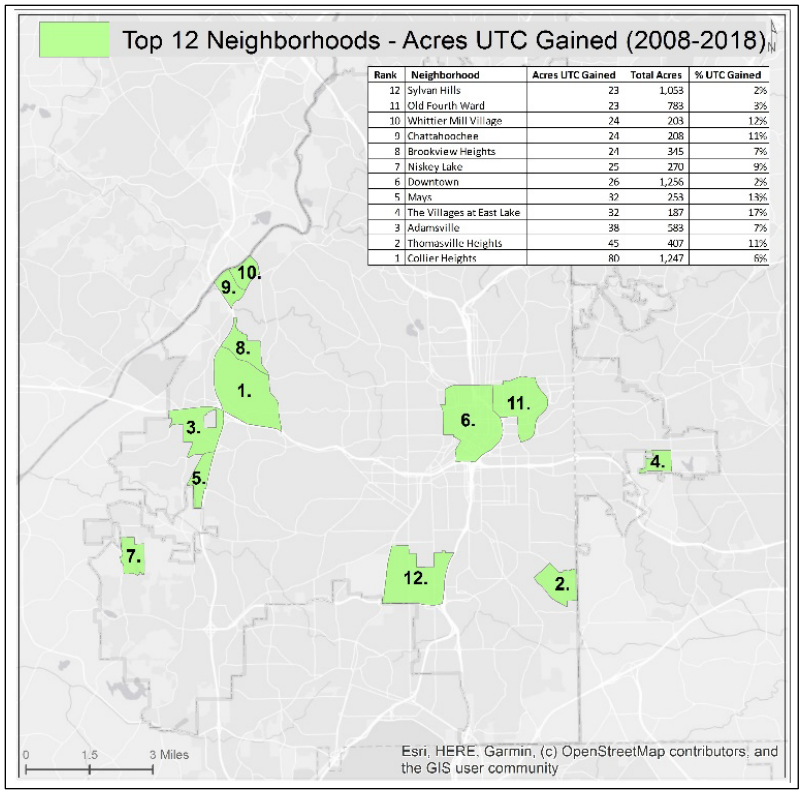


Figure 541. Acres Gained – Top 12 Neighborhoods

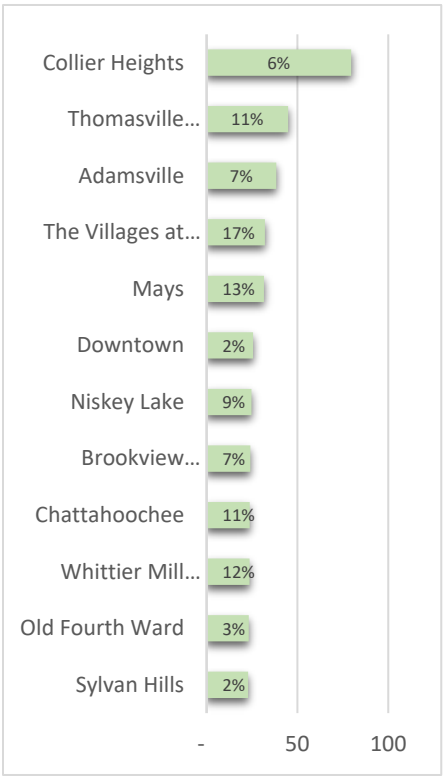


Figure 55. Acres Gained – Top 12 Neighborhoods - % Gain in Bars

Neighborhood	Change Observations
Sylvan Hills	Regrowth on cleared land + expected growth
Old Fourth Ward	Growth in Old 4th Ward park, new devs
Whittier Mill Village	Growth in park and regrowth on cleared land
Chattahoochee	Regrowth on demolished development
Brookview Heights	Regrowth on cleared land - former AHA
Niskey Lake	Regrowth on pipe farm - new growth new development
Downtown	Growth - street trees - Centennial park
Mays	Regrowth on very large, half-completed development
The Villages at East Lake	Growth - new trees planted
Adamsville	Regrowth on cleared land + expected growth
Thomasville Heights	Regrowth on cleared land, former AHA
Collier Heights	Growth - planted trees in new apartments, regrowth on cleared land

Figure 56. Observations for Neighborhoods Showing Increased Acres of UTC 2008 - 2018

Similar to the top 12 neighborhoods with increasing percent canopy, growth in these twelve neighborhoods ranges from regrowth due to land cleared on former AHA developments to rapid growth from street and other trees planted in new developments occurring in or just prior to 2008. Two city of Atlanta parks, Centennial and Old Fourth Ward showed significant growth since 2008 (Figure 56).

4.15 Canopy Decrease by Percentage for Bottom 12 Neighborhoods

Figure 57 shows the locations of the bottom 12 neighborhoods with decreasing percent canopy cover between 2008-2018. Figure 58 shows the percent canopy loss for these neighborhoods, with acres in the bars. These 12 neighborhoods, ranging in size from 27 acres in Colonial Homes to 565 in Bankhead/Bolton, experienced decreases in canopy cover percentages ranging from a low of -14% in Ridgewood Heights to a high of -25% in Bankhead/Bolton.

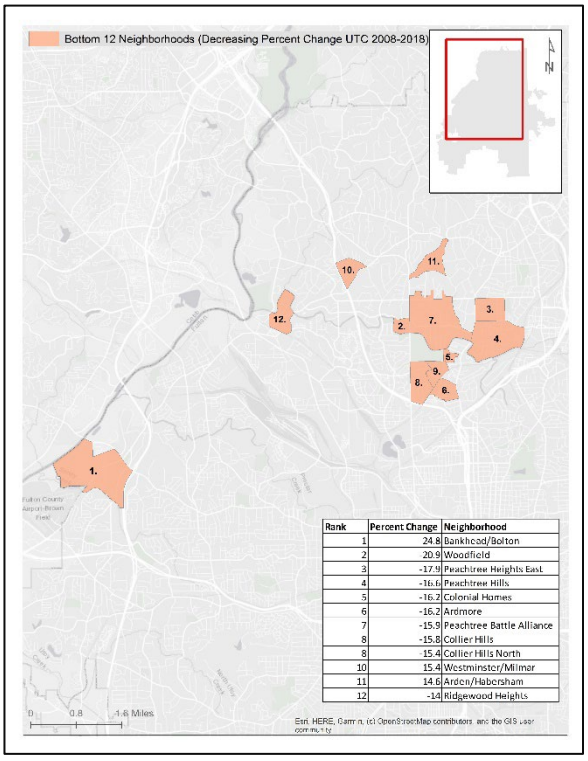


Figure 57. Bottom 12 Neighborhoods Decreasing % UTC 2008 -2018

The highest loss of canopy (-25% or 140 acres) occurred in Bankhead/Bolton, a neighborhood almost entirely zoned industrial. There is a small, area in the SE of Bankhead/Bolton that previously had contained multi-family residential but has been cleared as of 2018. The large loss of canopy in Bankhead/Bolton was due to one very large industrial/commercial development. Unfortunately, the few trees replanted on the new development were poorly maintained when viewed during site visits in July, 2020.

The percent canopy loss occurring in the other 11 neighborhoods was due primarily to redevelopment of single-family homes and multi-family developments. Often times, as was the case in Colonial homes, Ardmore, and Peachtree Hills, the majority of loss was due to one large, multi-family redevelopments per neighborhood (Figure 59).

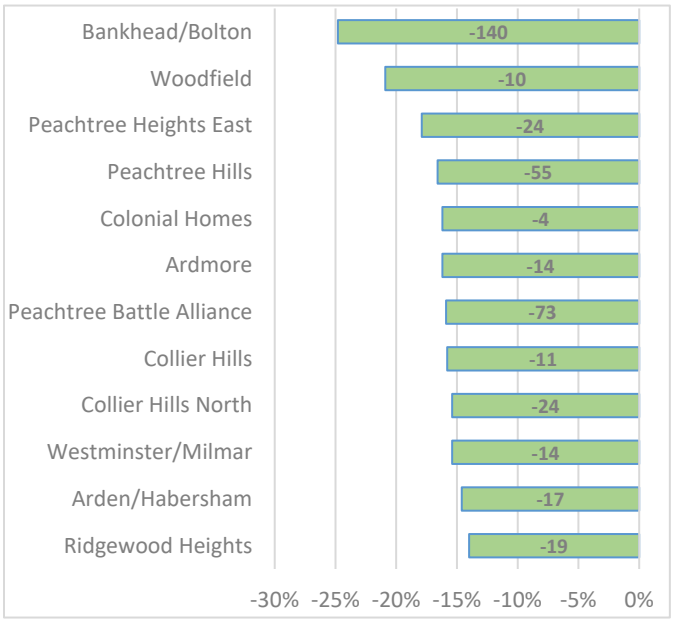


Figure 58. Botton 12 Neighborhoods Decreasing % UTC 2008-2018

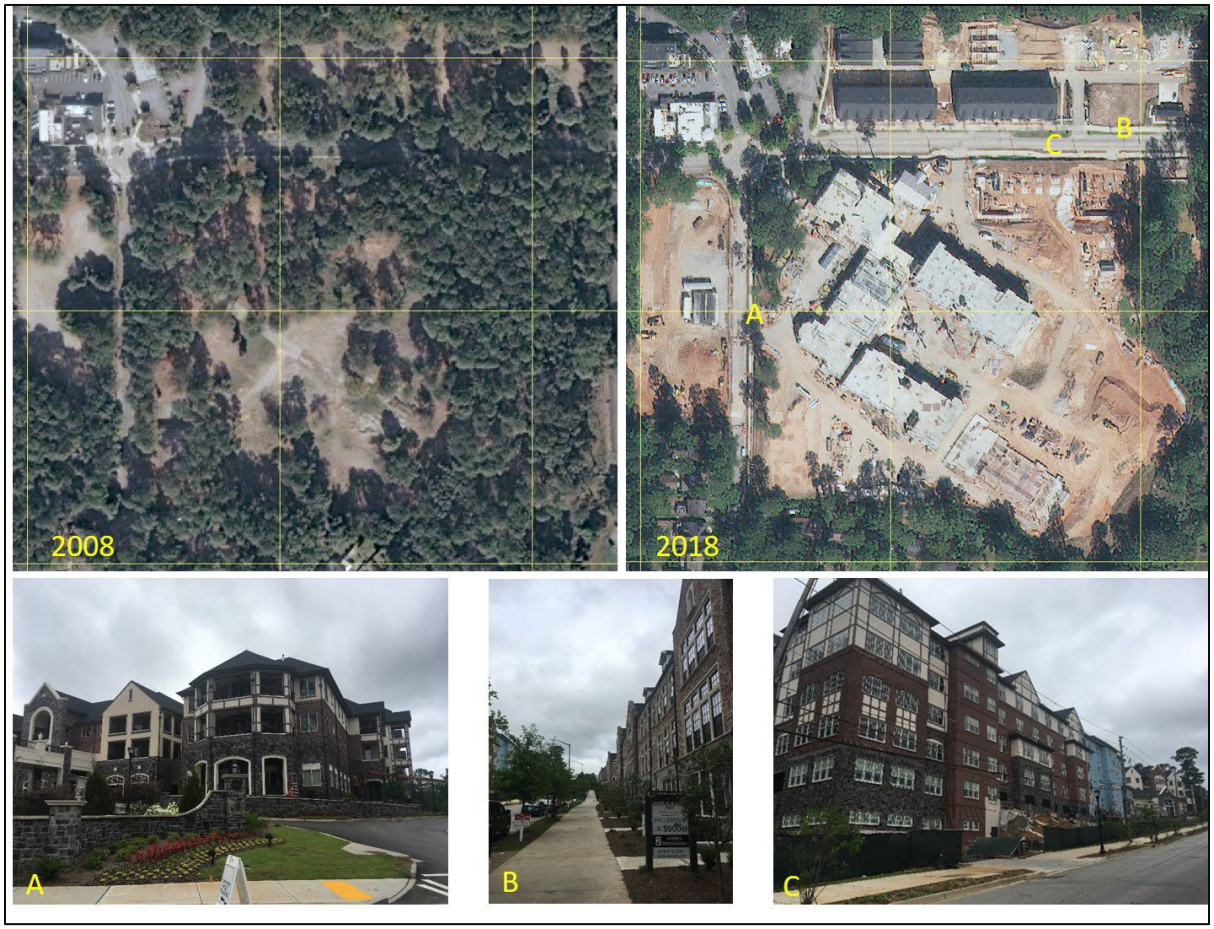


Figure 59. Canopy Loss to Large, Multi-Family Development (Lindbergh Dr.)

Since these canopy percentage increases were significant, the changes in each of these neighborhoods were *qualified* through visual inspections of these neighborhoods using the satellite images from 2008 and 2018 combined and in-person site visits. Figure 60 shows the categorization of loss observed in these 12 neighborhoods.

Neighborhood	Change Observations
Bankhead/Bolton	Industrial - UPS and across road
Woodfield	Redevelopment - small neigborhood
Peachtree Heights East	Redevelopment - single family
Peachtree Hills	Redevelopment - large multi-family
Colonial Homes	Redevelopment - large multi-family
Ardmore	Redevelopment - large multi-family
Peachtree Battle Alliance	Redevelopment - single family
Collier Hills North	Redevelopment - single family
Collier Hills	Redevelopment - single family
Westminster/Milmar	Redevelopment - single family
Arden/Habersham	Redevelopment - single family
Ridgewood Heights	Redevelopment - single family

Figure 60. Observations in 12 Neighborhoods Showing the Most % Canopy Loss 2008-2018

4.16 Canopy Decrease by Acres for Bottom 12 Neighborhoods

Figure 61 shows the area of canopy loss in acres (% canopy loss in bar) for the bottom 12 neighborhoods losing canopy area between 2008-2018. Figure 62 shows the location of these 12 neighborhoods.

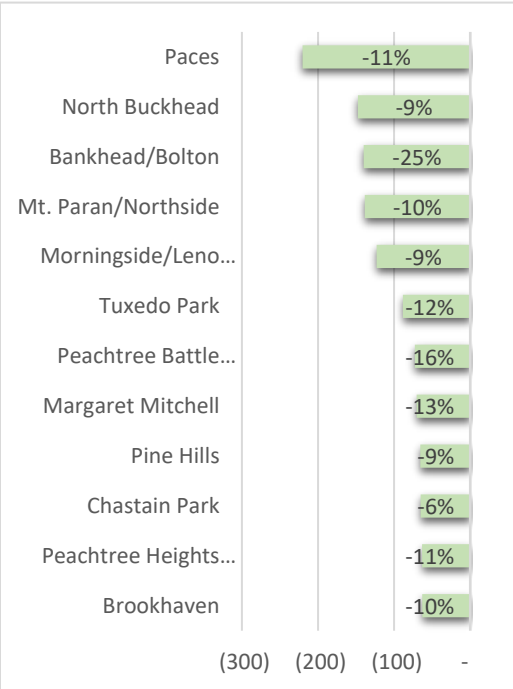
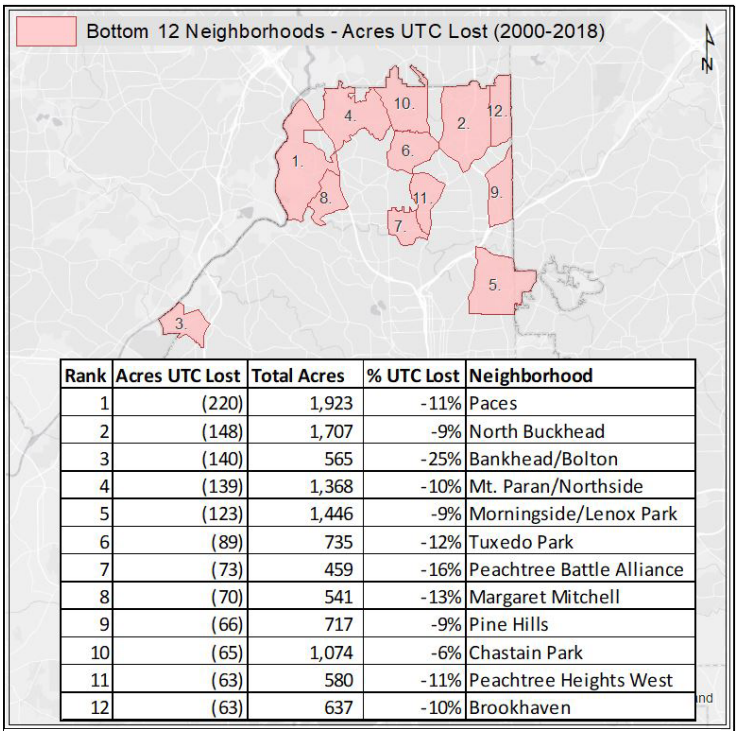


Figure 61. Bottom 12 Neighborhoods (Acres UTC Lost)



Rank	Acres UTC Lost	Total Acres	% UTC Lost	Neighborhood
1	(220)	1,923	-11%	Paces
2	(148)	1,707	-9%	North Buckhead
3	(140)	565	-25%	Bankhead/Bolton
4	(139)	1,368	-10%	Mt. Paran/Northside
5	(123)	1,446	-9%	Morningside/Lenox Park
6	(89)	735	-12%	Tuxedo Park
7	(73)	459	-16%	Peachtree Battle Alliance
8	(70)	541	-13%	Margaret Mitchell
9	(66)	717	-9%	Pine Hills
10	(65)	1,074	-6%	Chastain Park
11	(63)	580	-11%	Peachtree Heights West
12	(63)	637	-10%	Brookhaven

Figure 62. Bottom 12 Neighborhoods- Most Acres UTC Lost 2008-2018

These 12 neighborhoods, all larger than the average size of 333 acres and ranging in size from 459 acres in Peachtree Battle Alliance to 1,923 acres in Paces, the largest neighborhood in Atlanta, experienced significant canopy loss, from a low of 63 acres in Brookhaven and Peachtree Heights West to a high of 220 acres in Paces. These neighborhoods, almost all of which are located in north Atlanta and are primarily high-income residential, experienced canopy loss due to a variety reasons, ranging from a new, large industrial development in Bankhead/Bolton, the sole cause of canopy loss in that neighborhood, to a more pervasive type of canopy loss; intense redevelopment of a single-family home(s), where an older home occupying a small percentage of a lot is demolished and/or rebuilt with a much larger home often built out to the maximum allowable lot coverage, with trees removed in the process. This type of single-family redevelopment was the primary cause of canopy loss observed during the 2nd City of Atlanta canopy assessment and has only increased since 2014 as evidenced by the loss of canopy in all but one of these 12 neighborhoods. New mixed-use, commercial and multi-family developments also contributed to canopy loss, specifically in North Buckhead, Peachtree Heights West and Pine Hills. Figure 63 shows the categorization of canopy loss in these neighborhoods.

Neighborhood	Change Observations
Brookhaven	Redevelopment - single family
Peachtree Heights West	Redevelopment - single family, mixed-use
Chastain Park	Redevelopment - single family
Pine Hills	Redevelopment - single and multi-family
Margaret Mitchell	Redevelopment - single-amily, school expansion
Peachtree Battle Alliance	Redevelopment - single family
Tuxedo Park	Redevelopment - single family
Morningside/Lenox Park	Redevelopment - single-family and new multi-family
Mt. Paran/Northside	Redevelopment - single family
Bankhead/Bolton	New industrial - UPS and adjacent land
North Buckhead	Redevelopment - single and multi-family - new multi and single family, commercial
Paces	Redevelopment - single family

Figure 63. Observations in 12 Neighborhoods Showing the Most Acres Canopy Loss 2008-2018

4.17 Neighborhood Change Summary

Urban tree canopy change in the City of Atlanta's neighborhoods between 2008-2018 varies significantly across the City. Large, contiguous canopy gains in neighborhoods usually occurred on lands that were cleared sometime around 2008, many of which were former AHA properties or "Pipe Farms", developments where land was cleared and roads/utilities constructed but the developments were never completed (Figure 64). Smaller, concentrated areas of canopy growth in neighborhoods were often

Figure 64. Incomplete Development

observed in multi-family or mixed-use developments constructed just prior to 2008 (Figure 65), as well as several city parks, like Whittier Mills shown in Figure 66. Normal canopy growth also occurred across the City in mature, older trees, yet it is difficult to visualize on a small scale. Many neighborhoods experienced

Figure 65. Canopy Growth in Development Built ~ 2008

Figure 66. Whittier Mills Canopy

growth at a variety of scales, from street trees, to juvenile trees, to mature, forested stands. Figure 67 shows normal growth of trees in a subdivision in Benteen Park.

Figure 67. Canopy Growth in Benteen Park

Canopy loss across Atlanta's neighborhoods was pronounced in areas, especially the northern parts of the City. The largest, contiguous loss of canopy (190 acres) between 2008-2018 was in the Bankhead/Bolton Neighborhood and due to one, large industrial/commercial development combined with forest cleared across the divided highway (Figure 68). Many other smaller industrial developments also caused large losses of contiguous forest, primarily in the southern parts of the City (Figure 69).

Figure 68. Largest Area of Canopy Loss 2008 -2018

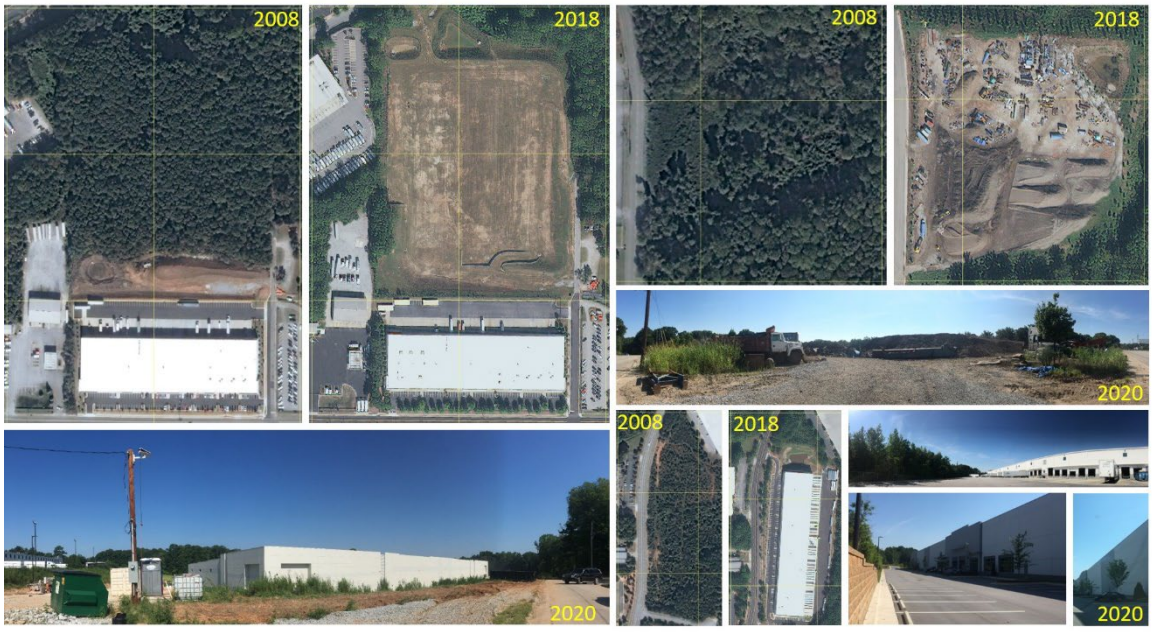


Figure 69. Canopy Loss on Industrial Lands

New multi-family, single-family homes and subdivisions, commercial, mixed-use and institutional developments also added to the canopy loss across the City. These sites usually ranged in size from an acre to 25 acres and were located in neighborhoods primarily north of I-20. Many of these sites had newly planted trees, where some were healthy and robust (Figure 70) while others were neglected and dying, usually due to inadequate growing space or lack of maintenance (Figure 71).

Figure 70. Healthy Canopy Planted on Redeveloped Land

Figure 71. Questionable Plantings at New Developments

A canopy threat greater than loss due to new development is redevelopment of existing properties, primarily single-family and multi-family. Several large, multi-family redevelopments and single-family subdivisions occurred across the city between 2008-2018, ranging in size from 10 acres to 40 acres. While many of these redeveloped sites were not completely tree-covered in 2008, they usually contained significant canopy coverage that was lost in the redevelopment process (Figures 72-74). While all of these redeveloped sites had replanted trees, many of these replantings were similar to those described above for new developments; poorly maintained and with inadequate space requirements.

Figure 72. Canopy Loss on Redeveloped Land

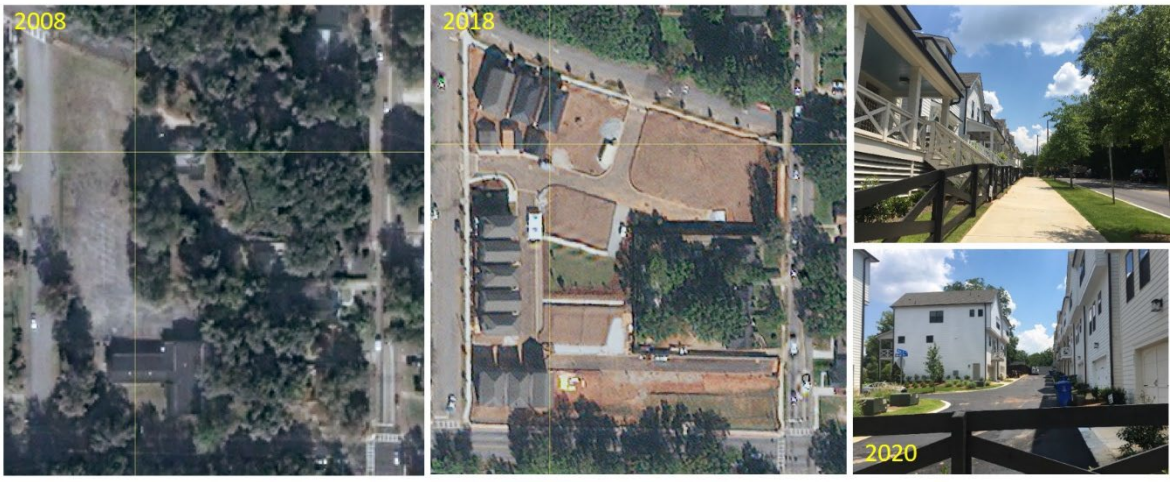


Figure 73. Canopy Loss on Redeveloped Land

Figure 74. Canopy Loss on Redeveloped Land

The most significant loss of canopy in Atlanta's neighborhoods between 2008-2018 was due to redevelopment of individual single-family homes (as described previously in this section), primarily in northern parts of the City. While this type of canopy loss does not usually result in loss of large, contiguous tracts of forest, it is, however, prolific and is causing the City to lose its forest on a lot by lot basis, slowly changing Atlanta's diverse urban forest to a patchy amalgam of mixed, non-native trees. The acreage lost for each individual single-family redevelopment generally ranges from .25 acres to 2 acres.

Figure 75. Canopy Loss Due to Single-Family Redevelopment

This type of redevelopment has gradually accelerated, starting in the early 2000s, breaking in 2008 with the recession, resuming in 2012 and continuing today, even during the Covid-19 pandemic. The size and scale of single-family redevelopment ranges greatly, from redevelopment of homes that are replaced with homes of similar size (Figure 75), to homes that are replaced with much larger homes built out to the maximum allowable lot size, with the latter being the most common type of single-family redevelopment. For example, Figure 76 shows multiple single-family redevelopments (all greater than 5,000 sq. ft. of living space) for the same neighborhood, all in varying stages of completion. This scale of single-family redevelopment in the northern parts of Atlanta was not uncommon. If anything, this scale of single-family redevelopment was the norm in many

Figure 76. Canopy Loss Due to Single-Family Redevelopment (small homes converted to large homes)

neighborhoods (Figures 77-81). And, it is likely to continue, with the quantity and composition of Atlanta's urban tree canopy destined to change because of it.

Figure 77. Canopy Loss Due to Single-Family Redevelopment

Figure 78. Canopy Loss Due to Single-Family Redevelopment

Figure 79. Canopy Loss Due to Single-Family Redevelopment

Figure 80. Canopy Loss Due to Single-Family Redevelopment

Figure 81. Canopy Loss Due to Single-Family Redevelopment

4.18 Neighborhood Planning Unit (NPU) Canopy 2018

The City of Atlanta contains approximately 25 Neighborhood Planning Units (NPU), ranging in size from 1.3 square miles (NPU L) to 11.4 square miles (NPU A), with an average NPU size of 5.5 square miles.

Figure 82 is a map of the 2018 canopy distribution for all NPUs in the City. The average 2018 percent canopy cover by NPU is 42.9%, with a low of 10.3% in NPU M and a high of 65.3% in NPU Q. Eleven NPUs are above the City average of 46.5% tree canopy, with these neighborhoods located primarily in the southwest, northwest and southeast. The 14 NPUs below the City average are located primarily downtown, in central business districts, and along the major transportation corridors. Figure 83 shows the percent land cover distribution of all 25 NPUs, with acres noted in the bars.

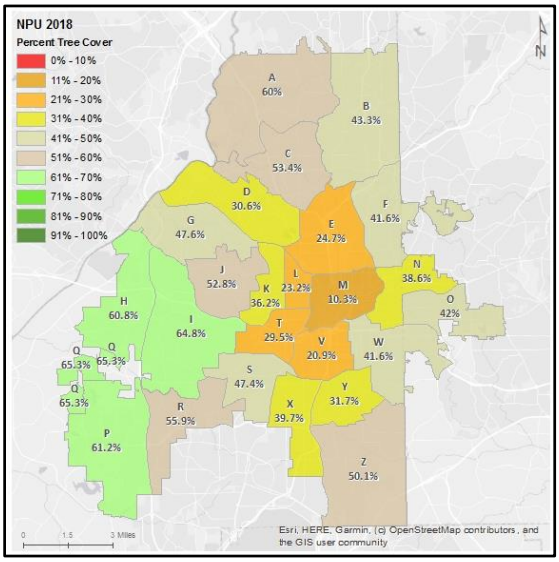


Figure 82. 2018 Canopy Percentage by NPU

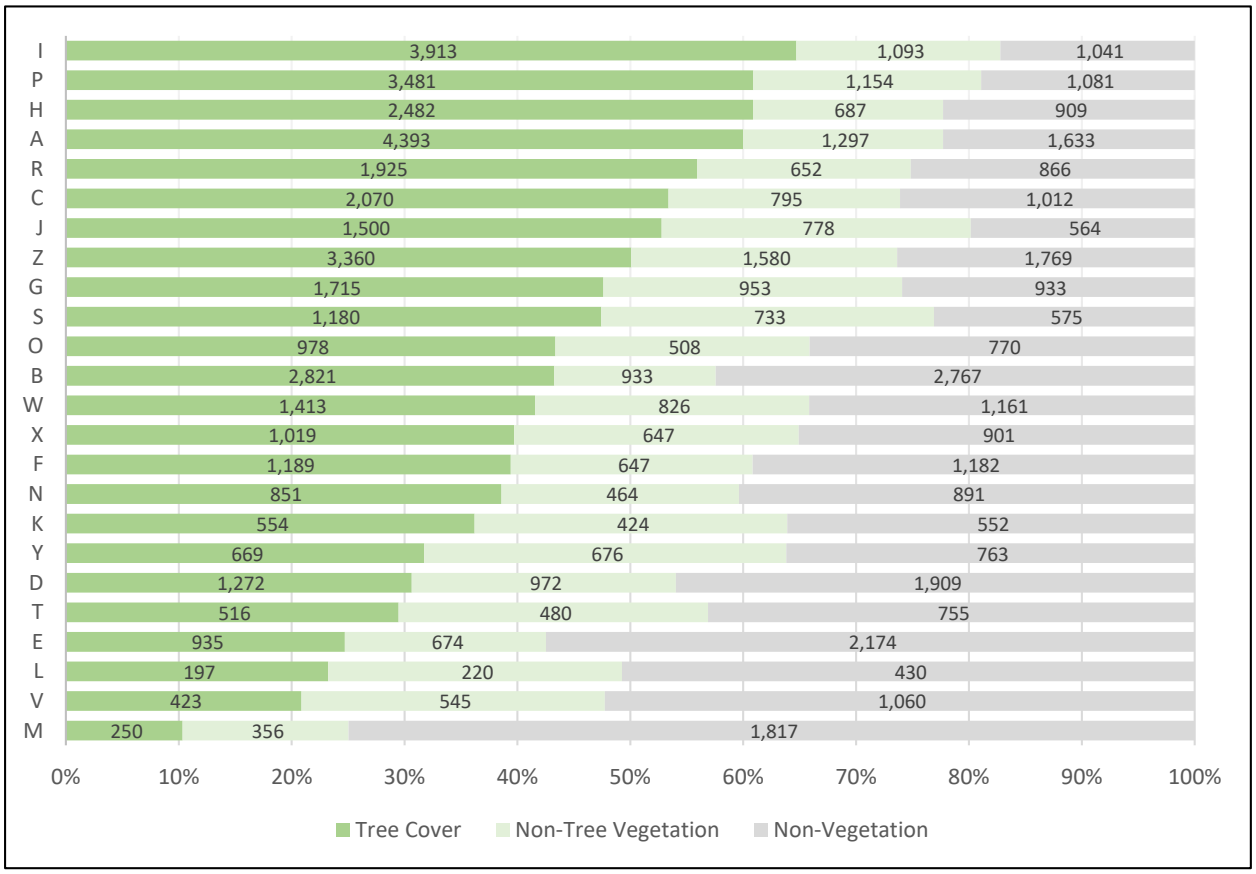


Figure 83. 2018 Landcover Distribution by NPU

Figure 84 shows the 2018 acreage and percent tree cover by NPU. As expected, the centrally located NPUs have significantly lower tree cover percentages than NPUs outside of downtown. The majority of NPUs with above city average tree cover percentages contain large stream corridors that run through residential neighborhoods and drain into the Chattahoochee River.

The NPUs vary significantly in size and composition. NPU A is largest (7,323 acres) in size and has the most tree cover by acres (4,393) but has only the 5th highest percentage of tree cover (62%) in the city. By contrast, NPU L is the smallest NPU (847 acres) and has the lowest total tree canopy area (197 acres), but only the third lowest percentage of tree canopy (25%)

NAME	Total Acres	Tree Cover (Acres)	Tree Cover (Percent)
Q	1,075	702	65%
I	6,142	3,980	65%
P	6,012	3,679	61%
H	4,092	2,488	61%
A	7,323	4,393	60%
R	3,451	1,930	56%
C	3,877	2,070	53%
J	2,842	1,500	53%
Z	6,710	3,361	50%
G	3,600	1,715	48%
S	2,488	1,180	47%
B	6,522	2,821	43%
O	2,493	1,047	42%
W	3,499	1,456	42%
F	3,848	1,600	42%
X	2,568	1,019	40%
N	2,206	851	39%
K	1,529	554	36%
Y	2,108	669	32%
D	4,154	1,272	31%
T	1,752	516	29%
E	3,783	935	25%
L	847	197	23%
V	2,029	423	21%
M	2,424	250	10%

Figure 84. 2018 Canopy Distribution by NPU

4.19 NPU Canopy Change[1] 2008 – 2018

Between 2008 – 2018, the change in tree canopy across the City's NPUs varied greatly. Figure 85 is a map of the percent tree canopy change by NPU. Figure 86 shows the percent canopy in each NPU, with acres changed noted in the bar. Figure 87 shows land cover change statistics for each NPU. The average percent canopy change by NPU was .13% with the most percent canopy loss (-11.3%) occurring in NPU C and the most percent canopy gain (4.9 %) found in NPU L. NPU A lost the most acres (748) of canopy while NPU I gained the most acres (243). All but one NPU with decreasing canopy are located in the north of the city, with the majority of canopy loss in these NPUs almost certainly due to redevelopment of single-family homes (Figure 90). The NPUs gaining canopy are located primarily across the middle of the city (Figure 88). Many of the NPUs showing significant growth contain pipe farms and lands cleared around 2008 (former AHA properties), where quick growing pines and non-native trees quickly replaced cleared lands (Figure 89). This growth is temporary as many of these sites are or will be re-cleared and developed.

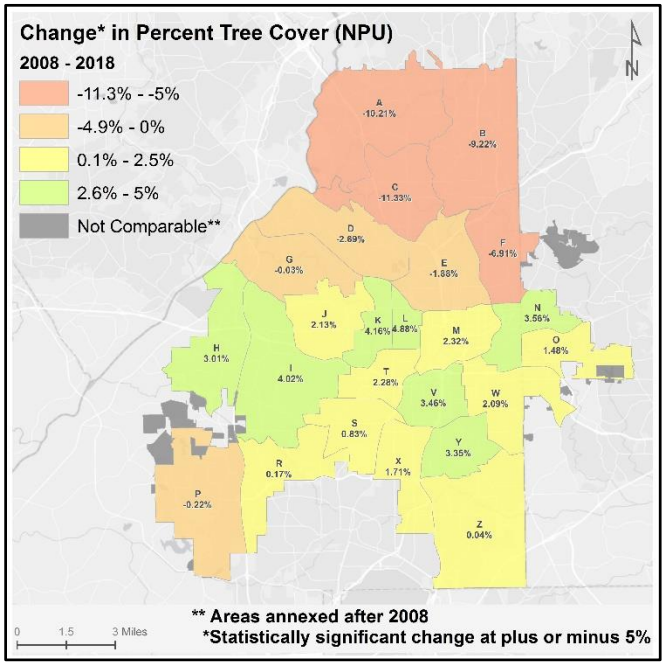


Figure 85. Percent Canopy Change by NPU 2008-2018

[1] 2008 Tree canopy data does not exist for areas annexed after 2008. Subsequently, NPU change between 2008 - 2018 was calculated using 2008 NPU boundaries.

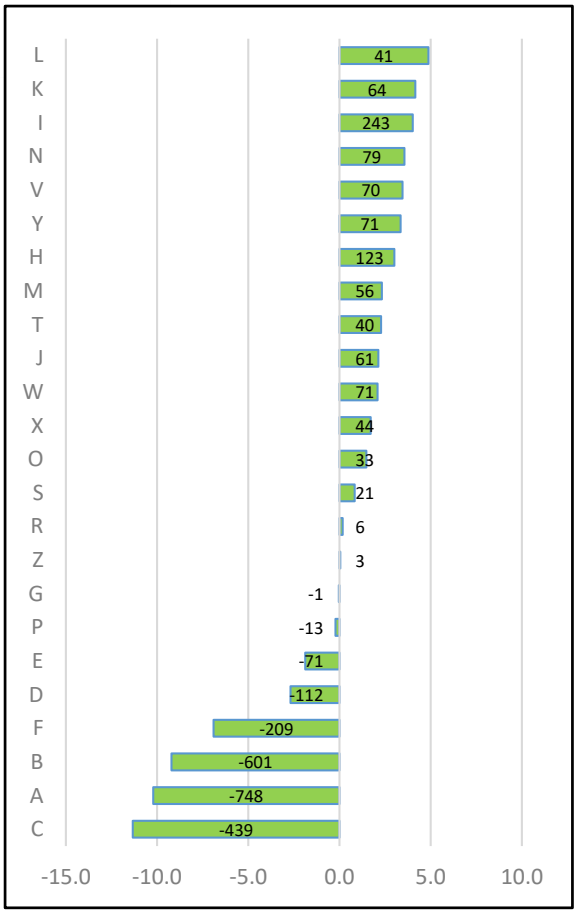


Figure 86. Canopy Change by NPU 2008-2018

NPU	Acres	Acres UTC Change	Acres NTV Change	Acres NV Change	% UTC Change	% NTV Change	% NV Change
A	7,323	(748)	122	694	-10%	2%	9%
B	6,521	(601)	(38)	672	-9%	-1%	10%
C	3,877	(439)	150	290	-11%	4%	7%
F	3,019	(209)	44	175	-7%	1%	6%
D	4,154	(112)	149	(17)	-3%	4%	0%
E	3,783	(71)	(37)	109	-2%	-1%	3%
P	5,717	(13)	(22)	149	0%	0%	3%
G	3,600	(1)	134	(109)	0%	4%	-3%
Z	6,708	3	(11)	29	0%	0%	0%
R	3,444	6	(78)	81	0%	-2%	2%
S	2,488	21	(41)	26	1%	-2%	1%
O	2,256	33	(103)	172	1%	-5%	8%
T	1,752	40	19	(59)	2%	1%	-3%
L	847	41	3	(44)	5%	0%	-5%
X	2,567	44	(24)	(9)	2%	-1%	0%
M	2,424	56	(7)	(49)	2%	0%	-2%
J	2,842	61	(15)	(46)	2%	-1%	-2%
K	1,529	64	8	(71)	4%	1%	-5%
V	2,029	70	26	(96)	3%	1%	-5%
Y	2,108	71	5	(76)	3%	0%	-4%
W	3,400	71	(161)	99	2%	-5%	3%
N	2,206	79	(114)	55	4%	-5%	3%
H	4,078	123	(221)	175	3%	-5%	4%
I	6,047	243	(325)	90	4%	-5%	1%

Figure 87. Landcover Change by NPU 2008-2018

Figure 88. Canopy Growth in NPU L

Figure 89. Pipe Farm Regrowth in NPU Z

Figure 90. New Development Canopy Loss in NPU B

4.20 Watersheds- Tree Canopy 2018

Watersheds or drainage basins are generally described as the area of land where surface water converges at a single point, usually the lowest elevation and the exit of the basin, where the water joins another larger water body. Subsequently, these naturally imposed boundaries do not align with human defined limits such as city boundaries. As a result, the City of Atlanta contains *portions* of *fourteen* basins that are approximately the same size as the United States Geologic Survey's (USGS) Hydrologic Unit Code (HUC 12) category (Figure 27). HUC 12's, usually categorized as sub-watersheds, range in size from 10,000–40,000 acres, and are normally too large for small scale planning purposes. Consequently, the city watershed department delineated watershed boundaries using high resolution elevation data and customized hydrologic models which are more detailed than the USGS HUC 12 category. Therefore, for this report, USGS HUC 12 basins will be referred to as Watersheds while city-derived data will be referred to as Sub-Watersheds. Unfortunately, the city has not updated their watershed and sub-watershed boundaries since 2014. Therefore, 2018 canopy data statistics by watershed and sub-watershed are reported at the 2014 watershed and sub-watershed scale.

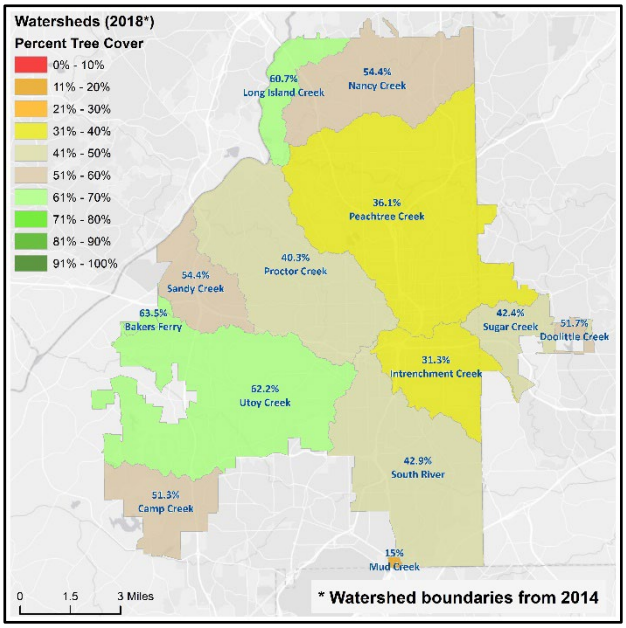


Figure 91. 2018 Percent Canopy by Watershed

Figure 92 is a map showing the 2018 percent tree cover by watershed for the City of Atlanta. Figure 92 shows the percentage land cover distribution of Atlanta's HUC 12 watersheds ordered from greatest to

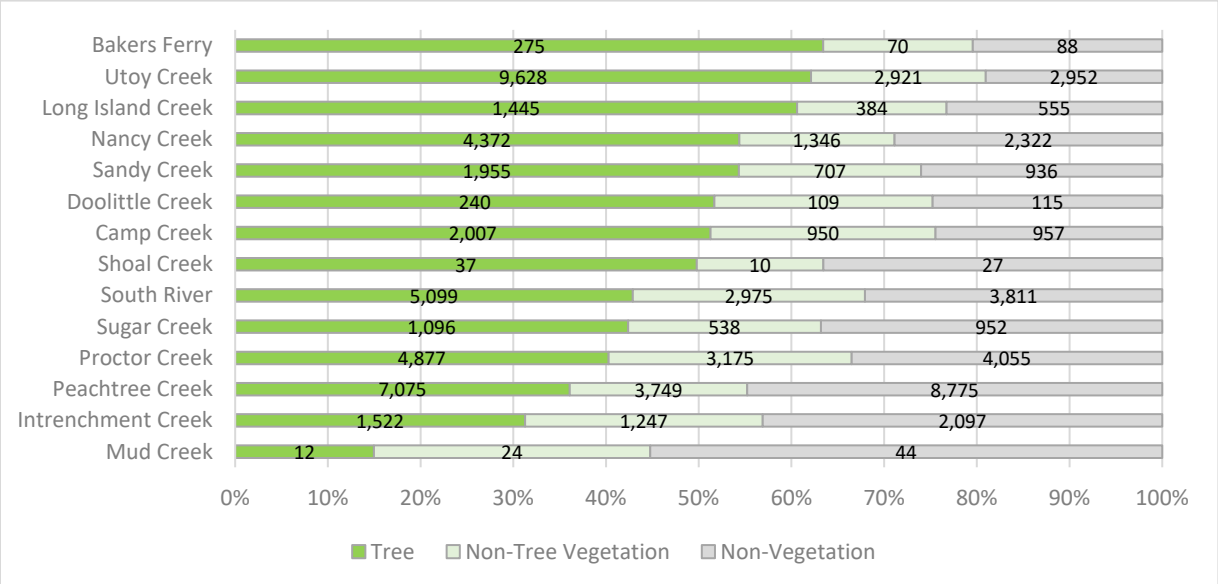


Figure 92. Percent Landcover Distribution by Watershed (acres in bars)

least percent canopy, with land cover acres represented inside the associated bars. Figure 93 shows the 2018 percent canopy values and canopy area in acres for each watershed.

The City of Atlanta has portions of 14 large watersheds ranging in size from 74 acres for Shoal Creek to 19,582 acres for Peachtree Creek. The average size watershed is 6,105 acres. Percent tree canopy coverage ranges greatly across the city, from a low of 15% in Mud Creek to a high of 63% in Bakers Ferry, with an average percent canopy coverage of 46.8%, only slightly higher than the city average of 46.5%. Three out of the top four largest watersheds have below city-average percent tree canopy cover, with the largest (Peachtree Creek) having 36% tree canopy. The 2nd largest watershed, Utoy Creek, has the most acres of tree canopy (9.628) and the 2nd highest percent tree canopy at 62%. Generally, the highest percent tree canopy is found in highly residential watersheds (Utoy, Long Island and Nancy) while the lowest percent tree canopy is found in more urbanized watersheds (Peachtree, Proctor and Intrenchment).

Watershed	Total Acres	Acres UTC	% UTC
Mud Creek	79	12	15
Intrenchment Creek	4,863	1,522	31
Peachtree Creek	19,582	7,075	36
Proctor Creek	12,097	4,877	40
Sugar Creek	2,583	1,096	42
South River	11,876	5,099	43
Shoal Creek	74	37	50
Camp Creek	3,912	2,007	51
Doolittle Creek	464	240	52
Sandy Creek	3,595	1,955	54
Nancy Creek	8,034	4,372	54
Long Island Creek	2,383	1,445	61
Utoy Creek	15,491	9,628	62
Bakers Ferry	433	275	63

Figure 93. Canopy Values by Watershed

Watershed Change[1] 2008 – 2018

Between 2008 – 2018, the change in tree canopy across the City's watersheds varied from -9.7% canopy loss in Nancy Creek to an 8.9% canopy gain in Bakers Ferry. Figure 94 is a map of the percent tree canopy change by watershed. Figure 95 shows the percent canopy change for each watershed, with acres changed noted next to the bar. Figure 96 shows tree canopy change statistics for each watershed. The average percent canopy change by watershed was -.5% with the most significant percent canopy loss occurring in highly residential watersheds like Nancy Creek (-9.7%) and Long Island (-9.6%), and likely due to

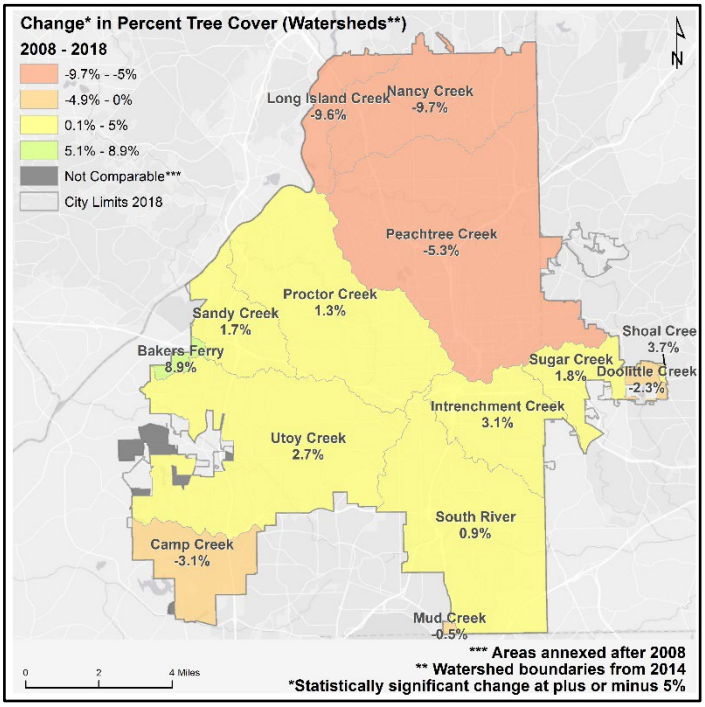


Figure 94. Percent Canopy Change by Watershed 2008-2018

[1] 2008 Tree canopy data does not exist for areas annexed after 2008. Subsequently, Council District change between 2008 - 2018 was calculated using 2008 Council District boundaries.

prolific single-family residential redevelopment (Figure 95). Only one watershed, Bakers Ferry, had significant canopy gain (+8.9%), which can be attributed to gain observed at one large site cleared in 2008 (Figure 96) combined with natural growth across the small watershed.

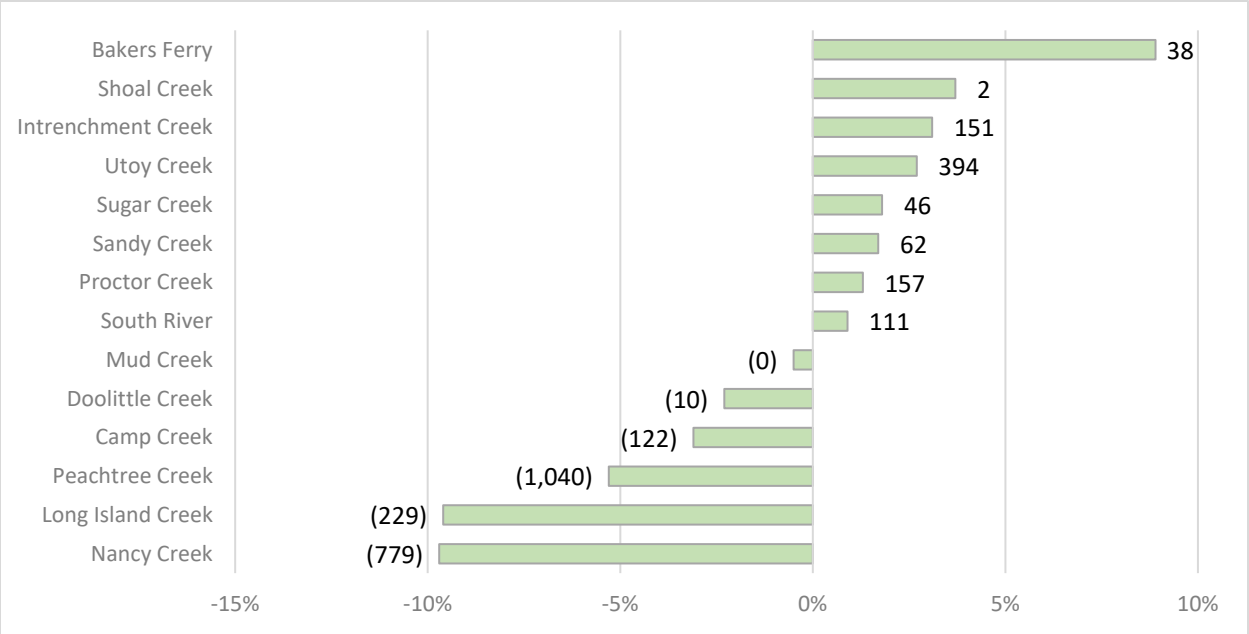


Figure 95. Percent Canopy Change by Watershed 2008-2018

Watershed	Acres	Acres UTC Change	% UTC Change
Utoy Creek	14,668	394	2.7%
Proctor Creek	12,107	157	1.3%
Intrenchment Creek	4,863	151	3.1%
South River	11,884	111	0.9%
Sandy Creek	3,597	62	1.7%
Sugar Creek	2,564	46	1.8%
Bakers Ferry	433	38	8.9%
Shoal Creek	58	2	3.7%
Mud Creek	79	0	-0.5%
Doolittle Creek	442	-10	-2.3%
Camp Creek	3,873	-122	-3.1%
Long Island Creek	2,384	-229	-9.6%
Nancy Creek	8,039	-779	-9.7%
Peachtree Creek	19,589	-1040	-5.3%

Figure 96. Watershed Canopy Change Values 2008-2018

Figure 97. Canopy Regrowth Due to Land Cleared Next to New School in Bakers Ferry Watershed

Figure 98. Canopy Loss Due to Single-Family Redevelopment in Nancy Creek Watershed

4.22 Sub-Watersheds: Tree Canopy 2018

Watersheds or drainage basins are generally described as the area of land where surface water converges at a single point, usually the lowest elevation and the exit of the basin, where the water joins another larger water body. Subsequently, these naturally imposed boundaries do not align with human defined limits such as city boundaries. As a result, the City of Atlanta contains *portions* of *fourteen* basins that are approximately the same size as the United States Geologic Survey's (USGS) Hydrologic Unit Code (HUC 12) category. HUC 12's, usually categorized as sub-watersheds, range in size from 10,000–40,000 acres, and are normally too large for small scale planning purposes. Consequently, the city watershed department delineated watershed boundaries using high resolution elevation data and customized hydrologic models which are more detailed than the USGS HUC 12 category. Therefore, for this report, USGS HUC 12 basins will be referred to as Watersheds while city-derived data will be referred to as Sub-Watersheds. Unfortunately, the city has not updated their watershed and sub-watershed boundaries since 2014. Therefore, 2018 canopy data statistics by watershed and sub-watershed are reported at the 2014 watershed and sub-watershed scale.

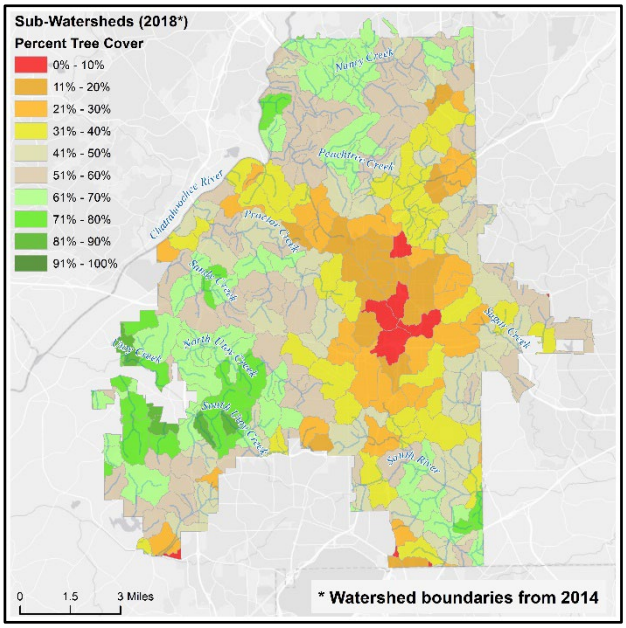


Figure 99. 2018 Percent Canopy by Sub-Watershed

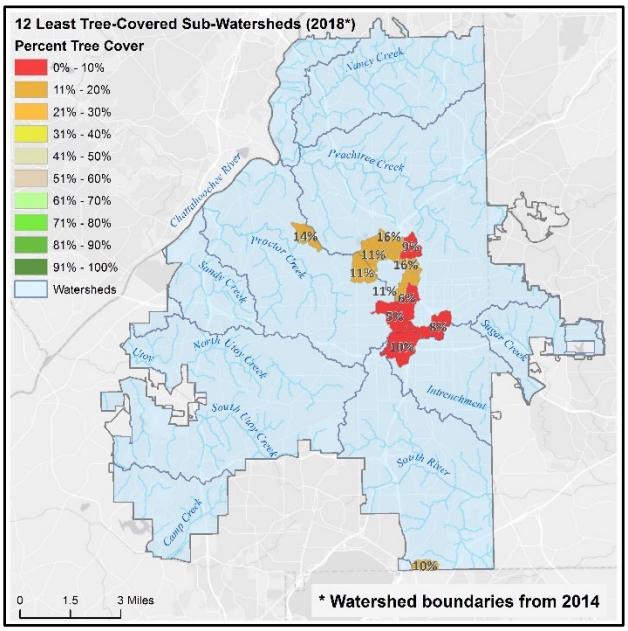


Figure 100. 2018 12 Least Tree-Covered Sub-Watersheds

Figure 99 is a map showing the 2018 percent tree cover by sub-watershed for the City of Atlanta. There are approximately 310 sub-watersheds or portions of sub-watershed in the City, ranging in size from less than one acre to 1,104 acres, with an average of 275 acres. Due to the large number of sub-watersheds in the City of Atlanta and their large variation in size, only the top and bottom 12 sub-watersheds greater than 100 acres will be highlighted. For complete sub-watershed canopy statistics, please see Appendices 2 and 3.

Figure 100 is a map showing the 2018 percent tree cover for the 12 least tree-covered sub-watersheds in the City. Figure 101 shows the percentage land cover distribution of Atlanta's 12 least tree-covered sub-watersheds ordered from least to greatest percent canopy, with land cover acres represented inside the associated bars. The percent tree canopy of these 12 sub-watersheds ranges from a low of 5.2% in Proctor_161 to a 16.5% in Peachtree Creek_131, all of which are well below the city average of 46.5%. The acres of tree canopy in these watersheds range from 15 in South River_246 to 51 in Intrenchment

Creek_42. All but two of these 12 sub-watersheds are located close to downtown and follow the downtown connector, Interstate 75/85. These are very urban, predominantly paved sub-watersheds where the lack of trees likely contributes to poor water quality and increased stormwater runoff.

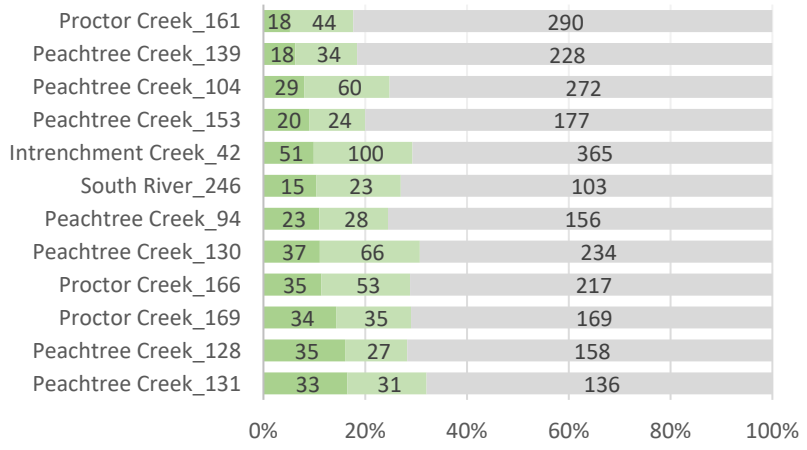


Figure 101. 2018 Land Cover Distribution for 12 Least Tree-Covered Sub-Watersheds

Figure 102 is a map showing the 2018 percent tree cover for the 12 most tree-covered sub-watersheds in the City. Figure 103 shows the percentage land cover distribution of Atlanta's 12 most tree-covered sub-watersheds ordered from most to least percent canopy, with land cover acres represented inside the associated bars. The

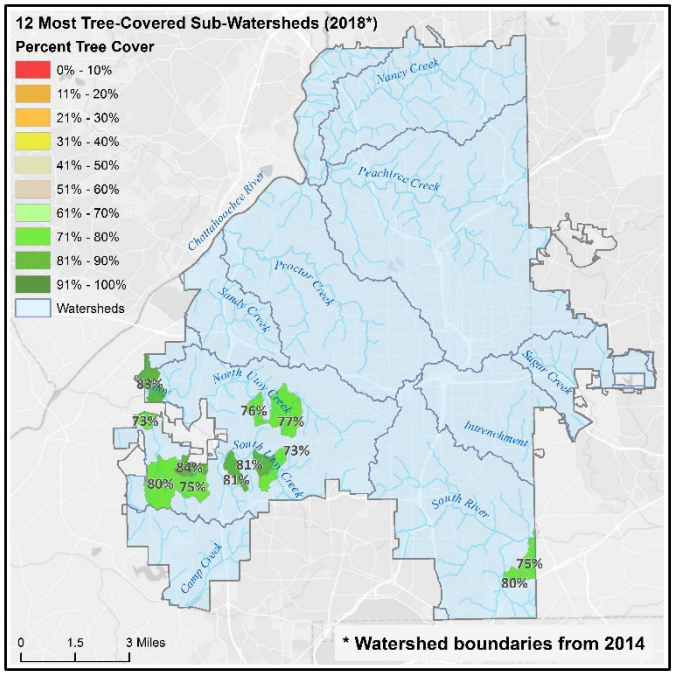


Figure 102. 2018 12 Most Tree-Covered Sub-Watersheds

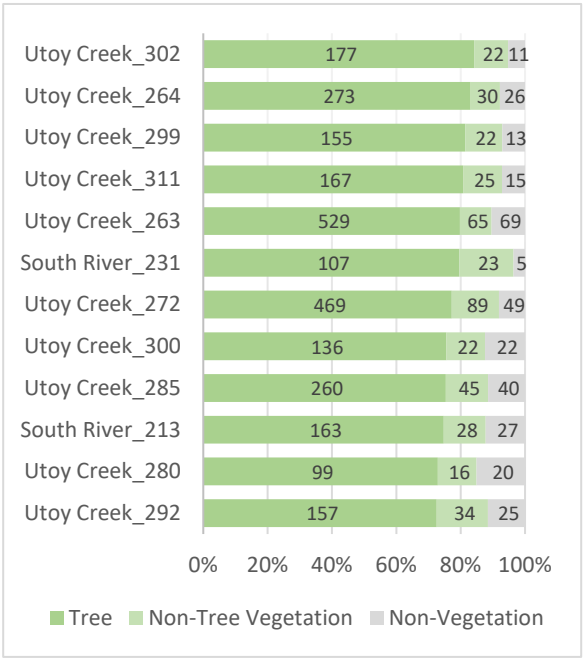


Figure 103. 2018 Land Cover Distribution for 12 Most Tree-Covered Sub-Watersheds

percent tree canopy in these 12 sub- watersheds ranges from 72.5% in Utoy Creek_292 to 84.2% in Utoy Creek_302, all of which are well above the city average of 46.5%. All but two of these sub-watersheds are located in the Utoy Creek watershed, which is the most tree-covered area in the City and most likely, the most environmentally healthy.

4.23 Sub-Watershed Change[1] 2008 – 2018

Between 2008 – 2018, the change in tree canopy across the City's sub-watersheds varied greatly from –36.7% canopy loss in Sandy Creek_192 to 15.8 % canopy gain in Utoy Creek_303, with an average change of -.53%. Figure 104 is a map of the percent tree canopy change by sub-watershed. The majority of sub-watersheds with significant tree canopy loss are located in the Peachtree and Nancy Creek sub-watersheds Atlanta while those showing significant tree canopy gain are located primarily in Utoy Creek sub-watersheds.

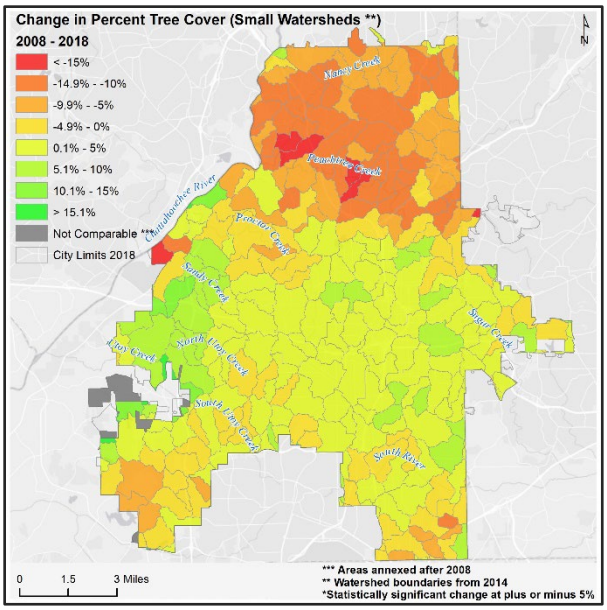


Figure 104. Percent Canopy Change by Sub-Watershed

Due to the large number of sub-watersheds in the City of Atlanta and their large variation in size, tree canopy change will be shown for only the top and bottom 12 sub-watersheds greater than 100 acres. For complete sub-watershed canopy change statistics, please see Appendices 4,5, and 6.

Figure 105 is a map of the 12 sub-watersheds that experienced the most loss in percent tree canopy

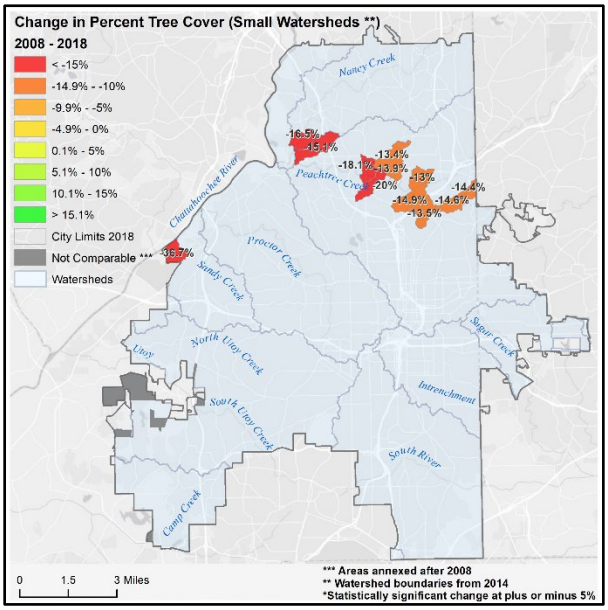


Figure 105. 12 Sub-Watersheds Showing Most Canopy Loss 2008-2018

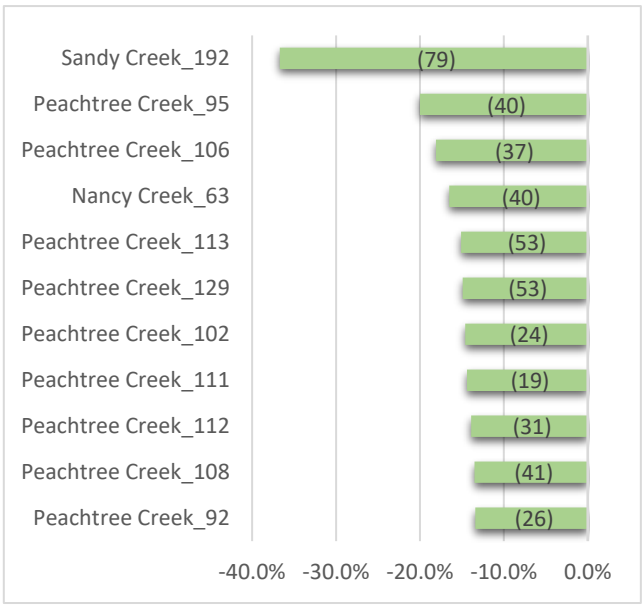


Figure 106. Sub-Watersheds Showing Most Canopy Loss

between 2008-2018. Figure 106 shows the percent canopy change for each watershed, with acres changed noted inside the bar. The most loss occurred in the Sandy Creek_192 sub-watershed and was due to the largest, singular development in the City between 2008-2018 (Figure 106). Sub-watersheds

[1] 2008 Tree canopy data does not exist for areas annexed after 2008. Subsequently, sub-watershed change between 2008 - 2018 was calculated using 2014 sub-watersheds.

along Peachtree and the confluence of Peachtree and Nancy Creeks experienced the most canopy loss between 2008-2018, likely due to a combination of new residential developments and redevelopments (Figures 105 and 106).

Figure 107. Significant Canopy Loss Observed at New Industrial Development Site

Figure 108. Canopy Loss Observed on Redeveloped Multi-Family Site

Figure 109 is a map of the 12 sub-watersheds gaining percent tree canopy between 2008-2018. Figure 110 shows the percent canopy change for each of these sub-watersheds, with acres changed noted inside the bar. The most significant change in percent tree canopy gain occurred in several sub-watersheds along Utoy Creek and Sandy Creek, ranging from a high of 14.5% in Utoy Creek_304 to 8% in Intrenchment Creek_32. The average change in sub-watersheds gaining tree canopy is 3.7%, with all of the sub-watersheds (over 100 acres) gaining tree canopy located south of Peachtree Creek. There are no sub-watersheds over 100 acres gaining tree canopy in north Atlanta.

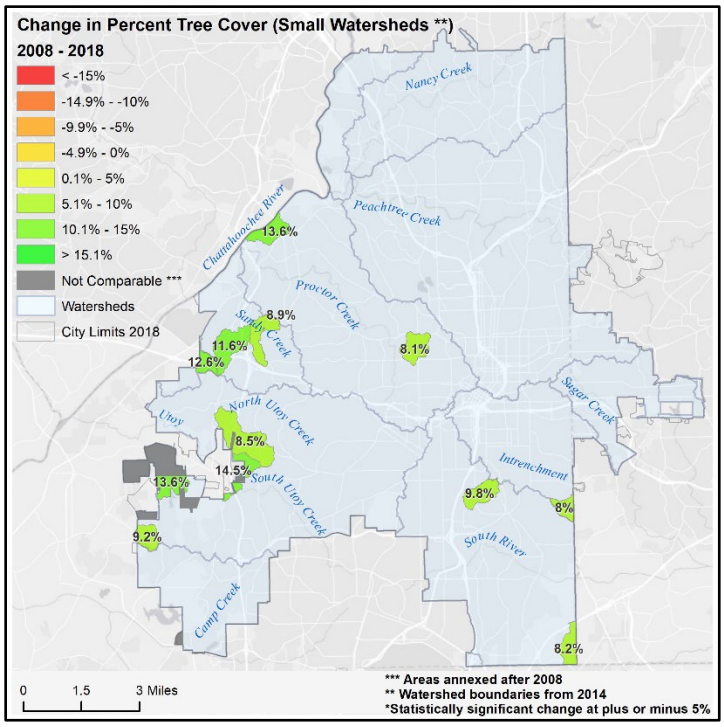


Figure 109. Top 12 Sub-Watersheds with Canopy Gains 2008-2018

The growth observed in these 12 sub-watersheds varies significantly, from normal growth observed in Whittier Mills park in Bakers Ferry_3 sub-watershed (Figure 111) to large areas of "regrowth" found on sites cleared for development around 2008 that either remained undeveloped or were partially developed as observed in Utoy Creek_298 sub-watershed (Figure 112).

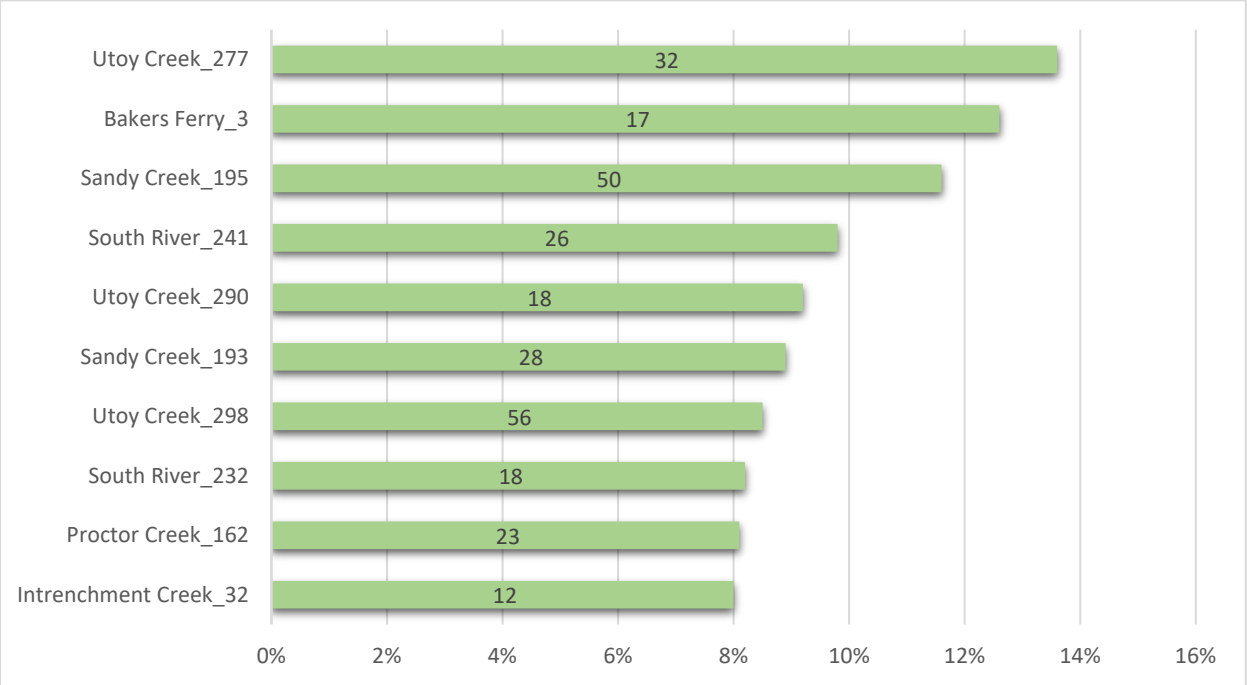


Figure 210. Land Cover Distribution for Top 12 Sub-Watersheds Showing Canopy Gains 2008-2018

Figure 111. Canopy growth observed in Whittier Mills park in Bakers Ferry_3 sub-watershed

Figure 3. Canopy growth and regrowth in partially-completed development in Utoy Creek_298 sub-watershed.

4.24 City Parks: Tree Canopy 2018

The City of Atlanta has 373 parks ranging in size from less than 1 acre to 250 acres. totaling approximately 3,934 acres (4.5% of the city's land area). These parks range in function from simple beauty spots or traffic circles to large, multi-use parks containing gyms, golf courses, playgrounds, and other amenities. These parks contain approximately 2,105 acres of tree-covered land or 5.2% of the city's tree canopy. Tree cover ranges significantly in the City's parks, from zero canopy in many traffic circles and other very small parks, to complete or 100% coverage in other parks. Figure 113 is a map showing the 2018 percent tree canopy for all parks. The average percent tree canopy for the City's 373 parks is 48.1%, slightly higher than the 2018 city average of 46.5%. However, after removing the 181 parks less than one acre in size from the calculation (mostly beauty spots or traffic circles), the average percent tree canopy in the remaining 192 parks is 56.4%.

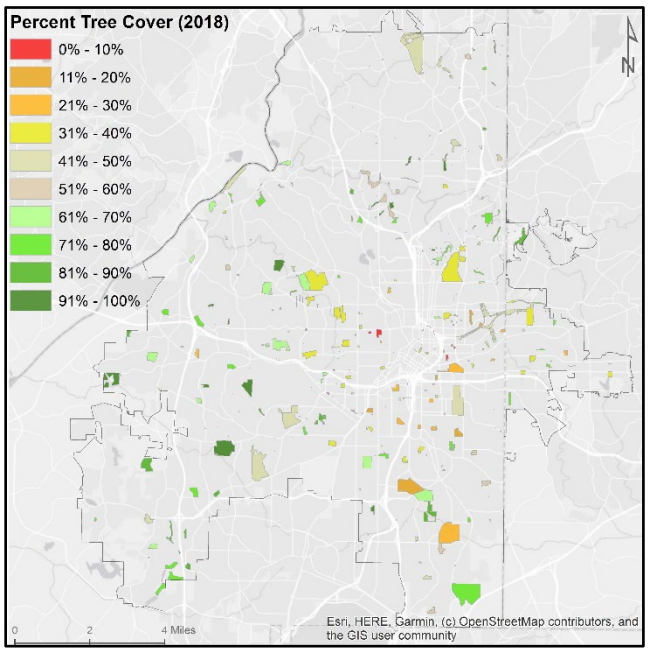


Figure 113. 2018 Percent Tree Canopy by Parks

Because the city has so many parks, only tree canopy statistics for parks over 20 acres in size will be summarized in this section. For complete tree canopy statistics, see Appendices 2 and 3.

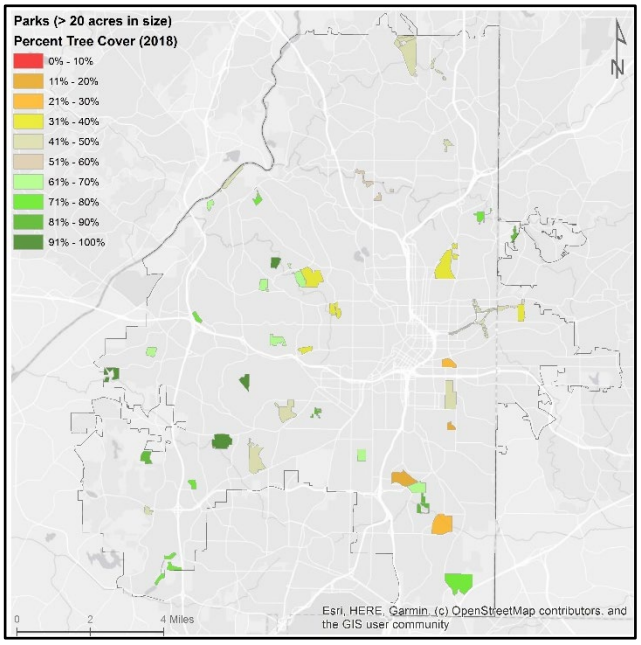


Figure 114. 2018 Percent Tree Canopy by Parks > 20 Acres in Size

Figure 114 is a map of the 40 city parks greater than 20 acres in size. For these parks, the amount of tree canopy varies from a high of 154 acres in Southside Park (72.8% canopy) to a low of 2.6 acres in Boulevard Crossing (12% canopy), with an average of 57.6% canopy coverage, which is significantly higher than the city average of 46.5%. The percentage tree canopy ranges from a high of 92.2% in Cascade Springs Nature Preserve (111.6 acres of canopy) to a low of 12% in Boulevard Crossing. The parks with the most percent canopy cover tend to be nature preserves while the parks with the least cover tend to be parks with golf courses or athletic fields that can't be forested. For a complete look at the 2018 land cover distribution for parks over 20 acres, see Figure 115 below, where acres of land cover are shown in the bars.

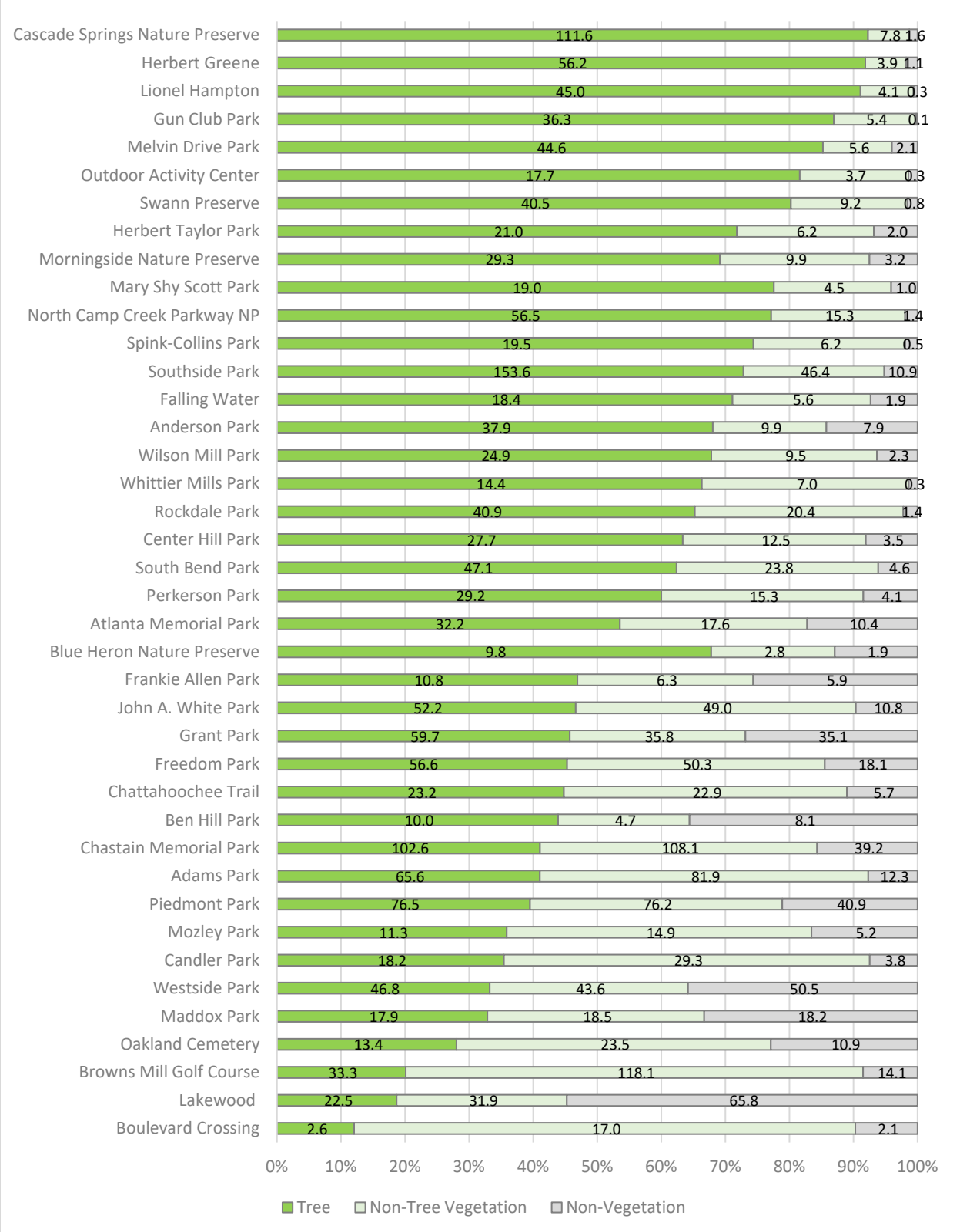


Figure 115. 2018 Land Cover Distribution for Parks > 20 Acres in Size

4.25 City Parks: Tree Canopy Change 2008 – 2018

Due to the large size variation in parks, acres of canopy change, not percent change in canopy, will be shown and discussed below. Furthermore, since there are 373 parks, only the 192 parks greater than 1 acre in size and those parks showing the most change will be highlighted here. Also, approximately 15-20 parks were added between 2008 -2018. For complete park change statistics, see Appendices 4, 5, and 6.

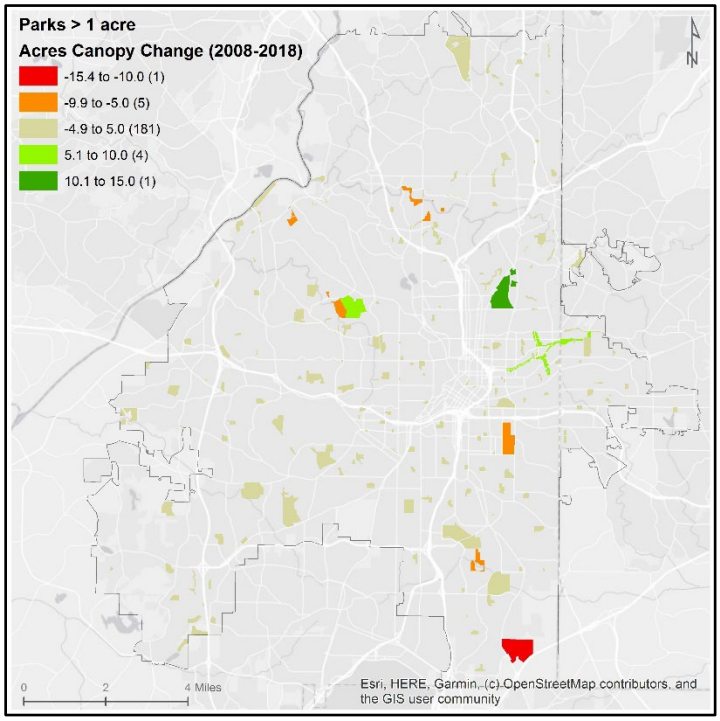


Figure 116. Acres Canopy Change by Parks > 1 Acre in Size 2008-2018

Figure 116 is a map showing the change in acres of tree canopy for parks greater than 1 acre in size. As shown in the map, the majority of parks (182) did not show significant change in canopy coverage. Nine parks showed increases of 2 acres or more, with the most gain occurring in Piedmont and Freedom parks (Figure 117). The growth in Piedmont park was a combination of new growth next to the new parking deck (2009) and existing growth on the large open areas along 10th street (Figure 118). Growth in these nine parks was due to expected growth in older trees (Oakland, Candler, John A. White, Adams), new growth of trees planted around 2008 (4th Ward, Whittier Mills, Freedom, and Piedmont) and regrowth occurring on land cleared in 2008 (Westside).

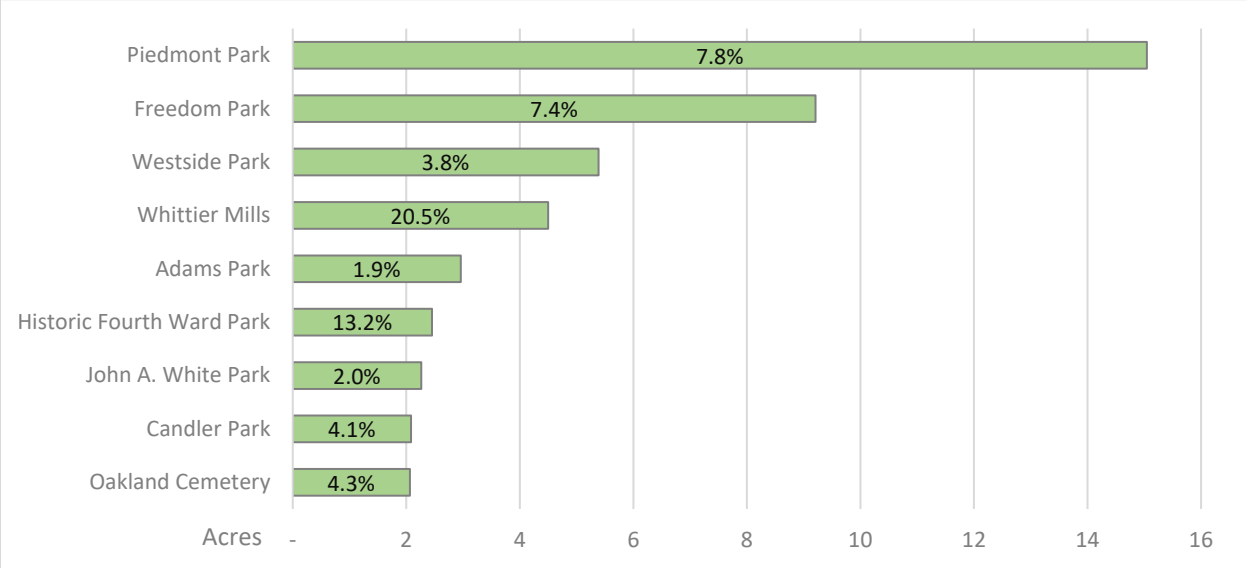


Figure 117. Parks Showing Increases of 2 or More Acres of Canopy 2008-2018

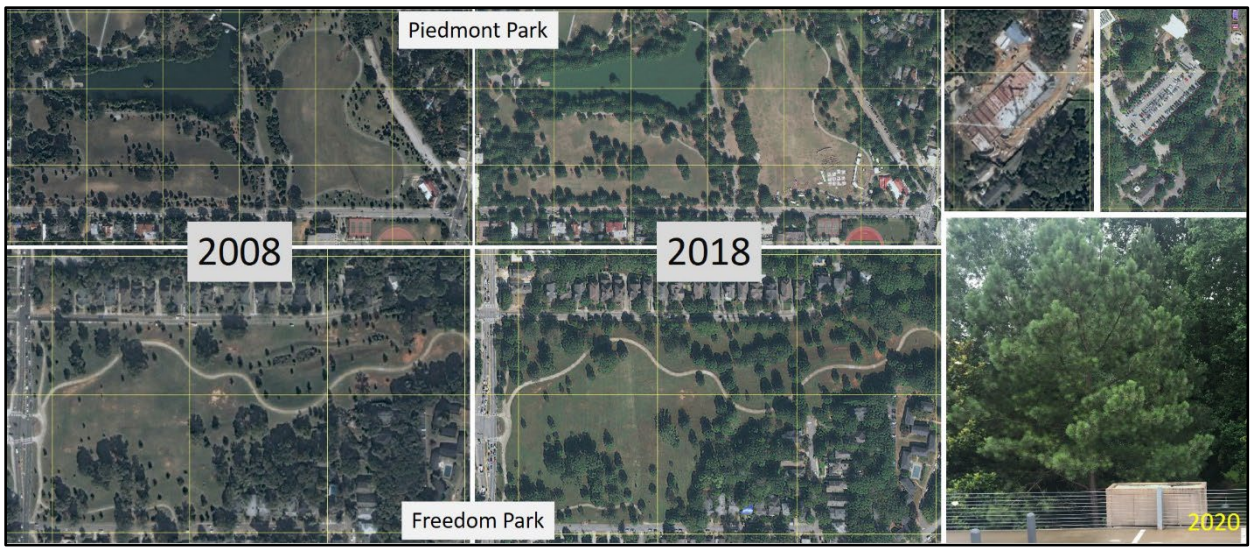


Figure 118. Piedmont Park Canopy Change 2008-2018

Seven parks lost more than two acres of canopy between 2008-2018 (Figure 119), with the most canopy lost at Southside due to tree loss/removal. Other causes of tree loss are described in Figure 120 below, and range from loss due to expansion, new trails, and park redevelopment (Figures 120-122).

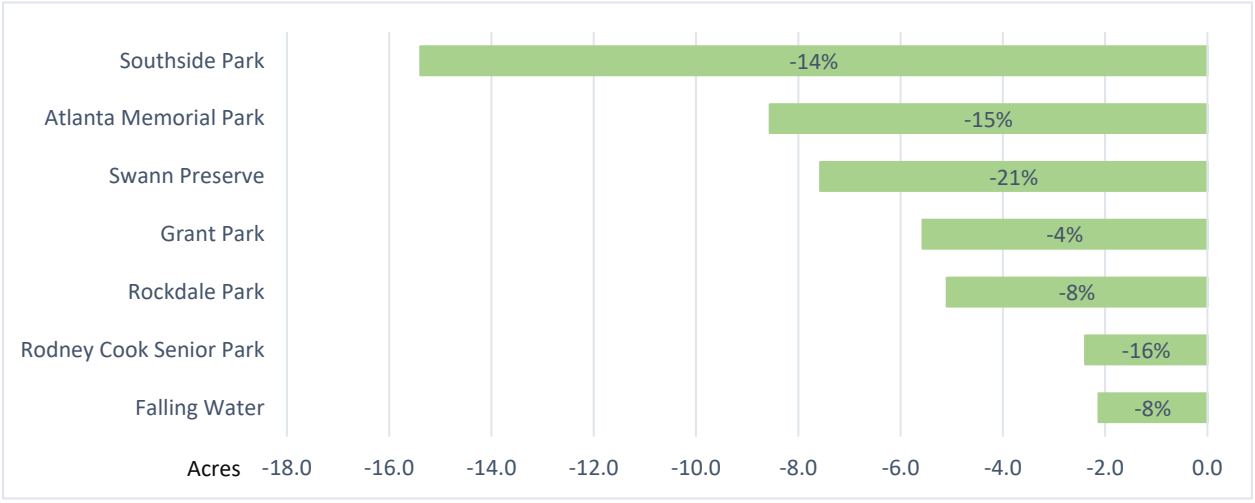


Figure 119. Parks with 2 or More Acres of Canopy Loss 2008-2018

Loss Description	Park	Acres UTC Lost	% UTC Lost
Clearing along easement	Falling Water	-2.1	-8%
Redeveloped in 2018 - trees cleared	Rodney Cook Senior Park	-2.4	-16%
New trail	Rockdale Park	-5.1	-8%
Zoo expansion	Grant Park	-5.6	-4%
New trail	Swann Preserve	-7.6	-15%
Clearing of trees at Bobby Jones	Atlanta Memorial Park	-8.6	-14%
Some tree clearing	Southside Park	-15.4	-7%

Figure 120. Causes of Tree Loss in Parks

Figure 121. Canopy Loss in the Swann Preserve and Rodney Cook Park 2008-2018

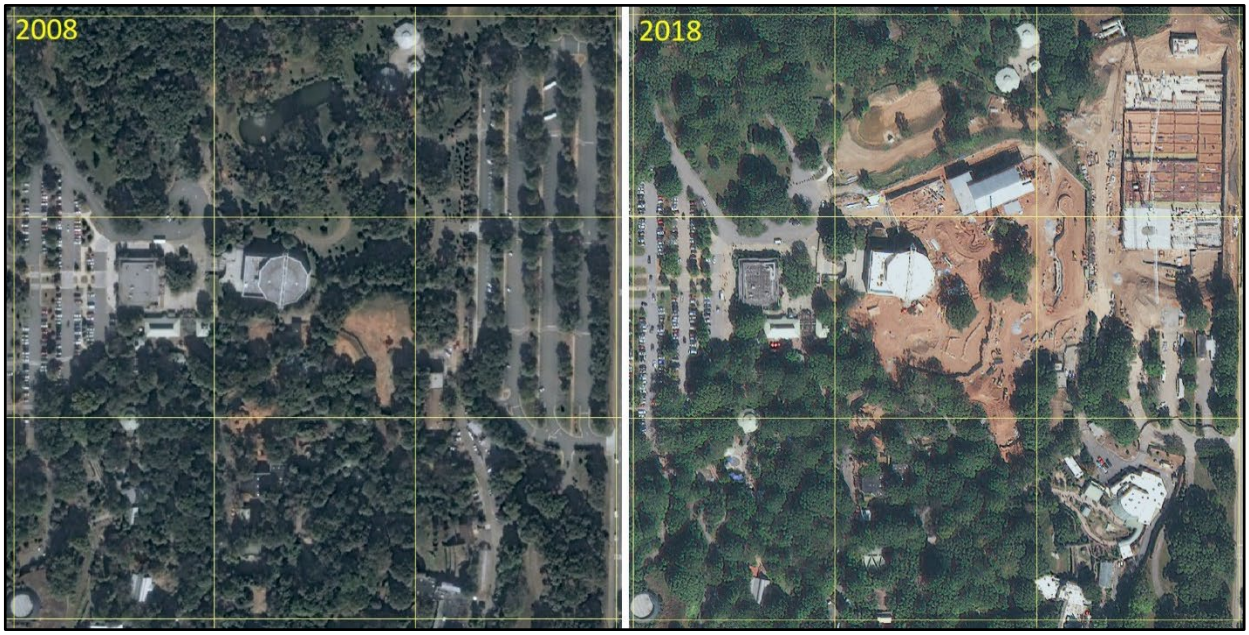


Figure 122. Canopy Loss in Grant Park due to Redevelopment

4.26 Zoning

The research team calculated tree canopy and other land cover for each of the city's zoning categories. Because the city has over 200 unique zoning classes, the project team aggregated zoning classes into 14 general zoning categories (e.g. C-1, C-2, and C-3 are grouped together into commercial). Figure 123 illustrates the distribution of these 14 zoning categories across the city. Further consolidation of these 14 zoning classes into 9 distinct classes allows the project team to easily visualize the overall land area in acres (Figure 124) and landcover distribution (Figure 125) for the major zoning classes across the city

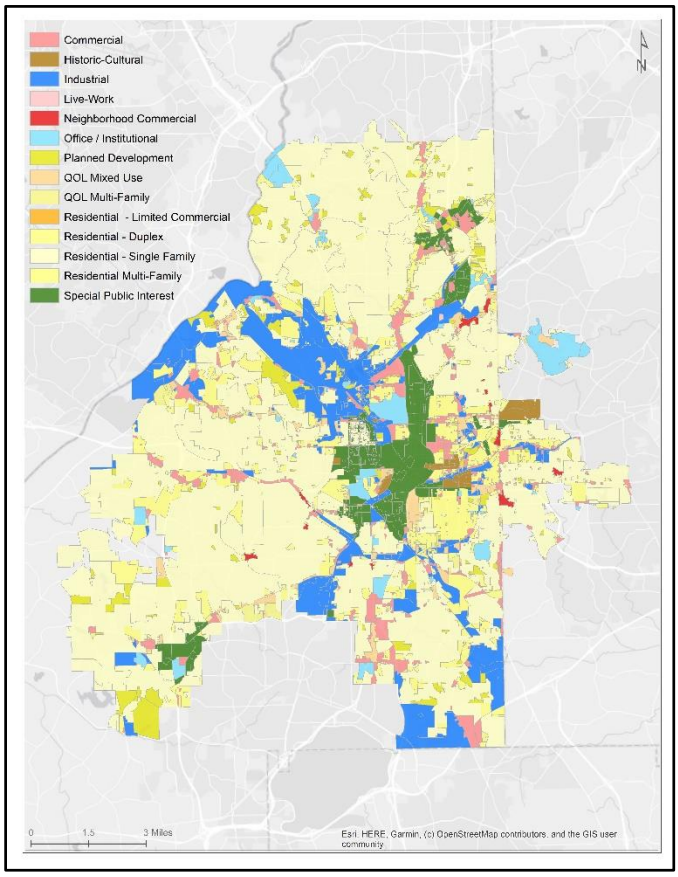


Figure 123. 2018 Zoning Distribution in the City of Atlanta

As each figure shows, the majority of the city is zoned residential, with single-family residential as the largest zoning category (52,927 acres; 61% of the city's land area), located primarily on the periphery of the city outside of downtown. The second largest zoning category is industrial, which constitutes a much smaller land area (9,842 acres; 11.3% of the city's land area) but much more concentrated, almost forming an X across the center of the city.

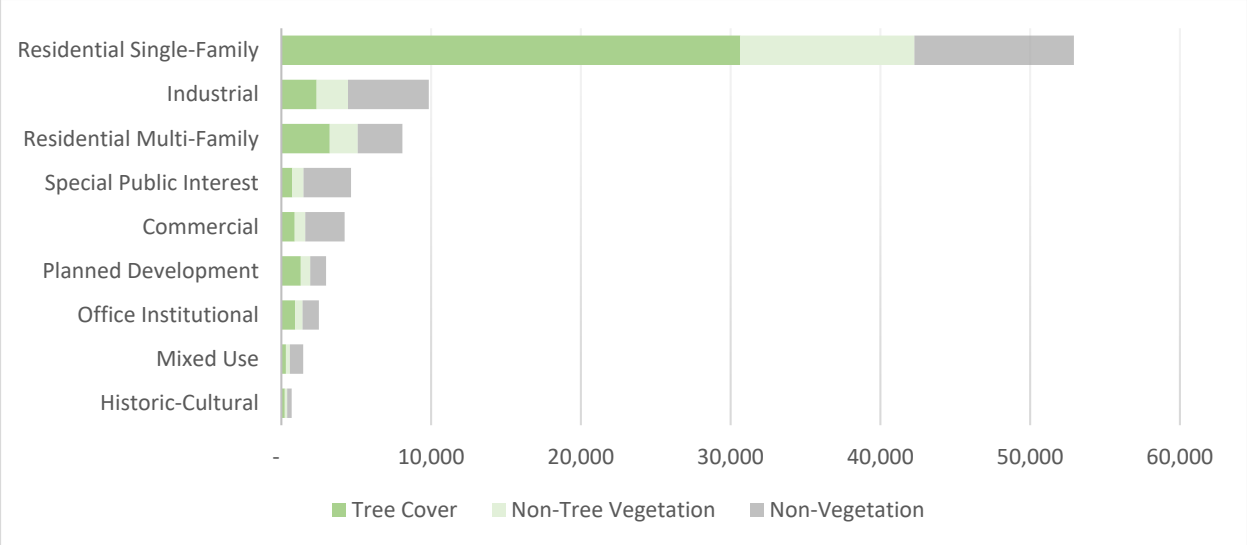


Figure 124. 2018 Land Cover Distribution in Acres by Zoning Group

The third largest category, multi-family residential (8,080 acres; 9.3% of the city's land area, a slight increase from 2014), is scattered across the city.

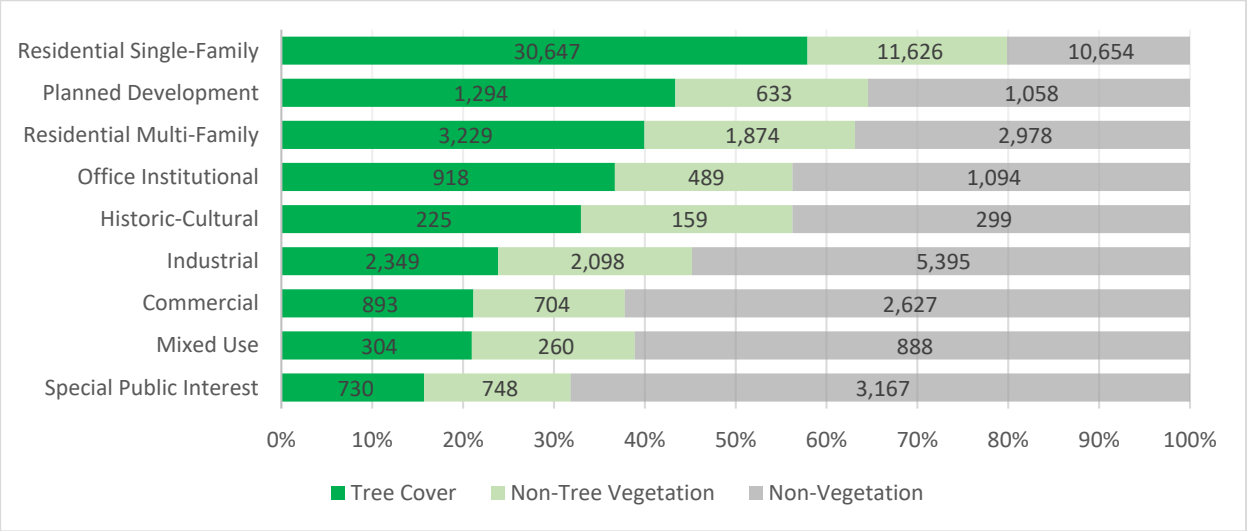


Figure 125. Land Cover Distribution Percentages and Acreage by Zoning Group

In addition to being the largest zoning category by far, residential property has more tree cover than any other zoning categories. [e.g., 58% of single-family residential land is tree-covered and 43% of areas zoned for planned housing development are tree-covered, compared with commercially zoned land where 21% is tree-covered] (Figure 126). Only single-family residential (58%) zoning has a tree cover percentage

Zoning	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
Special Public Interest	0.8%	15.7%	1.8%	0.9%	16.1%	4.0%	3.6%	68.2%	11.2%
Mixed Use	0.3%	21.0%	0.7%	0.3%	17.9%	1.4%	1.0%	61.1%	3.2%
Commercial	1.0%	21.1%	2.2%	0.8%	16.7%	3.8%	3.0%	62.2%	9.3%
Industrial	2.7%	23.9%	5.8%	2.4%	21.3%	11.3%	6.2%	54.8%	19.2%
Historic-Cultural	0.3%	33.0%	0.6%	0.2%	23.3%	0.9%	0.3%	43.7%	1.1%
Office Institutional	1.1%	36.7%	2.3%	0.6%	19.6%	2.6%	1.3%	43.7%	3.9%
Residential Multi-Family	3.7%	40.0%	8.0%	2.1%	23.2%	10.1%	3.4%	36.9%	10.6%
Planned Development	1.5%	43.4%	3.2%	0.7%	21.2%	3.4%	1.2%	35.4%	3.8%
Residential Single-Family	35.1%	57.9%	75.5%	13.3%	22.0%	62.5%	12.2%	20.1%	37.8%

Figure 126. 2018 Land Cover Summary Statistics by Zoning

above the 2018 city average of 46.5%. The lowest concentration of tree cover is in the areas zoned Mixed Use (21%), and special public interest (16%). Special public interest (SPI) zoning is difficult to characterize because it includes various land uses ranging from commercial to residential. SPI zoning in the city applies to commercial areas such as the Central Core, Buckhead Commercial Core, Buckhead/Lenox Station, Lindbergh Transit Station, Midtown, Piedmont Avenue, Buckhead Peachtree Corridor, Greenbriar,

Memorial Drive/Oakland Cemetery, and Lindbergh Transit Station; as well as residential areas such as Candler Park, Poncey-Highland, Home Park, Mechanicsville, and Historic West End/Adair Park.

While tree cover makes up only 24% of the 9,842 acres with industrial zoning, this represents 2,349 acres of tree cover (and 6% of the city's total tree cover). Under the zoning code, there are no limits on the amount of impervious lot coverage on many properties with industrial zoning. These data may suggest a significant amount of underdeveloped or vacant acreage that is zoned for industrial use, and therefore may represent areas with potentially signifcant loss of tree canopy if the acreage is developed in compliance with current regulations.

Section 5: Discussion

The canopy study found that in late 2018, 46.5% (40,609 acres) of land within the city limits was shaded by urban tree canopy. The study also showed that 22.1% (18,595 acres) was covered by non-tree vegetation such as grass, shrubs, and other plants while 30.0% (28,172 acres) was covered by non-vegetation such as buildings and paved surfaces. At 46.5%, the overall percentage of tree canopy is the highest among 20 major cities that have evaluated urban tree canopy in recent years[1], reflecting Atlanta's setting in a Piedmont forest (with almost 100% canopy in its natural state), its large land area, its predominantly residential development patterns, and its favorable climate, as well as its longstanding tree preservation and planting policies. These findings are significant and will enable the City of Atlanta to continue to effectively plan for and manage their urban forest. A few of the more noteworthy findings are further discussed below.

5.1 The majority of the city's canopy is found on land zoned single-family residential

As expected, the strong impact of zoning and land use on the distribution of tree canopy in 2018 is very similar to the 2008 and 2014 study findings. Most of the city's tree canopy grows on single-family residential property (75.5%) on the city's periphery and is heaviest in the northwest, southwest, and southeast The second highest concentration of canopy is on land zoned for multi-family residential use (8.0%) followed by industrial use (5.8%). Commercial (2.2%), Mixed Use (.7%), Historic-Cultural (.6%), Office-Institutional (2.3%) and Special Public Interest (1.8%) are the lowest contributors to the city's tree canopy. Tree cover is lowest downtown, in the areas surrounding downtown, and along commercial and transportation corridors. The distribution of the canopy varies significantly across Atlanta's 244 neighborhoods, with an average tree canopy of ***76***% in the dozen most-canopied neighborhoods, and an average tree canopy of only ***8*** % in the dozen least-canopied neighborhoods.

Ultimately, this means that tree canopy protection in the City of Atlanta is in the hands of its citizens. While the tree ordinance and zoning regulations provide protection to the canopy, unfortunately, these protective measures still allow for substantial removal of trees at the individual property level. Furthermore, if the ongoing trend of developing and redeveloping single-family homes to the maximum allowable lot coverage persists, the city will continue to lose significant canopy on a lot by lot basis. It may not happen all at once, and may not be as noticeable as a lot completely cleared for a new development, but a transformation of the city's canopy is underway and unless it is slowed down, the city's canopy will be considerably altered, diminished, and potentially changed forever.

5.2 Despite the Numbers, the Canopy is Changing

The lack of statically significant change in canopy cover between 2008 (47.9%), 2014 (47.1%), and 2018 (46.5%, 46% when using 2008 city limits as comparison) is very misleading. Observations on the ground during site visits in 2014 and 2018 revealed some very concerning trends that indicate more loss than

[1] D.J. Nowak, E.J. Greenfield / Urban Forestry & Urban Greening 11 (2012) 21–30

what the numbers showed, and more loss to come if the pattern continues. Approximately 500 acres (1% of total canopy cover) of the observed "gain" was identified as "temporary growth", indicating that the city's canopy may have declined to as little as 45% between 2008 - 2018.

5.3 Canopy Loss

The majority of canopy loss occurred in the northern part of Atlanta and was due primarily to redevelopment or new development of single-family homes as shown in Figure 127.

Figure 127. Single-Family Redevelopment between 2008-2018

While these losses can occur at one or two-acre increments, over time, this adds up, and, based on observations during site visits and the patterns of recent building permit activity, this type of development is continuing at a high rate (Figure 128).

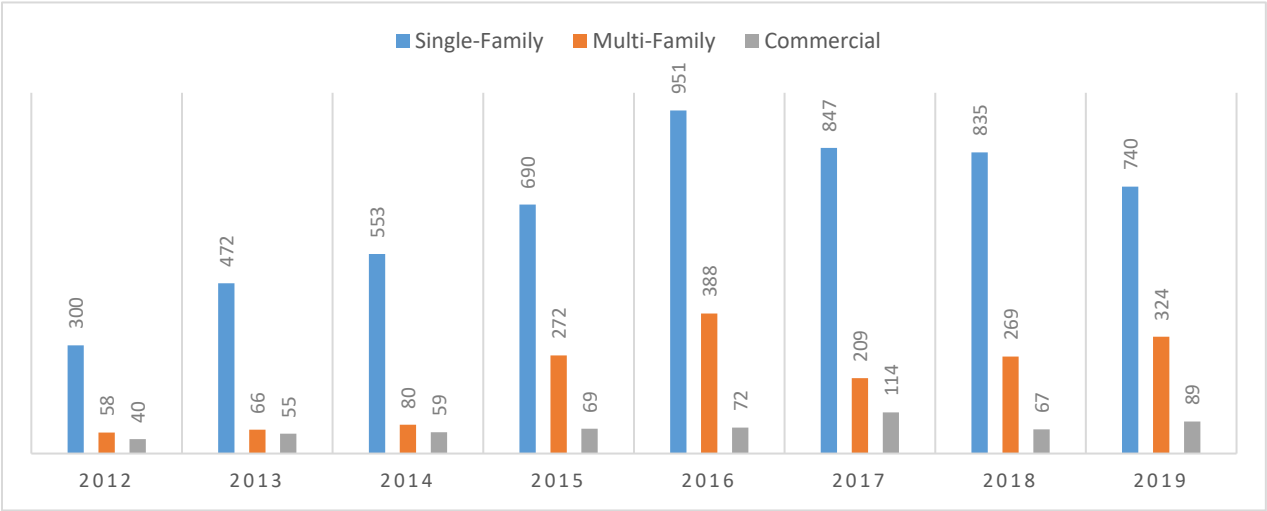


Figure 128. Development Permits 2012-2019

Redevelopment of single-family homes where the new home is built to the maximum allowable lot coverage is the city's newest and most serious threat to its tree canopy.

Figure 129. Canopy Loss due to Single-Family Redevelopment

Figure 130 shows estimates of canopy loss caused by single-family redevelopments that are built-out to the maximum allowable lot coverage.

% Single-Family Lots Built Out to Max Lot Coverage	100%	50%	25%	10%
Estimated Acres Lost	14,887	7,443	3,722	1,489
Estimated % UTC Lost	37%	18%	9%	4%

Figure 130. Canopy Loss Estimates Due to Max Lot Coverage Build-Out

As seen in Figure 130, if the trend of building-out to the maximum allowable lot coverage continues, it will have extremely negative consequences for the city's canopy.

5.4 Canopy Gain

The 2018 study results indicated substantial canopy growth at several small areas across the city since 2008. There were a few areas that appeared to be new, small contiguous forests (< 10 acres), but site visits typically revealed a much different story. Almost every one of the areas showing substantial growth were, in fact, sites previously cleared for development, demolished and/or stalled in development and during the site visits, covered by secondary growth (fast growing invasive trees or a monoculture of tightly spaced pines). Figure 131 shows a particular interesting example of a site showing canopy "gain". In the top left is a 2008 photo showing an area cleared for a single-family subdivision. In the top

Figure 131. Canopy Loss – Gain - Loss Cycle for Stalled Developments

right is the same area in 2014, with 9 homes completed and the remaining areas cleared in 2008 now covered with fast growing pines. The pictures on the right of Figure 131 were taken during site visits in 2017. The "new" forest cover in 2017 is dense, pine-dominated and likely replaced an older, healthy, mixed hardwood forest. In the 2018 photo in the bottom right of Figure 131, the "new" forested areas (previously cleared) observed in 2017 were cleared (again) and development started again. In the 2019 photo in the bottom left of Figure 131, development was completed, with all *temporary* canopy growth observed between 2008 and 2017 lost, again. A site visit in 2020 confirmed completion of the development. This example of regrowth is common across the city and varies in scale from the single lot to large subdivisions. Subsequently, much of the canopy gain observed across the city, especially large areas of gain, is found on sites like the example above, where the gains are temporary and/or low-quality, giving a false impression of canopy balance over time in the city of Atlanta.

At most of the large sites where canopy gain was observed, the demarcation between the old forest (cleared for development) and new growth was evident (Figure 132). This was a common observation at this type of location. In the top and bottom left photos in Figure 5, all taken in 2020, the new forest is seen in the foreground, with a visible demarcation between the older forest in the background. The

Figure 132. Canopy Differences After Land Clearing

photo on the bottom right is a close-up view of the type of forest that typically regrows on cleared land adjacent to mature forests. While definitely better than no canopy, this type of forest is of much lower quality and does not provide the same ecological benefits (especially habitat) as the previous, mature forest.

On a positive note, a handful of sites showing substantial canopy gain were valid. A few of the city's parks experienced notable gains in canopy, some due to plantings installed circa 2008. As seen in Figure

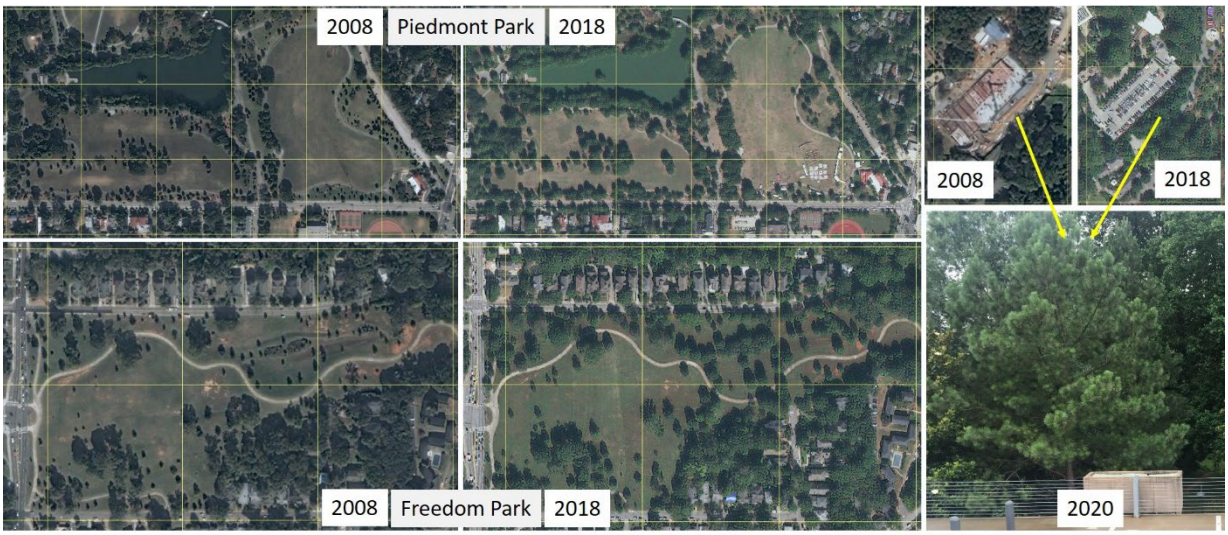


Figure 133. Canopy Growth in City Parks

133, Freedom and Piedmont parks both experienced substantial gain due to plantings and excellent maintenance of their existing canopy. There were also several subdivisions and individual properties built around 2008 that showed sizeable increase in canopy due to rapid street tree growth (Figure 134).

Figure 134. Canopy Growth in Multi-Family Development

There were many neighborhoods with mature trees and canopy that continued to increase, though not as quickly as areas with younger, faster growing trees. This type of growth is harder to visualize and capture through photography than quick growing trees.

5.5 What does this mean for Atlanta's canopy?

When simply looking at the numbers for "gain", we see an estimated increase in canopy. However, at most of the larger areas observed during site visits, there is no gain in the quality of canopy. Typically, when forested land with healthy, mature canopy is clear cut, depending upon soil conditions and adjacent uses, it is quickly replaced by fast growing invasive trees or a monoculture of pines. Furthermore, most of the sites with significant canopy gain are in developmental limbo and will likely be cleared again, as already observed at three large sites, making any gain, even low-quality gain, short-lived or temporary. These "temporary" gain sites are almost always degraded sites with graded soil where development has faltered and nature is trying to reclaim the land. Given decades, or centuries to fully recover, the sites DO have the potential to recover and offer some of the ecosystem services they provided prior to 2008. However, because of the roads, curb-and-gutter, and other infrastructure that was installed, they are unlikely to return to their full natural value. The city needs to better understand how these sites came to be, how to prevent this type of development practice from happening in the future, and how to incentivize (re)development at these sites over development of land with mature forests. Otherwise, because of sites like these and the trend towards lot build-out on redeveloped single-family homes, the city's high quality forests will diminish into a lower quality version of itself, providing fewer and fewer ecosystem services for Atlanta's residents.

5.6 The City's Canopy Goals

Following the first City of Atlanta Urban Tree Canopy Assessment, the city made a goal of obtaining and maintaining at least 50% tree cover across the city. While positive and praiseworthy, the mechanisms for achieving and maintaining this goal are not as straightforward as they might seem. Two things must happen in order to achieve the 50% canopy goal with no net-loss; plant trees and mitigate loss.

5.6.1 Plant Trees

If the city is currently covered by 46.5% tree canopy, 3.5% *new* canopy cover must be grown to reach 50%. This equates to roughly 3,100 acres of new tree cover, which could only be realized through a continued public and private tree planting efforts.

Land Type	Acres of Non-Tree Vegetation (Land for Tree Planting)
Parks	1,500
Public Schools	300
Other Public Lands	800
Private Land	14,600
Right-of-Way	3,050

Figure 135. Planting Area Estimates

Assessing the 2018 tree canopy data in conjunction with data obtained from the city's GIS department., the Fulton County Tax Assessor and the Atlanta Public School district, Atlanta contains roughly 2,600 acres of public land (non-tree vegetation) currently available for planting (Figure 135). A safe assumption might be that up to 25% (650 acres) of public land currently covered in non-tree vegetation could be planted with canopy trees, which leaves roughly 2,000 acres of new canopy that must be grown and maintained either on private land or in the right-of-

way. Fortunately, there is approximately 14,600 acres of privately owned, non-tree vegetated land in the City across 160,000 properties. There is also approximately 3,050 acres of non-tree vegetation acres in the right-of-way. Given adequate incentives and proper planning, 3,100 acres of tree cover could be achieved over time, through private plantings combined with some larger scale public planting. Alternatively, underutilized public properties covered by impervious surfaces could be converted to planting areas, though this strategy would likely be cost prohibitive.

5.6.2 Mitigate Loss

It is imperative that the City evaluate multiple options for mitigating tree loss because tree planting alone is not a quick or viable solution to replace lost canopy. The city is losing tree cover faster than it is gaining tree cover and, based on observations made during field visits for this project, that trend is likely to continue post 2018 with a substantial increase in magnitude and velocity.

The following are a few possibilities for mitigating tree loss.

5.6.2.1 Permanently protect existing forests:

Using 2018 City of Atlanta tax assessor data in conjunction with the 2018 urban tree canopy data, the project team identified approximately 3,480 vacant properties in the city that contain >= .25 acres of tree cover, totaling 5,700 acres of undisturbed forests, or roughly 14% of the existing canopy. Over 220 of these vacant properties are relatively large, with >=5 acres of canopy cover, totaling roughly 2,600 acres of tree cover or 6% of the existing canopy. The two vacant properties with the most tree canopy are both over 75 acres in size (118 and 77) and contain 80 acres and 57 acres of tree canopy respectively. More importantly, over 75 of the 220 vacant properties with >= 5 acres of tree cover are located within 250 feet of a river, including each river within the city limits. Unfortunately, based on current trends, there is a strong likelihood that many of these properties will be developed and much of this existing canopy will be permanently lost, potentially causing a negative effect to the city's delicate ecosystem.

The project team also identified 424 occupied, privately owned properties that are >= 10 acres in size and contain 80% or more tree cover, totaling approximately 3,900 acres of tree cover or 10% of the existing canopy cover. Nine of these properties have more than 50 acres of tree cover, with the largest having 116 acres of tree cover. As is the case with vacant land, there are a substantial number of these forested properties along Atlanta's streams. Approximately *136* of these properties are within 250 feet of a stream and therefore likely play a large role in maintaining clean water in Atlanta.

It is evident that by using the 2008 - 2018 tree canopy data in conjunction with tax assessor data and other relevant datasets (hydrography, parks, watersheds, etc.), the city is able to easily identify and prioritize large tracts of existing forests for permanent protection, whether that be through outright purchase, conservation easements, or other means of protection.

5.6.2.2. *Modify Minimum Lot Coverage for Zoning Categories:*

Maximum lot coverage is generally defined as the percentage of a lot that can be covered by impervious

Summary of Zoning Regulations in R Districts

		R-1	R-2	R-2A	R-2B	R-3	R-3A	R-4	R-4A	R-4B	R-5
MINIMUM SETBACKS	FRONT	60 ft.	60 ft.	60 ft.	50 ft.	50 ft.	50 ft.	35 ft.	30 ft.	20 ft.	30 ft.
	SIDE[a]	25 ft.	15 ft.	15 ft.	10 ft.	10 ft.	10 ft.	7 ft.	7 ft.	5 ft.	7 ft.[c]
	REAR	35 ft.	30 ft.	30 ft.	20 ft.	20 ft.	15 ft.	15 ft.	15 ft.	5 ft.	7 ft.[c]
LOT REQUIREMENTS	MINIMUM LOT AREA	2 acres	1 acre	30,000 sq.ft.	28,000 sq.ft.	18,000 sq.ft.	13,500 sq.ft.	9,000 sq.ft.	7,500 sq.ft.	2,800 sq.ft.	7,500 sq.ft.
	MINIMUM STREET FRONTAGE[b]	200 ft.	150 ft.	100 ft.	100 ft.	100 ft.	85 ft.	70 ft.	50 ft.	40 ft.	50 ft.[c]
	MAXIMUM LOT COVERAGE	25%	35%	35%	40%	40%	45%	50%	55%	85%	55%
	MAXIMUM FLOOR AREA RATIO	0.25	0.30	0.35	0.40	0.40	0.45	0.50	0.50[d]	0.75[e]	see section 16-07.010
	MINIMUM REQUIRED CAR PARKING SPACES	2	2	2	2	2	2	1	1	1	see section 16-07.010

Figure 136. Zoning Regulations in Residential Districts

surface (structures). Currently, the city zoning code allows for a wide range of maximum lot coverage across zoning categories, ranging from a high of 100% for Industrial land to a low of 25% for single-family residential land zoned R-1 (2-acre lot minimum). Aside from residential categories, most zoning allows for almost 100% coverage. The allowable maximum lot coverages for residential land vary from 25% to 55% (Figure 136).

Zoning	Acres	% of City Land	Acres UTC	% UTC
R-1	1,470	1.7%	968	66%
R-2	3,251	3.7%	2,038	63%
R-2A	865	1.0%	582	67%
R-2B	512	0.6%	256	50%
R-3	13,057	14.9%	8,325	64%
R-3A	325	0.4%	197	61%
R-4	24,754	28.3%	13,965	56%
R-4A	4,703	5.4%	2,515	53%
R-4B	320	0.4%	112	35%
R-5	2,764	3.2%	1,080	39%

Figure 137. Land and Canopy Values by Residential Zoning District

Figure 137 shows the acres of land, the percentage of the city's total area, and the tree canopy cover area and percentage cover for each major single-family residential zoning category in the city.

Zoning	% Single -Family Lots Built Out to Max Lot Coverage			
	100%	50%	25%	10%
R-1	153	77	38	15
R-2	609	305	152	61
R-2A	189	95	47	19
R-2B	92	46	23	9
R-3	3,135	1,567	784	313
R-3A	86	43	21	9
R-4	7,881	3,941	1,970	788
R-4A	1,669	835	417	167
R-4B	170	85	43	17
R-5	756	378	189	76
Total	**14,741**	**7,370**	**3,685**	**1,474**

Figure 138. Tree Canopy Loss Estimates

Modified Lot Coverage	Zoning	% Single -Family Lots Built Out to Max Lot Coverage			
		100%	50%	25%	10%
15.0%	R-1	0	0	0	0
25.0%	R-2	287	144	72	29
25.0%	R-2A	103	51	26	10
30.0%	R-2B	52	26	13	5
30.0%	R-3	1,834	917	458	183
35.0%	R-3A	53	27	13	5
40.0%	R-4	5,417	2,708	1,354	542
45.0%	R-4A	1,203	602	301	120
75.0%	R-4B	138	69	35	14
45.0%	R-5	485	243	121	49

Figure 139. Mitigating Canopy Loss Through Lot Cover Changes

Figure 138 shows the estimated acreage of tree cover loss at different levels of maximum lot coverage build-out for each single-family residential category. The vast majority of residential land is zoned either R-4 (9,000 sq. ft. lots) or R-3 (18,000 sq. ft. lots), and subsequently contain large amounts of tree canopy found at 56% and 64% respectively. If even 25% of R-4 or R-3 lots were built out to maximum lot coverage, the city would lose 7% of its total canopy, or approximately 2,800 acres of tree canopy. Based on observations made during site visits for this study, maximum lot build-out of 25% of all single-family properties is not unlikely. And, if it occurred, it would be almost impossible to recover that lost canopy any time soon, if ever.

Ultimately, the data produced in this study and future studies can be used by city planners to evaluate and modify planning policies. For example, as seen in Figure 139, by lowering the maximum lot coverage allowance by 10% for each residential zoning category, decision-makers can immediately quantify a policy change's potential effect on urban tree canopy. By using the tree canopy data to run scenarios like these allows the city to accurately estimate or quantify changes in tree cover due to planned or potential policy change.

5.7 Policy Recommendations

The 2008 – 2018 canopy change analysis provides documented, science-based data that can be used to inform decision-making related to urban trees and urban forest management in the city. Looking at tree canopy change between 2008 and 2018, the City can evaluate and quantify how the interaction between policy, decision making, and the free market affect urban tree canopy in the City of Atlanta over time. Subsequent UTC studies will add to this wealth of information and meaningfully inform decision-making for urban tree and urban forest management in the City.
The City can immediately use the findings to:

- Refine policies and set canopy goals to ensure that each area of the city receives the benefits of a healthy canopy and that the overall tree canopy is maintained and increased over time;
- Inform sustainability efforts and policy decisions related to climate, water and air quality, tree preservation, and watershed protection; and
- Educate the public about the value, distribution, and trends that affect tree canopy in Atlanta.

Specific recommendations for consideration:

- Increase stream buffer widths to preserve canopy in close proximity to stream segments.
- Permanently protect some of the few remaining large tracts of undisturbed forests with priorities based on proximity to streams.
- Require that all city-funded tree planting locations are mapped, catalogued and provided to the city in database format so the canopy contribution of these trees can be tracked over time.
- Identify methods for reducing tree loss during redevelopment of single-family properties.
- Inform policy decisions related to land development, specifically as it relates to “pipe farms” (partially developed sites).
- Evaluate maximum allowable lot coverages, especially residential land.
- Implement conservation measures for new subdivisions.
- Evaluate open space requirements for multi-family and other developments.
- Align replanting requirements with the species of trees that are removed or require replanting of native trees to ensure tree replacements are of similar quality to the removed trees.
- Develop measures to prevent clearing of large sites that will not be completed (such as development bonds).

5.8 Summation

The 2018 Urban Tree Canopy Assessment marks the third comprehensive detailed analysis of tree canopy within Atlanta's city limits. Using findings from this study, the city is well-equipped to build on their ongoing efforts to manage and protect the city's urban forest The tree canopy analysis and resultant baseline data are valuable city assets that can be utilized in numerous ways by a variety of stakeholders to:

- Continue to measure tree canopy change over time;
- Inform goals and policies for maintaining and increasing tree canopy throughout the city;
- Provide data for establishing a refined Urban Forestry Management plan;
- Offer public information about tree canopy throughout Atlanta on an interactive map; and
- Continue to improve canopy identification techniques for future urban tree canopy studies.

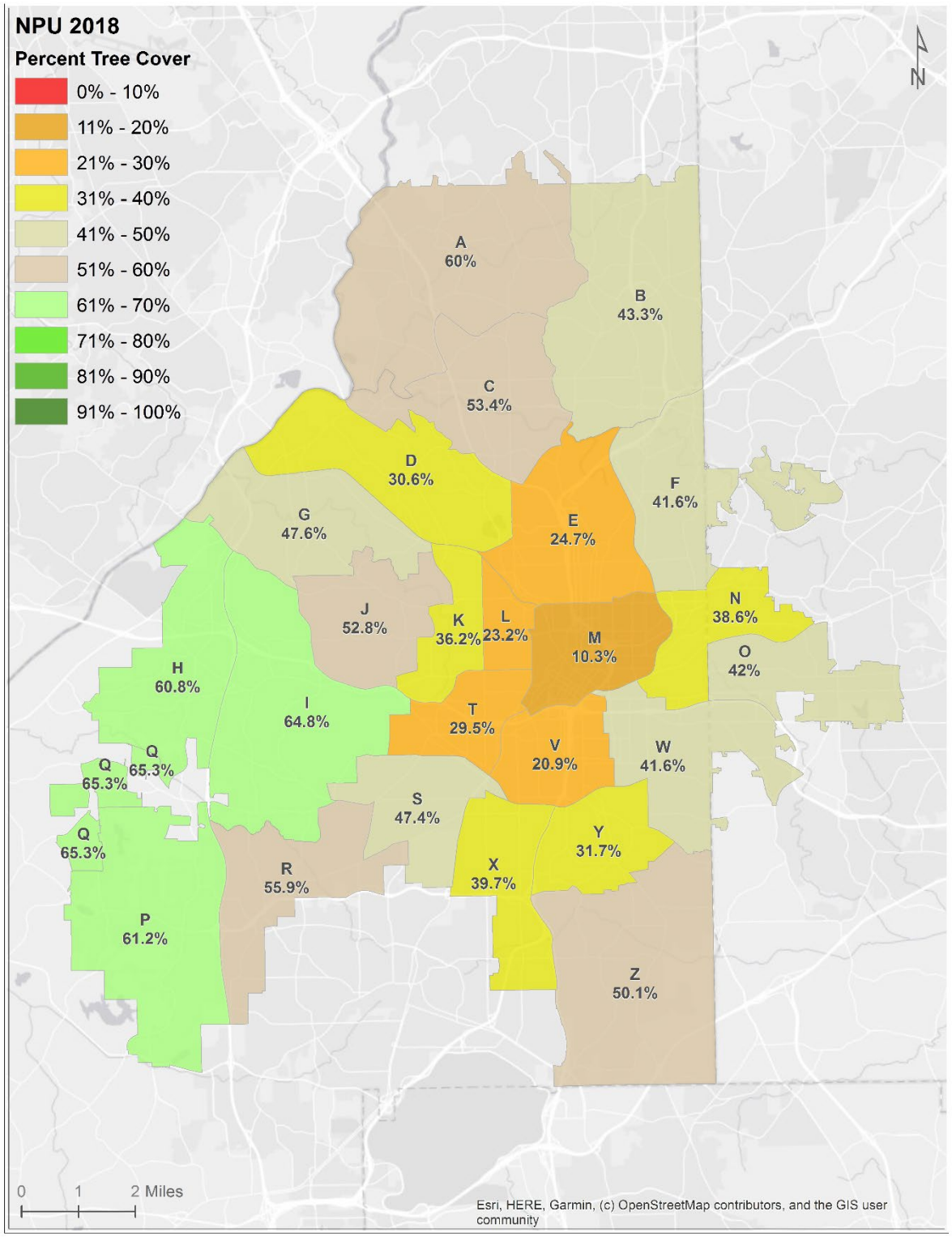
The three City of Atlanta Urban Tree Canopy Assessments are vital for an accurate understanding of the distribution of the tree canopy throughout the city, how it has changed over time, and how it will continue to change in the future. These studies provide essential information for planning for how to maintain and increase the benefits of the canopy for all Atlantans.

Project data, the final report and a suite of geospatial tools can be accessed online at

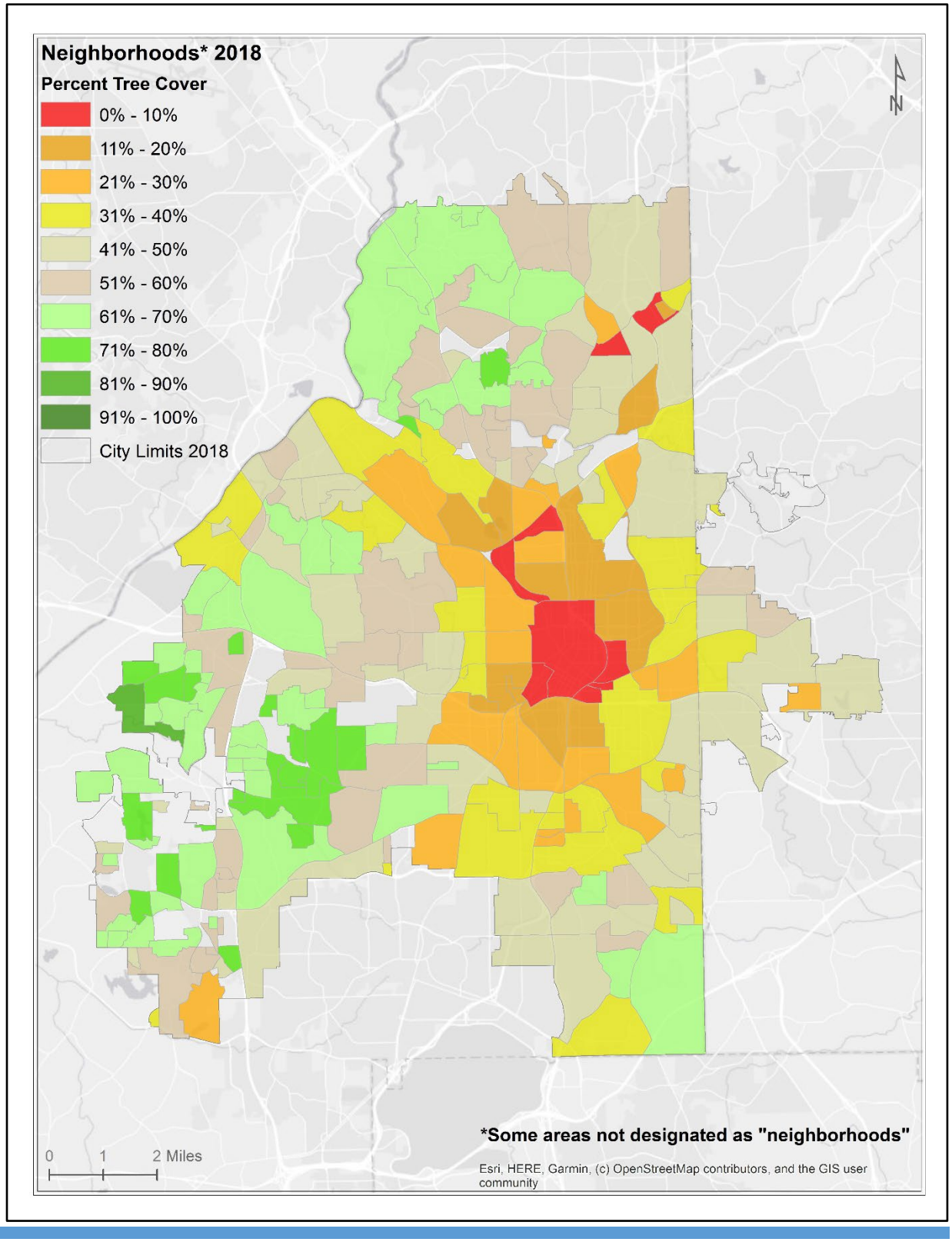
https://geospatial.gatech.edu/AtlantaUTC

Appendix 1
Urban Tree Canopy Maps by Selected Geographies

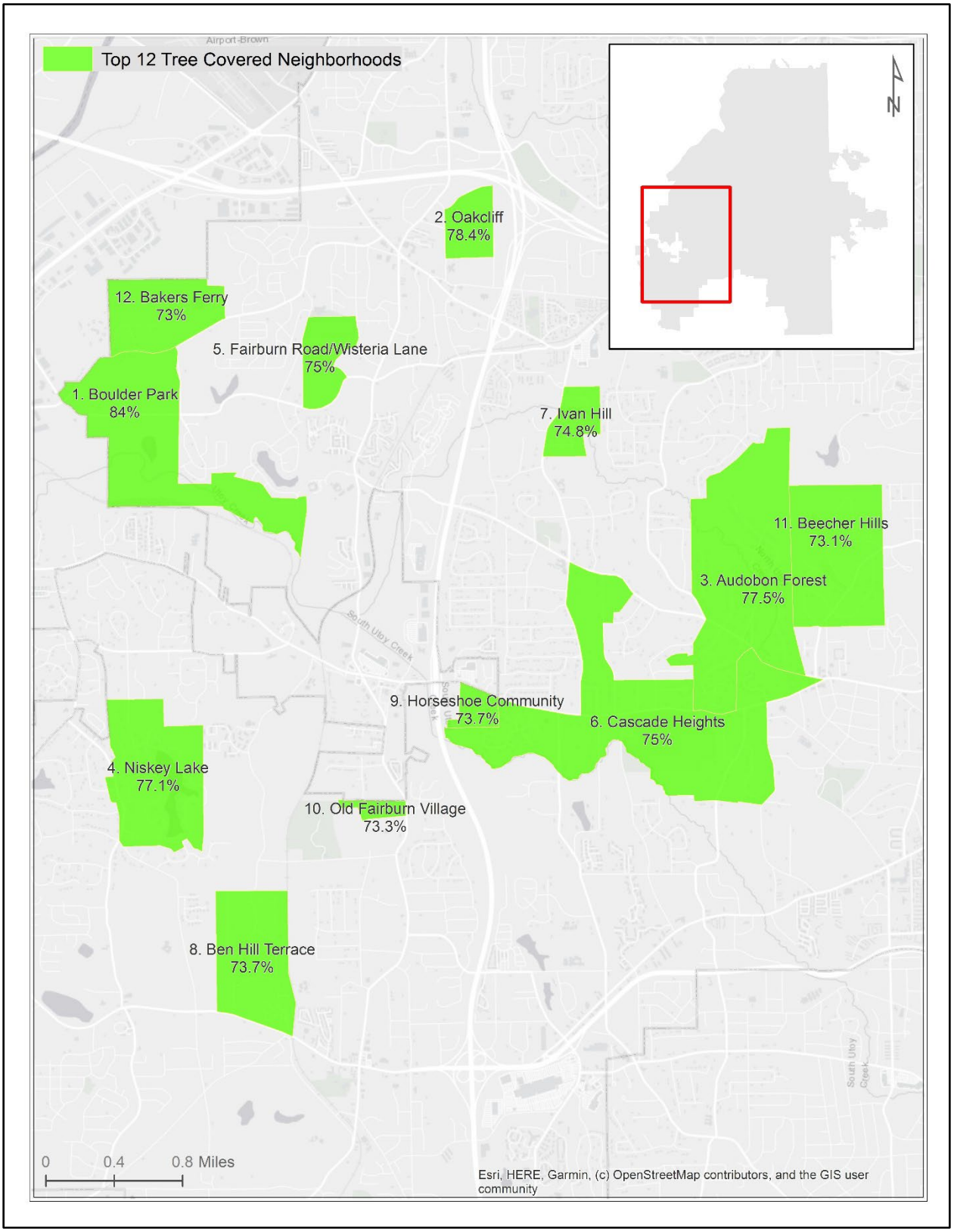
1. Neighborhood Planning Units



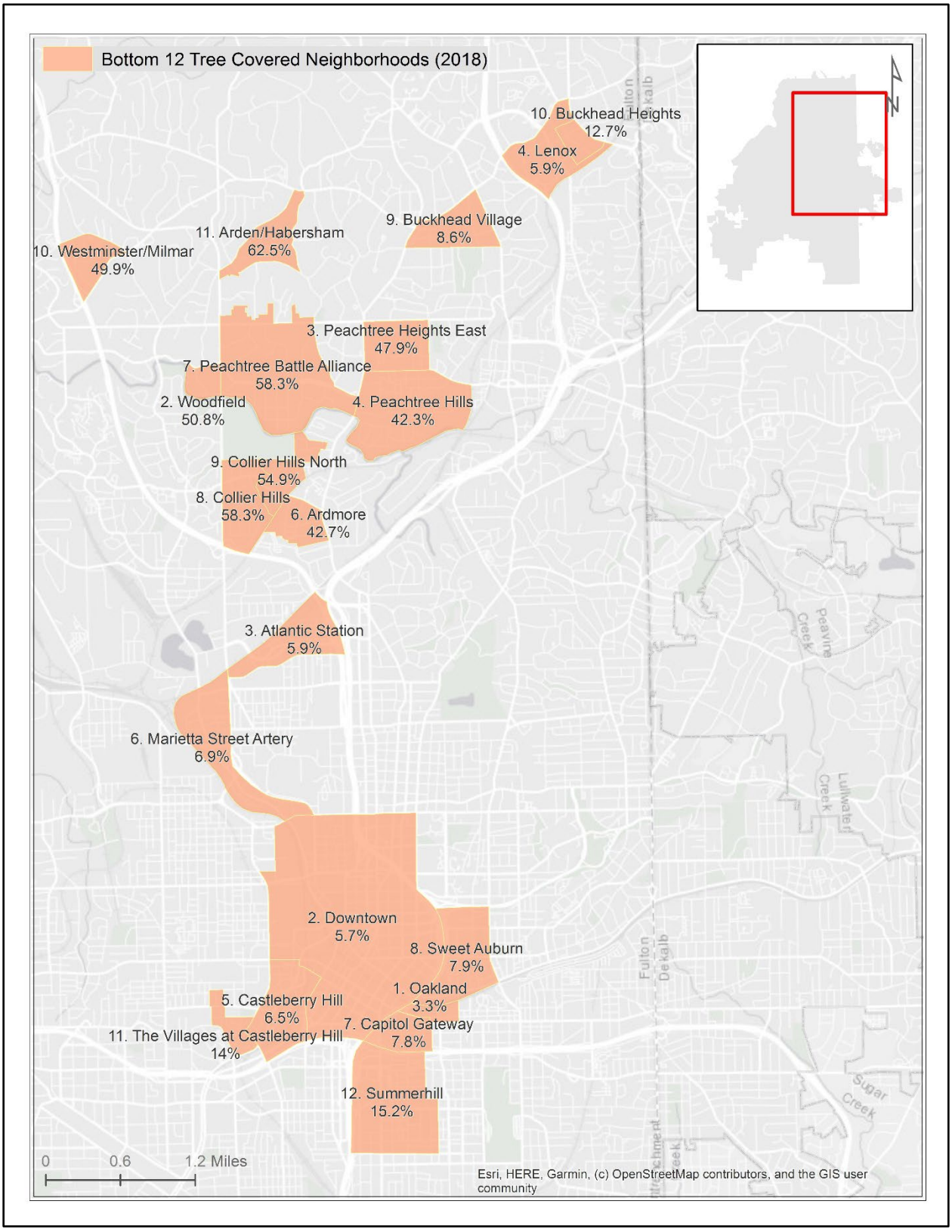
2. Neighborhoods



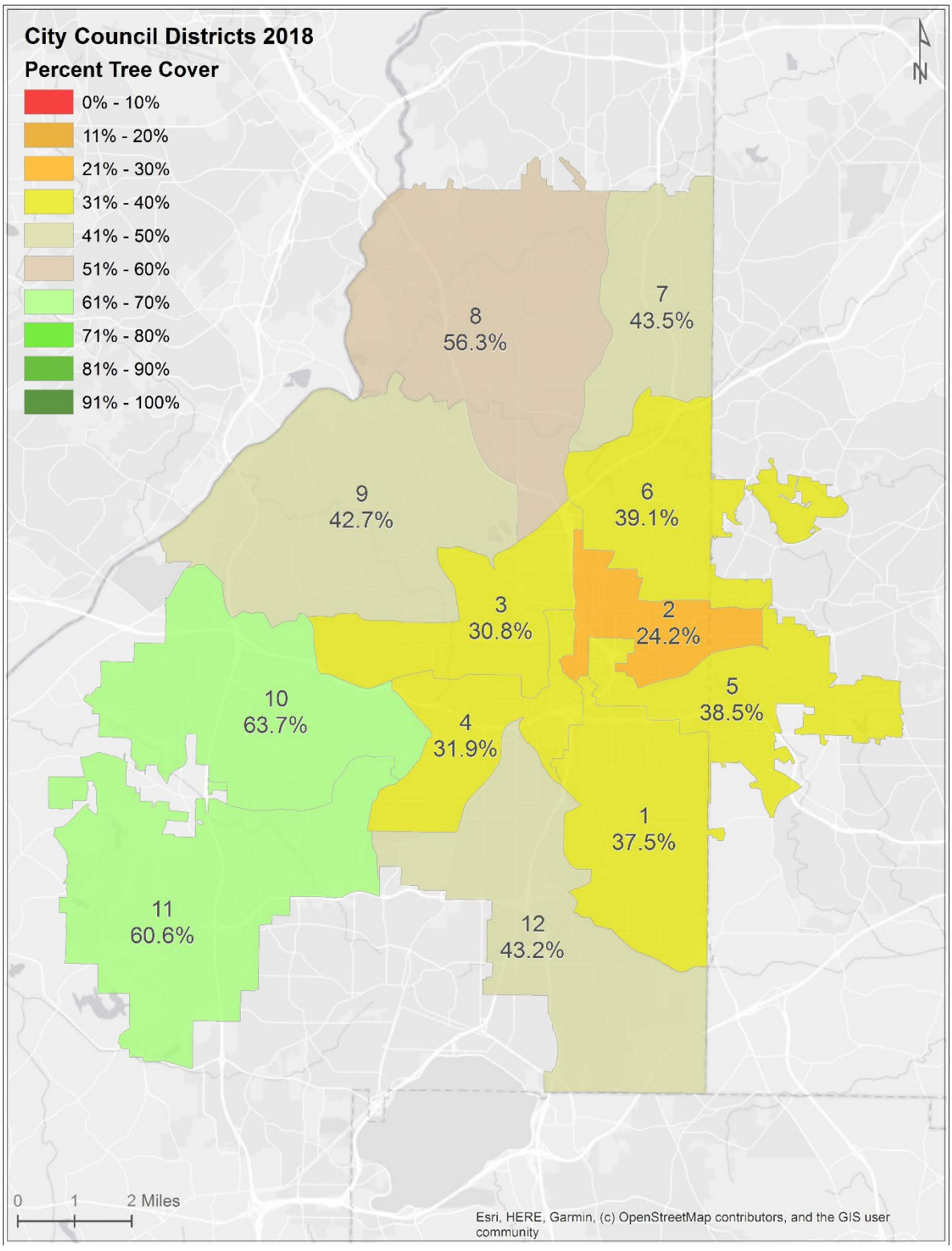
3. Top 12 Tree Covered Neighborhoods



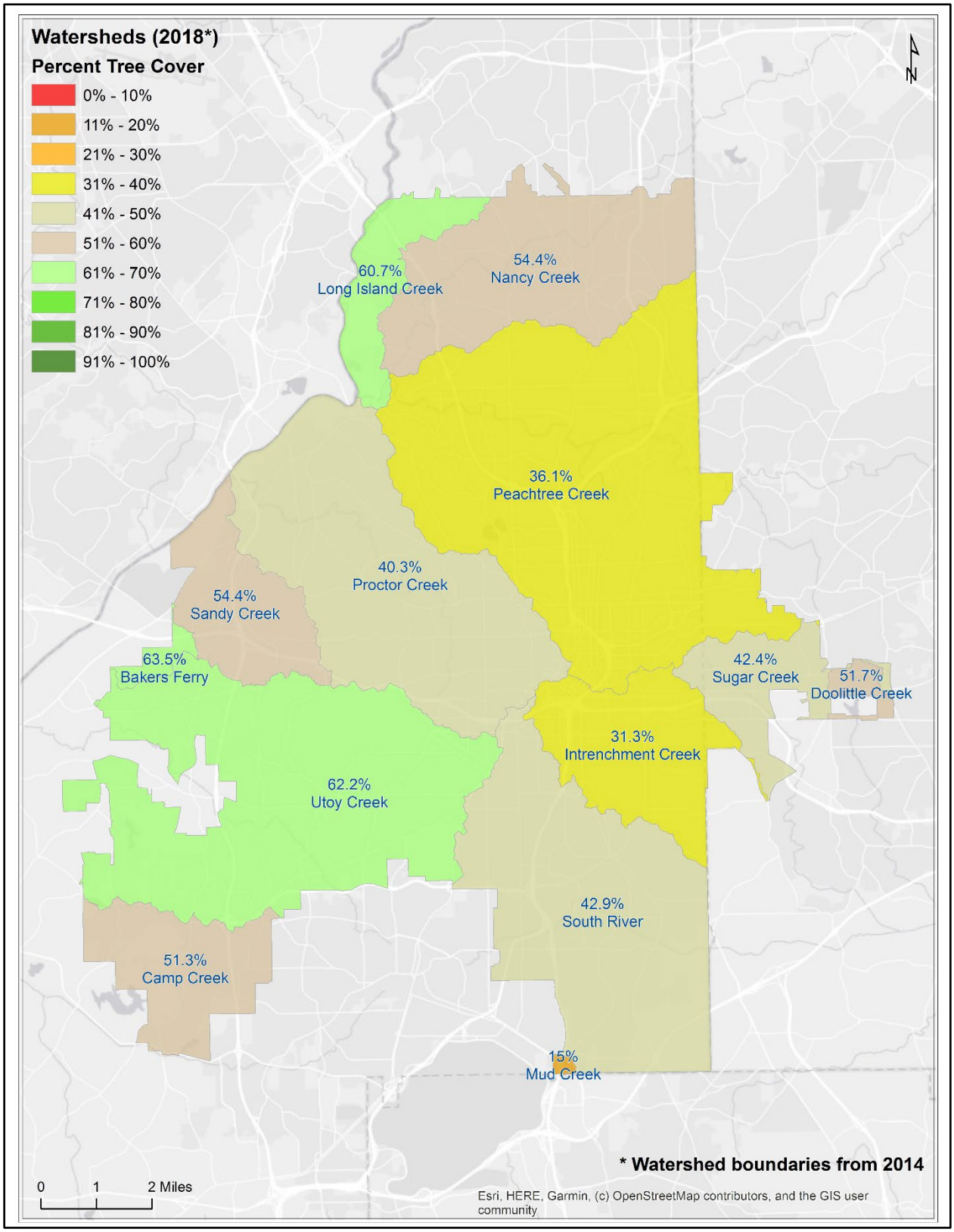
4. Bottom 12 Tree Covered Neighborhoods



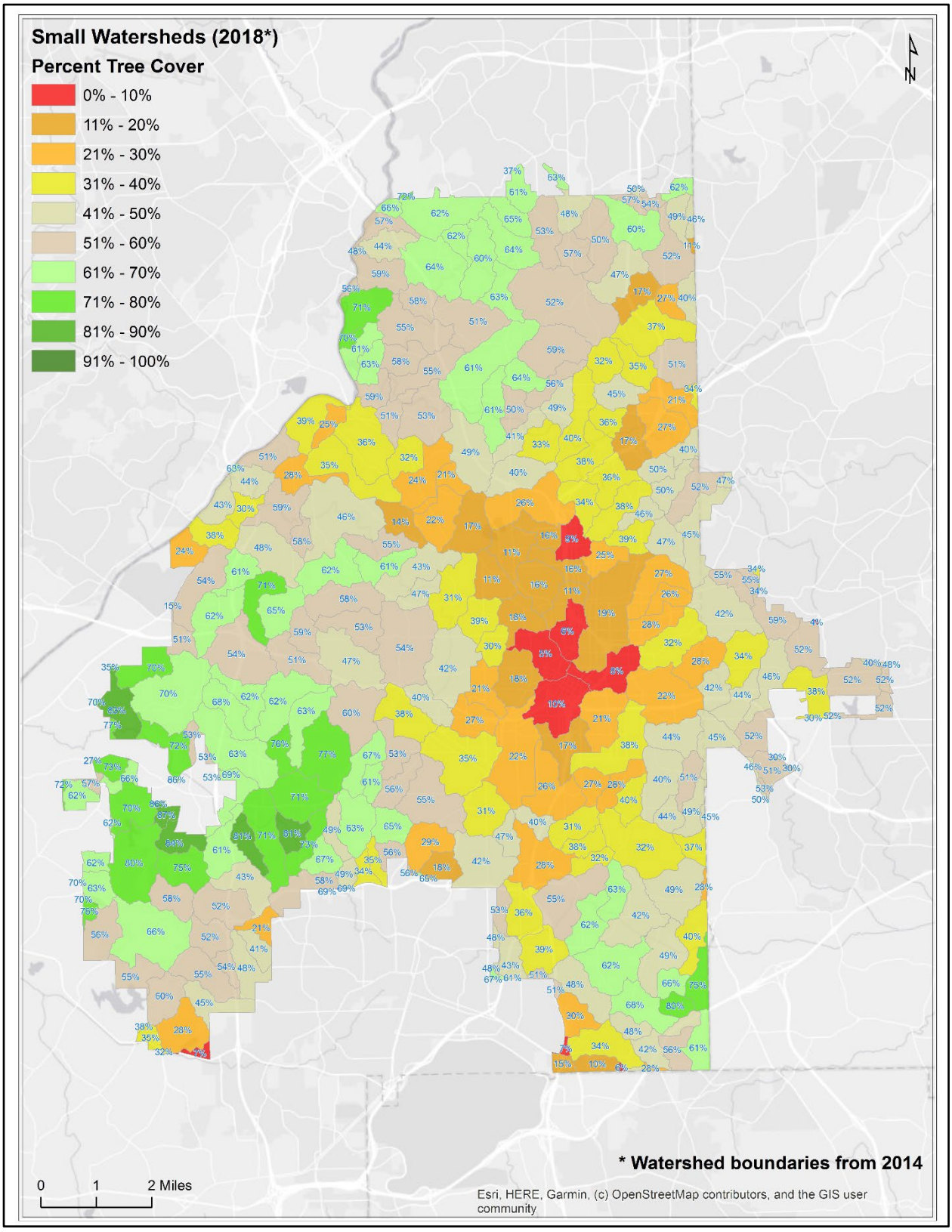
5. City Council Districts



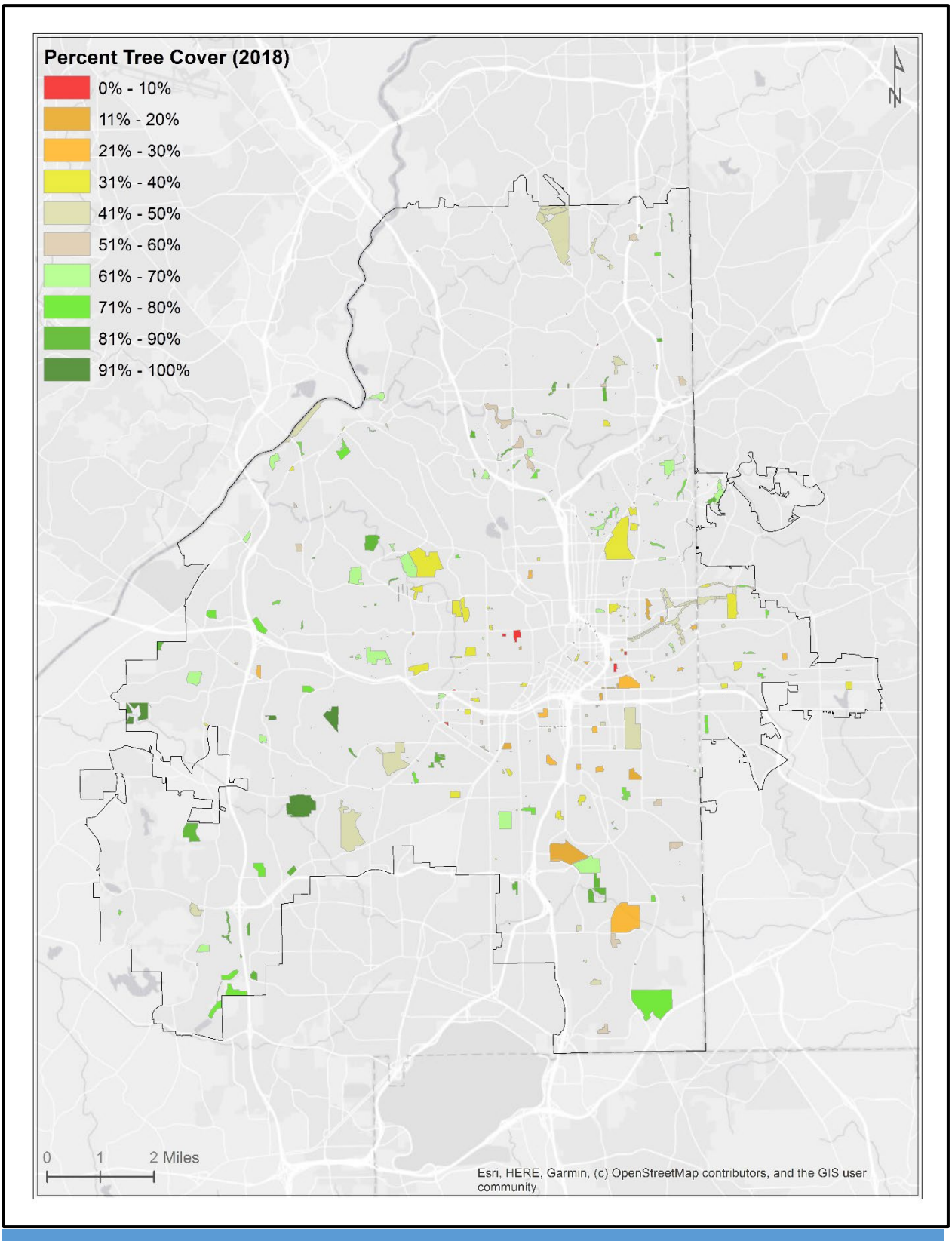
6. Watersheds



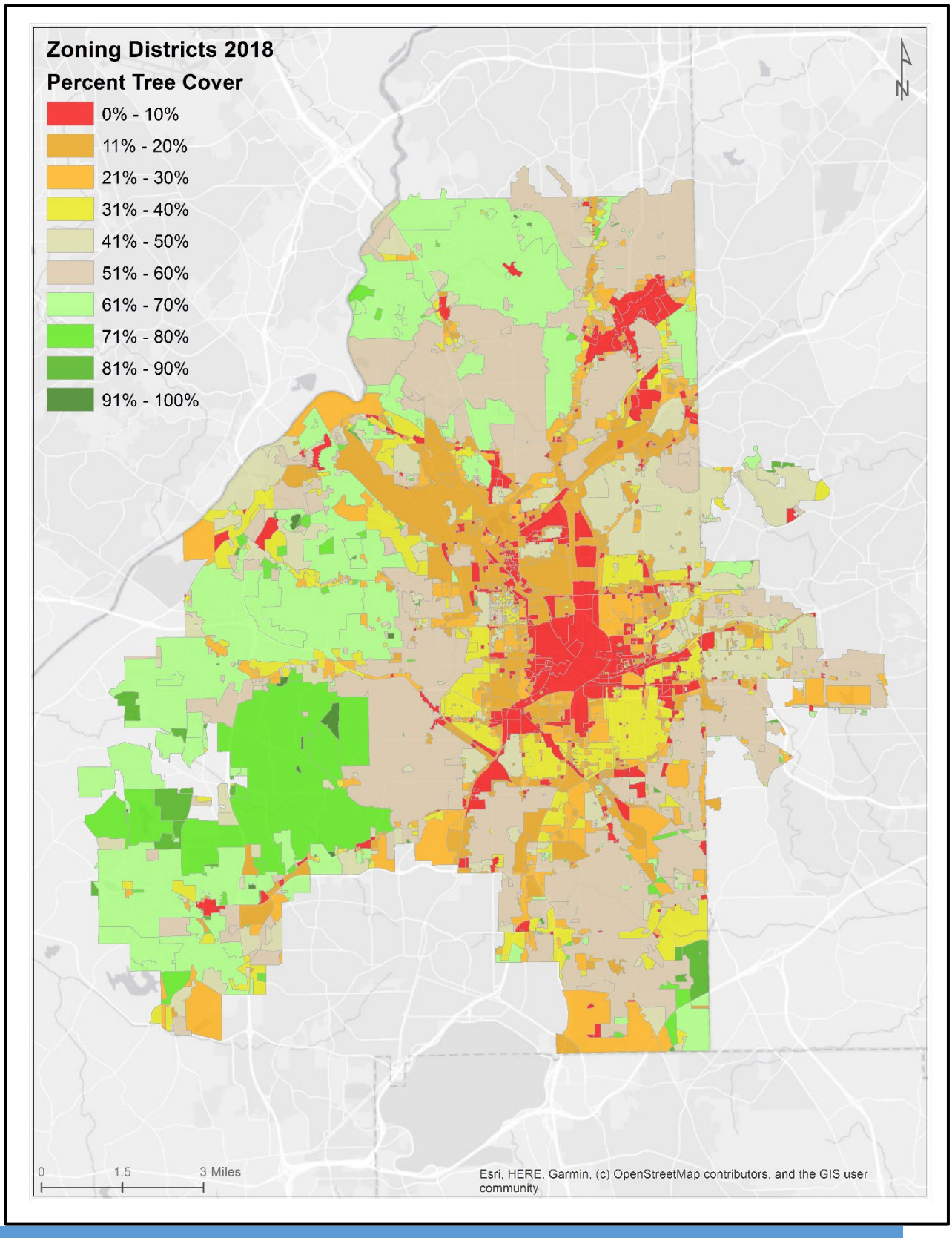
7. Small Watersheds



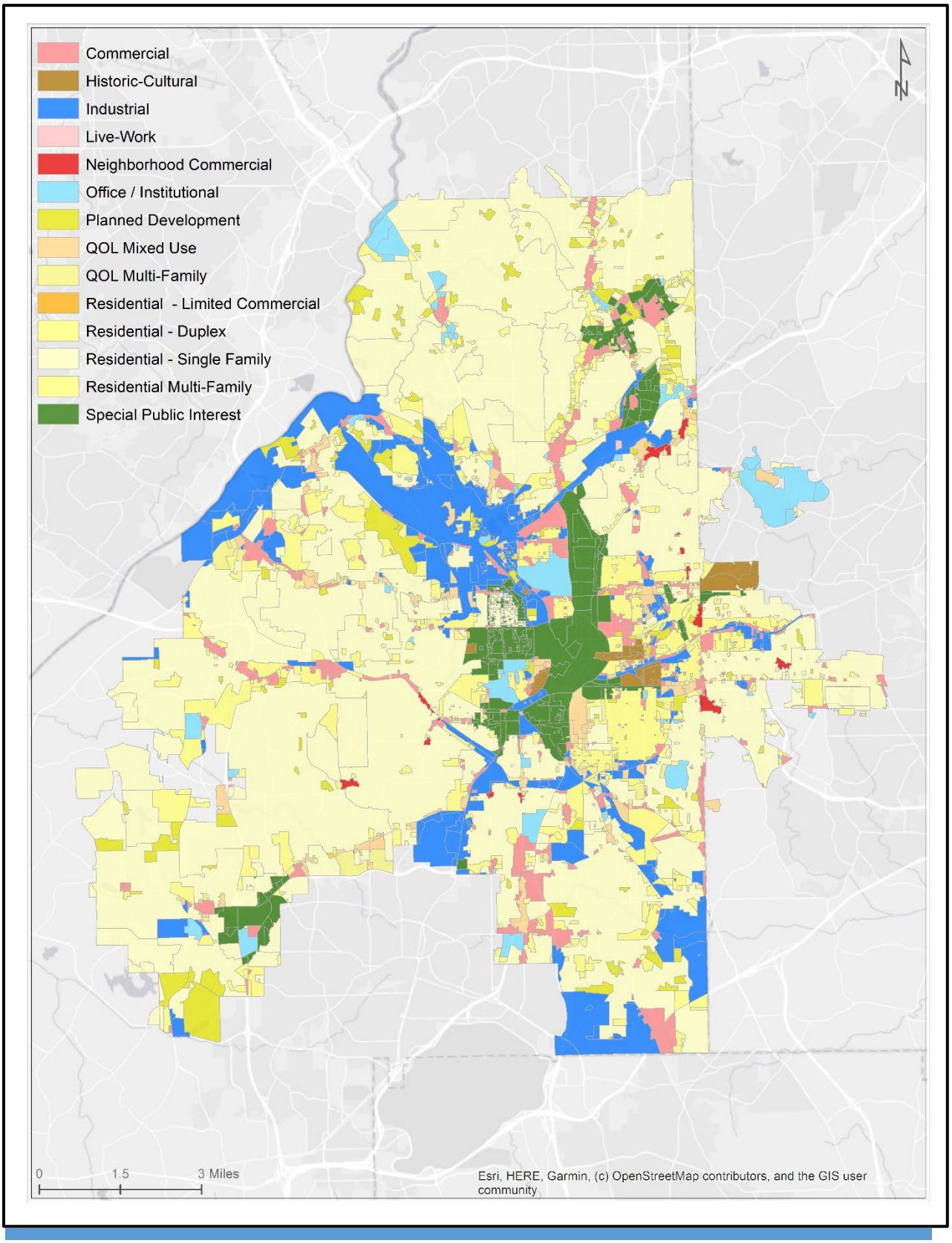
8. Parks


Percent Tree Cover (2018)
0% - 10%
11% - 20%
21% - 30%
31% - 40%
41% - 50%
51% - 60%
61% - 70%
71% - 80%
81% - 90%
91% - 100%
N
0
1
2 Miles
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

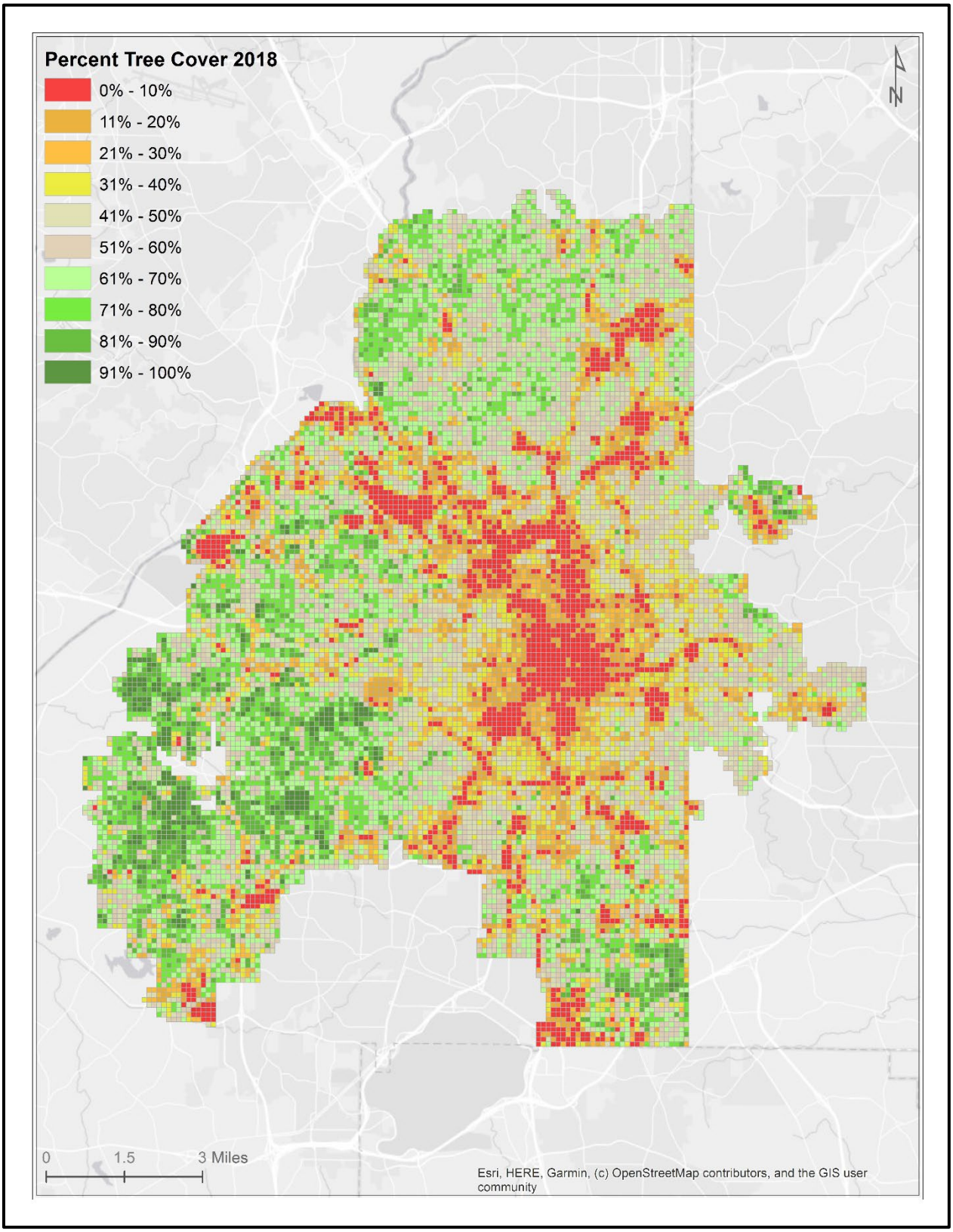
9. Zoning


Zoning Districts 2018
Percent Tree Cover
0% - 10%
11% - 20%
21% - 30%
31% - 40%
41% - 50%
51% - 60%
61% - 70%
71% - 80%
81% - 90%
91% - 100%
N
0
1.5
3 Miles
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

10. Zoning Classes



11. City Grid


Percent Tree Cover 2018
0% - 10%
11% - 20%
21% - 30%
31% - 40%
41% - 50%
51% - 60%
61% - 70%
71% - 80%
81% - 90%
91% - 100%
N
0
1.5
3 Miles
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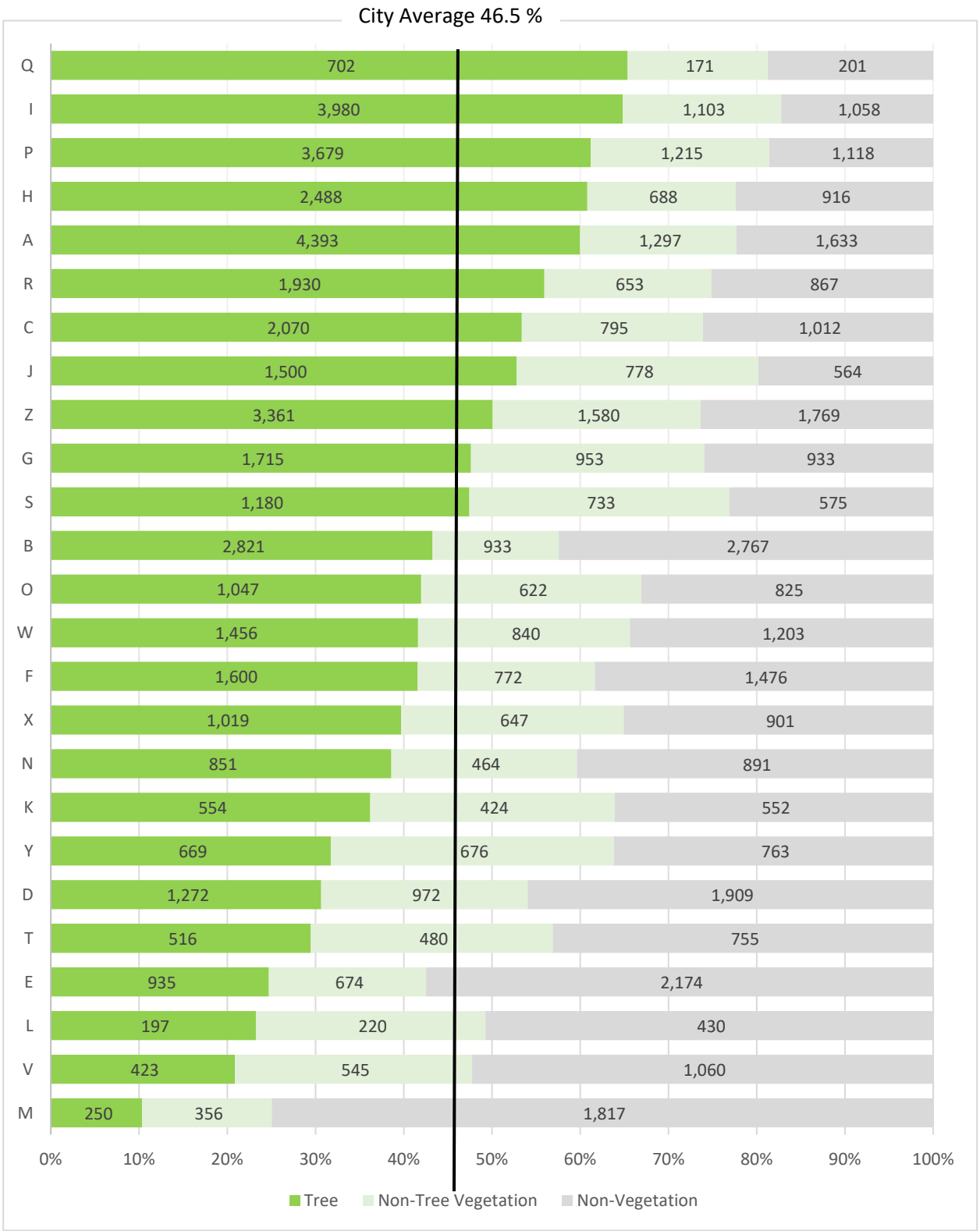
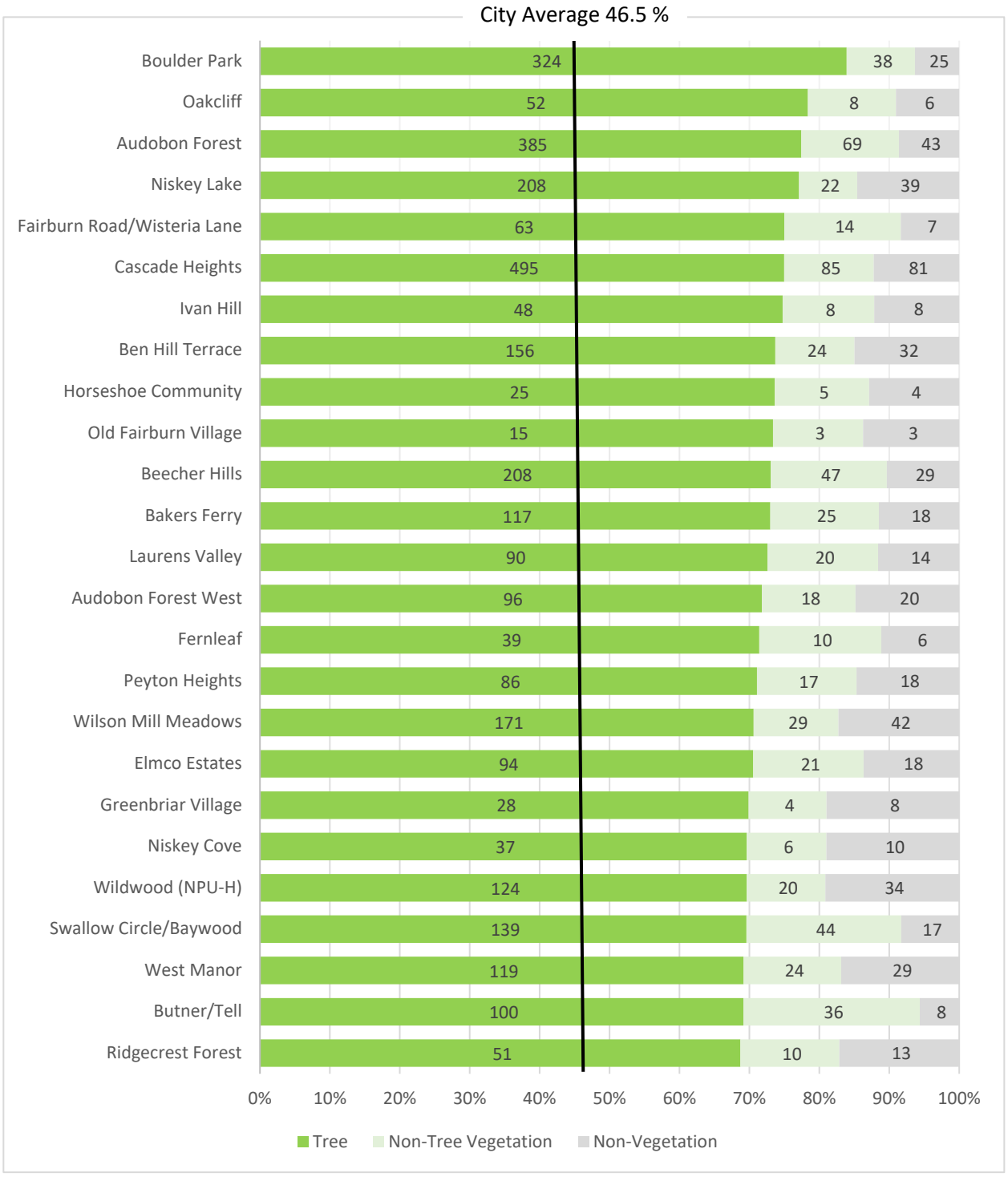
Appendix 2
Land Cover Distribution Graphs by Selected Geographies

1. Neighborhood Planning Units

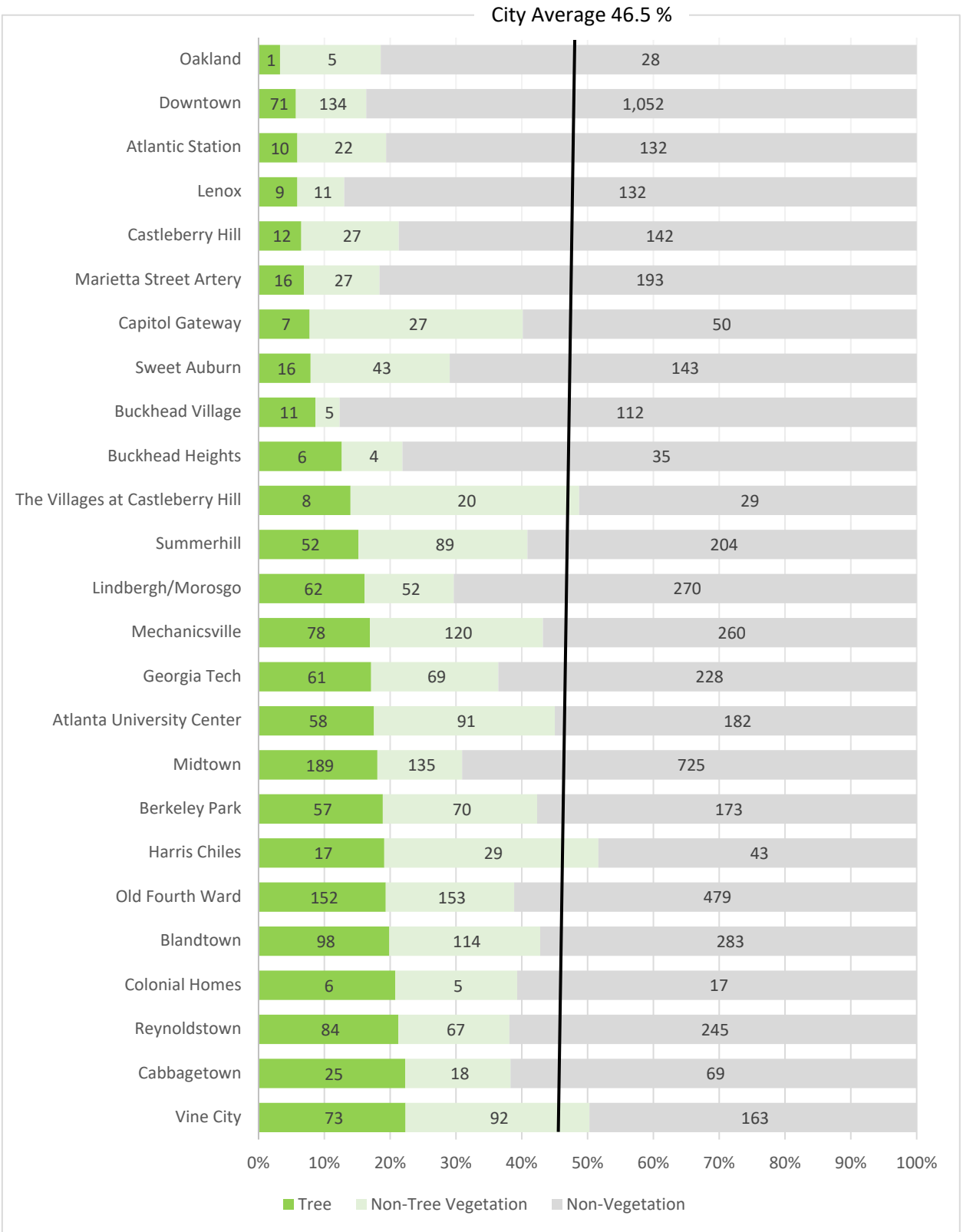


2. Neighborhoods

Due to the large number of neighborhoods, only the top and bottom 25 tree covered neighborhoods are shown below

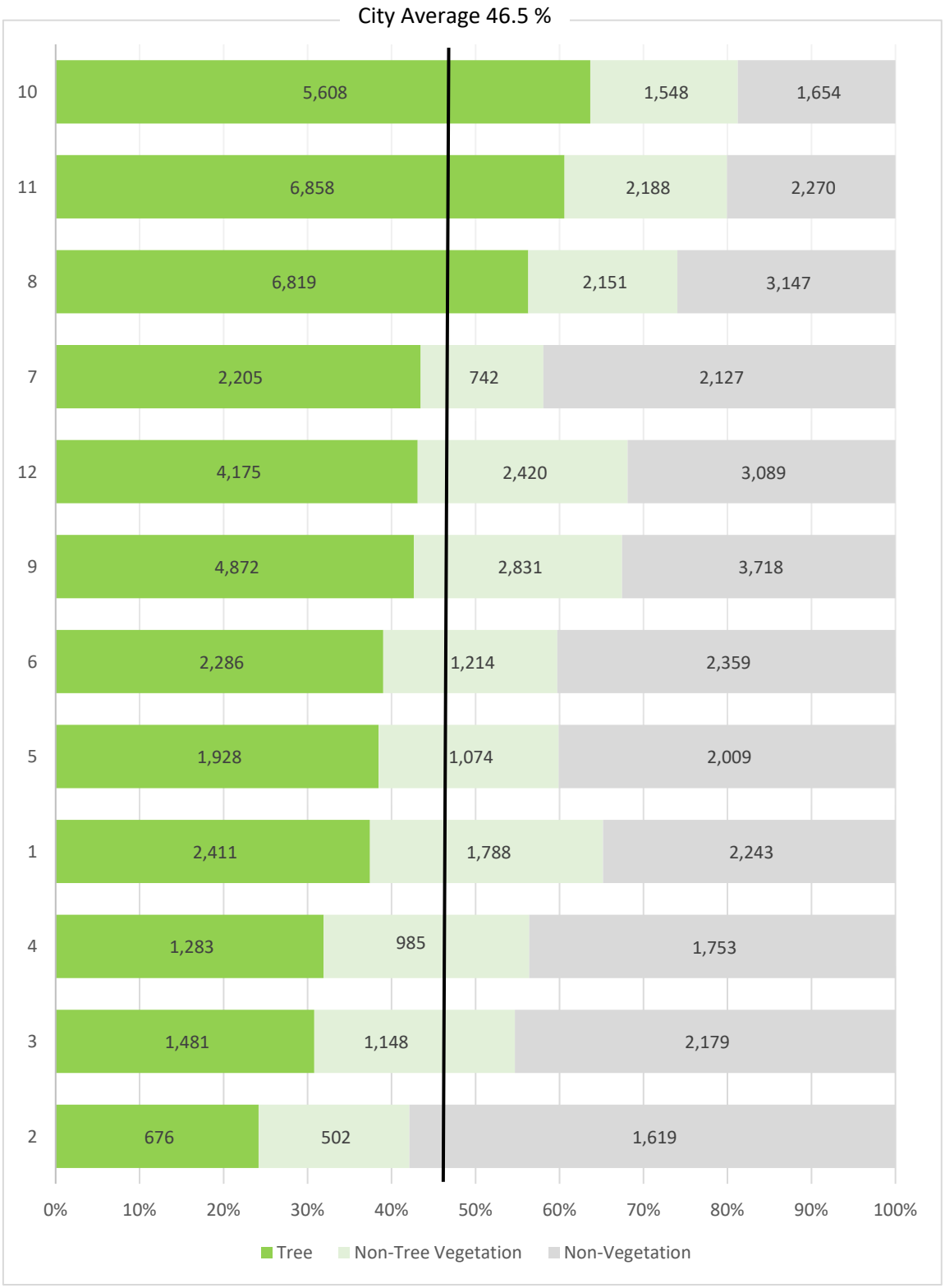


Top 25 Tree Covered Neighborhoods 2018

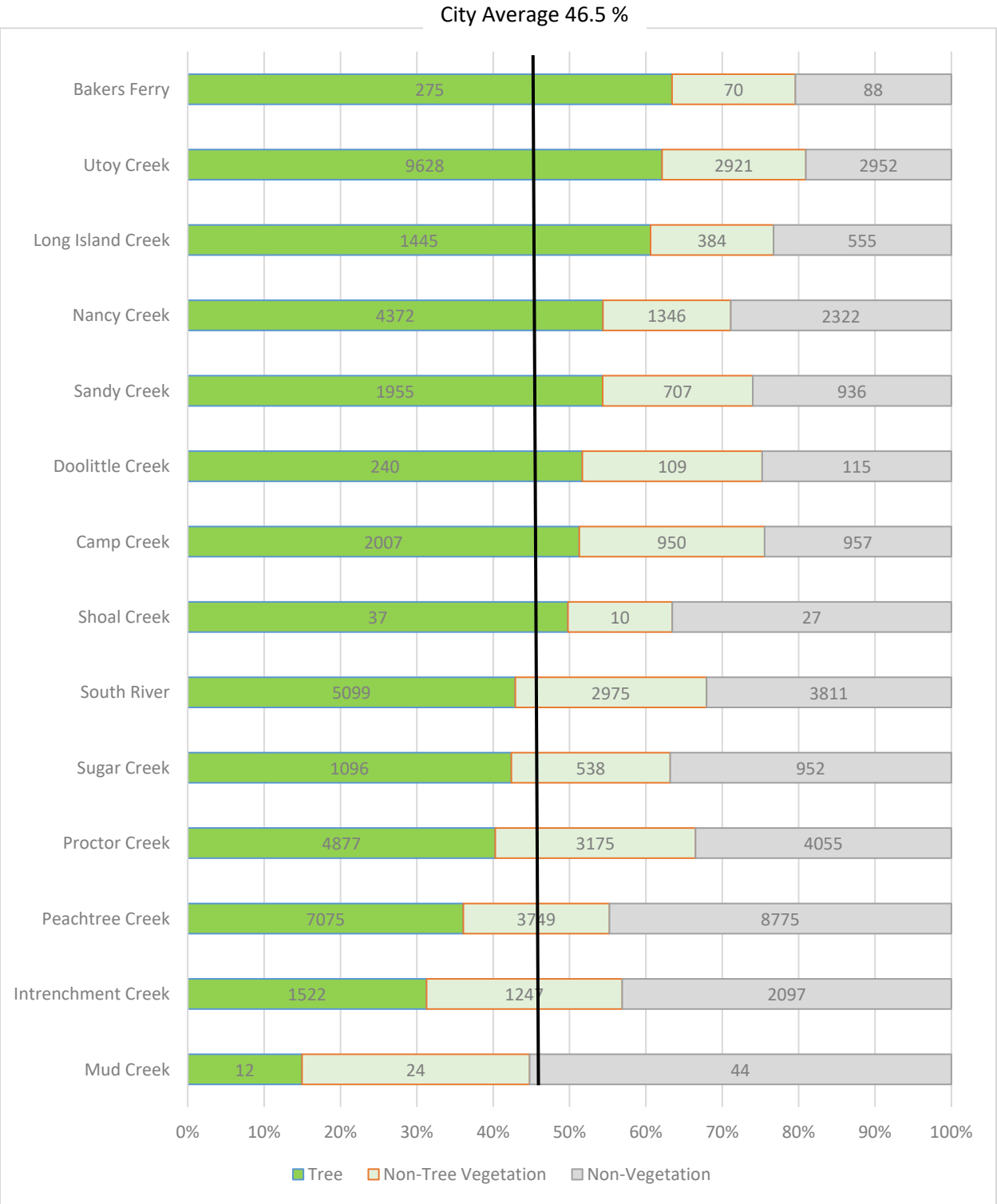


Bottom 25 Tree Covered Neighborhoods 2018

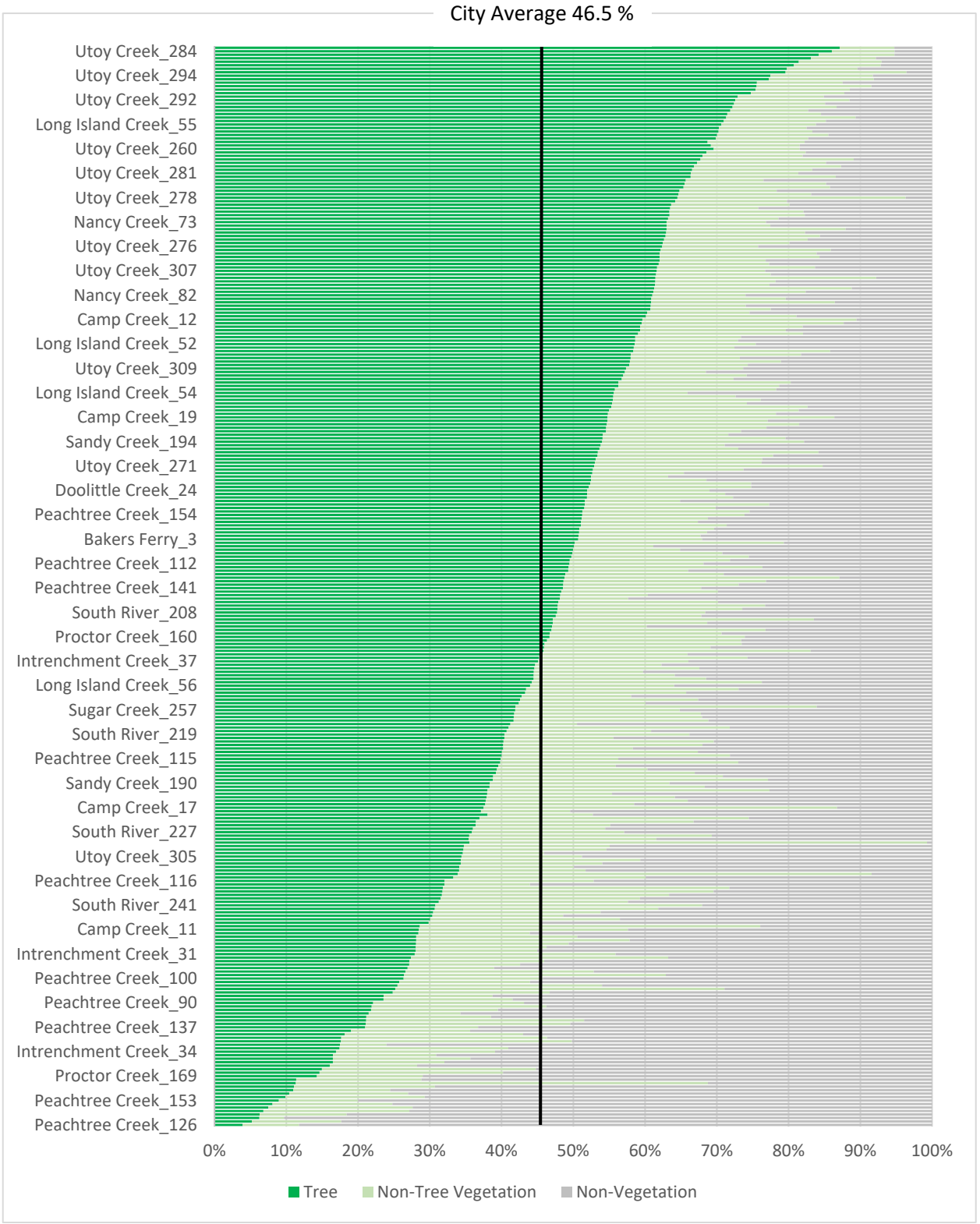
3. City Council Districts



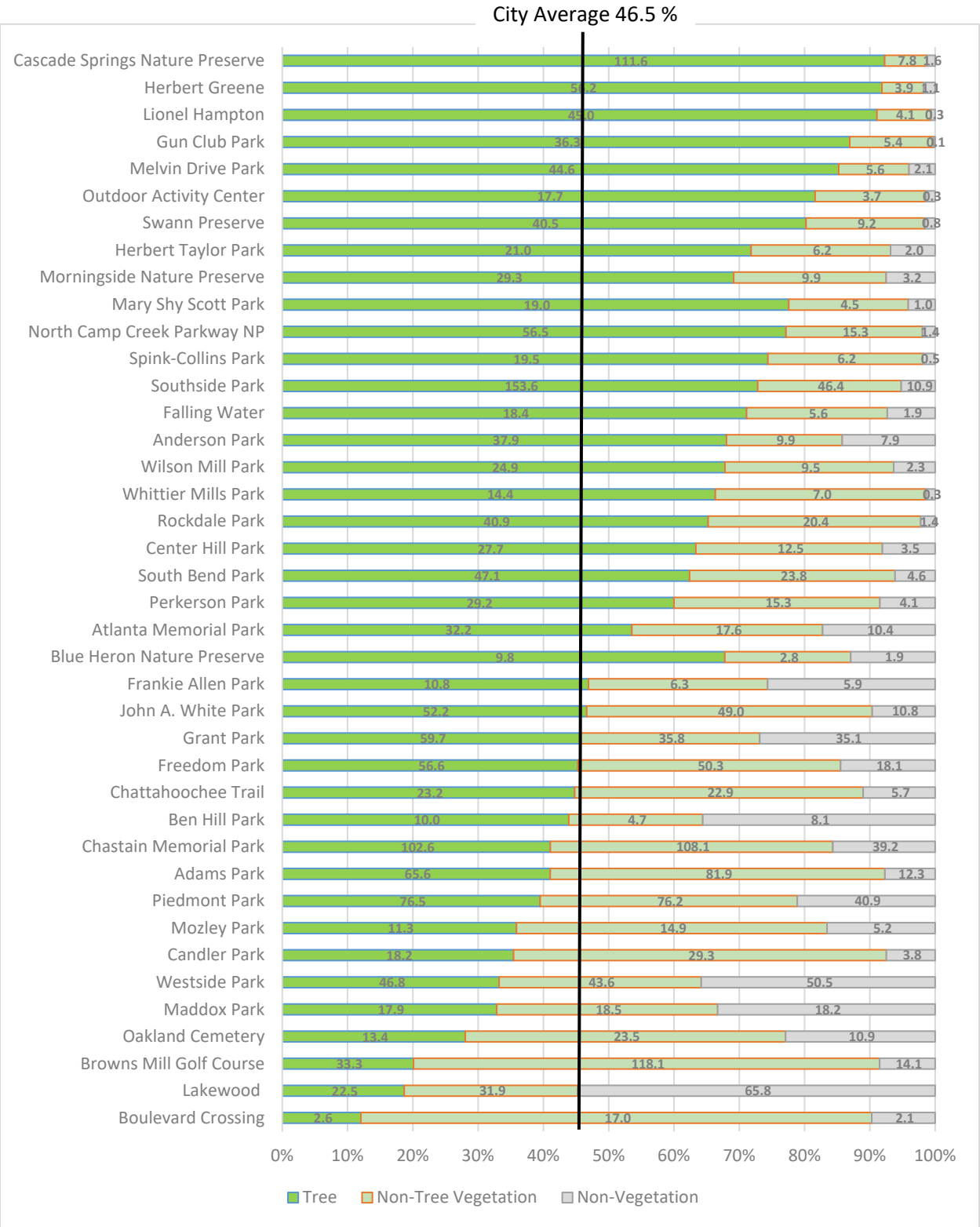
4. Watersheds



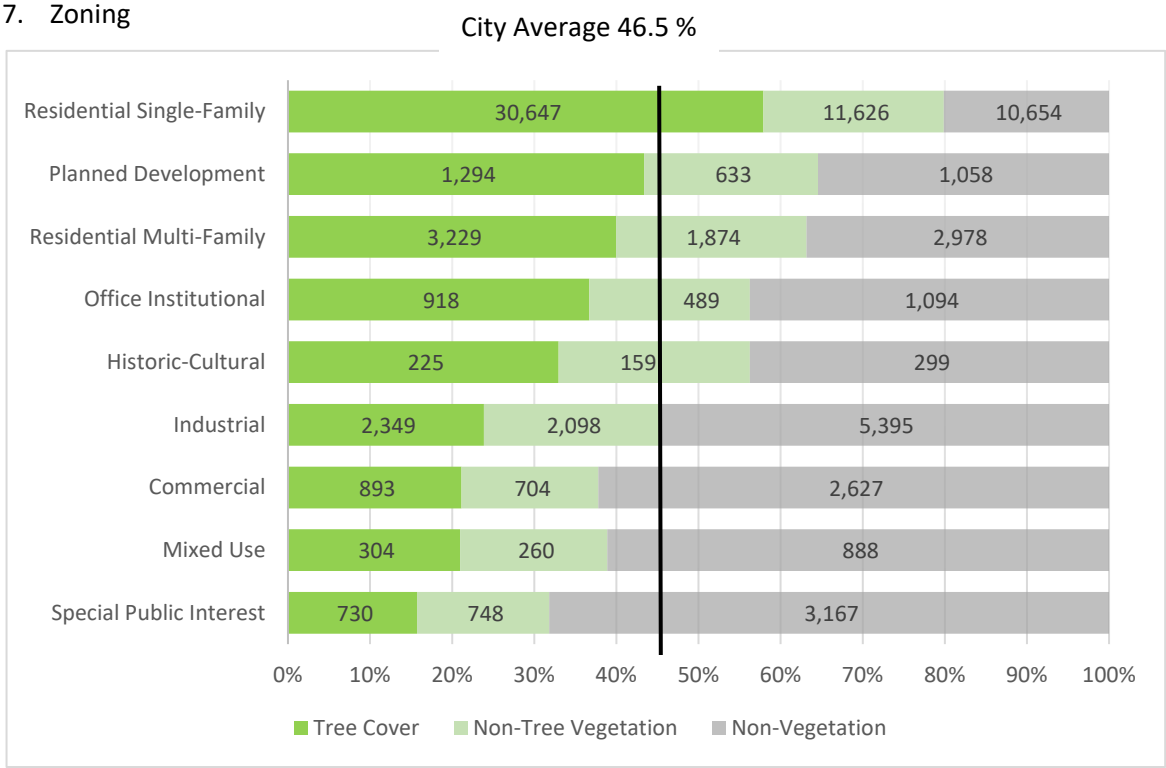
5. Small Watersheds – All small watershed names are not displayed. The graph is for illustrative purposes only.



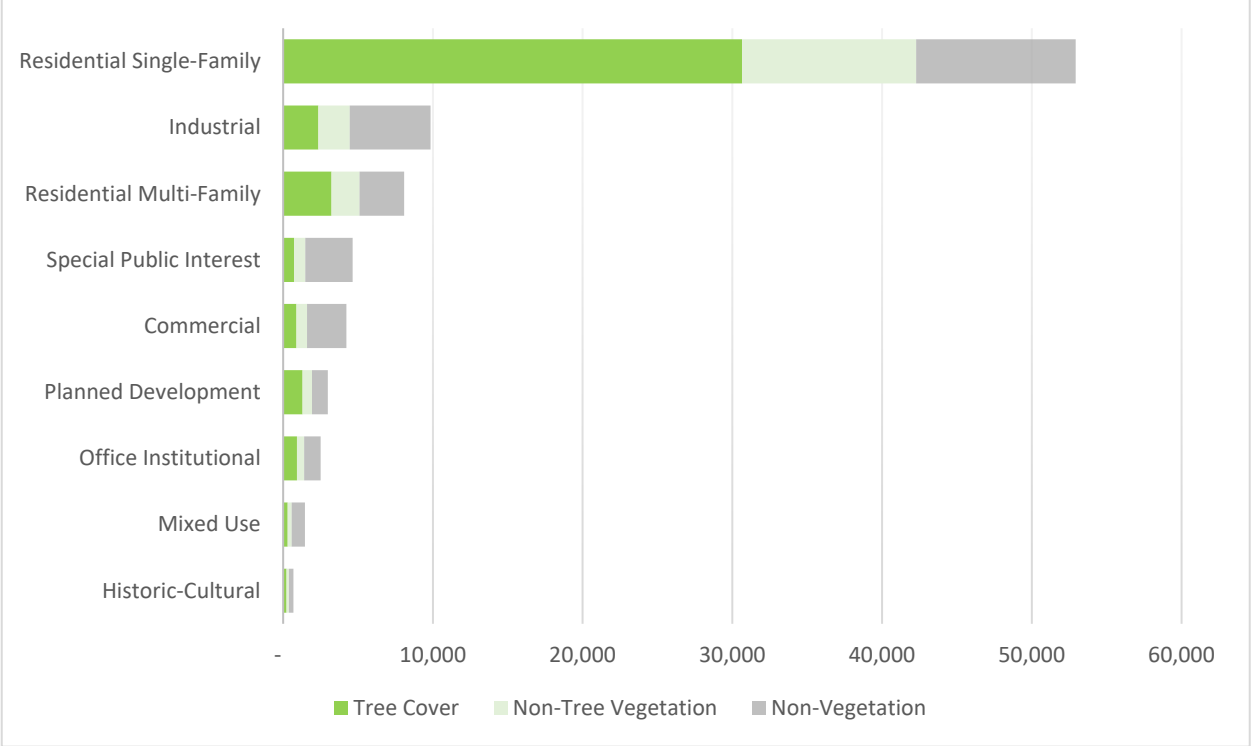
6. Parks - Due to the large number of parks, only parks greater than 20 acres in size are shown below.



7. Zoning



Land Cover Distribution by Zoning Category 2018



Land Cover Area in Acres by Zoning Category 2018

Appendix 3
Summary Land Cover Tables by Selected Geographies

Interpreting the **Summary Land Cover Tables** - Land cover summary statistics tables show land cover percentages for each geographic areas (NPUs, neighborhoods, parks, zoning, etc.) as they compare to the city as a whole (% City Land), to the geography itself (% Geography), and to each land cover class (% Cover Type), with cover types represented by acronyms (Tree cover = UTC, Non-Tree Vegetation = NTV, Non-Vegetation = NV).

- **"% City Land" -** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation for a specific geographic area. For example, a "% City Land" value of 4% in the "Tree Cover" grouping for a specific geography (NPU X, for example) means that 4% of the city's total area is comprised of tree cover found in that geography (NPU X) alone.

- **"% Geographic Unit"** - The percentage of the specified geography's (NPU, Council District, etc.) total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Geography" value of 16% in the "Non-Tree Vegetation" group for a specified geography (NPU X) means that 16% of that geography's area (NPU X's area) is comprised of non-tree vegetation.

- **"% Cover Type" -** The percentage of a cover type's total area that is covered by trees, non-tree vegetation, or non-vegetation within a specific geographic area. For example, a "% UTC" value of 8% in the "Tree Cover" grouping for a specific geography (NPU X) means that 8% of the city's total tree canopy area is comprised of tree cover found in that geography (NPU X) alone.

1. Neighborhood Planning Units

NPU	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% NPU	% UTC	% City	% NPU	% NTV	% City	% NPU	% NV
A	5.0%	60.0%	10.8%	1.5%	17.7%	7.0%	1.9%	22.3%	5.8%
B	3.2%	43.3%	6.9%	1.1%	14.3%	5.0%	3.2%	42.4%	9.8%
C	2.4%	53.4%	5.1%	0.9%	20.5%	4.3%	1.2%	26.1%	3.6%
D	1.5%	30.6%	3.1%	1.1%	23.4%	5.2%	2.2%	46.0%	6.8%
E	1.1%	24.7%	2.3%	0.8%	17.8%	3.6%	2.5%	57.5%	7.7%
F	1.8%	41.6%	3.9%	0.9%	20.1%	4.2%	1.7%	38.3%	5.2%
G	2.0%	47.6%	4.2%	1.1%	26.5%	5.1%	1.1%	25.9%	3.3%
H	2.8%	60.8%	6.1%	0.8%	16.8%	3.7%	1.0%	22.4%	3.3%
I	4.6%	64.8%	9.8%	1.3%	18.0%	5.9%	1.2%	17.2%	3.8%
J	1.7%	52.8%	3.7%	0.9%	27.4%	4.2%	0.6%	19.8%	2.0%
K	0.6%	36.2%	1.4%	0.5%	27.7%	2.3%	0.6%	36.1%	2.0%
L	0.2%	23.2%	0.5%	0.3%	26.0%	1.2%	0.5%	50.7%	1.5%
M	0.3%	10.3%	0.6%	0.4%	14.7%	1.9%	2.1%	75.0%	6.5%
N	1.0%	38.6%	2.1%	0.5%	21.0%	2.5%	1.0%	40.4%	3.2%
O	1.2%	42.0%	2.6%	0.7%	24.9%	3.3%	0.9%	33.1%	2.9%
P	4.2%	61.2%	9.1%	1.4%	20.2%	6.5%	1.3%	18.6%	4.0%
Q	0.8%	65.3%	1.7%	0.2%	15.9%	0.9%	0.2%	18.7%	0.7%
R	2.2%	55.9%	4.8%	0.7%	18.9%	3.5%	1.0%	25.1%	3.1%
S	1.4%	47.4%	2.9%	0.8%	29.5%	3.9%	0.7%	23.1%	2.0%
T	0.6%	29.5%	1.3%	0.5%	27.4%	2.6%	0.9%	43.1%	2.7%
V	0.5%	20.9%	1.0%	0.6%	26.9%	2.9%	1.2%	52.3%	3.8%
W	1.7%	41.6%	3.6%	1.0%	24.0%	4.5%	1.4%	34.4%	4.3%
X	1.2%	39.7%	2.5%	0.7%	25.2%	3.5%	1.0%	35.1%	3.2%
Y	0.8%	31.7%	1.6%	0.8%	32.1%	3.6%	0.9%	36.2%	2.7%
Z	3.8%	50.1%	8.3%	1.8%	23.5%	8.5%	2.0%	26.4%	6.3%

2. Neighborhoods

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Boulder Park	0.0%	84.0%	0.9%	0.0%	9.8%	0.2%	0.0%	6.3%	0.1%
Oakcliff	0.1%	78.4%	0.1%	0.2%	12.6%	0.0%	1.2%	9.1%	0.0%
Audobon Forest	0.0%	77.5%	1.0%	0.0%	14.0%	0.4%	0.2%	8.6%	0.2%
Niskey Lake	0.0%	77.1%	0.6%	0.0%	8.3%	0.1%	0.2%	14.6%	0.1%
Fairburn Road/Wisteria Lane	0.0%	75.0%	0.2%	0.0%	16.7%	0.1%	0.2%	8.4%	0.0%
Cascade Heights	0.0%	75.0%	1.3%	0.0%	12.8%	0.5%	0.2%	12.2%	0.3%
Ivan Hill	0.0%	74.8%	0.1%	0.0%	13.1%	0.0%	0.1%	12.2%	0.0%
Ben Hill Terrace	0.0%	73.7%	0.4%	0.0%	11.3%	0.1%	0.2%	15.0%	0.1%
Horseshoe Community	0.0%	73.7%	0.1%	0.0%	13.5%	0.0%	0.1%	12.9%	0.0%
Old Fairburn Village	0.0%	73.3%	0.0%	0.0%	12.9%	0.0%	0.0%	13.7%	0.0%
Beecher Hills	0.0%	73.1%	0.6%	0.0%	16.6%	0.3%	0.0%	10.4%	0.1%
Bakers Ferry	0.1%	73.0%	0.3%	0.1%	15.5%	0.1%	0.2%	11.5%	0.1%
Laurens Valley	0.1%	72.6%	0.2%	0.1%	15.8%	0.1%	0.3%	11.6%	0.1%
Audobon Forest West	0.1%	71.8%	0.3%	0.1%	13.4%	0.1%	0.3%	14.8%	0.1%
Fernleaf	0.1%	71.5%	0.1%	0.1%	17.5%	0.1%	0.3%	11.2%	0.0%
Peyton Heights	0.1%	71.1%	0.2%	0.1%	14.2%	0.1%	0.2%	14.7%	0.1%
Wilson Mill Meadows	0.2%	70.6%	0.5%	0.2%	12.1%	0.2%	0.8%	17.3%	0.2%
Elmco Estates	0.1%	70.6%	0.2%	0.1%	15.8%	0.1%	0.2%	13.7%	0.1%
Greenbriar Village	0.0%	69.9%	0.1%	0.0%	11.2%	0.0%	0.0%	19.0%	0.0%
Niskey Cove	0.2%	69.7%	0.1%	0.2%	11.4%	0.0%	0.5%	19.0%	0.0%
Wildwood (NPU-H)	0.1%	69.7%	0.3%	0.1%	11.2%	0.1%	0.3%	19.2%	0.1%
Swallow Circle/Baywood	0.0%	69.6%	0.4%	0.0%	22.1%	0.3%	0.0%	8.3%	0.1%
West Manor	0.1%	69.2%	0.3%	0.1%	14.0%	0.1%	0.3%	16.9%	0.1%
Butner/Tell	0.0%	69.2%	0.3%	0.0%	25.3%	0.2%	0.1%	5.6%	0.0%
Ridgecrest Forest	0.1%	68.8%	0.1%	0.1%	14.2%	0.1%	0.2%	17.2%	0.0%
Fairway Acres	0.0%	68.2%	0.2%	0.0%	19.1%	0.1%	0.0%	12.9%	0.1%
Magnum Manor	0.1%	68.1%	0.3%	0.1%	14.4%	0.1%	0.2%	17.6%	0.1%
Fairburn Mays	0.3%	67.9%	0.7%	0.2%	11.4%	0.3%	0.6%	20.7%	0.3%
Peyton Forest	0.0%	67.4%	0.5%	0.0%	15.4%	0.3%	0.0%	17.3%	0.2%
Pleasant Hill	0.1%	67.2%	0.5%	0.3%	16.6%	0.2%	0.2%	16.3%	0.2%
East Ardley Road	0.1%	66.8%	0.1%	0.1%	14.7%	0.1%	0.3%	18.6%	0.0%
Baker Hills	0.1%	66.6%	0.3%	0.2%	15.3%	0.2%	0.3%	18.1%	0.1%
Whitewater Creek	0.1%	66.6%	0.4%	0.1%	13.9%	0.2%	0.2%	19.6%	0.2%
Mt. Paran Parkway	0.1%	66.0%	0.2%	0.1%	15.7%	0.1%	0.2%	18.5%	0.1%
Monroe Heights	0.2%	66.0%	0.4%	0.2%	20.9%	0.3%	0.2%	13.3%	0.1%
Kings Forest	0.0%	65.9%	0.7%	0.0%	16.2%	0.4%	0.1%	18.0%	0.3%

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Almond Park	0.1%	65.8%	0.6%	0.1%	25.9%	0.5%	0.2%	8.3%	0.1%
Fairburn	0.1%	65.7%	0.2%	0.1%	19.3%	0.1%	0.2%	15.1%	0.1%
Fairburn Tell	0.1%	65.7%	0.3%	0.1%	22.6%	0.2%	0.1%	11.8%	0.1%
Ridgewood Heights	0.0%	65.6%	0.2%	0.0%	20.4%	0.2%	0.1%	14.1%	0.1%
Ben Hill Forest	0.2%	65.5%	0.2%	0.2%	21.7%	0.1%	0.4%	12.9%	0.0%
Castlewood	0.1%	65.2%	0.4%	0.1%	14.3%	0.2%	0.2%	20.6%	0.2%
Southwest	0.1%	65.1%	2.2%	0.0%	16.0%	1.2%	0.1%	19.0%	0.9%
Orchard Knob	0.0%	65.0%	0.5%	0.0%	21.3%	0.4%	0.0%	13.8%	0.2%
Collier Heights	0.1%	64.6%	2.2%	0.1%	19.8%	1.4%	0.2%	15.6%	0.7%
Midwest Cascade	0.1%	64.4%	1.0%	0.1%	15.2%	0.5%	0.1%	20.5%	0.5%
Westwood Terrace	0.2%	64.4%	0.2%	0.2%	18.8%	0.2%	0.2%	16.9%	0.1%
Carey Park	0.0%	64.4%	0.6%	0.0%	24.6%	0.5%	0.0%	10.9%	0.1%
Brandon	0.3%	64.2%	0.7%	0.2%	17.5%	0.4%	0.4%	18.3%	0.3%
Chalet Woods	0.1%	63.9%	0.1%	0.1%	18.5%	0.1%	0.1%	17.7%	0.1%
Green Acres Valley	0.1%	63.1%	0.1%	0.1%	15.8%	0.0%	0.1%	21.3%	0.0%
Wisteria Gardens	0.3%	63.0%	0.2%	0.2%	15.8%	0.1%	0.5%	21.3%	0.1%
Tuxedo Park	0.4%	63.0%	1.2%	0.3%	15.3%	0.6%	0.5%	21.8%	0.6%
Mellwood	0.2%	62.7%	0.0%	0.2%	22.8%	0.0%	0.1%	14.7%	0.0%
Wesley Battle	0.2%	62.7%	0.3%	0.1%	21.6%	0.2%	0.3%	15.6%	0.1%
Arden/Habersham	0.4%	62.5%	0.2%	0.3%	15.1%	0.1%	0.4%	22.5%	0.1%
Mt. Paran/Northside	0.2%	62.5%	2.3%	0.2%	19.1%	1.5%	0.3%	18.5%	0.9%
Venetian Hills	0.2%	62.3%	1.0%	0.1%	22.2%	0.8%	0.2%	15.6%	0.4%
Green Forest Acres	0.2%	62.2%	0.2%	0.1%	16.9%	0.1%	0.2%	20.9%	0.1%
Wyngate	0.4%	61.6%	0.3%	0.3%	13.6%	0.1%	0.5%	24.9%	0.2%
South River Gardens	0.0%	61.5%	3.0%	0.0%	20.7%	2.1%	0.0%	17.9%	1.2%
Fairburn Heights	0.0%	61.2%	0.6%	0.0%	17.4%	0.4%	0.0%	21.5%	0.3%
Hanover West	0.2%	61.0%	0.2%	0.1%	23.6%	0.1%	0.2%	15.4%	0.1%
Paces	0.0%	60.7%	3.1%	0.0%	16.0%	1.8%	0.0%	23.4%	1.7%
Bush Mountain	0.4%	60.6%	0.1%	0.3%	26.7%	0.1%	0.4%	12.8%	0.0%
Carroll Heights	0.1%	60.2%	0.4%	0.0%	22.4%	0.3%	0.1%	17.5%	0.2%
Kingswood	0.0%	60.1%	0.6%	0.0%	20.2%	0.5%	0.0%	19.8%	0.3%
Adams Park	0.2%	59.3%	1.0%	0.1%	25.6%	0.9%	0.1%	15.1%	0.4%
Heritage Valley	0.1%	59.2%	0.4%	0.0%	22.2%	0.3%	0.0%	18.6%	0.2%
Rue Royal	0.2%	59.2%	0.0%	0.1%	22.3%	0.0%	0.1%	18.6%	0.0%
Arlington Estates	0.3%	58.7%	0.3%	0.2%	22.9%	0.3%	0.3%	18.4%	0.1%
Memorial Park	0.1%	58.6%	0.1%	0.1%	22.1%	0.1%	0.1%	19.3%	0.1%
Lake Claire	0.1%	58.6%	0.5%	0.0%	15.1%	0.3%	0.1%	26.4%	0.3%
Mt. Gilead Woods	0.0%	58.4%	0.1%	0.0%	21.8%	0.0%	0.0%	19.7%	0.0%

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Peachtree Battle Alliance	0.0%	58.3%	0.7%	0.0%	20.4%	0.5%	0.0%	21.4%	0.4%
Collier Hills	0.0%	58.3%	0.2%	0.0%	19.8%	0.2%	0.0%	22.0%	0.1%
Rosedale Heights	0.1%	57.8%	0.3%	0.0%	22.8%	0.3%	0.1%	19.5%	0.1%
Lakewood	0.2%	57.8%	0.5%	0.1%	26.5%	0.5%	0.1%	15.9%	0.2%
South Oakes at Cascade	0.2%	57.6%	0.0%	0.1%	8.5%	0.0%	0.2%	33.9%	0.0%
Argonne Forest	0.0%	57.2%	0.3%	0.0%	15.9%	0.2%	0.0%	26.9%	0.2%
Bolton Hills	0.2%	57.1%	0.1%	0.1%	19.4%	0.1%	0.1%	23.6%	0.0%
Chastain Park	0.1%	57.1%	1.6%	0.0%	20.5%	1.3%	0.1%	22.5%	0.9%
Dixie Hills	0.3%	57.0%	0.7%	0.2%	22.1%	0.6%	0.2%	21.0%	0.4%
Old Gordon	0.0%	56.7%	0.1%	0.0%	13.1%	0.1%	0.0%	30.3%	0.1%
Ben Hill	0.3%	55.9%	1.0%	0.2%	30.4%	1.2%	0.2%	13.8%	0.4%
West Lake	0.4%	55.8%	0.3%	0.2%	22.1%	0.2%	0.4%	22.1%	0.2%
Tampa Park	0.4%	55.7%	0.0%	0.2%	23.9%	0.0%	0.4%	20.2%	0.0%
Cascade Avenue/Road	0.1%	55.7%	1.0%	0.1%	28.4%	1.1%	0.1%	16.0%	0.4%
Sandlewood Estates	0.2%	55.6%	0.1%	0.1%	15.3%	0.0%	0.1%	29.3%	0.1%
Adamsville	0.0%	55.4%	0.9%	0.0%	17.9%	0.6%	0.0%	26.8%	0.6%
Pomona Park	0.2%	55.3%	0.1%	0.1%	20.8%	0.1%	0.1%	24.0%	0.0%
Collier Hills North	0.3%	54.9%	0.1%	0.3%	22.7%	0.1%	0.2%	22.5%	0.1%
Margaret Mitchell	0.2%	54.5%	0.8%	0.1%	20.0%	0.6%	0.1%	25.5%	0.5%
Springlake	0.1%	54.3%	0.2%	0.0%	18.0%	0.2%	0.1%	27.7%	0.2%
Randall Mill	0.4%	54.2%	0.3%	0.3%	16.2%	0.2%	0.2%	29.6%	0.2%
Ben Hill Pines	0.2%	54.2%	0.1%	0.1%	23.9%	0.1%	0.1%	22.0%	0.0%
West Paces Ferry/Northside	0.2%	53.9%	0.6%	0.1%	18.4%	0.5%	0.1%	27.8%	0.4%
Grove Park	0.2%	53.2%	1.9%	0.1%	28.3%	2.2%	0.1%	18.5%	0.9%
Ben Hill Acres	0.0%	53.2%	0.1%	0.0%	19.4%	0.1%	0.0%	27.5%	0.1%
Westover Plantation	0.8%	53.0%	0.1%	0.4%	20.1%	0.1%	0.5%	27.0%	0.1%
Westhaven	0.3%	51.9%	0.2%	0.1%	13.6%	0.1%	0.2%	34.6%	0.2%
Wildwood (NPU-C)	0.1%	51.8%	0.3%	0.1%	15.8%	0.2%	0.1%	32.5%	0.3%
Peachtree Heights West	0.1%	51.8%	0.8%	0.0%	14.6%	0.5%	0.1%	33.7%	0.7%
East Chastain Park	0.2%	51.6%	0.5%	0.1%	11.3%	0.2%	0.2%	37.2%	0.5%
Brookhaven	0.1%	51.5%	0.9%	0.0%	21.5%	0.8%	0.1%	27.0%	0.6%
English Park	0.3%	51.2%	0.1%	0.1%	25.9%	0.2%	0.2%	22.9%	0.1%
Cross Creek	0.1%	51.2%	0.2%	0.1%	25.5%	0.3%	0.0%	23.4%	0.2%
Deerwood	0.2%	51.1%	0.2%	0.1%	31.5%	0.2%	0.1%	17.5%	0.1%
Whittier Mill Village	0.5%	50.8%	0.3%	0.2%	16.4%	0.2%	0.4%	32.8%	0.3%
Woodfield	0.1%	50.8%	0.1%	0.0%	22.5%	0.1%	0.0%	26.8%	0.0%
Polar Rock	0.3%	50.8%	0.4%	0.1%	28.4%	0.5%	0.2%	21.0%	0.2%
Briar Glen	0.4%	50.7%	0.1%	0.1%	23.6%	0.1%	0.3%	25.8%	0.1%

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Florida Heights	0.9%	50.5%	0.3%	0.2%	21.6%	0.3%	0.8%	28.0%	0.3%
Mays	0.1%	50.4%	0.3%	0.0%	21.2%	0.3%	0.1%	28.4%	0.3%
Druid Hills	0.2%	50.1%	0.5%	0.1%	25.6%	0.5%	0.1%	24.4%	0.3%
Wildwood Forest	0.1%	50.1%	0.1%	0.0%	29.0%	0.1%	0.0%	20.7%	0.1%
Meadowbrook Forest	0.1%	50.0%	0.1%	0.0%	27.0%	0.1%	0.1%	23.1%	0.1%
Westminster/Milmar	0.1%	49.9%	0.1%	0.0%	19.0%	0.1%	0.0%	31.1%	0.1%
Regency Trace	0.0%	49.9%	0.1%	0.0%	22.8%	0.1%	0.0%	27.4%	0.1%
Center Hill	0.2%	49.6%	0.9%	0.0%	31.4%	1.3%	0.1%	19.0%	0.5%
East Atlanta	0.0%	49.3%	1.2%	0.0%	19.7%	1.1%	0.0%	31.1%	1.1%
Thomasville Heights	0.0%	49.0%	0.5%	0.0%	28.0%	0.7%	0.0%	23.1%	0.4%
Harvel Homes Community	0.2%	48.7%	0.0%	0.1%	22.8%	0.0%	0.1%	28.7%	0.0%
Brentwood	0.5%	48.7%	0.1%	0.2%	32.3%	0.1%	0.3%	19.1%	0.0%
Harland Terrace	0.4%	48.6%	0.4%	0.3%	13.1%	0.2%	0.2%	38.4%	0.4%
Lake Estates	0.0%	48.5%	0.1%	0.0%	23.9%	0.1%	0.0%	27.6%	0.0%
Woodland Hills	0.1%	48.5%	0.1%	0.0%	23.4%	0.1%	0.0%	28.2%	0.1%
Chattahoochee	0.0%	48.2%	0.3%	0.0%	17.5%	0.2%	0.0%	34.3%	0.3%
Capitol View Manor	0.0%	48.1%	0.2%	0.0%	27.0%	0.2%	0.0%	25.0%	0.1%
Hunter Hills	0.2%	47.9%	0.4%	0.1%	23.9%	0.4%	0.1%	28.2%	0.3%
Peachtree Heights East	0.1%	47.9%	0.2%	0.1%	17.3%	0.1%	0.1%	34.9%	0.2%
North Buckhead	0.1%	47.7%	2.2%	0.1%	12.7%	1.2%	0.1%	39.6%	2.5%
Pine Hills	0.0%	47.3%	0.9%	0.0%	15.7%	0.6%	0.0%	37.1%	1.0%
Riverside	0.2%	47.3%	0.6%	0.1%	25.3%	0.7%	0.1%	27.5%	0.5%
Penelope Neighbors	0.0%	47.3%	0.2%	0.0%	23.2%	0.2%	0.0%	29.7%	0.1%
Kirkwood	0.1%	47.0%	1.2%	0.0%	18.8%	1.0%	0.1%	34.3%	1.2%
Custer/McDonough/Guice	0.1%	46.9%	0.4%	0.0%	28.7%	0.5%	0.0%	24.5%	0.3%
Benteen Park	0.1%	46.7%	0.2%	0.1%	29.4%	0.3%	0.0%	24.0%	0.2%
Ormewood Park	0.1%	46.7%	0.6%	0.0%	22.4%	0.6%	0.0%	31.0%	0.6%
Lincoln Homes	0.4%	46.7%	0.2%	0.2%	21.0%	0.2%	0.2%	32.4%	0.2%
Campbellton Road	0.2%	46.2%	0.5%	0.0%	16.4%	0.4%	0.1%	37.5%	0.6%
Sherwood Forest	0.3%	46.2%	0.2%	0.1%	20.1%	0.2%	0.2%	33.9%	0.2%
Carver Hills	0.1%	45.9%	0.3%	0.0%	28.0%	0.3%	0.1%	26.2%	0.2%
Garden Hills	0.1%	45.7%	0.6%	0.0%	15.2%	0.4%	0.1%	39.2%	0.7%
Morningside/Lenox Park	0.0%	45.6%	1.8%	0.0%	23.4%	1.9%	0.0%	31.1%	1.7%
Bankhead Courts	0.1%	45.5%	0.1%	0.0%	46.0%	0.1%	0.0%	8.6%	0.0%
Peachtree Park	0.8%	45.4%	0.4%	0.4%	14.9%	0.3%	0.3%	39.7%	0.5%
Hammond Park	0.3%	45.2%	0.5%	0.1%	22.3%	0.5%	0.1%	32.5%	0.5%
Rockdale	0.0%	45.1%	0.4%	0.0%	30.1%	0.6%	0.0%	24.9%	0.3%
East Lake	0.1%	44.7%	0.9%	0.0%	29.9%	1.3%	0.1%	25.4%	0.7%

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Brookwood Hills	0.1%	44.1%	0.2%	0.0%	19.3%	0.2%	0.0%	36.7%	0.3%
Westview	0.3%	43.9%	0.5%	0.1%	27.1%	0.6%	0.2%	29.1%	0.4%
Browns Mill Park	0.0%	43.7%	0.8%	0.0%	35.6%	1.3%	0.0%	20.8%	0.5%
Scotts Crossing	0.0%	43.7%	0.4%	0.0%	25.9%	0.5%	0.0%	30.5%	0.4%
Channing Valley	0.4%	43.2%	0.1%	0.1%	21.0%	0.1%	0.2%	35.9%	0.1%
Brookview Heights	0.0%	43.1%	0.4%	0.0%	32.2%	0.6%	0.0%	24.8%	0.3%
Mozley Park	0.4%	42.9%	0.3%	0.2%	26.3%	0.4%	0.1%	31.0%	0.3%
Glenrose Heights	0.0%	42.8%	1.0%	0.0%	19.5%	1.0%	0.0%	37.8%	1.3%
Greenbriar	0.1%	42.7%	0.9%	0.0%	20.0%	0.9%	0.0%	37.3%	1.2%
Oakland City	0.4%	42.7%	0.7%	0.2%	26.5%	1.0%	0.1%	30.9%	0.7%
Ardmore	0.1%	42.7%	0.1%	0.0%	15.9%	0.1%	0.0%	41.5%	0.1%
Perkerson	0.3%	42.6%	0.7%	0.1%	22.1%	0.8%	0.1%	35.4%	0.8%
Rebel Valley Forest	0.7%	42.4%	0.1%	0.3%	17.5%	0.1%	0.3%	40.1%	0.2%
Peachtree Hills	0.0%	42.3%	0.4%	0.0%	18.5%	0.3%	0.0%	39.3%	0.5%
Ashley Courts	0.1%	42.3%	0.0%	0.0%	15.6%	0.0%	0.1%	42.1%	0.1%
Candler Park	0.0%	41.8%	0.5%	0.0%	26.6%	0.6%	0.0%	31.7%	0.5%
Norwood Manor	0.2%	41.7%	0.4%	0.1%	28.8%	0.5%	0.1%	29.6%	0.4%
South Tuxedo Park	0.1%	41.3%	0.3%	0.1%	12.0%	0.2%	0.0%	46.7%	0.4%
Cascade Green	0.1%	40.5%	0.1%	0.0%	27.6%	0.1%	0.0%	32.0%	0.1%
Just Us	0.3%	39.9%	0.0%	0.1%	26.1%	0.0%	0.1%	34.1%	0.0%
Fort Valley	0.0%	39.9%	0.0%	0.0%	17.6%	0.0%	0.0%	42.5%	0.0%
Ridgedale Park	0.2%	39.5%	0.1%	0.1%	16.4%	0.1%	0.1%	44.1%	0.2%
Leila Valley	0.1%	39.5%	0.3%	0.0%	24.6%	0.4%	0.0%	35.9%	0.4%
Virginia Highland	0.1%	39.3%	0.7%	0.1%	21.7%	0.8%	0.0%	39.1%	1.0%
Ansley Park	0.0%	38.9%	0.4%	0.0%	28.5%	0.6%	0.0%	32.7%	0.5%
Boulevard Heights	0.2%	38.6%	0.1%	0.1%	30.5%	0.2%	0.1%	31.0%	0.2%
Capitol View	0.4%	38.6%	0.4%	0.2%	28.3%	0.6%	0.1%	33.2%	0.5%
Huntington	0.3%	37.9%	0.0%	0.1%	47.5%	0.1%	0.1%	14.6%	0.0%
Washington Park	0.2%	37.9%	0.2%	0.1%	26.3%	0.2%	0.1%	35.9%	0.2%
Lakewood Heights	0.0%	37.4%	0.9%	0.0%	27.5%	1.4%	0.0%	35.2%	1.2%
Edmund Park	1.3%	37.4%	0.0%	0.4%	21.7%	0.0%	0.5%	41.0%	0.0%
Atlanta Industrial Park	0.1%	37.1%	0.4%	0.0%	16.9%	0.4%	0.0%	46.1%	0.7%
Joyland	0.2%	36.7%	0.1%	0.1%	33.6%	0.2%	0.1%	29.7%	0.1%
Atkins Park	1.3%	36.0%	0.0%	0.4%	22.9%	0.0%	0.4%	41.2%	0.1%
Sylvan Hills	0.1%	35.3%	1.0%	0.0%	26.8%	1.6%	0.1%	38.0%	1.5%
Inman Park	0.1%	35.1%	0.4%	0.0%	21.4%	0.5%	0.0%	43.6%	0.6%
Lindridge/Martin Manor	0.4%	34.4%	0.4%	0.2%	18.4%	0.5%	0.1%	47.2%	0.8%
Bankhead/Bolton	1.0%	34.4%	0.5%	0.3%	23.3%	0.8%	0.3%	42.3%	0.9%

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Bolton	0.1%	34.3%	0.9%	0.0%	29.1%	1.6%	0.0%	36.7%	1.3%
Edgewood	0.1%	34.3%	0.5%	0.0%	23.0%	0.7%	0.0%	42.8%	0.9%
Historic Westin Heights/Bankhead	0.0%	33.7%	0.4%	0.0%	35.6%	0.8%	0.0%	30.7%	0.5%
Grant Park	0.5%	33.1%	1.0%	0.1%	25.8%	1.6%	0.2%	41.1%	1.7%
Blair Villa/Poole Creek	0.1%	32.7%	0.7%	0.0%	19.4%	0.9%	0.0%	48.0%	1.5%
Ashview Heights	0.0%	32.7%	0.2%	0.0%	31.2%	0.3%	0.0%	36.3%	0.2%
Poncey-Highland	0.1%	32.4%	0.2%	0.0%	21.5%	0.3%	0.0%	46.2%	0.4%
Underwood Hills	0.3%	31.3%	0.6%	0.1%	18.3%	0.8%	0.1%	50.5%	1.4%
High Point	0.2%	31.0%	0.1%	0.1%	34.8%	0.1%	0.0%	34.2%	0.1%
West Highlands	0.1%	30.8%	0.4%	0.0%	38.3%	1.1%	0.0%	31.0%	0.6%
South Atlanta	0.4%	30.6%	0.2%	0.1%	30.1%	0.5%	0.1%	39.4%	0.4%
Piedmont Heights	0.9%	29.8%	0.2%	0.3%	18.1%	0.3%	0.2%	52.1%	0.6%
Betmar LaVilla	0.2%	29.8%	0.1%	0.1%	32.7%	0.1%	0.0%	37.6%	0.1%
Buckhead Forest	0.9%	29.8%	0.2%	0.2%	8.9%	0.1%	0.3%	61.4%	0.5%
Loring Heights	0.2%	29.8%	0.2%	0.0%	17.2%	0.3%	0.0%	53.1%	0.6%
West End	0.1%	28.4%	0.5%	0.0%	25.4%	1.0%	0.0%	46.3%	1.2%
State Facility	0.1%	28.2%	0.1%	0.0%	31.6%	0.2%	0.0%	40.2%	0.2%
The Villages at East Lake	0.1%	27.8%	0.1%	0.0%	41.6%	0.4%	0.0%	30.8%	0.2%
Peoplestown	0.1%	27.4%	0.2%	0.0%	30.9%	0.6%	0.0%	41.8%	0.5%
Princeton Lakes	0.3%	27.4%	0.3%	0.1%	26.9%	0.7%	0.0%	45.8%	0.8%
Brookwood	0.3%	25.6%	0.1%	0.1%	14.8%	0.1%	0.1%	59.8%	0.2%
Chosewood Park	0.2%	25.2%	0.4%	0.1%	37.5%	1.2%	0.0%	37.4%	0.8%
Home Park	0.1%	24.5%	0.2%	0.0%	19.3%	0.4%	0.0%	56.2%	0.7%
Adair Park	0.2%	24.5%	0.2%	0.0%	24.2%	0.4%	0.1%	51.4%	0.6%
Pittsburgh	0.1%	24.0%	0.3%	0.0%	26.2%	0.8%	0.0%	49.9%	1.0%
English Avenue	0.1%	23.8%	0.3%	0.0%	24.8%	0.7%	0.0%	51.4%	1.0%
Fort McPherson	0.2%	23.7%	0.3%	0.0%	43.5%	1.3%	0.0%	32.9%	0.6%
The Villages at Carver	0.2%	23.3%	0.1%	0.1%	39.6%	0.2%	0.1%	37.1%	0.2%
Hills Park	0.3%	22.9%	0.6%	0.1%	22.4%	1.2%	0.1%	54.9%	2.0%
Knight Park/Howell Station	0.1%	22.4%	0.2%	0.0%	23.5%	0.5%	0.0%	54.2%	0.7%
Amal Heights	0.1%	22.4%	0.0%	0.0%	45.9%	0.1%	0.0%	31.7%	0.0%
Vine City	0.1%	22.3%	0.2%	0.0%	28.0%	0.5%	0.0%	49.8%	0.6%
Cabbagetown	0.1%	22.3%	0.1%	0.0%	16.0%	0.1%	0.0%	61.8%	0.3%
Reynoldstown	0.1%	21.3%	0.2%	0.0%	16.9%	0.4%	0.0%	61.9%	0.9%
Colonial Homes	0.2%	20.8%	0.0%	0.1%	18.5%	0.0%	0.0%	60.8%	0.1%
Blandtown	0.1%	19.9%	0.3%	0.0%	22.9%	0.7%	0.0%	57.2%	1.1%
Old Fourth Ward	0.0%	19.3%	0.4%	0.0%	19.5%	0.9%	0.0%	61.2%	1.8%
Harris Chiles	0.0%	19.1%	0.0%	0.0%	32.6%	0.2%	0.0%	48.4%	0.2%

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Hood	% UTC	% City	% Hood	% NTV	% City	% Hood	% NV
Berkeley Park	0.1%	18.9%	0.2%	0.0%	23.5%	0.4%	0.0%	57.7%	0.7%
Midtown	0.2%	18.1%	0.5%	0.0%	12.9%	0.8%	0.0%	69.1%	2.7%
Atlanta University Center	0.1%	17.6%	0.2%	0.0%	27.5%	0.5%	0.0%	55.0%	0.7%
Georgia Tech	0.0%	17.1%	0.2%	0.0%	19.3%	0.4%	0.0%	63.6%	0.9%
Mechanicsville	0.1%	16.9%	0.2%	0.0%	26.3%	0.7%	0.0%	56.8%	1.0%
Lindbergh/Morosgo	0.1%	16.1%	0.2%	0.0%	13.6%	0.3%	0.0%	70.4%	1.0%
Summerhill	0.1%	15.2%	0.1%	0.0%	25.7%	0.5%	0.0%	59.2%	0.8%
The Villages at Castleberry Hill	0.2%	14.0%	0.0%	0.1%	34.7%	0.1%	0.0%	51.3%	0.1%
Buckhead Heights	0.0%	12.7%	0.0%	0.0%	9.2%	0.0%	0.0%	78.2%	0.1%
Buckhead Village	0.0%	8.6%	0.0%	0.0%	3.7%	0.0%	0.0%	87.8%	0.4%
Sweet Auburn	0.2%	7.9%	0.0%	0.0%	21.2%	0.2%	0.0%	71.0%	0.5%
Capitol Gateway	0.1%	7.8%	0.0%	0.0%	32.4%	0.2%	0.0%	59.9%	0.2%
Marietta Street Artery	0.6%	6.9%	0.0%	0.1%	11.5%	0.2%	0.1%	81.7%	0.7%
Castleberry Hill	0.1%	6.5%	0.0%	0.0%	14.8%	0.2%	0.0%	78.8%	0.5%
Lenox	0.2%	5.9%	0.0%	0.0%	7.1%	0.1%	0.0%	87.0%	0.5%
Atlantic Station	0.4%	5.9%	0.0%	0.1%	13.5%	0.1%	0.0%	80.7%	0.5%
Downtown	0.1%	5.7%	0.2%	0.0%	10.7%	0.8%	0.0%	83.7%	3.9%
Oakland	0.4%	3.3%	0.0%	0.0%	15.3%	0.0%	0.0%	81.5%	0.1%

3. City Council Districts

Council	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Council	% UTC	% City	% Council	% NTV	% City	% Council	% NV
10	2.6%	63.7%	13.8%	1.4%	17.6%	8.3%	2.7%	18.8%	5.9%
11	7.8%	60.6%	16.9%	2.5%	19.4%	11.8%	2.6%	20.1%	8.1%
8	0.8%	56.3%	16.8%	0.6%	17.8%	11.6%	1.9%	26.0%	11.2%
7	7.8%	43.5%	5.4%	2.5%	14.6%	4.0%	3.6%	42.0%	7.6%
12	5.6%	43.2%	10.3%	3.2%	25.0%	13.0%	4.3%	31.9%	11.0%
9	4.8%	42.7%	12.0%	2.8%	24.8%	15.2%	3.5%	32.6%	13.2%
6	2.5%	39.1%	5.6%	0.8%	20.7%	6.5%	2.4%	40.3%	8.4%
5	1.7%	38.5%	4.7%	1.3%	21.5%	5.8%	2.5%	40.1%	7.1%
1	1.5%	37.5%	5.9%	1.1%	27.8%	9.6%	2.0%	34.8%	8.0%
4	6.4%	31.9%	3.2%	1.8%	24.5%	5.3%	1.9%	43.6%	6.2%
3	2.8%	30.8%	3.6%	2.0%	23.9%	6.2%	2.6%	45.4%	7.7%
2	2.2%	24.2%	1.7%	1.2%	18.0%	2.7%	2.3%	57.9%	5.7%

4. Watersheds

Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Mud Creek	0.0%	15.0%	0.0%	0.0%	29.8%	0.1%	0.1%	55.3%	0.2%
Intrenchment Creek	1.7%	31.3%	3.8%	1.4%	25.7%	6.9%	2.4%	43.1%	7.6%
Peachtree Creek	8.1%	36.1%	17.8%	4.3%	19.1%	20.6%	10.0%	44.8%	31.7%
Proctor Creek	5.6%	40.3%	12.3%	3.6%	26.2%	17.4%	4.6%	33.5%	14.6%
Sugar Creek	1.3%	42.4%	2.8%	0.6%	20.8%	3.0%	1.1%	36.9%	3.4%
South River	5.8%	42.9%	12.9%	3.4%	25.1%	16.3%	4.4%	32.1%	13.8%
Shoal Creek	0.0%	49.8%	0.1%	0.0%	13.7%	0.1%	0.0%	36.6%	0.1%
Camp Creek	2.3%	51.3%	5.1%	1.1%	24.3%	5.2%	1.1%	24.5%	3.5%
Doolittle Creek	0.3%	51.7%	0.6%	0.1%	23.6%	0.6%	0.1%	24.8%	0.4%
Sandy Creek	2.2%	54.4%	4.9%	0.8%	19.7%	3.9%	1.1%	26.0%	3.4%
Nancy Creek	5.0%	54.4%	11.0%	1.5%	16.8%	7.4%	2.7%	28.9%	8.4%
Long Island Creek	1.7%	60.7%	3.6%	0.4%	16.1%	2.1%	0.6%	23.3%	2.0%
Utoy Creek	11.0%	62.2%	24.3%	3.3%	18.9%	16.0%	3.4%	19.1%	10.7%

5. Small Watersheds

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Utoy Creek_289	0.1%	87.1%	0.2%	0.0%	7.6%	0.0%	0.0%	5.3%	0.0%
Utoy Creek_284	0.0%	86.0%	0.0%	0.0%	8.7%	0.0%	0.0%	5.2%	0.0%
Utoy Creek_302	0.2%	84.2%	0.4%	0.0%	10.6%	0.1%	0.0%	5.3%	0.0%
Utoy Creek_264	0.3%	83.1%	0.7%	0.0%	9.1%	0.2%	0.0%	7.8%	0.1%
Utoy Creek_299	0.2%	81.4%	0.4%	0.0%	11.5%	0.1%	0.0%	7.0%	0.0%
Utoy Creek_311	0.2%	80.7%	0.4%	0.0%	12.1%	0.1%	0.0%	7.2%	0.1%
Utoy Creek_263	0.6%	79.8%	1.3%	0.1%	9.8%	0.4%	0.1%	10.4%	0.2%
South River_231	0.1%	79.6%	0.3%	0.0%	16.8%	0.1%	0.0%	3.6%	0.0%
Utoy Creek_294	0.0%	77.4%	0.0%	0.0%	14.3%	0.0%	0.0%	8.3%	0.0%
Utoy Creek_272	0.5%	77.2%	1.2%	0.1%	14.6%	0.5%	0.1%	8.1%	0.2%
Utoy Creek_300	0.2%	75.6%	0.3%	0.0%	12.0%	0.1%	0.0%	12.5%	0.1%
Camp Creek_22	0.1%	75.5%	0.1%	0.0%	16.0%	0.1%	0.0%	8.5%	0.0%
Utoy Creek_285	0.3%	75.4%	0.7%	0.1%	13.1%	0.2%	0.0%	11.5%	0.1%
South River_213	0.2%	74.7%	0.4%	0.0%	13.0%	0.2%	0.0%	12.2%	0.1%
Utoy Creek_280	0.1%	72.9%	0.2%	0.0%	12.0%	0.1%	0.0%	15.1%	0.1%
Utoy Creek_292	0.2%	72.6%	0.4%	0.0%	15.9%	0.2%	0.0%	11.5%	0.1%
Utoy Creek_310	0.2%	72.4%	0.5%	0.0%	12.7%	0.2%	0.1%	14.9%	0.2%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Long Island Creek_59	0.0%	72.3%	0.0%	0.0%	14.5%	0.0%	0.0%	13.3%	0.0%
Utoy Creek_279	0.0%	71.8%	0.0%	0.0%	10.8%	0.0%	0.0%	17.3%	0.0%
Utoy Creek_275	0.4%	71.5%	0.9%	0.1%	13.1%	0.4%	0.1%	15.5%	0.3%
Sandy Creek_193	0.3%	71.3%	0.6%	0.1%	18.0%	0.3%	0.0%	10.7%	0.1%
Utoy Creek_269	0.4%	71.0%	0.8%	0.1%	14.2%	0.4%	0.1%	14.8%	0.2%
Long Island Creek_55	0.3%	70.6%	0.6%	0.1%	13.2%	0.2%	0.1%	16.2%	0.2%
Long Island Creek_47	0.1%	70.3%	0.1%	0.0%	12.2%	0.0%	0.0%	17.5%	0.0%
Utoy Creek_277	0.3%	70.2%	0.7%	0.1%	13.1%	0.3%	0.1%	16.7%	0.2%
Bakers Ferry_2	0.2%	70.0%	0.5%	0.1%	15.5%	0.2%	0.0%	14.5%	0.1%
Utoy Creek_268	0.7%	69.8%	1.5%	0.1%	12.9%	0.6%	0.2%	17.3%	0.5%
Camp Creek_14	0.0%	69.7%	0.0%	0.0%	13.7%	0.0%	0.0%	18.0%	0.0%
Bakers Ferry_1	0.0%	69.5%	0.0%	0.0%	12.4%	0.0%	0.0%	18.5%	0.0%
Utoy Creek_260	0.0%	69.5%	0.0%	0.0%	12.0%	0.0%	0.0%	18.4%	0.0%
Utoy Creek_304	0.2%	68.6%	0.4%	0.0%	13.8%	0.2%	0.0%	17.6%	0.1%
Utoy Creek_261	0.2%	68.0%	0.5%	0.0%	14.0%	0.2%	0.1%	18.0%	0.2%
South River_238	0.3%	67.7%	0.6%	0.1%	21.3%	0.4%	0.0%	10.9%	0.1%
Utoy Creek_293	0.2%	67.2%	0.3%	0.0%	18.0%	0.2%	0.0%	14.8%	0.1%
Utoy Creek_296	0.2%	66.8%	0.5%	0.1%	20.5%	0.3%	0.0%	12.7%	0.1%
South River_222	0.0%	66.5%	0.0%	0.0%	16.7%	0.0%	0.0%	16.7%	0.0%
Utoy Creek_281	0.1%	66.4%	0.2%	0.0%	15.0%	0.1%	0.0%	18.7%	0.1%
Camp Creek_6	0.6%	66.4%	1.4%	0.2%	20.2%	0.9%	0.1%	13.4%	0.4%
Long Island Creek_50	0.1%	65.7%	0.1%	0.0%	10.8%	0.0%	0.0%	23.5%	0.1%
South River_237	0.1%	65.5%	0.3%	0.0%	19.7%	0.2%	0.0%	14.8%	0.1%
Sandy Creek_199	0.2%	65.4%	0.5%	0.1%	20.4%	0.4%	0.1%	14.2%	0.2%
Nancy Creek_68	0.1%	64.8%	0.3%	0.0%	13.5%	0.1%	0.0%	21.7%	0.2%
Utoy Creek_313	0.2%	64.7%	0.4%	0.0%	18.5%	0.2%	0.0%	16.9%	0.1%
Utoy Creek_278	0.0%	64.6%	0.0%	0.0%	31.8%	0.0%	0.0%	3.7%	0.0%
Nancy Creek_88	0.4%	64.2%	1.0%	0.1%	15.6%	0.5%	0.1%	20.2%	0.4%
Nancy Creek_71	0.3%	63.6%	0.6%	0.1%	16.5%	0.3%	0.1%	19.9%	0.3%
Peachtree Creek_96	0.1%	63.5%	0.3%	0.0%	12.3%	0.1%	0.1%	24.2%	0.2%
Proctor Creek_186	0.0%	63.4%	0.0%	0.0%	18.7%	0.0%	0.0%	17.9%	0.0%
Utoy Creek_287	0.2%	63.4%	0.5%	0.1%	18.9%	0.3%	0.1%	17.7%	0.2%
Utoy Creek_298	0.5%	63.2%	1.1%	0.1%	15.4%	0.6%	0.2%	21.4%	0.5%
Nancy Creek_73	0.0%	63.0%	0.1%	0.0%	13.9%	0.0%	0.0%	23.2%	0.0%
Utoy Creek_290	0.1%	63.0%	0.3%	0.0%	14.5%	0.2%	0.1%	22.5%	0.2%
South River_220	0.2%	63.0%	0.4%	0.1%	24.9%	0.3%	0.0%	12.1%	0.1%
Long Island Creek_53	0.1%	62.9%	0.3%	0.0%	19.4%	0.2%	0.0%	17.7%	0.1%
Nancy Creek_67	0.2%	62.9%	0.4%	0.1%	21.5%	0.3%	0.0%	15.6%	0.1%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Utoy Creek_312	0.3%	62.7%	0.6%	0.1%	20.0%	0.4%	0.1%	17.3%	0.2%
Long Island Creek_60	0.4%	62.5%	0.9%	0.1%	17.7%	0.5%	0.1%	19.9%	0.4%
Utoy Creek_276	0.3%	62.4%	0.8%	0.1%	13.4%	0.4%	0.1%	24.3%	0.4%
Proctor Creek_179	0.3%	62.2%	0.7%	0.1%	23.7%	0.6%	0.1%	14.1%	0.2%
Nancy Creek_65	0.1%	62.0%	0.2%	0.0%	21.9%	0.2%	0.0%	16.1%	0.1%
South River_243	0.4%	62.0%	0.8%	0.1%	22.3%	0.6%	0.1%	15.7%	0.3%
Utoy Creek_262	0.2%	62.0%	0.4%	0.0%	14.8%	0.2%	0.1%	23.2%	0.2%
Sandy Creek_195	0.3%	61.9%	0.7%	0.1%	15.4%	0.4%	0.1%	22.7%	0.4%
South River_207	0.2%	61.7%	0.5%	0.1%	22.0%	0.4%	0.1%	16.3%	0.2%
Utoy Creek_307	0.2%	61.6%	0.4%	0.0%	15.1%	0.2%	0.1%	23.3%	0.2%
Nancy Creek_69	0.1%	61.5%	0.1%	0.0%	16.0%	0.1%	0.0%	22.5%	0.1%
Utoy Creek_267	0.1%	61.5%	0.2%	0.0%	30.7%	0.2%	0.0%	7.8%	0.0%
Peachtree Creek_155	0.6%	61.4%	1.3%	0.2%	16.8%	0.8%	0.2%	21.8%	0.7%
South River_209	0.0%	61.4%	0.0%	0.0%	15.9%	0.0%	0.0%	22.6%	0.0%
Proctor Creek_177	0.2%	61.3%	0.4%	0.1%	27.5%	0.4%	0.0%	11.2%	0.1%
Utoy Creek_301	0.2%	61.2%	0.5%	0.1%	21.2%	0.4%	0.1%	17.6%	0.2%
Nancy Creek_82	0.1%	61.0%	0.3%	0.0%	13.0%	0.1%	0.1%	26.0%	0.2%
Peachtree Creek_138	0.2%	60.9%	0.5%	0.1%	18.7%	0.3%	0.1%	20.4%	0.2%
South River_232	0.2%	60.9%	0.3%	0.1%	25.6%	0.3%	0.0%	13.6%	0.1%
Long Island Creek_48	0.1%	60.8%	0.3%	0.0%	13.3%	0.1%	0.1%	26.0%	0.2%
Sandy Creek_200	0.2%	60.8%	0.4%	0.0%	16.8%	0.2%	0.1%	22.5%	0.2%
Nancy Creek_87	0.3%	60.3%	0.7%	0.1%	14.3%	0.3%	0.1%	25.4%	0.4%
Nancy Creek_66	0.3%	60.1%	0.7%	0.1%	21.0%	0.5%	0.1%	18.9%	0.3%
Camp Creek_12	0.2%	59.6%	0.5%	0.1%	29.8%	0.5%	0.0%	10.5%	0.1%
Utoy Creek_297	0.4%	59.5%	0.8%	0.2%	28.2%	0.8%	0.1%	12.3%	0.2%
Sandy Creek_196	0.1%	59.3%	0.3%	0.1%	22.6%	0.3%	0.0%	18.0%	0.1%
Long Island Creek_49	0.1%	59.3%	0.3%	0.0%	20.3%	0.2%	0.0%	20.4%	0.1%
Proctor Creek_157	0.3%	59.0%	0.6%	0.1%	23.0%	0.5%	0.1%	18.0%	0.3%
Peachtree Creek_150	0.2%	58.6%	0.4%	0.0%	14.7%	0.2%	0.1%	26.6%	0.3%
Peachtree Creek_93	0.3%	58.6%	0.8%	0.1%	14.3%	0.4%	0.2%	27.1%	0.5%
Long Island Creek_52	0.2%	58.6%	0.5%	0.1%	16.9%	0.3%	0.1%	24.6%	0.3%
Utoy Creek_259	0.2%	58.4%	0.4%	0.0%	14.0%	0.2%	0.1%	27.5%	0.3%
Proctor Creek_173	0.1%	58.4%	0.2%	0.0%	27.4%	0.2%	0.0%	14.2%	0.1%
Proctor Creek_172	0.3%	58.0%	0.6%	0.1%	23.7%	0.6%	0.1%	18.3%	0.3%
Nancy Creek_74	0.1%	58.0%	0.3%	0.0%	15.2%	0.2%	0.1%	26.8%	0.2%
Nancy Creek_63	0.2%	57.9%	0.4%	0.1%	21.0%	0.3%	0.1%	21.1%	0.2%
Utoy Creek_291	0.2%	57.8%	0.4%	0.1%	16.5%	0.2%	0.1%	25.7%	0.3%
Utoy Creek_309	0.0%	57.3%	0.1%	0.0%	16.3%	0.0%	0.0%	26.3%	0.1%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Long Island Creek_51	0.1%	57.2%	0.3%	0.0%	11.3%	0.1%	0.1%	31.5%	0.2%
Nancy Creek_81	0.1%	57.0%	0.3%	0.0%	17.2%	0.2%	0.1%	25.9%	0.2%
Nancy Creek_86	0.0%	56.8%	0.1%	0.0%	15.6%	0.1%	0.0%	27.7%	0.1%
Camp Creek_23	0.2%	56.3%	0.5%	0.1%	24.0%	0.4%	0.1%	19.7%	0.2%
South River_228	0.1%	56.3%	0.3%	0.0%	22.4%	0.2%	0.0%	21.3%	0.1%
Utoy Creek_306	0.2%	55.8%	0.3%	0.1%	22.5%	0.3%	0.1%	21.7%	0.2%
Long Island Creek_54	0.0%	55.7%	0.1%	0.0%	10.3%	0.0%	0.0%	34.1%	0.0%
Peachtree Creek_92	0.1%	55.6%	0.3%	0.0%	17.0%	0.2%	0.1%	27.4%	0.2%
Utoy Creek_266	0.1%	55.5%	0.2%	0.0%	20.6%	0.1%	0.0%	23.9%	0.1%
Peachtree Creek_113	0.2%	55.4%	0.5%	0.1%	18.8%	0.4%	0.1%	25.8%	0.3%
Utoy Creek_270	0.4%	55.3%	0.9%	0.2%	27.3%	0.9%	0.1%	17.4%	0.4%
Camp Creek_8	0.2%	55.0%	0.5%	0.1%	26.4%	0.6%	0.1%	18.6%	0.3%
Proctor Creek_163	0.2%	54.8%	0.3%	0.1%	23.4%	0.3%	0.1%	21.8%	0.2%
Camp Creek_19	0.2%	54.8%	0.3%	0.1%	31.6%	0.4%	0.0%	13.6%	0.1%
Peachtree Creek_110	0.1%	54.8%	0.2%	0.0%	22.3%	0.2%	0.0%	22.9%	0.1%
South River_244	0.4%	54.7%	0.8%	0.2%	26.8%	0.9%	0.1%	18.5%	0.4%
Peachtree Creek_122	0.0%	54.6%	0.1%	0.0%	22.3%	0.1%	0.0%	23.1%	0.1%
Nancy Creek_64	0.3%	54.6%	0.7%	0.1%	18.8%	0.5%	0.1%	26.6%	0.5%
Camp Creek_15	0.1%	54.1%	0.1%	0.0%	17.5%	0.1%	0.0%	28.4%	0.1%
Proctor Creek_168	0.5%	54.1%	1.1%	0.2%	25.5%	1.2%	0.2%	20.4%	0.6%
Sandy Creek_194	0.3%	54.0%	0.6%	0.1%	28.1%	0.7%	0.1%	17.9%	0.3%
Nancy Creek_77	0.0%	53.8%	0.1%	0.0%	17.3%	0.1%	0.0%	28.9%	0.1%
Sandy Creek_191	0.4%	53.6%	0.9%	0.1%	19.4%	0.7%	0.2%	27.0%	0.6%
Proctor Creek_181	0.2%	53.4%	0.5%	0.1%	30.8%	0.6%	0.1%	15.8%	0.2%
South River_223	0.1%	53.4%	0.2%	0.0%	24.4%	0.2%	0.0%	22.2%	0.1%
Peachtree Creek_91	0.3%	53.1%	0.6%	0.1%	23.2%	0.6%	0.1%	23.7%	0.4%
Nancy Creek_72	0.2%	53.0%	0.5%	0.1%	23.2%	0.5%	0.1%	23.8%	0.3%
Utoy Creek_271	0.2%	52.9%	0.4%	0.1%	31.8%	0.5%	0.0%	15.3%	0.2%
Sugar Creek_253	0.0%	52.7%	0.0%	0.0%	21.0%	0.0%	0.0%	26.3%	0.0%
Utoy Creek_303	0.1%	52.7%	0.1%	0.0%	12.8%	0.1%	0.0%	34.6%	0.1%
Shoal Creek_201	0.0%	52.5%	0.1%	0.0%	10.7%	0.0%	0.0%	36.8%	0.1%
Sugar Creek_256	0.2%	52.5%	0.4%	0.1%	16.1%	0.3%	0.1%	31.5%	0.4%
Peachtree Creek_119	0.2%	52.4%	0.4%	0.1%	22.4%	0.4%	0.1%	25.2%	0.3%
Utoy Creek_286	0.2%	52.2%	0.5%	0.1%	22.6%	0.5%	0.1%	25.2%	0.4%
Doolittle Creek_24	0.1%	51.9%	0.2%	0.0%	17.0%	0.1%	0.0%	31.0%	0.1%
Sugar Creek_250	0.1%	51.9%	0.3%	0.1%	19.2%	0.2%	0.1%	28.8%	0.2%
Camp Creek_16	0.2%	51.9%	0.3%	0.1%	20.4%	0.3%	0.1%	27.7%	0.3%
Nancy Creek_89	0.7%	51.6%	1.4%	0.2%	13.3%	0.8%	0.4%	35.1%	1.4%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Doolittle Creek_25	0.2%	51.6%	0.5%	0.1%	25.7%	0.5%	0.1%	22.7%	0.3%
Nancy Creek_79	0.3%	51.5%	0.6%	0.1%	18.3%	0.4%	0.1%	30.2%	0.5%
Intrenchment Creek_36	0.1%	51.3%	0.2%	0.0%	23.3%	0.2%	0.1%	25.4%	0.2%
Peachtree Creek_154	0.1%	51.2%	0.3%	0.1%	22.6%	0.3%	0.1%	26.1%	0.2%
Proctor Creek_176	0.2%	51.2%	0.3%	0.1%	17.6%	0.3%	0.1%	31.3%	0.3%
Peachtree Creek_143	0.2%	51.1%	0.5%	0.1%	16.3%	0.3%	0.1%	32.6%	0.4%
South River_206	0.0%	51.0%	0.1%	0.0%	20.3%	0.1%	0.0%	28.6%	0.1%
Sugar Creek_248	0.1%	50.8%	0.2%	0.0%	18.8%	0.2%	0.1%	30.4%	0.2%
Nancy Creek_84	0.3%	50.8%	0.7%	0.1%	17.8%	0.5%	0.2%	31.4%	0.6%
Sandy Creek_197	0.2%	50.7%	0.4%	0.1%	17.0%	0.3%	0.1%	32.3%	0.4%
Bakers Ferry_3	0.1%	50.7%	0.2%	0.0%	17.2%	0.1%	0.1%	32.1%	0.2%
Peachtree Creek_106	0.1%	50.2%	0.3%	0.1%	29.1%	0.3%	0.0%	20.7%	0.2%
Nancy Creek_70	0.3%	50.1%	0.6%	0.1%	11.0%	0.3%	0.2%	38.9%	0.6%
Nancy Creek_76	0.0%	50.0%	0.0%	0.0%	14.9%	0.0%	0.0%	35.1%	0.0%
Intrenchment Creek_45	0.0%	49.9%	0.0%	0.0%	20.9%	0.0%	0.0%	29.2%	0.0%
Peachtree Creek_136	0.1%	49.7%	0.3%	0.1%	24.7%	0.3%	0.1%	25.5%	0.2%
Peachtree Creek_102	0.1%	49.5%	0.2%	0.0%	22.3%	0.2%	0.1%	28.2%	0.2%
Peachtree Creek_112	0.1%	49.5%	0.3%	0.0%	18.7%	0.2%	0.1%	31.9%	0.3%
Intrenchment Creek_38	0.1%	49.3%	0.2%	0.1%	27.0%	0.3%	0.1%	23.7%	0.2%
Utoy Creek_265	0.1%	49.3%	0.1%	0.0%	16.7%	0.1%	0.0%	34.0%	0.1%
South River_215	0.3%	48.9%	0.6%	0.1%	22.1%	0.6%	0.2%	29.0%	0.5%
Utoy Creek_295	0.1%	48.8%	0.2%	0.1%	38.3%	0.4%	0.0%	12.9%	0.1%
South River_205	0.2%	48.6%	0.5%	0.1%	28.2%	0.7%	0.1%	23.2%	0.4%
Nancy Creek_80	0.1%	48.6%	0.2%	0.0%	24.4%	0.2%	0.1%	27.0%	0.2%
Peachtree Creek_141	0.3%	48.6%	0.7%	0.1%	19.2%	0.6%	0.2%	32.2%	0.6%
Camp Creek_21	0.2%	48.3%	0.3%	0.1%	21.8%	0.3%	0.1%	29.8%	0.3%
Long Island Creek_58	0.0%	48.1%	0.0%	0.0%	12.2%	0.0%	0.0%	39.6%	0.0%
Shoal Creek_203	0.0%	48.1%	0.0%	0.0%	9.5%	0.0%	0.0%	42.4%	0.0%
South River_234	0.2%	47.9%	0.5%	0.1%	22.2%	0.5%	0.1%	29.8%	0.4%
Proctor Creek_156	0.3%	47.8%	0.6%	0.2%	28.9%	0.8%	0.1%	23.3%	0.4%
Nancy Creek_62	0.1%	47.8%	0.3%	0.1%	25.7%	0.3%	0.1%	26.4%	0.2%
South River_208	0.0%	47.8%	0.1%	0.0%	20.6%	0.0%	0.0%	31.6%	0.0%
South River_214	0.1%	47.6%	0.2%	0.0%	20.3%	0.2%	0.1%	32.2%	0.2%
Proctor Creek_170	0.1%	47.2%	0.2%	0.1%	36.4%	0.3%	0.0%	16.5%	0.1%
Peachtree Creek_101	0.1%	47.1%	0.3%	0.1%	21.5%	0.3%	0.1%	31.4%	0.3%
Nancy Creek_75	0.2%	47.1%	0.5%	0.1%	13.2%	0.3%	0.2%	39.8%	0.6%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
South River_225	0.1%	47.0%	0.2%	0.1%	29.8%	0.3%	0.0%	23.2%	0.1%
Peachtree Creek_120	0.0%	46.7%	0.0%	0.0%	23.9%	0.0%	0.0%	29.3%	0.0%
Proctor Creek_160	0.3%	46.7%	0.7%	0.2%	27.2%	0.9%	0.2%	26.1%	0.5%
Nancy Creek_78	0.0%	46.3%	0.1%	0.0%	27.1%	0.1%	0.0%	26.6%	0.1%
Intrenchment Creek_41	0.0%	46.0%	0.0%	0.0%	27.5%	0.0%	0.0%	26.5%	0.0%
Peachtree Creek_118	0.1%	45.9%	0.2%	0.0%	23.2%	0.2%	0.1%	30.9%	0.2%
Proctor Creek_159	0.5%	45.9%	1.0%	0.4%	37.2%	1.8%	0.2%	16.9%	0.5%
Sugar Creek_249	0.2%	45.6%	0.4%	0.1%	20.3%	0.4%	0.1%	34.1%	0.4%
Camp Creek_7	0.1%	45.2%	0.3%	0.1%	29.0%	0.4%	0.1%	25.7%	0.3%
Intrenchment Creek_37	0.1%	45.1%	0.3%	0.1%	20.9%	0.3%	0.1%	34.0%	0.3%
Peachtree Creek_125	0.1%	44.7%	0.3%	0.0%	17.6%	0.2%	0.1%	37.7%	0.3%
Peachtree Creek_147	0.2%	44.6%	0.5%	0.1%	23.0%	0.5%	0.2%	32.4%	0.5%
Proctor Creek_158	0.1%	44.5%	0.3%	0.0%	15.2%	0.2%	0.1%	40.3%	0.3%
Sugar Creek_258	0.1%	44.5%	0.3%	0.1%	19.7%	0.3%	0.1%	35.9%	0.3%
Intrenchment Creek_35	0.2%	44.5%	0.4%	0.1%	24.0%	0.4%	0.1%	31.5%	0.4%
Intrenchment Creek_40	0.1%	44.2%	0.2%	0.1%	32.0%	0.3%	0.0%	23.7%	0.1%
Long Island Creek_56	0.1%	44.0%	0.3%	0.1%	20.1%	0.3%	0.1%	35.9%	0.3%
Proctor Creek_165	0.2%	43.4%	0.5%	0.1%	29.6%	0.7%	0.1%	27.0%	0.4%
South River_211	0.1%	43.3%	0.2%	0.1%	22.4%	0.2%	0.1%	34.3%	0.2%
Sandy Creek_198	0.1%	42.8%	0.2%	0.0%	15.2%	0.2%	0.1%	41.9%	0.3%
Utoy Creek_282	0.2%	42.6%	0.4%	0.1%	24.8%	0.5%	0.1%	32.6%	0.4%
South River_230	0.1%	42.4%	0.3%	0.1%	17.6%	0.3%	0.1%	39.9%	0.4%
South River_242	0.3%	42.0%	0.6%	0.3%	42.0%	1.2%	0.1%	16.1%	0.3%
Sugar Creek_257	0.1%	41.9%	0.2%	0.1%	22.9%	0.3%	0.1%	35.2%	0.3%
Peachtree Creek_151	0.3%	41.8%	0.6%	0.2%	26.0%	0.8%	0.2%	32.2%	0.7%
Proctor Creek_164	0.3%	41.7%	0.7%	0.2%	26.2%	0.9%	0.2%	32.1%	0.7%
South River_217	0.3%	41.7%	0.6%	0.2%	27.1%	0.8%	0.2%	31.2%	0.6%
South River_236	0.0%	41.2%	0.0%	0.0%	9.3%	0.0%	0.0%	49.5%	0.0%
Peachtree Creek_95	0.1%	41.0%	0.2%	0.1%	30.8%	0.3%	0.1%	28.2%	0.2%
Camp Creek_9	0.1%	40.7%	0.2%	0.0%	20.1%	0.2%	0.1%	39.2%	0.2%
South River_219	0.1%	40.4%	0.1%	0.0%	25.8%	0.2%	0.1%	33.8%	0.2%
Peachtree Creek_98	0.1%	40.4%	0.2%	0.0%	15.2%	0.1%	0.1%	44.4%	0.2%
Intrenchment Creek_44	0.2%	40.3%	0.5%	0.2%	29.3%	0.7%	0.2%	30.4%	0.5%
Proctor Creek_175	0.1%	40.2%	0.2%	0.1%	27.8%	0.4%	0.1%	32.0%	0.3%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Peachtree Creek_107	0.2%	40.2%	0.4%	0.1%	18.1%	0.4%	0.2%	41.7%	0.6%
Shoal Creek_202	0.0%	40.0%	0.0%	0.0%	27.3%	0.0%	0.0%	32.6%	0.0%
Peachtree Creek_111	0.1%	40.0%	0.1%	0.0%	31.8%	0.2%	0.0%	28.2%	0.1%
Peachtree Creek_115	0.2%	39.9%	0.4%	0.1%	16.4%	0.3%	0.2%	43.7%	0.6%
Intrenchment Creek_39	0.1%	39.8%	0.2%	0.1%	33.2%	0.4%	0.1%	27.0%	0.2%
South River_216	0.1%	39.6%	0.3%	0.1%	16.3%	0.3%	0.1%	44.1%	0.5%
South River_212	0.1%	39.4%	0.3%	0.1%	21.0%	0.4%	0.2%	39.7%	0.5%
Peachtree Creek_148	0.1%	39.2%	0.2%	0.1%	27.7%	0.3%	0.1%	33.1%	0.3%
Proctor Creek_162	0.1%	38.8%	0.3%	0.1%	32.0%	0.5%	0.1%	29.2%	0.3%
Proctor Creek_180	0.1%	38.8%	0.3%	0.1%	38.3%	0.7%	0.1%	22.9%	0.3%
Sandy Creek_190	0.1%	38.4%	0.2%	0.1%	25.0%	0.3%	0.1%	36.6%	0.3%
South River_235	0.1%	38.3%	0.2%	0.1%	30.0%	0.3%	0.1%	31.7%	0.2%
Utoy Creek_273	0.2%	38.0%	0.4%	0.2%	39.3%	0.9%	0.1%	22.7%	0.3%
Peachtree Creek_129	0.2%	38.0%	0.3%	0.1%	17.4%	0.3%	0.2%	44.6%	0.6%
Sugar Creek_255	0.1%	37.9%	0.3%	0.1%	26.2%	0.4%	0.1%	35.8%	0.4%
Intrenchment Creek_43	0.2%	37.8%	0.5%	0.2%	28.2%	0.8%	0.2%	34.0%	0.7%
Peachtree Creek_133	0.1%	37.7%	0.3%	0.1%	20.7%	0.4%	0.2%	41.5%	0.5%
Camp Creek_17	0.0%	37.5%	0.0%	0.0%	49.2%	0.0%	0.0%	13.3%	0.0%
Peachtree Creek_146	0.2%	37.1%	0.5%	0.1%	12.4%	0.4%	0.3%	50.4%	0.9%
Long Island Creek_57	0.0%	37.1%	0.0%	0.0%	14.3%	0.0%	0.0%	46.1%	0.0%
Intrenchment Creek_32	0.1%	36.9%	0.1%	0.1%	37.5%	0.3%	0.0%	25.6%	0.1%
Peachtree Creek_108	0.1%	36.4%	0.3%	0.1%	30.3%	0.5%	0.1%	33.2%	0.4%
Proctor Creek_182	0.3%	36.4%	0.6%	0.1%	18.7%	0.6%	0.3%	44.9%	1.0%
Peachtree Creek_134	0.1%	36.0%	0.2%	0.0%	18.4%	0.2%	0.1%	45.6%	0.3%
South River_227	0.1%	35.9%	0.3%	0.1%	21.2%	0.4%	0.2%	42.9%	0.5%
Camp Creek_18	0.0%	35.5%	0.1%	0.0%	33.8%	0.2%	0.0%	30.7%	0.1%
Utoy Creek_314	0.3%	35.4%	0.7%	0.2%	26.2%	1.1%	0.3%	38.4%	1.0%
Bakers Ferry_4	0.0%	35.2%	0.0%	0.0%	63.3%	0.0%	0.0%	0.7%	0.0%
Utoy Creek_288	0.0%	34.7%	0.1%	0.0%	20.3%	0.1%	0.0%	44.9%	0.2%
Proctor Creek_167	0.2%	34.7%	0.4%	0.1%	19.9%	0.5%	0.3%	45.4%	0.8%
Peachtree Creek_109	0.1%	34.6%	0.2%	0.0%	11.3%	0.2%	0.2%	54.1%	0.5%
Utoy Creek_305	0.0%	34.4%	0.1%	0.0%	16.8%	0.1%	0.1%	48.8%	0.2%
Sugar Creek_251	0.1%	34.3%	0.3%	0.1%	25.0%	0.5%	0.2%	40.7%	0.5%
South River_247	0.2%	34.3%	0.3%	0.1%	19.7%	0.4%	0.2%	46.0%	0.7%
Peachtree Creek_149	0.0%	34.1%	0.0%	0.0%	16.0%	0.0%	0.0%	49.9%	0.1%
Peachtree Creek_105	0.1%	34.1%	0.2%	0.1%	17.6%	0.3%	0.2%	48.3%	0.5%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Peachtree Creek_121	0.0%	33.9%	0.0%	0.0%	57.6%	0.0%	0.0%	8.4%	0.0%
Peachtree Creek_140	0.1%	33.3%	0.2%	0.1%	26.8%	0.4%	0.1%	39.9%	0.4%
Peachtree Creek_116	0.2%	32.1%	0.4%	0.1%	20.8%	0.5%	0.3%	47.2%	0.8%
Peachtree Creek_145	0.1%	32.1%	0.2%	0.0%	11.9%	0.2%	0.2%	56.1%	0.5%
Camp Creek_13	0.0%	31.8%	0.0%	0.0%	39.9%	0.0%	0.0%	28.2%	0.0%
Peachtree Creek_142	0.1%	31.8%	0.2%	0.1%	37.8%	0.5%	0.1%	30.4%	0.3%
South River_221	0.3%	31.7%	0.6%	0.3%	31.7%	1.3%	0.3%	36.7%	1.0%
South River_233	0.1%	31.5%	0.1%	0.0%	27.8%	0.2%	0.1%	40.7%	0.2%
South River_224	0.1%	31.2%	0.3%	0.1%	26.3%	0.6%	0.2%	42.4%	0.6%
South River_241	0.1%	30.8%	0.2%	0.1%	37.2%	0.5%	0.1%	32.1%	0.3%
Proctor Creek_185	0.2%	30.7%	0.4%	0.2%	31.1%	0.8%	0.2%	38.2%	0.7%
Proctor Creek_174	0.1%	30.5%	0.1%	0.0%	23.3%	0.2%	0.1%	46.2%	0.2%
Sugar Creek_252	0.0%	30.3%	0.0%	0.0%	18.2%	0.0%	0.0%	51.4%	0.0%
Proctor Creek_189	0.1%	30.0%	0.1%	0.1%	26.4%	0.3%	0.1%	43.5%	0.3%
South River_239	0.1%	29.8%	0.2%	0.0%	15.5%	0.2%	0.1%	54.7%	0.5%
Utoy Creek_274	0.1%	28.6%	0.2%	0.2%	47.4%	0.9%	0.1%	24.0%	0.3%
Camp Creek_11	0.1%	28.5%	0.3%	0.1%	29.1%	0.6%	0.2%	42.4%	0.6%
South River_204	0.0%	28.4%	0.0%	0.0%	15.5%	0.0%	0.0%	56.0%	0.0%
Peachtree Creek_132	0.1%	28.1%	0.2%	0.1%	22.4%	0.3%	0.2%	49.5%	0.5%
South River_240	0.2%	28.1%	0.4%	0.2%	29.7%	0.9%	0.3%	42.2%	0.8%
Proctor Creek_171	0.1%	28.1%	0.2%	0.1%	21.3%	0.3%	0.1%	50.6%	0.5%
Sugar Creek_254	0.1%	28.0%	0.2%	0.1%	18.2%	0.3%	0.2%	53.7%	0.6%
South River_229	0.0%	28.0%	0.0%	0.0%	16.9%	0.0%	0.0%	55.0%	0.1%
Intrenchment Creek_31	0.1%	27.9%	0.1%	0.1%	28.0%	0.3%	0.1%	44.1%	0.3%
Intrenchment Creek_30	0.1%	27.4%	0.1%	0.1%	35.8%	0.4%	0.1%	36.8%	0.2%
Peachtree Creek_99	0.1%	27.2%	0.3%	0.1%	18.8%	0.4%	0.2%	54.1%	0.8%
Peachtree Creek_144	0.1%	27.1%	0.3%	0.1%	15.4%	0.4%	0.3%	57.4%	0.9%
Peachtree Creek_123	0.0%	26.9%	0.1%	0.0%	12.0%	0.1%	0.1%	61.0%	0.3%
Proctor Creek_187	0.1%	26.6%	0.2%	0.1%	26.2%	0.4%	0.2%	47.2%	0.5%
Utoy Creek_308	0.0%	26.5%	0.0%	0.0%	36.6%	0.0%	0.0%	37.3%	0.0%
Peachtree Creek_100	0.1%	26.4%	0.1%	0.0%	19.4%	0.2%	0.1%	54.3%	0.3%
Peachtree Creek_152	0.2%	25.7%	0.4%	0.1%	18.2%	0.6%	0.4%	56.0%	1.2%
South River_245	0.2%	25.5%	0.3%	0.2%	28.5%	0.8%	0.3%	46.0%	0.9%
Proctor Creek_178	0.0%	25.2%	0.1%	0.1%	45.9%	0.4%	0.0%	28.9%	0.2%
Peachtree Creek_124	0.1%	24.8%	0.1%	0.1%	21.9%	0.3%	0.1%	53.3%	0.4%
Sandy Creek_192	0.1%	23.6%	0.1%	0.0%	15.2%	0.2%	0.2%	61.3%	0.5%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Peachtree Creek_117	0.1%	23.5%	0.2%	0.1%	18.0%	0.4%	0.3%	58.5%	0.9%
Peachtree Creek_90	0.1%	22.1%	0.2%	0.1%	21.0%	0.4%	0.2%	56.9%	0.8%
South River_226	0.2%	21.9%	0.4%	0.2%	24.3%	1.0%	0.5%	53.8%	1.5%
Intrenchment Creek_46	0.2%	21.8%	0.4%	0.1%	17.6%	0.6%	0.5%	60.4%	1.5%
Camp Creek_20	0.0%	21.5%	0.1%	0.0%	12.8%	0.1%	0.1%	65.7%	0.3%
Peachtree Creek_97	0.0%	21.1%	0.1%	0.0%	17.4%	0.2%	0.1%	61.5%	0.4%
Intrenchment Creek_33	0.1%	21.1%	0.2%	0.2%	30.4%	0.7%	0.2%	48.5%	0.8%
Proctor Creek_188	0.1%	21.1%	0.1%	0.1%	28.5%	0.4%	0.2%	50.4%	0.5%
Peachtree Creek_137	0.1%	21.0%	0.1%	0.0%	15.7%	0.2%	0.2%	63.3%	0.6%
Peachtree Creek_127	0.2%	19.0%	0.5%	0.2%	16.6%	0.9%	0.7%	64.4%	2.3%
Proctor Creek_184	0.1%	18.1%	0.1%	0.1%	24.9%	0.4%	0.2%	57.0%	0.6%
Proctor Creek_183	0.1%	17.6%	0.2%	0.1%	28.7%	0.7%	0.3%	53.7%	0.8%
Utoy Creek_283	0.0%	17.6%	0.1%	0.1%	32.2%	0.3%	0.1%	50.2%	0.3%
Nancy Creek_85	0.1%	17.5%	0.1%	0.0%	6.5%	0.1%	0.2%	76.0%	0.7%
Peachtree Creek_114	0.1%	17.4%	0.2%	0.1%	23.5%	0.5%	0.3%	59.1%	0.9%
Intrenchment Creek_34	0.1%	16.9%	0.1%	0.1%	22.2%	0.4%	0.2%	60.9%	0.7%
Peachtree Creek_135	0.1%	16.5%	0.1%	0.1%	14.4%	0.3%	0.3%	69.1%	0.8%
Peachtree Creek_103	0.1%	16.5%	0.2%	0.1%	19.1%	0.4%	0.3%	64.4%	0.9%
Peachtree Creek_131	0.0%	16.5%	0.1%	0.0%	15.6%	0.2%	0.2%	68.0%	0.5%
Peachtree Creek_128	0.0%	16.1%	0.1%	0.0%	12.2%	0.1%	0.2%	71.8%	0.6%
Mud Creek_61	0.0%	15.0%	0.0%	0.0%	29.8%	0.1%	0.1%	55.2%	0.2%
Bakers Ferry_5	0.0%	14.6%	0.0%	0.0%	25.6%	0.0%	0.0%	59.9%	0.0%
Proctor Creek_169	0.0%	14.3%	0.1%	0.0%	14.7%	0.2%	0.2%	71.0%	0.6%
Proctor Creek_166	0.0%	11.4%	0.1%	0.1%	17.4%	0.3%	0.2%	71.2%	0.8%
Nancy Creek_83	0.0%	11.3%	0.0%	0.0%	57.5%	0.1%	0.0%	31.3%	0.0%
Peachtree Creek_130	0.0%	11.1%	0.1%	0.1%	19.6%	0.4%	0.3%	69.3%	0.8%
Peachtree Creek_94	0.0%	11.0%	0.1%	0.0%	13.5%	0.2%	0.2%	75.5%	0.6%
South River_246	0.0%	10.4%	0.0%	0.0%	16.6%	0.1%	0.1%	73.0%	0.4%
Intrenchment Creek_42	0.1%	9.9%	0.1%	0.1%	19.4%	0.5%	0.4%	70.7%	1.3%
Peachtree Creek_153	0.0%	9.0%	0.0%	0.0%	11.0%	0.1%	0.2%	80.0%	0.6%
Peachtree Creek_104	0.0%	8.1%	0.1%	0.1%	16.7%	0.3%	0.3%	75.2%	1.0%
Camp Creek_10	0.0%	7.5%	0.0%	0.0%	20.1%	0.1%	0.0%	72.4%	0.1%
South River_218	0.0%	6.8%	0.0%	0.0%	20.3%	0.0%	0.0%	72.8%	0.1%
Peachtree Creek_139	0.0%	6.3%	0.0%	0.0%	12.1%	0.2%	0.3%	81.6%	0.8%
South River_210	0.0%	6.3%	0.0%	0.0%	3.4%	0.0%	0.0%	90.7%	0.0%

Small Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Shed	% UTC	% City	% Shed	% NTV	% City	% Shed	% NV
Proctor Creek_161	0.0%	5.2%	0.0%	0.1%	12.4%	0.2%	0.3%	82.3%	1.0%
Peachtree Creek_126	0.0%	3.9%	0.0%	0.0%	7.9%	0.0%	0.0%	88.2%	0.0%

6. Parks > 2 Acres in Size (Sorted by Size - Largest First)

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Park	% UTC	% City	% Park	% NTV	% City	% Park	% NV
Chastain Memorial Park	0.1%	41.1%	5.0%	0.1%	43.3%	8.6%	0.0%	15.7%	7.3%
Southside Park	0.2%	72.8%	7.4%	0.1%	22.0%	3.7%	0.0%	5.2%	2.0%
Piedmont Park	0.1%	39.5%	3.7%	0.1%	39.4%	6.0%	0.0%	21.1%	7.6%
Browns Mill Golf Course	0.0%	20.1%	1.6%	0.1%	71.4%	9.4%	0.0%	8.5%	2.6%
Adams Park	0.1%	41.0%	3.2%	0.1%	51.3%	6.5%	0.0%	7.7%	2.3%
Westside Park	0.1%	33.2%	2.3%	0.0%	30.9%	3.5%	0.1%	35.8%	9.4%
Grant Park	0.1%	45.7%	2.9%	0.0%	27.4%	2.8%	0.0%	26.9%	6.5%
Freedom Park	0.1%	45.2%	2.7%	0.1%	40.1%	4.0%	0.0%	14.4%	3.4%
Cascade Springs Nature Preserve	0.1%	92.3%	5.4%	0.0%	6.4%	0.6%	0.0%	1.3%	0.3%
Lakewood	0.0%	18.7%	1.1%	0.0%	26.6%	2.5%	0.1%	54.7%	12.3%
John A. White Park	0.1%	46.6%	2.5%	0.1%	43.7%	3.9%	0.0%	9.6%	2.0%
South Bend Park	0.1%	62.4%	2.3%	0.0%	31.5%	1.9%	0.0%	6.1%	0.9%
North Camp Creek Parkway NP	0.1%	77.2%	2.7%	0.0%	20.9%	1.2%	0.0%	2.0%	0.3%
Rockdale Park	0.0%	65.2%	2.0%	0.0%	32.5%	1.6%	0.0%	2.2%	0.3%
Herbert Greene	0.1%	91.8%	2.7%	0.0%	6.4%	0.3%	0.0%	1.8%	0.2%
Atlanta Memorial Park	0.0%	53.6%	1.6%	0.0%	29.2%	1.4%	0.0%	17.2%	1.9%
Anderson Park	0.0%	68.0%	1.8%	0.0%	17.7%	0.8%	0.0%	14.2%	1.5%
Maddox Park	0.0%	32.8%	0.9%	0.0%	33.8%	1.5%	0.0%	33.3%	3.4%
Melvin Drive Park	0.1%	85.2%	2.2%	0.0%	10.8%	0.4%	0.0%	4.0%	0.4%
Chattahoochee Trail	0.0%	44.8%	1.1%	0.0%	44.2%	1.8%	0.0%	11.0%	1.1%
Candler Park	0.0%	35.4%	0.9%	0.0%	57.1%	2.3%	0.0%	7.5%	0.7%
Swann Preserve	0.0%	80.2%	2.0%	0.0%	18.2%	0.7%	0.0%	1.6%	0.1%
Lionel Hampton	0.1%	91.1%	2.2%	0.0%	8.3%	0.3%	0.0%	0.6%	0.1%
Perkerson Park	0.0%	60.0%	1.4%	0.0%	31.5%	1.2%	0.0%	8.5%	0.8%
Oakland Cemetery	0.0%	28.1%	0.6%	0.0%	49.1%	1.9%	0.0%	22.9%	2.0%
Center Hill Park	0.0%	63.4%	1.3%	0.0%	28.6%	1.0%	0.0%	8.1%	0.7%
Gun Club Park	0.0%	86.9%	1.8%	0.0%	12.9%	0.4%	0.0%	0.2%	0.0%
Morningside Nature Preserve	0.0%	78.4%	1.4%	0.0%	26.5%	0.8%	0.0%	8.5%	0.6%

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Park	% UTC	% City	% Park	% NTV	% City	% Park	% NV
Wilson Mill Park	0.0%	67.8%	1.2%	0.0%	25.8%	0.8%	0.0%	6.3%	0.4%
Mozley Park	0.0%	35.9%	0.5%	0.0%	47.6%	1.2%	0.0%	16.6%	1.0%
Spink-Collins Park	0.0%	74.4%	0.9%	0.0%	23.7%	0.5%	0.0%	1.9%	0.1%
Herbert Taylor Park	0.0%	80.1%	1.0%	0.0%	23.8%	0.5%	0.0%	7.6%	0.4%
Falling Water	0.0%	71.1%	0.9%	0.0%	21.5%	0.4%	0.0%	7.3%	0.4%
Mary Shy Scott Park	0.0%	77.6%	0.9%	0.0%	18.3%	0.4%	0.0%	4.1%	0.2%
Frankie Allen Park	0.0%	46.9%	0.5%	0.0%	27.5%	0.5%	0.0%	25.7%	1.1%
Ben Hill Park	0.0%	43.8%	0.5%	0.0%	20.5%	0.4%	0.0%	35.5%	1.5%
Outdoor Activity Center	0.0%	81.4%	0.9%	0.0%	16.9%	0.3%	0.0%	1.4%	0.1%
Boulevard Crossing	0.0%	12.0%	0.1%	0.0%	78.2%	1.3%	0.0%	9.7%	0.4%
Whittier Mills Park	0.0%	66.3%	0.7%	0.0%	32.3%	0.6%	0.0%	1.4%	0.1%
Blue Heron Nature Preserve	0.0%	47.1%	0.5%	0.0%	13.4%	0.2%	0.0%	9.0%	0.3%
Washington Park	0.0%	37.2%	0.4%	0.0%	40.9%	0.6%	0.0%	21.9%	0.8%
Rosel Fann Park	0.0%	53.8%	0.5%	0.0%	25.3%	0.4%	0.0%	21.0%	0.7%
Historic Fourth Ward Park	0.0%	19.1%	0.2%	0.0%	35.8%	0.5%	0.0%	45.1%	1.6%
Central Park	0.0%	31.2%	0.3%	0.0%	49.8%	0.7%	0.0%	19.0%	0.6%
Grove Park	0.0%	38.8%	0.3%	0.0%	47.5%	0.7%	0.0%	13.7%	0.4%
Deerwood Park	0.0%	63.0%	0.5%	0.0%	29.0%	0.4%	0.0%	8.0%	0.3%
Thomasville Park	0.0%	52.0%	0.4%	0.0%	30.9%	0.4%	0.0%	17.1%	0.5%
Chosewood Park	0.0%	72.6%	0.6%	0.0%	24.2%	0.3%	0.0%	3.1%	0.1%
Collier Park	0.0%	75.2%	0.6%	0.0%	18.3%	0.2%	0.0%	6.4%	0.2%
Coventry Station CE	0.0%	86.2%	0.7%	0.0%	13.1%	0.2%	0.0%	0.9%	0.0%
Tanyard Creek Park	0.0%	59.4%	0.5%	0.0%	33.6%	0.4%	0.0%	7.0%	0.2%
Fort Peachtree Landings	0.0%	64.2%	0.5%	0.0%	22.7%	0.3%	0.0%	13.1%	0.4%
Rodney Cook Senior Park	0.0%	8.2%	0.1%	0.0%	11.7%	0.1%	0.0%	80.2%	2.2%
Rev. James Orange Park at Oakland City	0.0%	39.6%	0.3%	0.0%	46.2%	0.5%	0.0%	14.2%	0.4%
Isabel Gates Webster Park	0.0%	75.8%	0.5%	0.0%	18.1%	0.2%	0.0%	6.1%	0.2%
Pittman Park	0.0%	25.6%	0.2%	0.0%	53.2%	0.6%	0.0%	21.2%	0.5%
Rosa L. Burney Park	0.0%	24.2%	0.2%	0.0%	49.5%	0.5%	0.0%	26.3%	0.7%
Harper Park	0.0%	54.1%	0.4%	0.0%	34.6%	0.4%	0.0%	11.4%	0.3%
Coan Park	0.0%	31.4%	0.2%	0.0%	47.4%	0.5%	0.0%	21.2%	0.5%
Emma Millican Park	0.0%	76.5%	0.5%	0.0%	20.4%	0.2%	0.0%	3.0%	0.1%
Brownwood Park	0.0%	71.2%	0.4%	0.0%	21.8%	0.2%	0.0%	7.0%	0.2%
Shady Valley Park	0.0%	59.9%	0.3%	0.0%	28.5%	0.3%	0.0%	11.6%	0.2%
Mountain Way Commons	0.0%	58.0%	0.3%	0.0%	10.7%	0.1%	0.0%	31.3%	0.7%
South Atlanta Park	0.0%	38.6%	0.2%	0.0%	43.9%	0.4%	0.0%	17.4%	0.4%

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Park	% UTC	% City	% Park	% NTV	% City	% Park	% NV
Alexander Park	0.0%	93.4%	0.5%	0.0%	13.2%	0.1%	0.0%	2.7%	0.1%
Adamsville Recrecreation Center	0.0%	27.7%	0.1%	0.0%	17.3%	0.2%	0.0%	54.9%	1.1%
Stone Hogan Park	0.0%	87.4%	0.5%	0.0%	10.2%	0.1%	0.0%	2.5%	0.1%
Adair Park II	0.0%	16.9%	0.1%	0.0%	61.4%	0.5%	0.0%	21.7%	0.4%
Avery Park-Gilbert House	0.0%	90.1%	0.5%	0.0%	17.0%	0.1%	0.0%	2.3%	0.0%
A.D. Williams Park	0.0%	59.9%	0.3%	0.0%	33.0%	0.3%	0.0%	7.1%	0.1%
West Manor Park	0.0%	60.0%	0.3%	0.0%	26.0%	0.2%	0.0%	13.9%	0.3%
East Lake Park	0.0%	35.7%	0.2%	0.0%	48.4%	0.4%	0.0%	15.9%	0.3%
Campbellton Road Park	0.0%	83.1%	0.4%	0.0%	10.0%	0.1%	0.0%	6.6%	0.1%
Empire Park	0.0%	47.7%	0.2%	0.0%	48.4%	0.4%	0.0%	3.8%	0.1%
Benteen Park	0.0%	51.9%	0.3%	0.0%	41.7%	0.3%	0.0%	6.3%	0.1%
Winn Park	0.0%	62.0%	0.3%	0.0%	33.5%	0.3%	0.0%	4.6%	0.1%
Arthur Langford Jr Park	0.0%	36.5%	0.2%	0.0%	43.4%	0.3%	0.0%	20.0%	0.4%
Underwood Hills Park	0.0%	72.8%	0.3%	0.0%	31.5%	0.2%	0.0%	6.0%	0.1%
Howard Park	0.0%	90.6%	0.4%	0.0%	20.8%	0.2%	0.0%	9.0%	0.2%
Klaus Park and Preserve in Bakers Ferry	0.0%	89.1%	0.4%	0.0%	8.8%	0.1%	0.0%	2.1%	0.0%
English Park	0.0%	62.7%	0.3%	0.0%	31.1%	0.2%	0.0%	6.1%	0.1%
Enota Park	0.0%	62.9%	0.3%	0.0%	32.6%	0.2%	0.0%	4.3%	0.1%
Barbara A. McCoy Park	0.0%	74.9%	0.3%	0.0%	23.7%	0.2%	0.0%	1.5%	0.0%
D.H. Stanton Park	0.0%	23.7%	0.1%	0.0%	59.5%	0.4%	0.0%	17.3%	0.3%
Sibley Park	0.0%	92.1%	0.4%	0.0%	9.1%	0.1%	0.0%	2.4%	0.0%
Cumberlander	0.0%	92.9%	0.4%	0.0%	5.7%	0.0%	0.0%	1.5%	0.0%
Lenox-Wildwood Park	0.0%	86.0%	0.4%	0.0%	20.3%	0.1%	0.0%	5.5%	0.1%
Daniel Johnson Nature Preserve	0.0%	83.2%	0.3%	0.0%	14.5%	0.1%	0.0%	2.1%	0.0%
Peachtree Hills Park	0.0%	38.3%	0.1%	0.0%	41.6%	0.2%	0.0%	20.1%	0.3%
Phoenix II Park	0.0%	23.4%	0.1%	0.0%	57.0%	0.3%	0.0%	19.9%	0.3%
Beaverbrook Park	0.0%	81.6%	0.3%	0.0%	15.1%	0.1%	0.0%	3.3%	0.0%
Greenbriar	0.0%	80.0%	0.3%	0.0%	17.3%	0.1%	0.0%	2.6%	0.0%
Walker Park	0.0%	32.0%	0.1%	0.0%	57.8%	0.3%	0.0%	9.8%	0.1%
Bessie Branham Park	0.0%	24.5%	0.1%	0.0%	40.9%	0.2%	0.0%	34.6%	0.4%
West End Park	0.0%	38.8%	0.1%	0.0%	50.7%	0.3%	0.0%	10.9%	0.1%
Kirkwood Urban Forest	0.0%	73.6%	0.2%	0.0%	23.4%	0.1%	0.0%	2.5%	0.0%
J. Allen Couch Park	0.0%	27.1%	0.1%	0.0%	67.9%	0.3%	0.0%	4.9%	0.1%
Emma Lane	0.0%	68.9%	0.2%	0.0%	26.4%	0.1%	0.0%	4.6%	0.1%
Tanyard Creek Urban Forest	0.0%	76.4%	0.2%	0.0%	15.1%	0.1%	0.0%	8.5%	0.1%

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Park	% UTC	% City	% Park	% NTV	% City	% Park	% NV
Adair Park I	0.0%	37.4%	0.1%	0.0%	56.3%	0.3%	0.0%	6.3%	0.1%
Orme Park	0.0%	78.1%	0.2%	0.0%	18.3%	0.1%	0.0%	3.6%	0.0%
Ansley Park	0.0%	76.4%	0.2%	0.0%	15.4%	0.1%	0.0%	8.2%	0.1%
Dean Rusk Park	0.0%	31.4%	0.1%	0.0%	44.2%	0.2%	0.0%	24.2%	0.3%
Riverside	0.0%	71.4%	0.2%	0.0%	20.6%	0.1%	0.0%	7.9%	0.1%
Renaissance Park	0.0%	67.5%	0.2%	0.0%	24.7%	0.1%	0.0%	7.0%	0.1%
Selena S. Butler Park	0.0%	8.9%	0.0%	0.0%	26.4%	0.1%	0.0%	64.9%	0.7%
Tullwater Park	0.0%	73.0%	0.2%	0.0%	19.3%	0.1%	0.0%	7.7%	0.1%
Cleveland Avenue Park	0.0%	45.0%	0.1%	0.0%	38.2%	0.2%	0.0%	17.0%	0.2%
Springlake Park	0.0%	91.2%	0.2%	0.0%	14.1%	0.1%	0.0%	4.2%	0.0%
Springdale Park	0.0%	33.0%	0.1%	0.0%	59.4%	0.2%	0.0%	7.5%	0.1%
Beecher Park	0.0%	89.2%	0.2%	0.0%	8.9%	0.0%	0.0%	2.0%	0.0%
McClatchey Park	0.0%	65.2%	0.2%	0.0%	19.1%	0.1%	0.0%	15.5%	0.1%
Lake Claire Park	0.0%	71.0%	0.2%	0.0%	20.7%	0.1%	0.0%	8.4%	0.1%
Drake Park	0.0%	96.7%	0.2%	0.0%	23.8%	0.1%	0.0%	0.1%	0.0%
Bass Recreation Center	0.0%	23.1%	0.1%	0.0%	60.3%	0.2%	0.0%	16.2%	0.1%
Four Corners Park	0.0%	29.0%	0.1%	0.0%	62.0%	0.2%	0.0%	9.3%	0.1%
Little Nancy Creek Park	0.0%	73.5%	0.2%	0.0%	16.7%	0.1%	0.0%	9.8%	0.1%
Memorial Drive Greenway	0.0%	10.9%	0.0%	0.0%	70.3%	0.3%	0.0%	19.5%	0.2%
Rawson-Washington Park	0.0%	19.5%	0.0%	0.0%	49.7%	0.2%	0.0%	31.0%	0.3%
Shirley Place Park	0.0%	65.1%	0.1%	0.0%	30.8%	0.1%	0.0%	3.8%	0.0%
Cleopas R. Johnson Park	0.0%	33.6%	0.1%	0.0%	43.9%	0.1%	0.0%	22.5%	0.2%
Edwin Place Park	0.0%	82.6%	0.2%	0.0%	16.3%	0.1%	0.0%	1.1%	0.0%
Springvale Park	0.0%	64.8%	0.1%	0.0%	23.5%	0.1%	0.0%	11.7%	0.1%
John C. Burdine Center	0.0%	27.6%	0.1%	0.0%	48.4%	0.2%	0.0%	23.8%	0.2%
Peachtree Battle Parkway	0.0%	65.4%	0.1%	0.0%	21.6%	0.1%	0.0%	13.2%	0.1%
Shadyside Park	0.0%	73.2%	0.1%	0.0%	17.5%	0.1%	0.0%	9.2%	0.1%
Indian Creek Park	0.0%	82.4%	0.2%	0.0%	10.8%	0.0%	0.0%	6.8%	0.1%
Phoenix III Park	0.0%	46.6%	0.1%	0.0%	41.3%	0.1%	0.0%	12.6%	0.1%
Cabbagetown Park	0.0%	38.4%	0.1%	0.0%	45.8%	0.1%	0.0%	16.0%	0.1%
Spring Valley Park	0.0%	93.5%	0.2%	0.0%	17.2%	0.0%	0.0%	3.0%	0.0%
Virgilee Park	0.0%	41.9%	0.1%	0.0%	52.1%	0.1%	0.0%	6.0%	0.0%
Oak Grove Park	0.0%	52.6%	0.1%	0.0%	33.7%	0.1%	0.0%	13.5%	0.1%
Lang-Carson Park	0.0%	28.4%	0.0%	0.0%	39.7%	0.1%	0.0%	32.1%	0.2%
Garden Hills Park	0.0%	59.4%	0.1%	0.0%	18.1%	0.0%	0.0%	22.6%	0.1%
Robert W. Woodruff Park	0.0%	34.0%	0.1%	0.0%	34.3%	0.1%	0.0%	31.9%	0.2%

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Park	% UTC	% City	% Park	% NTV	% City	% Park	% NV
Kathryn Johnston Memorial Park	0.0%	32.5%	0.1%	0.0%	64.5%	0.2%	0.0%	3.2%	0.0%
Chattahoochee Park	0.0%	33.8%	0.1%	0.0%	43.3%	0.1%	0.0%	23.1%	0.1%
Mayson Ravine	0.0%	99.4%	0.2%	0.0%	9.9%	0.0%	0.0%	2.0%	0.0%
John Howell Memorial Park	0.0%	64.6%	0.1%	0.0%	21.0%	0.1%	0.0%	14.3%	0.1%
Haynes Manor Park	0.0%	90.4%	0.1%	0.0%	25.1%	0.1%	0.0%	7.7%	0.0%
Dale Creek Park	0.0%	93.4%	0.1%	0.0%	15.9%	0.0%	0.0%	1.1%	0.0%
Mayson Park	0.0%	97.1%	0.1%	0.0%	12.7%	0.0%	0.0%	2.2%	0.0%
Tucson Trail Park	0.0%	71.3%	0.1%	0.0%	24.2%	0.1%	0.0%	4.7%	0.0%
Gilliam Park	0.0%	74.2%	0.1%	0.0%	18.3%	0.0%	0.0%	7.6%	0.0%
Sidney Marcus Park	0.0%	69.0%	0.1%	0.0%	27.3%	0.1%	0.0%	3.5%	0.0%
Knight Park	0.0%	70.1%	0.1%	0.0%	24.9%	0.1%	0.0%	5.3%	0.0%
Rose Circle Park	0.0%	51.7%	0.1%	0.0%	38.8%	0.1%	0.0%	9.2%	0.0%
Mantissa Road	0.0%	85.5%	0.1%	0.0%	12.9%	0.0%	0.0%	1.7%	0.0%
Goldsboro Park	0.0%	48.0%	0.1%	0.0%	27.2%	0.1%	0.0%	24.7%	0.1%
Ella Mae Wade Brayboy Memorial Park	0.0%	30.2%	0.0%	0.0%	54.9%	0.1%	0.0%	15.4%	0.1%
J.F. Kennedy Park	0.0%	3.7%	0.0%	0.0%	5.6%	0.0%	0.0%	91.0%	0.4%
17th Street Park	0.0%	92.5%	0.1%	0.0%	20.0%	0.0%	0.0%	9.6%	0.0%
Lillian Cooper Shepherd Park	0.0%	54.4%	0.1%	0.0%	37.4%	0.1%	0.0%	8.3%	0.0%
Sunnybrook Park	0.0%	92.2%	0.1%	0.0%	11.0%	0.0%	0.0%	5.9%	0.0%
Howell Park	0.0%	50.9%	0.1%	0.0%	38.4%	0.1%	0.0%	10.4%	0.0%
Vermont Road Park	0.0%	81.4%	0.1%	0.0%	10.7%	0.0%	0.0%	7.9%	0.0%
Lanier Boulevard Parkway	0.0%	55.9%	0.1%	0.0%	26.1%	0.0%	0.0%	17.7%	0.1%
Doctors Park	0.0%	38.9%	0.0%	0.0%	15.4%	0.0%	0.0%	45.7%	0.2%
Yonah Park	0.0%	75.2%	0.1%	0.0%	20.6%	0.0%	0.0%	4.2%	0.0%
Iverson Park	0.0%	48.9%	0.0%	0.0%	40.4%	0.1%	0.0%	10.6%	0.0%

7. Zoning

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
C-1	0.4%	22.8%	0.9%	0.3%	17.8%	0.7%	1.1%	59.5%	2.4%
C-1-C	0.2%	33.1%	0.5%	0.1%	18.8%	0.3%	0.3%	48.1%	0.7%
C-2	0.2%	21.5%	0.4%	0.1%	18.0%	0.3%	0.5%	60.5%	1.1%

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
C-2-C	0.0%	22.8%	0.1%	0.0%	20.6%	0.1%	0.1%	56.5%	0.2%
C-3	0.0%	9.7%	0.1%	0.0%	7.6%	0.1%	0.3%	82.7%	0.7%
C-3-C	0.0%	11.8%	0.1%	0.0%	13.8%	0.1%	0.2%	74.4%	0.4%
C-4	0.0%	19.7%	0.0%	0.0%	20.2%	0.0%	0.1%	60.1%	0.1%
C-4-C	0.0%	4.3%	0.0%	0.0%	11.7%	0.0%	0.2%	84.0%	0.3%
C-5	0.0%	0.9%	0.0%	0.0%	2.0%	0.0%	0.0%	97.2%	0.0%
C-5-C	0.0%	12.4%	0.0%	0.0%	32.1%	0.0%	0.0%	55.6%	0.0%
FCR-3	0.5%	64.9%	1.0%	0.1%	15.0%	0.2%	0.1%	20.1%	0.3%
HC-20A SA1	0.0%	6.3%	0.0%	0.0%	9.7%	0.0%	0.0%	84.0%	0.0%
HC-20A SA2	0.0%	21.2%	0.0%	0.0%	22.8%	0.0%	0.0%	56.0%	0.0%
HC-20A SA3	0.0%	36.0%	0.1%	0.0%	22.8%	0.0%	0.0%	41.1%	0.1%
HC-20A SA4	0.0%	29.5%	0.0%	0.0%	16.5%	0.0%	0.0%	54.0%	0.0%
HC-20A SA4-C	0.0%	14.0%	0.0%	0.0%	8.6%	0.0%	0.0%	77.3%	0.0%
HC-20A SA5	0.0%	3.9%	0.0%	0.0%	7.8%	0.0%	0.0%	88.3%	0.1%
HC-20B	0.2%	51.5%	0.4%	0.1%	26.3%	0.2%	0.1%	22.3%	0.2%
HC-20C SA1	0.0%	15.8%	0.0%	0.0%	19.8%	0.0%	0.0%	64.4%	0.0%
HC-20C SA2	0.0%	22.2%	0.0%	0.0%	19.0%	0.0%	0.0%	58.8%	0.0%
HC-20C SA3	0.0%	7.8%	0.0%	0.0%	15.3%	0.0%	0.0%	77.0%	0.1%
HC-20C SA3-C	0.0%	34.1%	0.0%	0.0%	36.8%	0.0%	0.0%	29.1%	0.0%
HC-20C SA4	0.0%	5.0%	0.0%	0.0%	9.6%	0.0%	0.1%	85.3%	0.1%
HC-20D	0.0%	36.5%	0.0%	0.0%	40.1%	0.0%	0.0%	23.4%	0.0%
HC-20E	0.0%	27.3%	0.0%	0.0%	47.9%	0.1%	0.0%	24.9%	0.0%
HC-20N SA1	0.0%	5.4%	0.0%	0.0%	12.4%	0.0%	0.0%	82.3%	0.1%
HC-20N SA2	0.0%	5.4%	0.0%	0.0%	15.6%	0.0%	0.0%	79.1%	0.0%
I-1	0.9%	21.4%	2.0%	1.0%	21.6%	2.1%	2.5%	57.0%	5.4%
I-1-C	0.4%	42.9%	0.8%	0.2%	22.0%	0.4%	0.3%	35.0%	0.6%
I-2	1.3%	23.1%	2.9%	1.2%	21.2%	2.6%	3.2%	55.7%	7.0%
I-2-C	0.0%	20.3%	0.1%	0.0%	15.4%	0.1%	0.1%	64.2%	0.3%
LD Mean Street	0.0%	3.4%	0.0%	0.0%	4.3%	0.0%	0.0%	92.3%	0.0%
LW	0.0%	9.0%	0.0%	0.0%	9.5%	0.0%	0.0%	81.5%	0.0%
LW-C	0.0%	13.7%	0.0%	0.0%	13.2%	0.0%	0.0%	73.1%	0.0%
MR-1	0.0%	25.8%	0.0%	0.0%	14.0%	0.0%	0.0%	60.2%	0.0%
MR-2	0.1%	39.8%	0.1%	0.1%	48.1%	0.2%	0.0%	12.1%	0.0%
MR-2-C	0.0%	41.9%	0.1%	0.0%	26.3%	0.0%	0.0%	31.8%	0.0%
MR-3	0.0%	40.1%	0.1%	0.0%	21.9%	0.0%	0.0%	38.0%	0.1%
MR-3-C	0.1%	39.3%	0.1%	0.0%	24.2%	0.1%	0.1%	36.5%	0.1%
MR-4-C	0.0%	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	93.1%	0.0%

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
MR-4A	0.0%	23.4%	0.0%	0.0%	26.5%	0.0%	0.0%	50.0%	0.1%
MR-4A-C	0.0%	21.0%	0.1%	0.0%	26.0%	0.1%	0.1%	53.0%	0.2%
MR-4B	0.0%	63.2%	0.1%	0.0%	25.4%	0.0%	0.0%	11.4%	0.0%
MR-4B-C	0.0%	51.8%	0.0%	0.0%	22.1%	0.0%	0.0%	26.1%	0.0%
MR-5A-C	0.0%	10.2%	0.0%	0.0%	11.6%	0.0%	0.0%	78.2%	0.0%
MRC-1	0.1%	31.9%	0.1%	0.0%	20.8%	0.1%	0.1%	47.3%	0.2%
MRC-1-C	0.1%	19.6%	0.1%	0.1%	18.8%	0.1%	0.2%	61.7%	0.4%
MRC-2	0.1%	45.1%	0.2%	0.0%	28.8%	0.1%	0.0%	26.0%	0.1%
MRC-2-C	0.1%	21.4%	0.1%	0.0%	14.8%	0.1%	0.2%	63.8%	0.4%
MRC-3	0.0%	14.9%	0.0%	0.0%	20.3%	0.0%	0.0%	64.8%	0.1%
MRC-3-C	0.1%	14.0%	0.2%	0.1%	15.5%	0.2%	0.5%	70.5%	1.1%
NC-1	0.0%	11.4%	0.0%	0.0%	18.5%	0.0%	0.0%	70.1%	0.1%
NC-10 SA1	0.0%	10.6%	0.0%	0.0%	6.5%	0.0%	0.0%	83.0%	0.0%
NC-10 SA2	0.0%	30.8%	0.0%	0.0%	10.5%	0.0%	0.0%	58.7%	0.0%
NC-11	0.0%	13.4%	0.0%	0.0%	10.4%	0.0%	0.0%	76.1%	0.0%
NC-12 SA1	0.0%	5.2%	0.0%	0.0%	8.6%	0.0%	0.0%	86.2%	0.0%
NC-12 SA2	0.0%	18.7%	0.0%	0.0%	16.4%	0.0%	0.0%	64.8%	0.0%
NC-15	0.0%	12.1%	0.0%	0.0%	21.2%	0.0%	0.0%	66.7%	0.0%
NC-2	0.0%	14.0%	0.0%	0.0%	16.5%	0.0%	0.0%	69.5%	0.1%
NC-3	0.0%	26.3%	0.0%	0.0%	9.5%	0.0%	0.0%	64.2%	0.0%
NC-4	0.0%	16.2%	0.0%	0.0%	11.6%	0.0%	0.0%	72.2%	0.0%
NC-5	0.0%	13.0%	0.0%	0.0%	10.8%	0.0%	0.0%	76.2%	0.1%
NC-6	0.0%	21.3%	0.0%	0.0%	14.2%	0.0%	0.0%	64.5%	0.0%
NC-7	0.0%	17.4%	0.0%	0.0%	25.7%	0.0%	0.0%	56.9%	0.0%
NC-7-C	0.0%	20.1%	0.0%	0.0%	38.4%	0.0%	0.0%	41.5%	0.0%
NC-8	0.0%	14.3%	0.0%	0.0%	21.5%	0.0%	0.0%	64.2%	0.0%
NC-9	0.0%	15.8%	0.0%	0.0%	20.3%	0.0%	0.0%	63.9%	0.0%
O-I	0.5%	30.7%	1.2%	0.4%	22.6%	0.9%	0.8%	46.7%	1.8%
O-I-C	0.5%	46.3%	1.1%	0.2%	14.7%	0.3%	0.4%	39.0%	0.9%
PD-H	1.0%	55.7%	2.2%	0.3%	18.6%	0.7%	0.5%	25.7%	1.0%
PD-H1	0.0%	65.5%	0.1%	0.0%	18.1%	0.0%	0.0%	16.5%	0.0%
PD-H2	0.0%	51.3%	0.0%	0.0%	14.8%	0.0%	0.0%	33.9%	0.0%
PD-MU	0.4%	28.8%	0.8%	0.4%	26.5%	0.8%	0.6%	44.8%	1.3%
PD-OC	0.0%	16.9%	0.1%	0.0%	7.4%	0.0%	0.1%	75.7%	0.3%
R-1	1.1%	65.8%	2.4%	0.3%	15.5%	0.6%	0.3%	18.7%	0.7%
R-2	2.3%	62.7%	5.0%	0.7%	17.8%	1.4%	0.7%	19.6%	1.6%
R-2A	0.7%	67.2%	1.4%	0.2%	16.2%	0.3%	0.2%	16.5%	0.4%

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
R-2B	0.3%	63.5%	0.6%	0.1%	14.9%	0.1%	0.1%	21.7%	0.2%
R-3	9.5%	63.9%	20.5%	2.7%	18.0%	5.8%	2.7%	18.1%	5.8%
R-3-C	0.0%	73.8%	0.1%	0.0%	11.2%	0.0%	0.0%	15.0%	0.0%
R-3A	0.2%	60.6%	0.5%	0.1%	19.4%	0.2%	0.1%	20.0%	0.2%
R-4	16.0%	56.4%	34.4%	6.7%	23.6%	14.4%	5.7%	20.0%	12.2%
R-4-C	0.0%	46.2%	0.1%	0.0%	31.8%	0.1%	0.0%	21.9%	0.1%
R-4A	2.9%	53.9%	6.2%	1.4%	26.7%	3.1%	1.0%	19.4%	2.2%
R-4A-C	0.0%	46.8%	0.0%	0.0%	23.2%	0.0%	0.0%	30.0%	0.0%
R-4B	0.1%	34.8%	0.3%	0.1%	31.4%	0.2%	0.1%	33.8%	0.3%
R-4B-C	0.0%	28.8%	0.1%	0.1%	34.6%	0.1%	0.1%	36.5%	0.1%
R-5	1.2%	39.5%	2.7%	0.9%	28.7%	1.9%	1.0%	31.7%	2.1%
R-5-C	0.1%	41.8%	0.2%	0.1%	27.8%	0.1%	0.1%	30.4%	0.2%
R-LC	0.0%	37.4%	0.1%	0.0%	17.5%	0.0%	0.1%	45.1%	0.1%
R-LC-C	0.0%	43.6%	0.1%	0.0%	15.5%	0.0%	0.0%	41.0%	0.1%
RG-1	0.1%	41.3%	0.1%	0.0%	31.2%	0.1%	0.0%	27.5%	0.1%
RG-1-C	0.0%	44.1%	0.0%	0.0%	17.2%	0.0%	0.0%	38.8%	0.0%
RG-2	0.9%	42.7%	2.0%	0.5%	22.9%	1.1%	0.7%	34.3%	1.6%
RG-2-C	0.3%	50.8%	0.7%	0.1%	19.1%	0.3%	0.2%	30.1%	0.4%
RG-3	1.6%	41.7%	3.5%	0.9%	23.8%	2.0%	1.3%	34.6%	2.9%
RG-3-C	0.2%	32.8%	0.5%	0.2%	23.2%	0.4%	0.3%	44.0%	0.7%
RG-4	0.1%	21.5%	0.2%	0.1%	22.6%	0.2%	0.2%	55.9%	0.5%
RG-4-C	0.0%	25.0%	0.1%	0.0%	14.4%	0.1%	0.1%	60.6%	0.2%
RG-5	0.0%	24.0%	0.0%	0.0%	14.8%	0.0%	0.1%	61.1%	0.1%
RG-5-C	0.0%	32.6%	0.0%	0.0%	11.3%	0.0%	0.0%	56.1%	0.0%
RL-C	0.0%	11.9%	0.0%	0.0%	24.9%	0.0%	0.0%	63.2%	0.0%
SPI-1 SA1	0.0%	4.4%	0.1%	0.1%	9.2%	0.2%	0.8%	86.4%	1.7%
SPI-1 SA2	0.0%	5.9%	0.0%	0.0%	8.2%	0.0%	0.1%	85.9%	0.1%
SPI-1 SA3	0.0%	7.7%	0.0%	0.0%	11.0%	0.0%	0.0%	81.3%	0.1%
SPI-1 SA4	0.0%	24.6%	0.0%	0.0%	14.4%	0.0%	0.1%	60.9%	0.1%
SPI-1 SA5	0.0%	7.4%	0.0%	0.0%	19.9%	0.0%	0.1%	72.7%	0.2%
SPI-1 SA6	0.0%	3.5%	0.0%	0.0%	6.6%	0.0%	0.0%	89.8%	0.1%
SPI-1 SA7	0.0%	3.7%	0.0%	0.0%	4.1%	0.0%	0.0%	92.2%	0.1%
SPI-11 SA1	0.0%	6.9%	0.0%	0.0%	17.3%	0.0%	0.0%	75.9%	0.0%
SPI-11 SA10	0.0%	60.0%	0.0%	0.0%	23.5%	0.0%	0.0%	16.4%	0.0%
SPI-11 SA11	0.0%	5.6%	0.0%	0.0%	11.3%	0.0%	0.0%	83.1%	0.0%
SPI-11 SA12	0.0%	10.7%	0.0%	0.0%	27.5%	0.0%	0.0%	61.9%	0.1%
SPI-11 SA2	0.0%	11.0%	0.0%	0.0%	15.7%	0.0%	0.0%	73.4%	0.0%

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
SPI-11 SA3	0.0%	18.7%	0.0%	0.0%	29.3%	0.0%	0.0%	52.0%	0.1%
SPI-11 SA4	0.0%	35.4%	0.0%	0.0%	34.7%	0.0%	0.0%	29.8%	0.0%
SPI-11 SA5	0.0%	37.3%	0.0%	0.0%	23.8%	0.0%	0.0%	38.9%	0.0%
SPI-11 SA6	0.1%	38.5%	0.1%	0.0%	23.5%	0.1%	0.1%	38.1%	0.1%
SPI-11 SA7	0.0%	26.2%	0.0%	0.0%	25.9%	0.0%	0.0%	47.9%	0.1%
SPI-11 SA8	0.0%	23.7%	0.0%	0.0%	31.0%	0.0%	0.0%	45.3%	0.1%
SPI-11 SA9	0.0%	19.2%	0.0%	0.0%	18.5%	0.0%	0.0%	62.3%	0.0%
SPI-12 SA1	0.0%	6.9%	0.0%	0.0%	5.2%	0.0%	0.2%	87.9%	0.4%
SPI-12 SA2	0.0%	15.3%	0.0%	0.0%	13.5%	0.0%	0.0%	71.3%	0.0%
SPI-12 SA3	0.0%	17.8%	0.0%	0.0%	26.1%	0.0%	0.0%	56.1%	0.0%
SPI-15 SA1	0.0%	9.6%	0.0%	0.0%	5.7%	0.0%	0.0%	84.7%	0.1%
SPI-15 SA2	0.0%	9.2%	0.0%	0.0%	10.9%	0.0%	0.0%	79.9%	0.0%
SPI-15 SA3	0.0%	7.3%	0.0%	0.0%	8.2%	0.0%	0.1%	84.5%	0.2%
SPI-15 SA4	0.0%	31.0%	0.0%	0.0%	17.3%	0.0%	0.0%	51.7%	0.0%
SPI-15 SA5	0.0%	37.7%	0.0%	0.0%	23.7%	0.0%	0.0%	38.6%	0.0%
SPI-15 SA6	0.0%	35.9%	0.0%	0.0%	18.0%	0.0%	0.0%	46.1%	0.0%
SPI-15 SA7	0.0%	19.0%	0.0%	0.0%	12.7%	0.0%	0.0%	68.4%	0.0%
SPI-15 SA8	0.0%	11.3%	0.0%	0.0%	14.0%	0.0%	0.0%	74.7%	0.1%
SPI-16 SA1	0.1%	9.6%	0.1%	0.1%	9.2%	0.1%	0.5%	81.1%	1.1%
SPI-16 SA1C	0.0%	19.9%	0.0%	0.0%	18.4%	0.0%	0.0%	61.7%	0.0%
SPI-16 SA2	0.0%	17.4%	0.0%	0.0%	10.7%	0.0%	0.0%	71.9%	0.0%
SPI-16 SA2 JSTA	0.0%	10.8%	0.0%	0.0%	7.7%	0.0%	0.0%	81.5%	0.0%
SPI-16 SA3	0.0%	10.6%	0.0%	0.0%	7.7%	0.0%	0.0%	81.6%	0.0%
SPI-17 SA1	0.0%	26.5%	0.0%	0.0%	16.6%	0.0%	0.0%	56.9%	0.0%
SPI-17 SA2	0.0%	17.6%	0.0%	0.0%	12.7%	0.0%	0.0%	69.8%	0.0%
SPI-17 SA3	0.0%	8.2%	0.0%	0.0%	10.0%	0.0%	0.0%	81.9%	0.0%
SPI-17 SA4	0.0%	25.6%	0.0%	0.0%	15.4%	0.0%	0.0%	59.0%	0.0%
SPI-18 SA1	0.0%	14.1%	0.0%	0.0%	23.9%	0.0%	0.0%	61.9%	0.1%
SPI-18 SA10	0.0%	14.7%	0.0%	0.0%	34.2%	0.1%	0.0%	51.2%	0.1%
SPI-18 SA2	0.0%	11.5%	0.0%	0.0%	22.8%	0.0%	0.0%	65.8%	0.1%
SPI-18 SA3	0.0%	9.2%	0.0%	0.0%	21.0%	0.0%	0.0%	69.8%	0.0%
SPI-18 SA4	0.0%	20.1%	0.0%	0.0%	33.6%	0.0%	0.0%	46.2%	0.1%
SPI-18 SA5	0.0%	29.8%	0.0%	0.0%	29.4%	0.0%	0.0%	40.7%	0.1%
SPI-18 SA6	0.0%	30.6%	0.0%	0.0%	31.0%	0.0%	0.0%	38.4%	0.0%
SPI-18 SA7	0.0%	15.9%	0.0%	0.0%	29.9%	0.0%	0.0%	54.3%	0.0%
SPI-18 SA8	0.0%	7.1%	0.0%	0.0%	8.3%	0.0%	0.1%	84.6%	0.1%
SPI-18 SA9	0.0%	15.0%	0.0%	0.0%	28.9%	0.0%	0.0%	56.1%	0.0%

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
SPI-19 overlay	0.0%	6.7%	0.0%	0.0%	20.0%	0.0%	0.0%	73.3%	0.0%
SPI-19 SA10	0.0%	14.9%	0.0%	0.0%	40.5%	0.0%	0.0%	44.6%	0.0%
SPI-19 SA11	0.0%	7.2%	0.0%	0.0%	8.9%	0.0%	0.0%	83.9%	0.0%
SPI-19 SA5	0.0%	18.6%	0.0%	0.0%	32.4%	0.0%	0.0%	49.0%	0.0%
SPI-19 SA6	0.0%	27.7%	0.0%	0.0%	31.4%	0.1%	0.0%	40.9%	0.1%
SPI-19 SA8	0.0%	23.3%	0.0%	0.0%	24.9%	0.0%	0.0%	51.8%	0.0%
SPI-20 SA1	0.0%	16.3%	0.1%	0.0%	17.7%	0.1%	0.1%	66.1%	0.2%
SPI-20 SA2	0.0%	26.2%	0.1%	0.0%	16.4%	0.0%	0.1%	57.4%	0.1%
SPI-20 SA3	0.0%	18.9%	0.0%	0.0%	17.6%	0.0%	0.0%	63.5%	0.0%
SPI-20 SA4	0.0%	40.2%	0.1%	0.0%	16.8%	0.0%	0.0%	43.0%	0.1%
SPI-20 SA5	0.1%	54.3%	0.2%	0.0%	19.0%	0.1%	0.0%	26.8%	0.1%
SPI-20 SA6	0.0%	57.8%	0.0%	0.0%	35.7%	0.0%	0.0%	6.5%	0.0%
SPI-21 SA1	0.0%	1.4%	0.0%	0.0%	4.7%	0.0%	0.0%	93.8%	0.0%
SPI-21 SA10	0.0%	2.1%	0.0%	0.0%	8.2%	0.0%	0.0%	89.7%	0.1%
SPI-21 SA2	0.0%	7.3%	0.0%	0.0%	14.0%	0.0%	0.0%	78.7%	0.1%
SPI-21 SA3	0.0%	8.4%	0.0%	0.0%	13.2%	0.0%	0.0%	78.5%	0.0%
SPI-21 SA4	0.0%	8.2%	0.0%	0.0%	14.2%	0.0%	0.0%	77.6%	0.0%
SPI-21 SA5	0.0%	14.6%	0.0%	0.0%	19.6%	0.0%	0.0%	65.9%	0.1%
SPI-21 SA6	0.0%	11.7%	0.0%	0.0%	11.0%	0.0%	0.0%	77.4%	0.0%
SPI-21 SA7	0.0%	48.4%	0.0%	0.0%	35.7%	0.0%	0.0%	15.9%	0.0%
SPI-21 SA8	0.0%	15.3%	0.0%	0.0%	26.8%	0.0%	0.0%	57.9%	0.1%
SPI-21 SA9	0.0%	5.1%	0.0%	0.0%	12.8%	0.0%	0.0%	82.1%	0.1%
SPI-22 SA1	0.0%	4.5%	0.0%	0.0%	16.0%	0.0%	0.0%	79.5%	0.0%
SPI-22 SA2	0.0%	3.7%	0.0%	0.0%	46.6%	0.0%	0.0%	49.7%	0.0%
SPI-22 SA3	0.0%	8.0%	0.0%	0.0%	29.5%	0.0%	0.0%	62.4%	0.1%
SPI-22 SA4	0.0%	8.6%	0.0%	0.0%	16.2%	0.0%	0.1%	75.2%	0.1%
SPI-22 TSA	0.0%	7.3%	0.0%	0.0%	11.6%	0.0%	0.0%	81.0%	0.0%
SPI-3 SA1	0.0%	31.5%	0.0%	0.0%	23.3%	0.0%	0.0%	45.2%	0.0%
SPI-3 SA2	0.0%	45.7%	0.0%	0.0%	26.4%	0.0%	0.0%	27.9%	0.0%
SPI-3 SA3	0.0%	40.7%	0.0%	0.0%	25.3%	0.0%	0.0%	34.0%	0.0%
SPI-3 SA5	0.0%	33.1%	0.0%	0.0%	26.1%	0.0%	0.0%	40.7%	0.0%
SPI-3 SA6	0.0%	19.8%	0.0%	0.0%	33.5%	0.0%	0.0%	46.7%	0.0%
SPI-3 SA7	0.0%	4.2%	0.0%	0.0%	13.4%	0.0%	0.0%	82.4%	0.0%
SPI-3 SA8	0.0%	15.2%	0.0%	0.0%	20.5%	0.0%	0.0%	64.3%	0.0%
SPI-3 SA9	0.0%	11.2%	0.0%	0.0%	10.8%	0.0%	0.0%	78.1%	0.0%
SPI-5 SA1	0.0%	49.4%	0.0%	0.0%	38.4%	0.0%	0.0%	12.2%	0.0%
SPI-5 SA2	0.0%	33.4%	0.0%	0.0%	20.2%	0.0%	0.0%	46.3%	0.0%

Zoning Class	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
SPI-5 SA3	0.0%	41.0%	0.0%	0.0%	22.1%	0.0%	0.0%	36.9%	0.0%
SPI-6 SA1	0.0%	60.1%	0.0%	0.0%	30.0%	0.0%	0.0%	9.9%	0.0%
SPI-6 SA2	0.0%	48.3%	0.0%	0.0%	37.0%	0.0%	0.0%	14.7%	0.0%
SPI-6 SA3	0.0%	40.8%	0.0%	0.0%	29.6%	0.0%	0.0%	29.6%	0.0%
SPI-6 SA4	0.0%	28.4%	0.0%	0.0%	40.0%	0.0%	0.0%	31.6%	0.0%
SPI-7 SA1	0.0%	38.4%	0.0%	0.0%	50.6%	0.0%	0.0%	11.0%	0.0%
SPI-7 SA2A	0.0%	52.1%	0.0%	0.0%	13.0%	0.0%	0.0%	34.8%	0.0%
SPI-7 SA2B	0.0%	23.2%	0.0%	0.0%	12.0%	0.0%	0.0%	64.8%	0.0%
SPI-7 SA2C	0.0%	42.3%	0.0%	0.0%	23.9%	0.0%	0.0%	33.8%	0.0%
SPI-7 SA3	0.0%	26.1%	0.0%	0.0%	17.1%	0.0%	0.0%	56.7%	0.0%
SPI-9 SA1	0.0%	7.1%	0.0%	0.0%	3.7%	0.0%	0.1%	89.2%	0.2%
SPI-9 SA2	0.0%	31.3%	0.0%	0.0%	27.1%	0.0%	0.0%	41.6%	0.0%
SPI-9 SA3	0.0%	14.5%	0.0%	0.0%	4.9%	0.0%	0.0%	80.5%	0.1%
SPI-9 SA4	0.0%	6.9%	0.0%	0.0%	4.4%	0.0%	0.0%	88.7%	0.0%

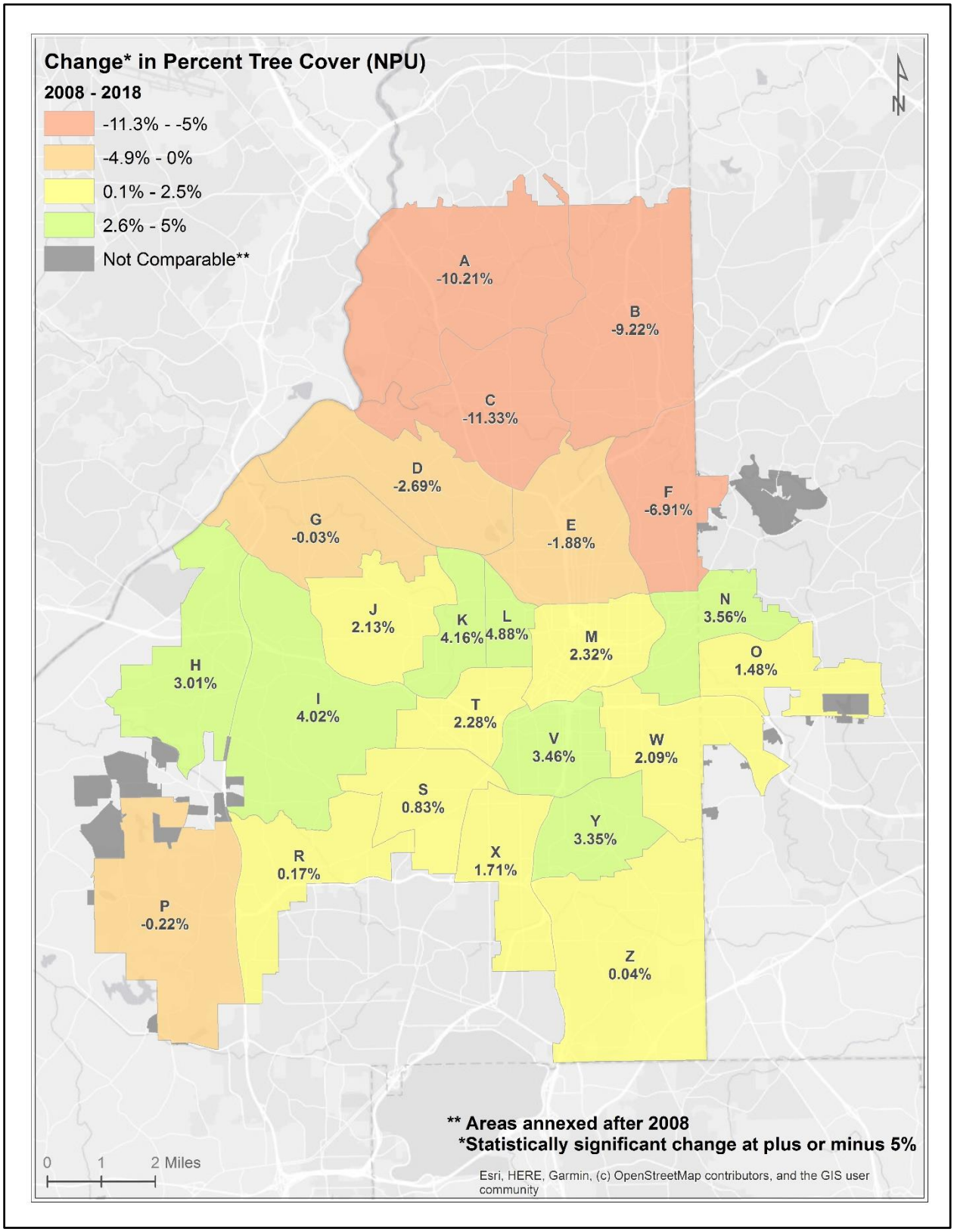
Zoning	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	%City	%Zoning	%UTC	%City	%Zoning	%NTV	%City	%Zoning	%NV
Commercial	1.0%	21.5%	2.1%	0.8%	16.8%	3.6%	2.8%	61.7%	8.7%
Historic-Cultural	0.3%	33.0%	0.6%	0.2%	23.3%	0.9%	0.3%	43.7%	1.1%
Industrial	2.7%	23.9%	5.8%	2.4%	21.3%	11.3%	6.2%	54.8%	19.2%
Live-Work	0.0%	10.1%	0.0%	0.0%	10.3%	0.0%	0.0%	79.7%	0.1%
Neighborhood Commercial	0.0%	15.4%	0.1%	0.0%	14.3%	0.2%	0.2%	70.3%	0.6%
Office / Institutional	1.1%	36.7%	2.3%	0.6%	19.6%	2.6%	1.3%	43.7%	3.9%
Planned Development	1.5%	43.4%	3.2%	0.7%	21.2%	3.4%	1.2%	35.4%	3.8%
QOL Mixed Use	0.3%	21.1%	0.7%	0.3%	18.0%	1.4%	1.0%	60.9%	3.1%
QOL Multi-Family	0.3%	35.6%	0.6%	0.2%	29.0%	1.0%	0.3%	35.4%	0.8%
Residential - Duplex	1.3%	39.7%	2.9%	1.0%	28.7%	4.5%	1.1%	31.6%	3.3%
Residential - Single Family	33.8%	59.0%	72.6%	12.3%	21.6%	58.0%	11.1%	19.5%	34.5%
Residential Multi-Family	3.4%	40.3%	7.4%	1.9%	22.7%	9.1%	3.1%	37.0%	9.8%

Special Public Interest	0.8%	15.7%	1.8%	0.9%	16.1%	4.0%	3.6%	68.2%	11.2%

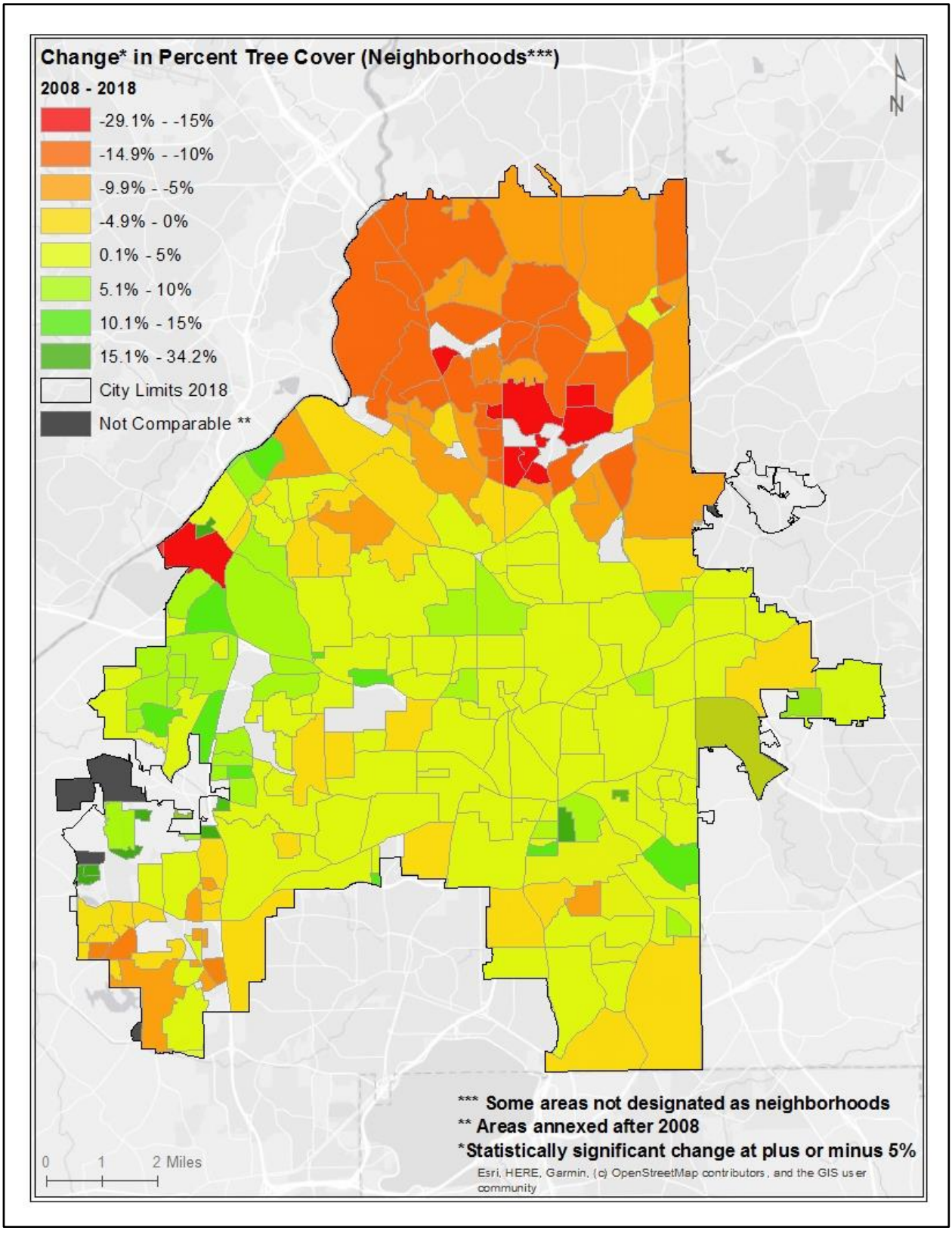
Zoning	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City	% Zoning	% UTC	% City	% Zoning	% NTV	% City	% Zoning	% NV
Special Public Interest	0.8%	15.7%	1.8%	0.9%	16.1%	4.0%	3.6%	68.2%	11.2%
Mixed Use	0.3%	21.0%	0.7%	0.3%	17.9%	1.4%	1.0%	61.1%	3.2%
Commercial	1.0%	21.1%	2.2%	0.8%	16.7%	3.8%	3.0%	62.2%	9.3%
Industrial	2.7%	23.9%	5.8%	2.4%	21.3%	11.3%	6.2%	54.8%	19.2%
Historic-Cultural	0.3%	33.0%	0.6%	0.2%	23.3%	0.9%	0.3%	43.7%	1.1%
Office Institutional	1.1%	36.7%	2.3%	0.6%	19.6%	2.6%	1.3%	43.7%	3.9%
Residential Multi-Family	3.7%	40.0%	8.0%	2.1%	23.2%	10.1%	3.4%	36.9%	10.6%
Planned Development	1.5%	43.4%	3.2%	0.7%	21.2%	3.4%	1.2%	35.4%	3.8%
Residential Single-Family	35.1%	57.9%	75.5%	13.3%	22.0%	62.5%	12.2%	20.1%	37.8%

Appendix 4
Land Cover Change Maps by Selected Geographies

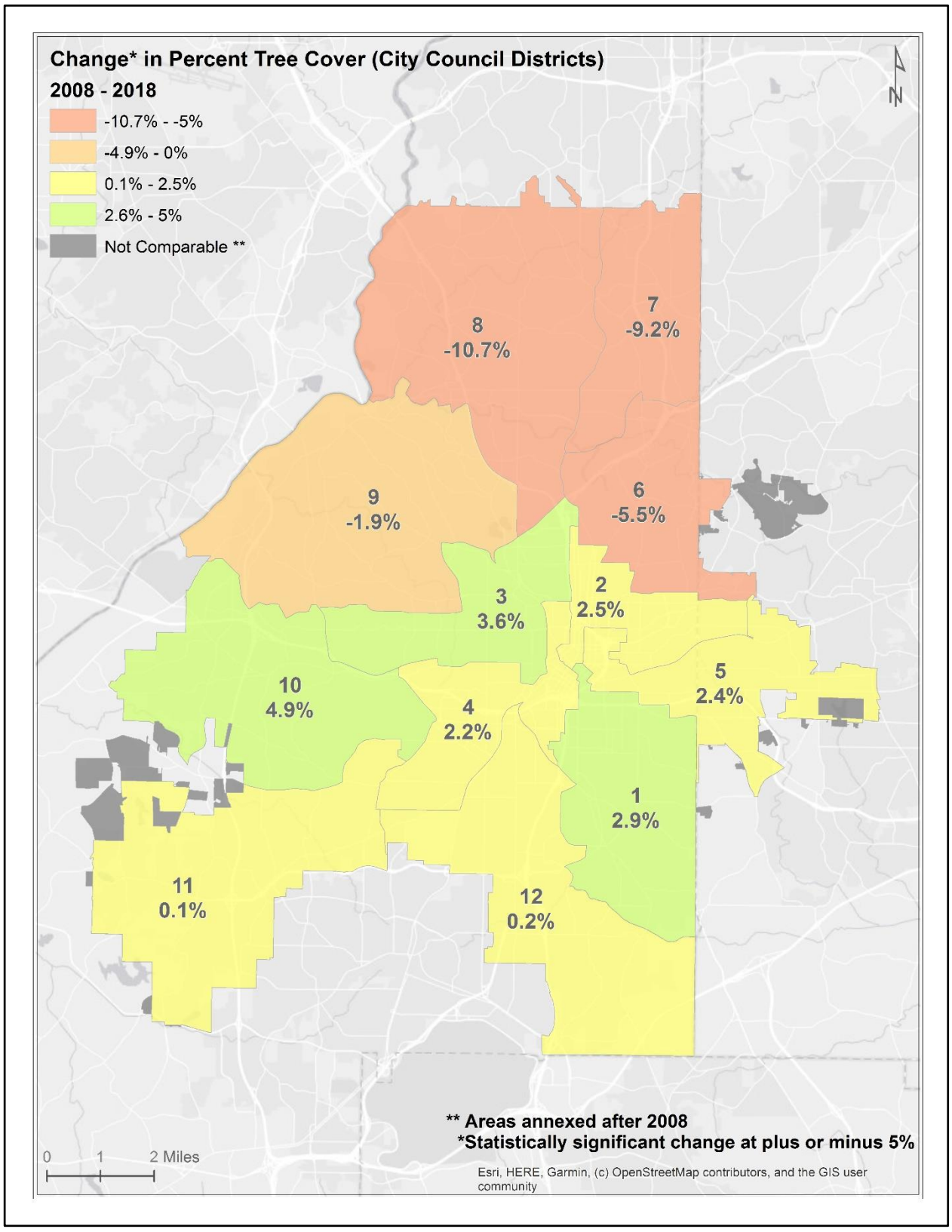
1. Neighborhood Planning Units



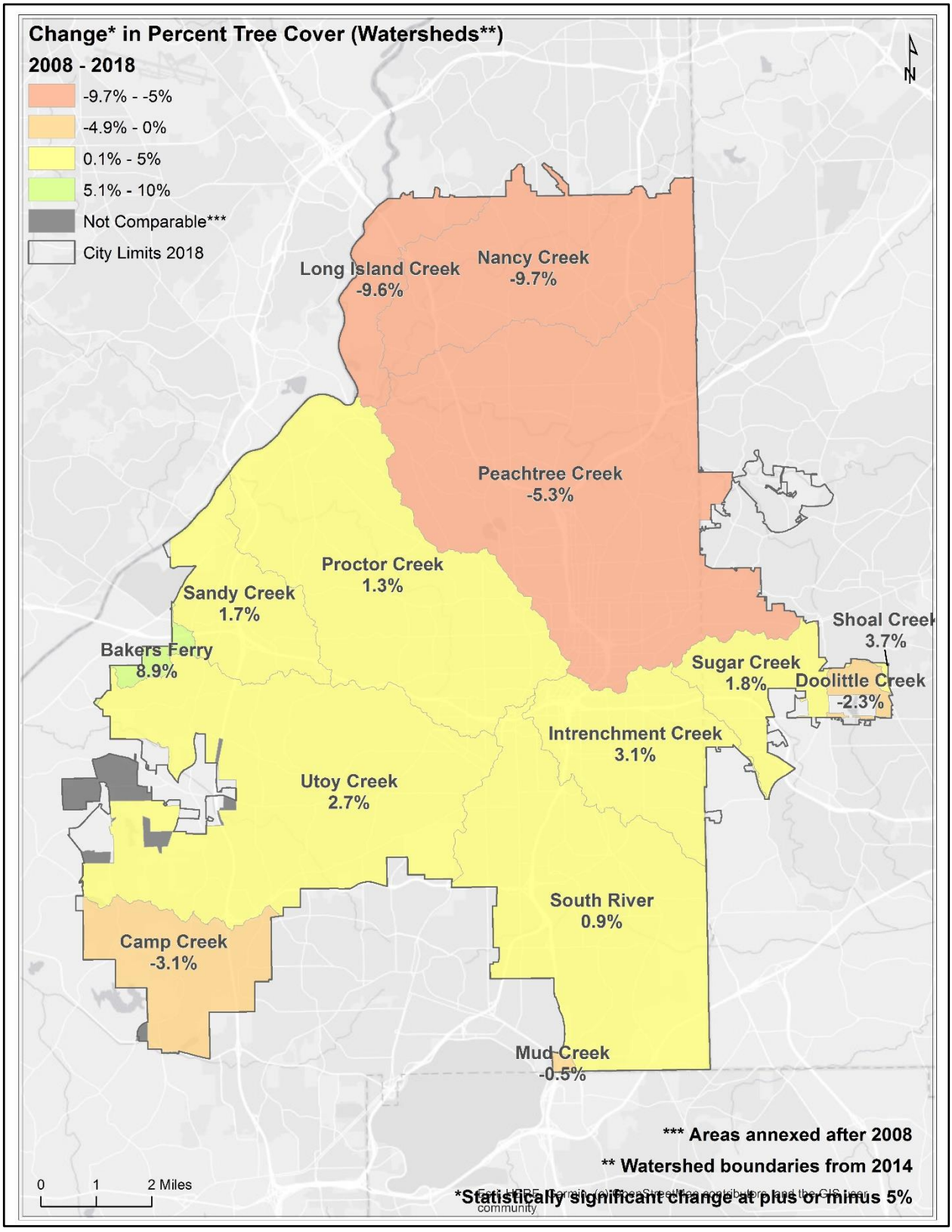
2. Neighborhoods



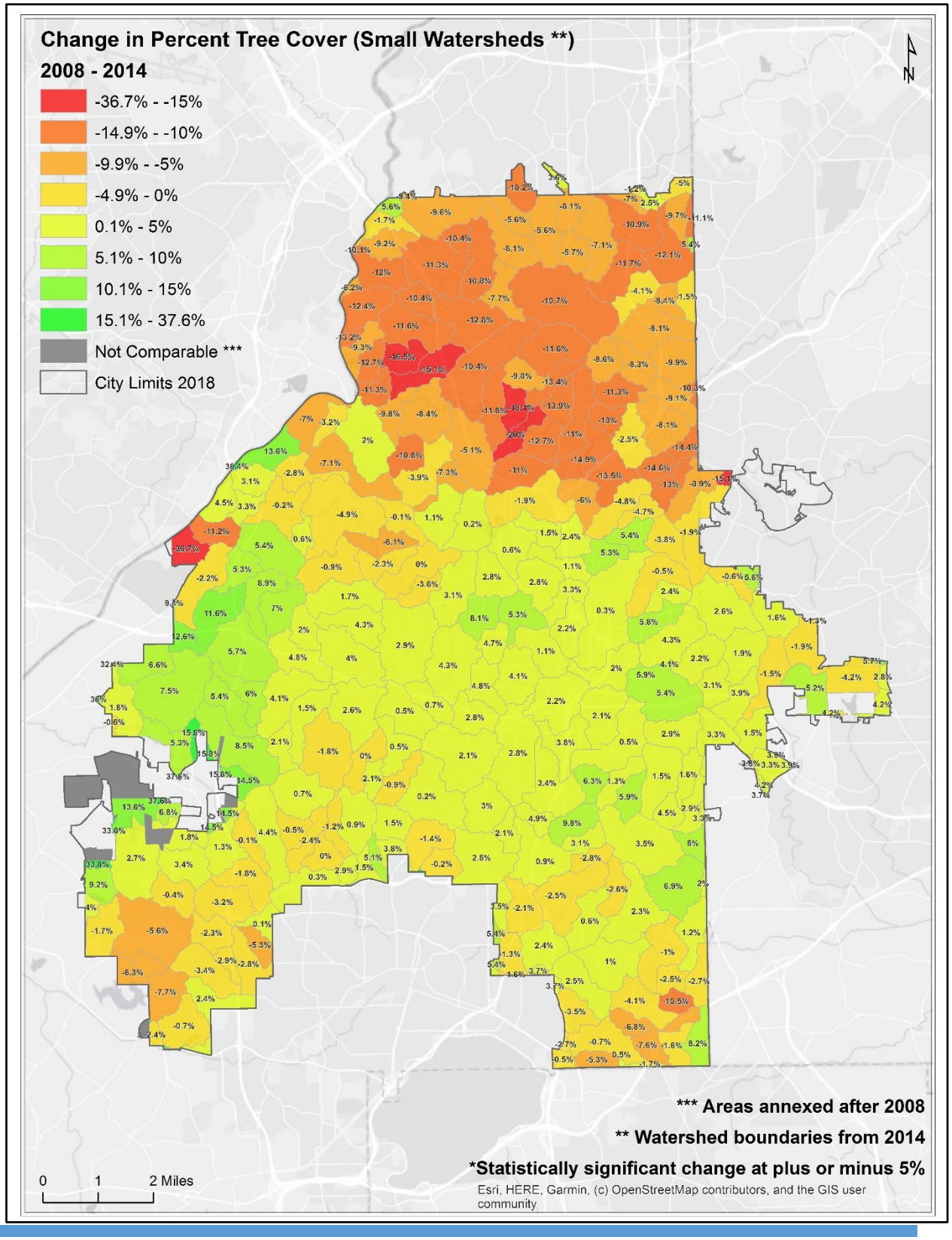
3. City Council Districts



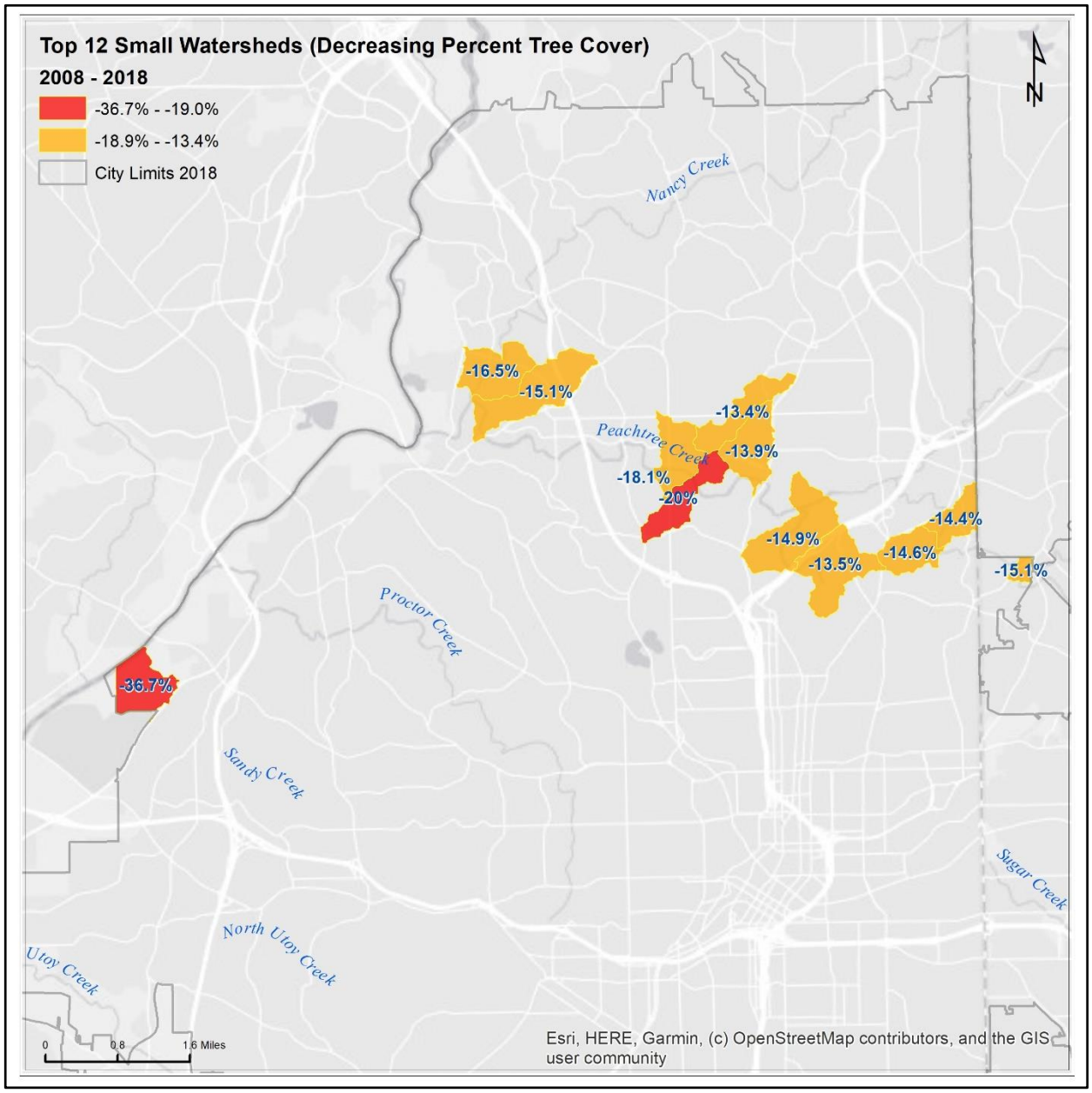
4. Watersheds



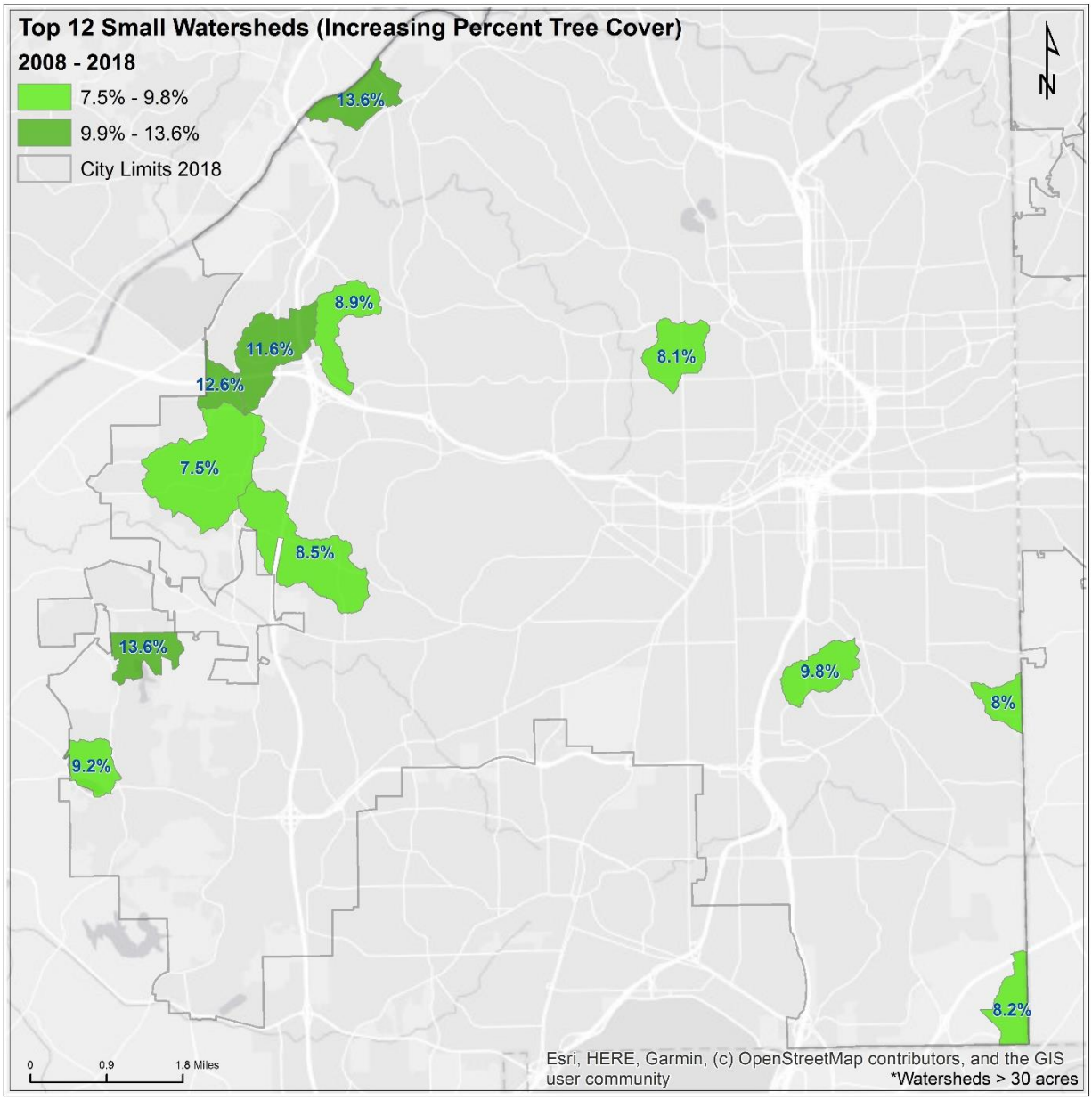
5. Small Watersheds



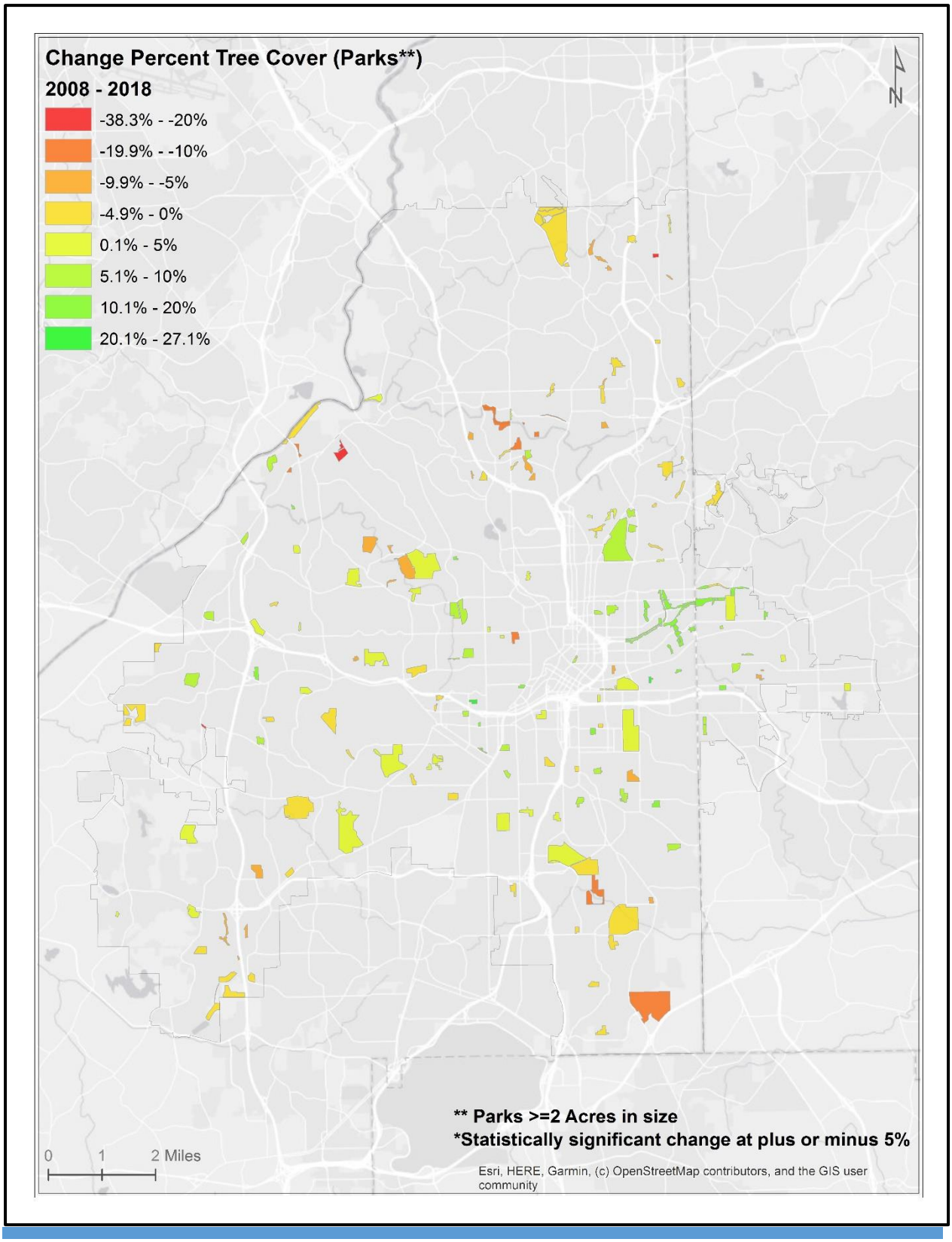
6. Small Watersheds Losing Canopy



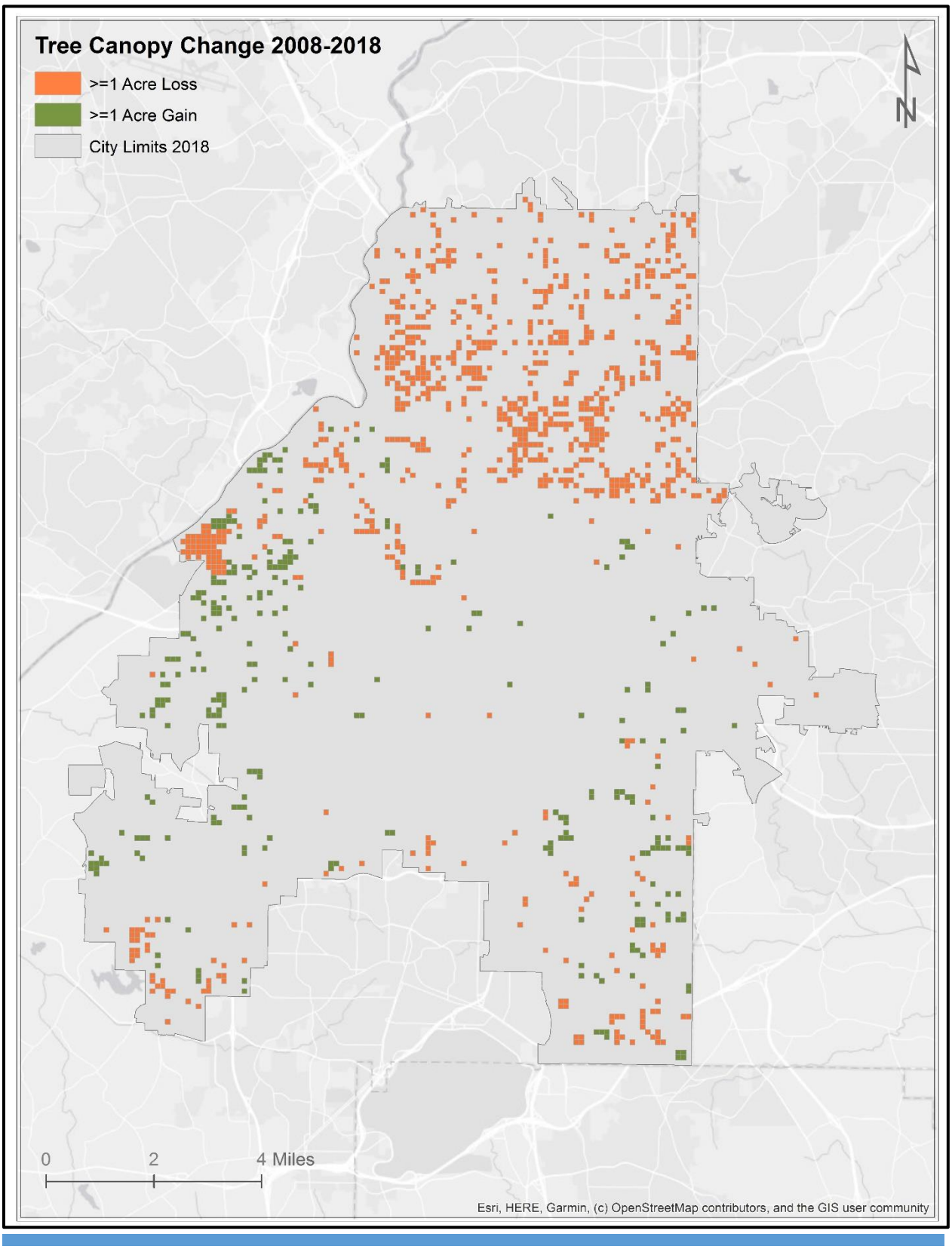
7. Small Watersheds Gaining Canopy



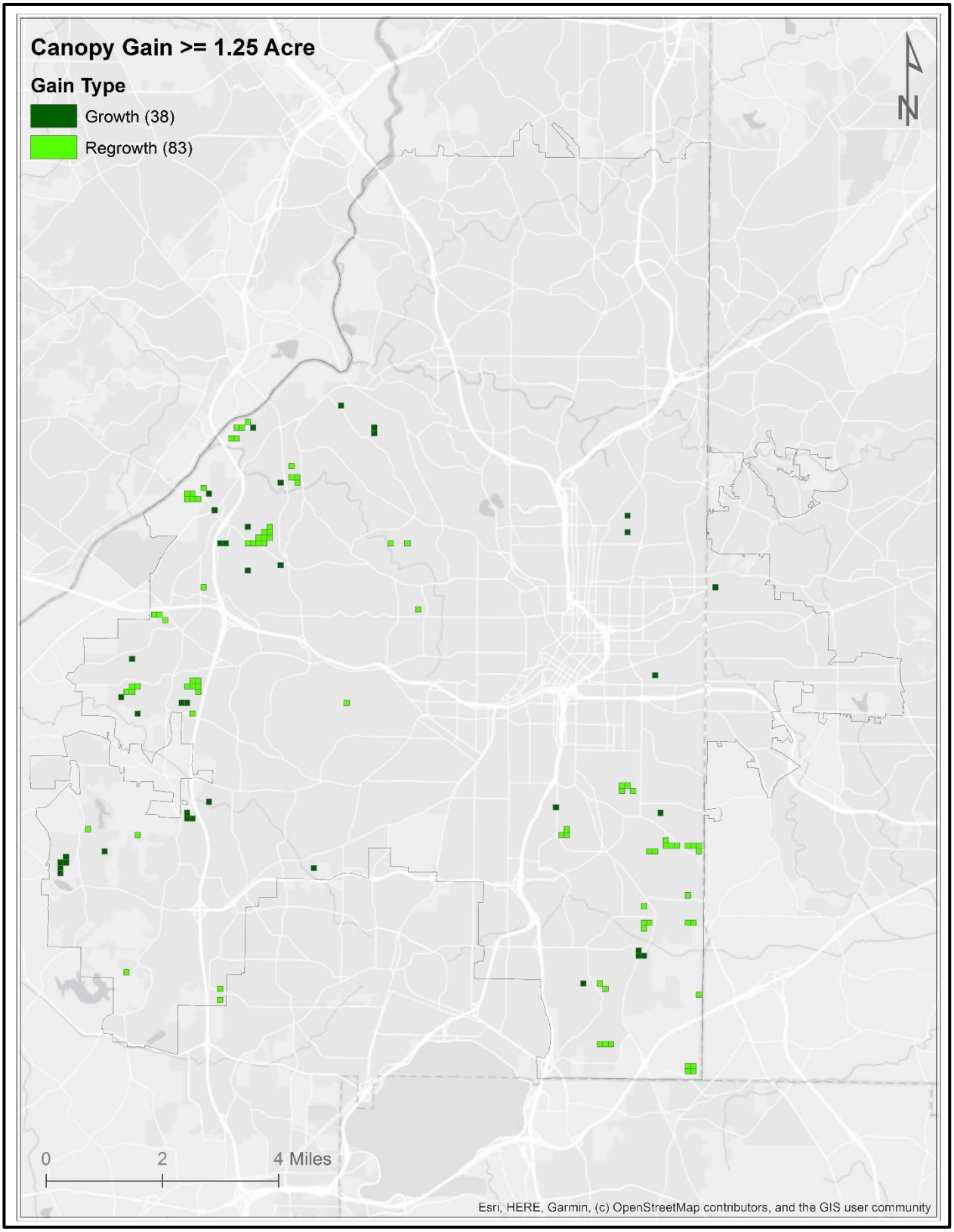
8. Parks


Change Percent Tree Cover (Parks**)
2008 - 2018
-38.3% - -20%
-19.9% - -10%
-9.9% - -5%
-4.9% - 0%
0.1% - 5%
5.1% - 10%
10.1% - 20%
20.1% - 27.1%
N
** Parks >=2 Acres in size
*Statistically significant change at plus or minus 5%
0
1
2 Miles
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

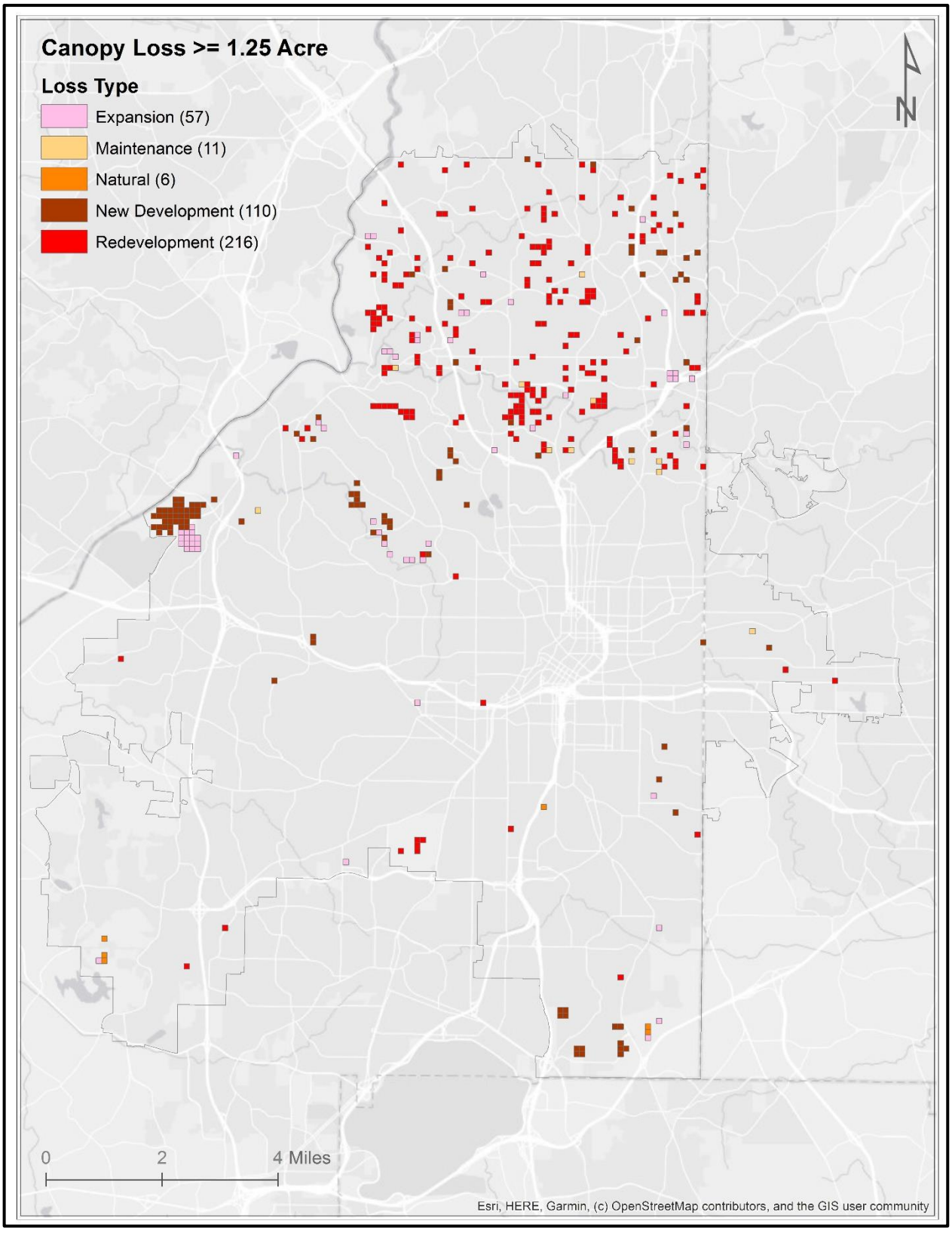
9. City Grid – (6 acre cells): canopy loss and gain at greater than 1 acre



10. City Grid – canopy gain over 1.25 acre by category



11. City Grid – canopy loss greater than 1.25 acre by category



Appendix 5
Land Cover Change Tables by Selected Geographies

Interpreting the **Land Cover Change Tables**

All tables sorted by percent change in UTC change (most loss to least)

Change by zoning categories was not calculated due to significant changes in zoning boundaries and categories between 2008-2018.

1. Neighborhood Planning Units

* = Contains incomplete data for 2008 and or 2014 due to city expansion

** = area annexed after 2008 – no change data available

NPU	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Change	% NV Change
C	3,877	2,070	53	(439)	(11)	150	4	290	7
A	7,323	4,393	60	(748)	(10)	122	2	694	9
B	6,521	2,821	43	(601)	(9)	(38)	(1)	672	10
F*	3,019	1,189	39	(209)	(7)	44	1	175	6
D	4,154	1,272	31	(112)	(3)	149	4	(17)	(0)
E	3,783	935	25	(71)	(2)	(37)	(1)	109	3
P*	5,717	3,481	61	(13)	(0)	(22)	(0)	149	3
G	3,600	1,715	48	(1)	(0)	134	4	(109)	(3)
Q**	-	6	78	-	-	-	-	-	-
Z	6,708	3,360	50	3	0	(11)	(0)	29	0
R	3,444	1,925	56	6	0	(78)	(2)	81	2
S	2,488	1,180	47	21	1	(41)	(2)	26	1
O*	2,256	978	43	33	1	(103)	(5)	172	8
X	2,567	1,019	40	44	2	(24)	(1)	(9)	(0)

NPU	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Change	% NV Change
W*	3,400	1,413	42	71	2	(161)	(5)	99	3
J	2,842	1,500	53	61	2	(15)	(1)	(46)	(2)
T	1,752	516	29	40	2	19	1	(59)	(3)
M	2,424	250	10	56	2	(7)	(0)	(49)	(2)
H	4,078	2,482	61	123	3	(221)	(5)	175	4
Y	2,108	669	32	71	3	5	0	(76)	(4)
V	2,029	423	21	70	3	26	1	(96)	(5)
N	2,206	851	39	79	4	(114)	(5)	55	3
I	6,047	3,913	65	243	4	(325)	(5)	90	1
K	1,529	554	36	64	4	8	1	(71)	(5)
L	847	197	23	41	5	3	0	(44)	(5)

2. Neighborhoods

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Bankhead/Bolton	565	195	34%	(140)	-25%	26	5%	141	25%
Woodfield	46	24	51%	(10)	-21%	4	9%	5	12%
Peachtree Heights East	133	64	48%	(24)	-18%	5	4%	19	14%
Peachtree Hills	331	140	42%	(55)	-17%	9	3%	46	14%
Colonial Homes	27	6	21%	(4)	-16%	(2)	-8%	7	24%
Ardmore	84	36	43%	(14)	-16%	2	3%	11	13%
Peachtree Battle Alliance	459	267	58%	(73)	-16%	19	4%	54	12%
Collier Hills	151	88	58%	(24)	-16%	7	5%	17	11%
Collier Hills North	71	39	55%	(11)	-15%	3	4%	8	11%
Westminster/Milmar	90	45	50%	(14)	-15%	3	4%	10	12%
Arden/Habersham	115	72	63%	(17)	-15%	2	2%	14	12%
Ridgewood Heights	137	90	66%	(19)	-14%	12	9%	7	5%
Buckhead Heights	44	6	13%	(6)	-14%	(4)	-8%	10	22%
Brookwood Hills	199	88	44%	(27)	-14%	8	4%	19	10%
Springlake	152	83	54%	(20)	-13%	5	3%	15	10%
South Tuxedo Park	244	101	41%	(32)	-13%	(6)	-2%	38	15%
Brandon	410	263	64%	(53)	-13%	24	6%	30	7%
Margaret Mitchell	541	295	55%	(70)	-13%	18	3%	52	10%
Wesley Battle	199	125	63%	(25)	-13%	15	8%	10	5%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
West Paces Ferry/Northside	428	230	54%	(54)	-13%	13	3%	41	10%
Pleasant Hill	253	170	67%	(32)	-13%	12	5%	20	8%
Peachtree Park	311	141	45%	(38)	-12%	6	2%	31	10%
Tuxedo Park	735	463	63%	(89)	-12%	6	1%	83	11%
Channing Valley	73	32	43%	(9)	-12%	3	3%	6	8%
Paces	1,923	1,168	61%	(220)	-11%	69	4%	180	9%
Piedmont Heights	311	93	30%	(35)	-11%	6	2%	30	10%
Memorial Park	93	54	59%	(11)	-11%	7	7%	4	4%
Garden Hills	482	220	46%	(53)	-11%	(13)	-3%	66	14%
Peachtree Heights West	580	300	52%	(63)	-11%	1	0%	62	11%
Whitewater Creek	241	161	67%	(25)	-11%	3	1%	24	10%
Argonne Forest	173	99	57%	(18)	-11%	(3)	-2%	22	12%
Wildwood Forest	67	33	50%	(7)	-10%	3	4%	6	9%
Mt. Paran/Northside	1,368	855	63%	(139)	-10%	32	2%	107	8%
Mt. Paran Parkway	91	60	66%	(9)	-10%	2	2%	7	8%
Brookhaven	637	328	52%	(63)	-10%	11	2%	68	11%
Wyngate	187	115	62%	(18)	-10%	(2)	-1%	20	11%
Lindridge/Martin Manor	452	155	34%	(44)	-10%	16	4%	28	6%
Riverside	500	236	47%	(48)	-10%	15	3%	40	8%
Kingswood	401	241	60%	(38)	-10%	5	1%	33	8%
Sherwood Forest	133	62	46%	(13)	-10%	1	0%	12	9%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Randall Mill	218	118	54%	(21)	-10%	2	1%	18	8%
Pine Hills	717	339	47%	(66)	-9%	3	0%	67	9%
North Buckhead	1,707	815	48%	(148)	-9%	(22)	-1%	181	11%
Ridgedale Park	116	46	40%	(10)	-9%	(2)	-1%	12	10%
Morningside/Lenox Park	1,446	660	46%	(123)	-9%	38	3%	97	7%
Mt. Gilead Woods	36	21	58%	(3)	-8%	(1)	-3%	4	11%
Hanover West	100	61	61%	(8)	-8%	9	9%	(0)	0%
East Chastain Park	349	180	52%	(27)	-8%	(9)	-3%	37	11%
Swallow Circle/Baywood	199	139	70%	(15)	-8%	9	5%	6	3%
Fernleaf	54	39	71%	(4)	-7%	4	7%	0	0%
Ben Hill Acres	94	50	53%	(7)	-7%	(0)	0%	7	7%
Brookwood	101	26	26%	(7)	-7%	(1)	-1%	7	7%
Mellwood	23	15	63%	(2)	-6%	0	0%	1	6%
Ansley Park	389	151	39%	(25)	-6%	(4)	-1%	28	7%
Tampa Park	17	10	56%	(1)	-6%	(0)	-2%	1	8%
Chastain Park	1,074	614	57%	(65)	-6%	(43)	-4%	112	10%
West Highlands	507	156	31%	(31)	-6%	41	8%	(10)	-2%
Wildwood (NPU-C)	236	122	52%	(14)	-6%	6	2%	9	4%
Westover Plantation	51	27	53%	(3)	-6%	4	7%	(1)	-1%
Ben Hill	685	383	56%	(39)	-6%	60	9%	(2)	0%
Brentwood	46	23	49%	(2)	-5%	(1)	-3%	4	8%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Rue Royal	23	13	59%	(1)	-5%	(1)	-4%	2	10%
Underwood Hills	718	225	31%	(37)	-5%	36	5%	1	0%
Castlewood	208	147	71%	(22)	-5%	2	1%	20	10%
Bolton Hills	47	27	57%	(2)	-5%	(3)	-6%	5	10%
English Park	109	56	51%	(5)	-4%	3	3%	2	2%
Almond Park	337	222	66%	(15)	-4%	20	6%	(6)	-2%
Carver Hills	207	95	46%	(8)	-4%	2	1%	6	3%
Blair Villa/Poole Creek	848	277	33%	(33)	-4%	21	2%	13	2%
Fairburn Tell	176	115	66%	(7)	-4%	3	2%	4	2%
Rockdale	358	162	45%	(14)	-4%	25	7%	(12)	-3%
Buckhead Forest	200	60	30%	(8)	-4%	(9)	-5%	17	8%
Bolton	965	331	34%	(36)	-4%	54	6%	(12)	-1%
Butner/Tell	144	100	69%	(19)	-3%	16	11%	4	3%
Briar Glen	67	34	51%	(2)	-3%	(2)	-3%	4	6%
Beecher Hills	285	208	73%	(9)	-3%	(4)	-1%	13	5%
Heritage Valley	243	144	59%	(8)	-3%	(4)	-2%	12	5%
Meadowbrook Forest	71	35	50%	(2)	-3%	(2)	-3%	4	5%
Elmco Estates	133	94	71%	(4)	-3%	(3)	-2%	6	5%
Fairburn	115	75	66%	(3)	-3%	(3)	-2%	6	5%
Carey Park	333	215	64%	(9)	-3%	15	5%	(6)	-2%
South River Gardens	1,804	1,109	61%	(46)	-3%	79	4%	(26)	-1%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Lake Estates	42	20	49%	(1)	-2%	(1)	-2%	2	4%
Polar Rock	300	152	51%	(6)	-2%	(2)	-1%	8	3%
Lindbergh/Morosgo	383	62	16%	(8)	-2%	(3)	-1%	11	3%
Fairway Acres	124	84	68%	(2)	-2%	0	0%	3	3%
Greenbriar	822	351	43%	(16)	-2%	3	0%	13	2%
Loring Heights	276	82	30%	(4)	-2%	(10)	-4%	15	5%
Buckhead Village	127	11	9%	(2)	-1%	(7)	-6%	9	7%
Laurens Valley	125	90	73%	(2)	-1%	(4)	-3%	6	4%
Audobon Forest	497	385	77%	(6)	-1%	(5)	-1%	11	2%
Cross Creek	179	92	51%	(2)	-1%	8	5%	(6)	-3%
Hills Park	969	222	23%	(11)	-1%	40	4%	(28)	-3%
Berkeley Park	300	57	19%	(3)	-1%	7	2%	(3)	-1%
Kirkwood	967	454	47%	(9)	-1%	(73)	-8%	84	9%
Perkerson	608	259	43%	(5)	-1%	9	1%	3	0%
Virginia Highland	671	264	39%	(4)	-1%	(15)	-2%	22	3%
Westview	401	176	44%	(2)	0%	(4)	-1%	6	1%
Lakewood Heights	883	330	37%	(3)	0%	(3)	0%	6	1%
Rosedale Heights	200	116	58%	(1)	0%	(3)	-2%	4	2%
Lakewood	344	198	58%	(1)	0%	(9)	-3%	10	3%
Fort McPherson	516	122	24%	(1)	0%	(5)	-1%	11	2%
Oakland	34	1	3%	0	0%	3	8%	(3)	-8%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Adams Park	629	373	59%	0	0%	(26)	-4%	25	4%
Blandtown	495	98	20%	1	0%	23	5%	(24)	-5%
Just Us	18	7	40%	0	0%	(1)	-3%	1	3%
Cascade Avenue/Road	673	375	56%	1	0%	(13)	-2%	11	2%
Ben Hill Forest	96	73	76%	(10)	0%	4	4%	5	6%
Midtown	1,048	189	18%	4	0%	(19)	-2%	15	1%
Peyton Heights	122	86	71%	1	0%	(4)	-4%	4	3%
Venetian Hills	616	383	62%	3	0%	(19)	-3%	16	3%
Custer/McDonough/Guice	288	135	47%	2	1%	(7)	-2%	5	2%
West Lake	185	104	56%	1	1%	(9)	-5%	8	4%
Grove Park	1,342	714	53%	9	1%	40	3%	(49)	-4%
Glenrose Heights	893	382	43%	6	1%	(19)	-2%	27	3%
Scotts Crossing	311	136	44%	3	1%	19	6%	(22)	-7%
Southwest	1,262	821	65%	11	1%	(26)	-2%	20	2%
Woodland Hills	95	46	48%	1	1%	(5)	-5%	4	4%
Lenox	152	9	6%	1	1%	1	0%	(2)	-1%
Grant Park	1,108	367	33%	11	1%	(34)	-3%	24	2%
Audobon Forest West	133	96	72%	1	1%	(9)	-7%	7	6%
Home Park	319	78	25%	3	1%	(4)	-1%	1	0%
Westwood Terrace	141	91	64%	2	1%	(10)	-7%	8	6%
Kings Forest	419	276	66%	5	1%	(18)	-4%	12	3%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Atkins Park	35	12	36%	1	1%	(2)	-5%	1	4%
State Facility	117	33	28%	2	2%	(2)	-2%	0	0%
West End	681	193	28%	11	2%	3	0%	(14)	-2%
Campbellton Road	432	200	46%	7	2%	(13)	-3%	11	3%
Boulder Park	386	324	84%	7	2%	(6)	-1%	4	1%
Oakcliff	67	52	78%	1	2%	(1)	-2%	0	0%
Adair Park	289	71	25%	5	2%	(0)	0%	(5)	-2%
Ben Hill Pines	45	25	54%	1	2%	(3)	-7%	2	5%
Georgia Tech	359	61	17%	7	2%	(12)	-3%	5	1%
Pomona Park	47	26	55%	1	2%	(5)	-10%	4	8%
Marietta Street Artery	236	16	7%	5	2%	3	1%	(8)	-3%
Sweet Auburn	202	16	8%	4	2%	7	4%	(11)	-6%
Castleberry Hill	181	12	7%	4	2%	0	0%	(4)	-2%
Peyton Forest	286	193	67%	6	2%	(19)	-7%	13	5%
Downtown	1,256	71	6%	26	2%	18	1%	(44)	-3%
Browns Mill Park	656	287	44%	13	2%	(25)	-4%	11	2%
Arlington Estates	216	127	59%	5	2%	(3)	-1%	5	2%
Princeton Lakes	477	131	27%	10	2%	(3)	-1%	27	6%
Sylvan Hills	1,053	372	35%	23	2%	(12)	-1%	(7)	-1%
Lincoln Homes	167	78	47%	4	2%	1	1%	(5)	-3%
Mozley Park	277	119	43%	6	2%	(15)	-5%	9	3%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Reynoldstown	395	84	21%	9	2%	(13)	-3%	4	1%
Center Hill	704	349	50%	16	2%	(5)	-1%	(11)	-2%
Oakland City	630	269	43%	15	2%	(3)	-1%	(11)	-2%
Druid Hills	341	171	50%	8	2%	(15)	-4%	15	5%
Hammond Park	390	176	45%	10	3%	(14)	-4%	5	1%
Pittsburgh	512	123	24%	13	3%	11	2%	(24)	-5%
Capitol View	369	142	39%	10	3%	(3)	-1%	(7)	-2%
Norwood Manor	332	139	42%	9	3%	(3)	-1%	(6)	-2%
Edgewood	554	190	34%	15	3%	(26)	-5%	11	2%
Candler Park	416	174	42%	12	3%	(24)	-6%	13	3%
Benteen Park	181	84	47%	5	3%	(5)	-3%	(1)	0%
Old Fourth Ward	783	152	19%	23	3%	(33)	-4%	10	1%
Capitol Gateway	84	7	8%	2	3%	5	6%	(8)	-9%
Deerwood	118	60	51%	4	3%	(6)	-5%	3	2%
Boulevard Heights	140	54	39%	4	3%	(6)	-4%	1	1%
Lake Claire	315	185	59%	10	3%	(22)	-7%	23	7%
High Point	65	20	31%	2	3%	3	4%	(5)	-7%
Orchard Knob	294	191	65%	9	3%	(10)	-4%	1	0%
Harris Chiles	89	17	19%	3	3%	5	5%	(7)	-8%
East Atlanta	932	459	49%	29	3%	(74)	-8%	56	6%
Amal Heights	36	8	22%	1	3%	(1)	-3%	(0)	0%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Cascade Heights	659	495	75%	22	3%	(35)	-5%	16	2%
Atlantic Station	163	10	6%	6	3%	9	5%	(14)	-9%
Vine City	327	73	22%	12	4%	(4)	-1%	(7)	-2%
Ormewood Park	506	236	47%	18	4%	(30)	-6%	12	2%
Atlanta Industrial Park	419	155	37%	16	4%	5	1%	(15)	-4%
Chosewood Park	560	141	25%	21	4%	10	2%	(31)	-6%
Mechanicsville	458	78	17%	18	4%	11	2%	(29)	-6%
Florida Heights	247	125	51%	10	4%	(19)	-8%	9	4%
Knight Park/Howell Station	349	78	22%	15	4%	17	5%	(32)	-9%
Bakers Ferry	161	117	73%	7	4%	1	1%	6	4%
Dixie Hills	468	267	57%	20	4%	(26)	-5%	6	1%
Chalet Woods	77	49	64%	3	4%	(6)	-8%	3	4%
Old Gordon	79	45	57%	3	4%	(3)	-4%	(0)	0%
Leila Valley	315	124	40%	13	4%	(13)	-4%	(1)	0%
Hunter Hills	323	155	48%	14	4%	(20)	-6%	6	2%
Capitol View Manor	147	71	48%	7	5%	(4)	-3%	(3)	-2%
Washington Park	164	62	38%	7	5%	(6)	-3%	(2)	-1%
Peoplestown	340	93	27%	15	5%	3	1%	(19)	-5%
Summerhill	345	52	15%	16	5%	(4)	-1%	(12)	-3%
Atlanta University Center	332	58	18%	16	5%	12	4%	(27)	-8%
Bush Mountain	50	30	61%	2	5%	(1)	-2%	(1)	-2%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
The Villages at Castleberry Hill	57	8	14%	3	5%	6	10%	(8)	-15%
Ivan Hill	65	48	75%	3	5%	(5)	-8%	2	3%
Fairburn Mays	403	274	68%	19	5%	(18)	-4%	5	1%
Ben Hill Terrace	212	156	74%	10	5%	(18)	-8%	8	4%
Monroe Heights	249	164	66%	12	5%	6	2%	(18)	-7%
Joyland	86	32	37%	4	5%	(3)	-3%	(1)	-2%
Inman Park	384	135	35%	19	5%	(20)	-5%	1	0%
Historic Westin Heights/Bankhead	416	140	34%	21	5%	31	8%	(53)	-13%
Carroll Heights	271	163	60%	14	5%	(15)	-5%	3	1%
Poncey-Highland	240	78	32%	12	5%	(14)	-6%	1	1%
Fairburn Road/Wisteria Lane	83	63	75%	4	5%	(6)	-7%	1	2%
West Manor	172	119	69%	9	5%	(16)	-9%	7	4%
Ashview Heights	175	57	33%	10	6%	(2)	-1%	(8)	-5%
English Avenue	519	124	24%	30	6%	7	1%	(37)	-7%
Westhaven	152	79	52%	9	6%	(11)	-8%	3	2%
South Atlanta	296	90	31%	17	6%	(10)	-3%	(8)	-3%
Wilson Mill Meadows	242	171	71%	14	6%	(21)	-9%	7	3%
Harland Terrace	295	143	49%	18	6%	(12)	-4%	(6)	-2%
Collier Heights	1,247	806	65%	80	6%	(51)	-4%	(29)	-2%
Adamsville	583	323	55%	38	7%	(54)	-9%	16	3%
Brookview Heights	345	149	43%	24	7%	4	1%	(29)	-8%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
East Lake	783	350	45%	56	7%	74	9%	104	13%
Cabbagetown	112	25	22%	9	8%	(6)	-5%	(3)	-3%
Rebel Valley Forest	112	48	42%	9	8%	(5)	-4%	(4)	-3%
Baker Hills	183	122	67%	16	9%	(22)	-12%	6	3%
Magnum Manor	150	102	68%	13	9%	(17)	-12%	5	3%
Green Forest Acres	101	63	62%	9	9%	(12)	-12%	5	5%
Niskey Lake	270	208	77%	25	9%	(14)	-5%	5	2%
Old Fairburn Village	21	15	73%	2	9%	(1)	-6%	1	3%
Wisteria Gardens	111	70	63%	11	10%	(15)	-13%	4	4%
Ridgecrest Forest	74	51	69%	7	10%	(10)	-14%	3	4%
Penelope Neighbors	126	60	47%	13	10%	(13)	-10%	(1)	0%
Harvel Homes Community	16	8	49%	2	11%	(2)	-13%	0	2%
Fairburn Heights	357	218	61%	39	11%	(41)	-11%	2	1%
East Ardley Road	66	44	67%	7	11%	(9)	-14%	2	3%
Thomasville Heights	407	199	49%	45	11%	(30)	-7%	(15)	-4%
Chattahoochee	208	100	48%	24	11%	(5)	-3%	0	0%
Fort Valley	23	9	40%	3	11%	(2)	-9%	(0)	0%
Betmar LaVilla	72	22	30%	8	11%	(4)	-6%	(4)	-6%
Whittier Mill Village	203	103	51%	24	12%	(25)	-12%	9	5%
Wildwood (NPU-H)	179	124	70%	21	12%	(23)	-13%	2	1%
Mays	253	127	50%	32	12%	(24)	-10%	(4)	-2%

Neighborhood	Acres	Acres UTC 2018	% UTC 2018	Acres UTC CHG	% UTC CHG	Acres NTV CHG	% NTV CHG	Acres NV CHG	% NV CHG
Green Acres Valley	49	31	63%	7	14%	(7)	-14%	4	8%
Niskey Cove	53	37	70%	9	17%	(8)	-16%	1	1%
Cascade Green	49	20	40%	8	17%	(7)	-14%	(2)	-3%
The Villages at East Lake	187	52	28%	32	17%	30	16%	24	13%
The Villages at Carver	108	25	23%	19	18%	13	12%	(32)	-30%
Ashley Courts	36	15	42%	8	23%	(4)	-10%	(1)	-4%
Greenbriar Village	40	28	70%	11	28%	(6)	-15%	(1)	-3%
Sandlewood Estates	57	31	56%	16	29%	(7)	-13%	(3)	-5%
Bankhead Courts	49	22	46%	17	34%	6	13%	(23)	-47%

3. City Council Districts

Council District	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
8	12,117	6,819	56%	(1,291)	-11%	204	2%	1,155	10%
7	5,073	2,205	43%	(468)	-9%	(25)	0%	525	10%
6	5,031	1,876	37%	(274)	-5%	24	0%	270	5%
9	11,421	4,872	43%	(217)	-2%	366	3%	(77)	-1%
11	9,976	5,974	60%	13	0%	(126)	-1%	241	2%
12	9,681	4,174	43%	18	0%	9	0%	10	0%
4	4,020	676	24%	88	2%	4	0%	(92)	-2%
5	4,716	1,283	32%	114	2%	(213)	-5%	223	5%
2	2,797	1,826	39%	69	2%	(100)	-4%	31	1%
1	6,409	1,481	31%	186	3%	(121)	-2%	(65)	-1%
3	4,808	2,406	38%	172	4%	(19)	0%	(153)	-3%
10	8,677	5,522	64%	427	5%	(540)	-6%	174	2%

D. Watersheds

Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Nancy Creek	8,039	4,372	54%	(779)	-10%	19	0%	790	10%
Long Island Creek	2,384	1,445	61%	(229)	-10%	66	3%	226	9%
Peachtree Creek	19,589	7,070	36%	(1,040)	-5%	146	1%	921	5%
Camp Creek	3,873	1,991	51%	(122)	-3%	85	2%	96	2%
Doolittle Creek	442	231	52%	(10)	-2%	(25)	-6%	40	9%
Mud Creek	79	12	15%	(0)	-1%	7	9%	(6)	-8%
South River	11,884	5,098	43%	111	1%	(21)	0%	(60)	-1%
Proctor Creek	12,107	4,877	40%	157	1%	199	2%	(316)	-3%
Sandy Creek	3,597	1,955	54%	62	2%	(137)	-4%	95	3%
Sugar Creek	2,564	1,085	42%	46	2%	(168)	-7%	161	6%
Utoy Creek	14,668	9,076	62%	394	3%	(609)	-4%	320	2%
Intrenchment Creek	4,863	1,520	31%	151	3%	(92)	-2%	(59)	-1%
Shoal Creek	58	31	52%	2	4%	(8)	-13%	8	13%
Bakers Ferry	433	275	63%	38	9%	(35)	-8%	11	3%

E. Small Watersheds

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Sandy Creek_192	216	51	24%	(79.34)	-37%	(17.96)	-8%	106.74	49%
Peachtree Creek_95	199	82	41%	(39.73)	-20%	12.05	6%	27.67	14%
Peachtree Creek_106	203	102	50%	(36.76)	-18%	18.48	9%	18.29	9%
Nancy Creek_63	245	142	58%	(40.35)	-17%	12.68	5%	27.66	11%
Peachtree Creek_113	351	194	55%	(53.07)	-15%	15.50	4%	37.58	11%
Peachtree Creek_120	36	17	47%	(5.52)	-15%	2.98	8%	2.52	7%
Peachtree Creek_129	358	136	38%	(53.36)	-15%	14.97	4%	38.39	11%
Peachtree Creek_102	167	83	50%	(24.37)	-15%	12.30	7%	12.07	7%
Peachtree Creek_111	135	54	40%	(19.40)	-14%	12.83	10%	6.56	5%
Peachtree Creek_112	222	110	49%	(30.93)	-14%	4.03	2%	26.88	12%
Peachtree Creek_108	306	112	36%	(41.19)	-14%	13.40	4%	27.81	9%
Peachtree Creek_92	194	108	56%	(25.98)	-13%	2.93	2%	23.05	12%
Long Island Creek_47	64	45	70%	(8.40)	-13%	3.75	6%	9.29	15%
Peachtree Creek_136	215	107	50%	(27.87)	-13%	10.66	5%	17.20	8%
Peachtree Creek_134	170	61	36%	(22.15)	-13%	0.70	0%	21.43	13%
Nancy Creek_84	533	271	51%	(68.33)	-13%	14.09	3%	54.25	10%
Long Island Creek_53	175	110	63%	(22.30)	-13%	5.60	3%	16.72	10%
Peachtree Creek_140	268	89	33%	(34.17)	-13%	4.47	2%	29.72	11%
Long Island Creek_55	336	237	71%	(41.56)	-12%	12.12	4%	30.83	9%
Nancy Creek_79	426	219	52%	(51.36)	-12%	3.09	1%	49.74	12%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Long Island Creek_52	328	192	59%	(39.41)	-12%	6.35	2%	36.27	11%
Peachtree Creek_138	329	200	61%	(38.66)	-12%	14.70	4%	23.95	7%
Nancy Creek_75	384	181	47%	(45.12)	-12%	(3.10)	-1%	48.25	13%
Nancy Creek_64	492	268	55%	(57.16)	-12%	18.90	4%	38.25	8%
Peachtree Creek_93	520	305	59%	(60.61)	-12%	5.08	1%	55.52	11%
Sugar Creek_254	0	0	33%	(0.02)	-11%	(0.03)	-17%	0.04	25%
Peachtree Creek_125	248	111	45%	(27.89)	-11%	3.73	2%	24.16	10%
Nancy Creek_88	602	387	64%	(67.79)	-11%	23.43	4%	44.34	7%
Long Island Creek_49	182	108	59%	(20.59)	-11%	9.97	5%	10.64	6%
Sandy Creek_190	235	90	38%	(26.37)	-11%	15.30	7%	14.30	6%
Nancy Creek_78	59	27	46%	(6.58)	-11%	1.27	2%	6.39	11%
Peachtree Creek_115	389	155	40%	(42.58)	-11%	6.10	2%	36.48	9%
Peachtree Creek_107	369	149	40%	(40.49)	-11%	9.99	3%	30.51	8%
Nancy Creek_87	428	258	60%	(46.88)	-11%	(3.19)	-1%	50.06	12%
Peachtree Creek_142	234	75	32%	(25.29)	-11%	14.83	6%	10.48	4%
Nancy Creek_66	436	262	60%	(47.28)	-11%	11.69	3%	35.60	8%
Nancy Creek_89	1,105	570	52%	(118.22)	-11%	(10.33)	-1%	128.54	12%
South River_231	135	107	80%	(14.19)	-11%	11.62	9%	2.58	2%
Nancy Creek_74	206	119	58%	(21.31)	-10%	5.04	2%	16.28	8%
Nancy Creek_65	140	87	62%	(14.50)	-10%	3.74	3%	10.76	8%
Peachtree Creek_155	843	518	61%	(88.00)	-10%	24.24	3%	63.77	8%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Peachtree Creek_149	37	13	34%	(3.84)	-10%	0.37	1%	3.63	10%
Nancy Creek_82	196	119	61%	(19.95)	-10%	(5.52)	-3%	28.21	14%
Long Island Creek_58	19	9	48%	(1.92)	-10%	0.24	1%	4.43	23%
Peachtree Creek_143	374	191	51%	(36.90)	-10%	2.95	1%	33.93	9%
Peachtree Creek_96	201	128	64%	(19.70)	-10%	(2.63)	-1%	22.35	11%
Peachtree Creek_154	204	105	51%	(19.97)	-10%	13.16	6%	6.81	3%
Nancy Creek_80	164	80	49%	(15.89)	-10%	4.67	3%	12.32	8%
Long Island Creek_60	541	338	62%	(51.93)	-10%	9.24	2%	43.45	8%
Long Island Creek_59	12	9	72%	(1.17)	-9%	0.58	5%	1.03	8%
Long Island Creek_48	196	119	61%	(18.24)	-9%	4.75	2%	23.50	12%
Long Island Creek_56	241	106	44%	(22.11)	-9%	9.90	4%	12.23	5%
Peachtree Creek_137	260	55	21%	(23.76)	-9%	4.22	2%	19.56	8%
Peachtree Creek_119	300	157	52%	(26.82)	-9%	9.47	3%	21.50	7%
Peachtree Creek_145	244	78	32%	(20.96)	-9%	(12.83)	-5%	33.79	14%
Peachtree Creek_91	476	253	53%	(39.96)	-8%	32.67	7%	7.24	2%
Peachtree Creek_123	150	40	27%	(12.71)	-8%	(3.31)	-2%	16.01	11%
Peachtree Creek_109	245	85	35%	(20.31)	-8%	(4.13)	-2%	24.44	10%
Nancy Creek_71	368	234	64%	(29.72)	-8%	(2.23)	-1%	31.93	9%
Nancy Creek_62	214	102	48%	(17.31)	-8%	(8.63)	-4%	26.14	12%
Peachtree Creek_146	521	193	37%	(42.22)	-8%	6.74	1%	36.15	7%
Peachtree Creek_144	418	113	27%	(33.99)	-8%	2.94	1%	31.06	7%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Camp Creek_12	318	189	60%	(24.39)	-8%	32.36	10%	(0.07)	0%
Nancy Creek_67	255	160	63%	(19.64)	-8%	1.97	1%	17.69	7%
South River_230	276	117	42%	(20.84)	-8%	12.53	5%	8.33	3%
Peachtree Creek_97	170	36	21%	(12.45)	-7%	8.13	5%	4.29	3%
Nancy Creek_70	442	221	50%	(31.41)	-7%	(17.73)	-4%	49.12	11%
Proctor Creek_167	502	174	35%	(35.82)	-7%	24.06	5%	11.77	2%
Proctor Creek_180	330	128	39%	(23.08)	-7%	33.63	10%	(0.14)	0%
Nancy Creek_86	70	40	57%	(4.95)	-7%	2.94	4%	3.18	5%
South River_214	154	73	48%	(10.39)	-7%	(2.05)	-1%	12.44	8%
Camp Creek_19	249	137	55%	(15.74)	-6%	21.73	9%	(3.67)	-1%
Long Island Creek_54	36	20	56%	(2.25)	-6%	0.13	0%	6.61	18%
Proctor Creek_163	252	138	55%	(15.44)	-6%	14.30	6%	1.15	0%
Peachtree Creek_105	272	93	34%	(16.24)	-6%	(1.06)	0%	17.28	6%
Nancy Creek_81	224	127	57%	(12.83)	-6%	(4.36)	-2%	17.20	8%
Nancy Creek_72	363	192	53%	(20.41)	-6%	(16.72)	-5%	37.11	10%
Camp Creek_6	817	542	66%	(46.06)	-6%	25.17	3%	20.90	3%
Nancy Creek_68	196	127	65%	(11.09)	-6%	(6.64)	-3%	17.75	9%
South River_246	141	15	10%	(7.47)	-5%	7.43	5%	(0.02)	0%
Camp Creek_9	156	64	41%	(8.31)	-5%	(4.05)	-3%	12.35	8%
Peachtree Creek_141	540	262	49%	(27.78)	-5%	21.92	4%	5.88	1%
Nancy Creek_69	95	58	62%	(4.71)	-5%	2.60	3%	12.33	13%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Proctor Creek_159	880	403	46%	(43.50)	-5%	61.58	7%	(18.11)	-2%
Peachtree Creek_133	343	129	38%	(16.53)	-5%	(7.15)	-2%	23.66	7%
Peachtree Creek_118	150	69	46%	(7.09)	-5%	0.10	0%	6.98	5%
Doolittle Creek_25	343	177	52%	(14.26)	-4%	(13.18)	-4%	30.13	9%
Nancy Creek_85	252	44	17%	(10.20)	-4%	(10.36)	-4%	20.56	8%
South River_238	361	245	68%	(14.69)	-4%	8.82	2%	5.86	2%
Peachtree Creek_117	416	98	24%	(16.38)	-4%	17.45	4%	(1.07)	0%
Intrenchment Creek_41	13	6	45%	(0.48)	-4%	(0.84)	-7%	1.34	11%
Peachtree Creek_101	253	119	47%	(9.71)	-4%	(8.69)	-3%	18.43	7%
Proctor Creek_170	175	82	47%	(6.32)	-4%	13.52	8%	(7.20)	-4%
South River_239	234	70	30%	(8.12)	-4%	0.90	0%	13.25	6%
Camp Creek_8	387	213	55%	(13.22)	-3%	(7.02)	-2%	20.23	5%
Utoy Creek_286	402	209	52%	(12.82)	-3%	(6.34)	-2%	19.17	5%
Proctor Creek_178	145	37	25%	(4.66)	-3%	11.86	8%	(7.20)	-5%
Camp Creek_15	108	58	54%	(3.15)	-3%	2.18	2%	0.96	1%
South River_233	140	44	32%	(3.86)	-3%	(1.18)	-1%	5.02	4%
Camp Creek_21	277	134	48%	(7.78)	-3%	10.68	4%	(2.84)	-1%
Proctor Creek_171	250	70	28%	(7.04)	-3%	2.54	1%	4.51	2%
South River_218	25	2	7%	(0.66)	-3%	1.21	5%	1.86	8%
South River_213	218	163	75%	(5.85)	-3%	8.22	4%	(2.37)	-1%
South River_220	238	150	63%	(6.14)	-3%	(0.78)	0%	6.91	3%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
South River_244	587	321	55%	(14.65)	-3%	(5.29)	-1%	19.97	3%
South River_237	153	100	66%	(3.82)	-3%	1.29	1%	2.53	2%
Peachtree Creek_135	321	53	17%	(8.11)	-3%	0.24	0%	7.88	2%
Utoy Creek_292	216	157	73%	(5.15)	-2%	(2.81)	-1%	7.96	4%
Camp Creek_18	58	21	35%	(1.43)	-2%	1.71	3%	1.87	3%
Camp Creek_16	260	135	52%	(5.98)	-2%	(0.17)	0%	6.16	2%
Proctor Creek_177	246	151	61%	(5.68)	-2%	11.62	5%	(5.94)	-2%
Intrenchment Creek_43	0	0	34%	(0.00)	-2%	0.02	10%	(0.01)	-6%
Sandy Creek_194	455	246	54%	(10.18)	-2%	15.09	3%	(2.80)	-1%
South River_227	338	121	36%	(6.94)	-2%	11.23	3%	(4.31)	-1%
Sugar Creek_256	317	167	53%	(5.98)	-2%	(30.14)	-10%	37.88	12%
Peachtree Creek_152	609	157	26%	(11.80)	-2%	(4.45)	-1%	16.28	3%
Peachtree Creek_147	419	186	45%	(8.13)	-2%	(8.28)	-2%	23.04	6%
Utoy Creek_282	345	147	43%	(6.07)	-2%	(4.46)	-1%	10.50	3%
Utoy Creek_272	608	469	77%	(11.19)	-2%	(5.37)	-1%	16.58	3%
Long Island Creek_51	179	103	57%	(3.09)	-2%	1.02	1%	18.25	10%
South River_204	18	5	28%	(0.32)	-2%	0.53	3%	(0.22)	-1%
Camp Creek_23	332	187	56%	(5.75)	-2%	(4.34)	-1%	13.02	4%
South River_209	8	5	61%	(0.13)	-2%	(0.11)	-1%	0.24	3%
South River_228	192	108	56%	(3.16)	-2%	4.00	2%	(0.85)	0%
Utoy Creek_260	3	2	71%	(0.04)	-2%	(0.05)	-2%	0.17	6%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Sugar Creek_249	347	158	46%	(5.06)	-2%	(21.81)	-6%	27.45	8%
Peachtree Creek_98	151	61	40%	(2.28)	-2%	(5.16)	-3%	11.73	8%
Utoy Creek_274	338	97	29%	(4.82)	-1%	3.45	1%	2.42	1%
Peachtree Creek_126	2	0	4%	(0.02)	-1%	0.12	7%	(0.10)	-5%
South River_211	200	87	43%	(2.65)	-1%	0.14	0%	2.58	1%
Utoy Creek_295	172	84	49%	(2.01)	-1%	(2.08)	-1%	4.09	2%
Nancy Creek_76	14	7	50%	(0.17)	-1%	1.06	7%	(0.37)	-3%
South River_205	439	214	49%	(4.36)	-1%	14.73	3%	(10.34)	-2%
Proctor Creek_179	428	266	62%	(3.94)	-1%	13.56	3%	(9.64)	-2%
Utoy Creek_306	246	137	56%	(2.30)	-1%	(7.32)	-3%	9.62	4%
Camp Creek_11	384	109	28%	(2.64)	-1%	(3.52)	-1%	7.96	2%
South River_247	397	136	34%	(2.93)	-1%	8.30	2%	(5.36)	-1%
Utoy Creek_294	23	18	77%	(0.14)	-1%	0.21	1%	(0.02)	0%
Peachtree Creek_110	161	88	55%	(1.01)	-1%	(6.84)	-4%	8.93	6%
Peachtree Creek_99	401	109	27%	(1.91)	-1%	(5.24)	-1%	7.10	2%
Mud Creek_61	79	12	15%	(0.40)	-1%	7.13	9%	(6.47)	-8%
Utoy Creek_299	191	155	81%	(1.03)	-1%	(3.91)	-2%	4.91	3%
Utoy Creek_291	274	158	58%	(1.02)	0%	(12.12)	-4%	13.13	5%
Utoy Creek_283	192	34	18%	(0.32)	0%	(7.07)	-4%	12.09	6%
Proctor Creek_157	404	238	59%	(0.73)	0%	9.71	2%	(8.98)	-2%
Proctor Creek_169	239	34	14%	(0.27)	0%	7.36	3%	(7.08)	-3%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Utoy Creek_311	207	167	81%	(0.25)	0%	(2.54)	-1%	2.80	1%
Utoy Creek_296	269	180	67%	(0.01)	0%	(10.00)	-4%	10.00	4%
Proctor Creek_165	437	190	43%	(0.03)	0%	26.05	6%	(26.01)	-6%
Utoy Creek_293	197	132	67%	(0.08)	0%	(5.95)	-3%	6.04	3%
Camp Creek_20	136	29	21%	0.14	0%	(0.51)	0%	0.37	0%
Peachtree Creek_114	407	71	17%	1.01	0%	22.77	6%	(23.79)	-6%
Utoy Creek_270	626	346	55%	1.28	0%	(2.24)	0%	0.96	0%
Peachtree Creek_127	974	185	19%	3.21	0%	(18.67)	-2%	15.48	2%
Utoy Creek_259	295	172	58%	0.93	0%	(10.19)	-3%	9.44	3%
South River_236	12	5	41%	0.04	0%	0.11	1%	(0.15)	-1%
Intrenchment Creek_43	531	201	38%	2.86	1%	(12.39)	-2%	9.57	2%
Utoy Creek_271	281	149	53%	1.41	1%	(8.86)	-3%	7.45	3%
Utoy Creek_273	395	150	38%	1.96	1%	(10.16)	-3%	8.23	2%
South River_210	9	1	6%	0.04	1%	0.04	0%	(0.04)	0%
Peachtree Creek_130	338	37	11%	2.19	1%	0.90	0%	(3.07)	-1%
Proctor Creek_173	126	74	58%	0.77	1%	4.99	4%	(5.74)	-5%
South River_207	336	207	62%	1.95	1%	(10.80)	-3%	8.84	3%
Proctor Creek_175	230	93	40%	1.66	1%	(5.30)	-2%	3.62	2%
Utoy Creek_269	448	318	71%	3.12	1%	(21.13)	-5%	18.03	4%
South River_240	521	146	28%	4.87	1%	(4.21)	-1%	(0.67)	0%
Utoy Creek_312	385	241	63%	3.48	1%	(21.66)	-6%	18.20	5%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
South River_243	524	325	62%	5.30	1%	(11.05)	-2%	5.76	1%
Peachtree Creek_128	220	35	16%	2.49	1%	(5.98)	-3%	3.50	2%
Proctor Creek_161	353	18	5%	3.87	1%	5.10	1%	(8.98)	-3%
Peachtree Creek_90	375	83	22%	3.98	1%	21.90	6%	(25.87)	-7%
South River_216	284	112	40%	3.34	1%	(0.00)	0%	(3.33)	-1%
Utoy Creek_301	324	197	61%	4.25	1%	(10.31)	-3%	6.22	2%
Intrenchment Creek_33	0	0	13%	0.00	1%	0.00	3%	0.00	2%
Intrenchment Creek_31	208	58	28%	2.65	1%	(2.95)	-1%	0.29	0%
Peachtree Creek_131	200	33	16%	3.07	2%	2.19	1%	(5.28)	-3%
Utoy Creek_305	107	37	34%	1.64	2%	(2.86)	-3%	5.62	5%
Utoy Creek_287	338	214	63%	5.15	2%	(19.29)	-6%	14.15	4%
Utoy Creek_313	235	152	65%	3.51	2%	(12.94)	-5%	9.43	4%
Sugar Creek_250	232	121	52%	3.43	2%	(22.54)	-10%	20.04	9%
Intrenchment Creek_44	454	183	40%	6.64	2%	(15.12)	-3%	8.48	2%
Peachtree Creek_150	264	155	58%	4.35	2%	(19.21)	-7%	19.89	8%
Intrenchment Creek_36	186	95	51%	2.92	2%	(10.71)	-6%	7.79	4%
Proctor Creek_172	438	254	58%	7.55	2%	(3.93)	-1%	(3.63)	-1%
Utoy Creek_302	169	143	85%	3.10	2%	(1.08)	-1%	1.25	1%
Utoy Creek_264	327	272	83%	5.87	2%	(10.98)	-3%	6.21	2%
Sugar Creek_251	357	123	34%	6.94	2%	(17.88)	-5%	10.94	3%
South River_229	29	8	28%	0.58	2%	(0.96)	-3%	0.37	1%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Peachtree Creek_104	361	29	8%	7.16	2%	5.04	1%	(12.21)	-3%
Sandy Creek_196	212	126	59%	4.17	2%	(6.72)	-3%	2.56	1%
Proctor Creek_182	609	222	36%	11.97	2%	(2.26)	0%	(8.95)	-1%
South River_225	155	73	47%	3.32	2%	(4.04)	-3%	0.74	0%
Utoy Creek_300	180	136	76%	3.83	2%	(9.67)	-5%	5.81	3%
Utoy Creek_314	732	259	35%	15.20	2%	(4.94)	-1%	(10.25)	-1%
Intrenchment Creek_33	434	92	21%	8.94	2%	7.95	2%	(16.89)	-4%
Utoy Creek_267	130	80	61%	2.67	2%	(2.20)	-2%	(0.48)	0%
Peachtree Creek_139	279	18	6%	6.13	2%	(1.23)	0%	(4.91)	-2%
Intrenchment Creek_42	516	51	10%	11.15	2%	6.52	1%	(17.68)	-3%
Sugar Creek_254	321	90	28%	6.93	2%	(12.72)	-4%	5.78	2%
South River_242	524	220	42%	11.97	2%	(12.19)	-2%	0.25	0%
South River_222	14	10	67%	0.32	2%	(0.58)	-4%	0.26	2%
Peachtree Creek_100	177	47	26%	4.31	2%	(8.18)	-5%	3.90	2%
Camp Creek_7	274	124	45%	6.65	2%	(1.19)	0%	(5.40)	-2%
Peachtree Creek_153	221	20	9%	5.24	2%	1.54	1%	(6.78)	-3%
South River_212	333	131	39%	7.88	2%	(5.68)	-2%	(2.20)	-1%
South River_234	381	183	48%	9.39	3%	(16.58)	-4%	7.38	2%
Nancy Creek_77	71	38	54%	1.75	3%	3.88	5%	3.87	5%
Utoy Creek_297	522	311	60%	13.80	3%	(25.18)	-5%	11.38	2%
Peachtree Creek_151	569	238	42%	15.02	3%	(34.66)	-6%	19.64	3%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Utoy Creek_263	609	481	79%	16.51	3%	(27.18)	-4%	12.44	2%
South River_226	762	167	22%	21.67	3%	13.70	2%	(35.37)	-5%
Proctor Creek_187	288	77	27%	8.15	3%	2.67	1%	(10.79)	-4%
South River_217	560	233	42%	15.81	3%	(5.44)	-1%	(7.88)	-1%
Proctor Creek_166	304	35	11%	8.55	3%	9.81	3%	(18.35)	-6%
Peachtree Creek_103	366	60	16%	10.14	3%	(8.62)	-2%	(1.52)	0%
Shoal Creek_201	46	25	54%	1.28	3%	(6.40)	-14%	5.29	11%
Utoy Creek_265	99	49	49%	2.89	3%	(3.06)	-3%	0.26	0%
Intrenchment Creek_35	330	147	44%	9.56	3%	(25.52)	-8%	15.96	5%
Proctor Creek_168	834	451	54%	24.11	3%	(21.01)	-3%	(3.08)	0%
Intrenchment Creek_38	195	96	49%	5.56	3%	(7.93)	-4%	2.35	1%
South River_224	381	119	31%	11.36	3%	(3.00)	-1%	(8.37)	-2%
South River_235	165	63	38%	5.19	3%	0.19	0%	(5.39)	-3%
Proctor Creek_158	227	101	44%	7.04	3%	(7.55)	-3%	0.53	0%
Proctor Creek_185	480	147	31%	14.89	3%	29.99	6%	(44.89)	-9%
Sugar Creek_257	227	95	42%	7.01	3%	(11.52)	-5%	4.52	2%
Intrenchment Creek_37	285	128	45%	9.43	3%	(14.58)	-5%	5.19	2%
Peachtree Creek_94	207	23	11%	6.76	3%	(2.33)	-1%	(4.44)	-2%
Proctor Creek_174	144	44	30%	4.70	3%	7.61	5%	(12.31)	-9%
Sugar Creek_248	175	89	51%	5.68	3%	(16.97)	-10%	12.94	7%
South River_245	527	134	26%	18.13	3%	9.91	2%	(28.04)	-5%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Utoy Creek_285	342	258	75%	11.66	3%	(18.00)	-5%	6.40	2%
South River_223	127	68	53%	4.49	4%	(6.12)	-5%	4.23	3%
South River_221	738	234	32%	25.56	4%	(14.71)	-2%	(10.87)	-1%
Nancy Creek_73	42	27	63%	1.53	4%	(2.94)	-7%	2.42	6%
South River_206	56	29	51%	2.09	4%	(2.77)	-5%	6.07	11%
Intrenchment Creek_45	9	4	49%	0.32	4%	(0.96)	-11%	0.71	8%
Intrenchment Creek_34	340	57	17%	13.06	4%	1.24	0%	(14.31)	-4%
Utoy Creek_266	113	63	55%	4.25	4%	(7.24)	-6%	3.99	4%
Sugar Creek_258	270	120	44%	10.64	4%	(18.93)	-7%	8.28	3%
Sugar Creek_252	5	1	30%	0.18	4%	(0.04)	-1%	0.69	15%
Camp Creek_22	60	45	76%	2.39	4%	3.12	5%	(0.24)	0%
Proctor Creek_160	575	268	47%	22.86	4%	(30.82)	-5%	7.98	1%
Camp Creek_10	51	3	6%	2.11	4%	7.66	15%	23.63	46%
Utoy Creek_276	490	306	62%	20.12	4%	(25.94)	-5%	5.81	1%
Proctor Creek_183	416	73	18%	17.09	4%	11.18	3%	(28.28)	-7%
Peachtree Creek_116	0	0	12%	0.01	4%	(0.02)	-7%	0.00	0%
Sugar Creek_253	25	13	53%	1.05	4%	(2.62)	-11%	2.18	9%
Doolittle Creek_24	99	53	54%	4.16	4%	(11.91)	-12%	10.24	10%
Proctor Creek_164	634	264	42%	27.43	4%	(35.68)	-6%	8.25	1%
Peachtree Creek_116	468	150	32%	20.18	4%	(28.01)	-6%	7.84	2%
Proctor Creek_181	344	184	53%	14.77	4%	(5.93)	-2%	(8.85)	-3%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Utoy Creek_275	507	362	71%	22.25	4%	(29.92)	-6%	7.67	2%
Sandy Creek_198	205	88	43%	9.18	5%	2.40	1%	(6.78)	-3%
Intrenchment Creek_40	154	68	44%	6.85	5%	(8.37)	-5%	1.51	1%
Proctor Creek_189	187	56	30%	8.75	5%	0.08	0%	(8.84)	-5%
Proctor Creek_188	275	58	21%	13.33	5%	15.18	6%	(28.52)	-10%
Sandy Creek_197	343	174	51%	16.48	5%	(20.58)	-6%	4.12	1%
South River_219	146	59	40%	7.11	5%	(4.16)	-3%	(2.96)	-2%
Utoy Creek_288	97	34	35%	4.92	5%	(8.11)	-8%	3.21	3%
Sugar Creek_255	289	109	38%	15.09	5%	(12.43)	-4%	30.24	10%
Proctor Creek_184	294	53	18%	15.72	5%	5.94	2%	(21.64)	-7%
Peachtree Creek_124	219	54	25%	11.63	5%	(14.12)	-6%	2.50	1%
Utoy Creek_310	296	214	72%	15.72	5%	(6.39)	-2%	2.72	1%
Sandy Creek_200	234	142	61%	12.41	5%	(7.86)	-3%	(4.51)	-2%
Nancy Creek_83	18	2	11%	1.00	5%	(0.04)	0%	0.41	2%
Peachtree Creek_148	210	82	39%	11.35	5%	(4.17)	-2%	(7.22)	-3%
Proctor Creek_156	502	240	48%	27.11	5%	5.13	1%	(32.27)	-6%
South River_208	43	20	48%	2.30	5%	(0.77)	-2%	2.67	6%
Intrenchment Creek_46	669	146	22%	35.97	5%	(18.39)	-3%	(17.57)	-3%
Utoy Creek_261	311	212	68%	16.66	5%	(22.05)	-7%	5.39	2%
Peachtree Creek_122	65	35	55%	3.64	6%	(3.39)	-5%	2.09	3%
Long Island Creek_50	75	49	66%	4.20	6%	2.57	3%	13.12	18%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Shoal Creek_202	8	3	41%	0.44	6%	(0.70)	-9%	1.38	18%
Sandy Creek_191	636	341	54%	36.30	6%	(41.03)	-6%	4.73	1%
Peachtree Creek_132	265	75	28%	15.40	6%	(15.44)	-6%	0.04	0%
Intrenchment Creek_39	207	82	40%	12.29	6%	8.59	4%	(20.87)	-10%
Peachtree Creek_104	0	0	10%	0.02	6%	0.03	8%	(0.05)	-13%
Utoy Creek_262	268	166	62%	16.12	6%	(19.21)	-7%	3.09	1%
Sugar Creek_257	0	0	28%	0.00	6%	0.00	6%	(0.00)	-24%
Intrenchment Creek_30	184	50	27%	11.63	6%	1.85	1%	(13.48)	-7%
Bakers Ferry_2	287	201	70%	18.85	7%	(14.66)	-5%	9.02	3%
Peachtree Creek_121	12	4	32%	0.81	7%	0.75	6%	0.15	1%
Utoy Creek_289	84	73	87%	5.67	7%	0.11	0%	2.47	3%
South River_215	514	251	49%	35.53	7%	(34.13)	-7%	(1.44)	0%
Sandy Creek_199	323	211	65%	22.54	7%	(10.57)	-3%	(11.98)	-4%
Utoy Creek_268	849	593	70%	63.60	8%	(82.40)	-10%	18.79	2%
Intrenchment Creek_32	149	55	37%	11.99	8%	(0.52)	0%	(11.46)	-8%
Proctor Creek_162	281	109	39%	22.68	8%	9.61	3%	(32.30)	-12%
South River_232	222	135	61%	18.16	8%	7.24	3%	(18.86)	-8%
Utoy Creek_298	656	417	64%	55.68	9%	(66.29)	-10%	12.81	2%
Sandy Creek_193	309	220	71%	27.54	9%	(17.32)	-6%	(10.21)	-3%
Intrenchment Creek_35	0	0	15%	0.00	9%	0.02	35%	(0.02)	-42%
Utoy Creek_290	197	124	63%	18.20	9%	(7.68)	-4%	(6.01)	-3%

Small Watershed	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Bakers Ferry_5	3	0	15%	0.31	9%	0.10	3%	(0.36)	-11%
South River_241	267	82	31%	25.99	10%	3.33	1%	(29.31)	-11%
Shoal Creek_203	4	2	55%	0.46	10%	(0.77)	-17%	0.89	20%
Sandy Creek_195	429	265	62%	49.68	12%	(48.20)	-11%	(1.50)	0%
Bakers Ferry_3	137	70	51%	17.32	13%	(19.74)	-14%	2.39	2%
Proctor Creek_176	266	136	51%	36.32	14%	(25.83)	-10%	13.12	5%
Utoy Creek_277	233	177	76%	31.59	14%	(11.41)	-5%	2.81	1%
Utoy Creek_304	180	122	68%	26.12	15%	(22.18)	-12%	4.32	2%
Camp Creek_13	3	1	19%	0.48	15%	0.69	22%	0.31	10%
Utoy Creek_303	89	47	53%	14.04	16%	(5.90)	-7%	3.39	4%
Utoy Creek_278	2	2	64%	0.45	18%	(0.01)	0%	(0.10)	-4%
Camp Creek_17	2	0	24%	0.37	24%	0.75	48%	0.30	20%
Bakers Ferry_4	1	0	35%	0.18	32%	0.35	63%	0.00	1%
Utoy Creek_307	52	38	73%	17.50	34%	(6.78)	-13%	(1.51)	-3%
Bakers Ferry_1	5	4	69%	1.83	36%	(0.58)	-12%	0.06	1%
Proctor Creek_186	11	7	63%	4.08	36%	0.49	4%	0.97	9%
Utoy Creek_284	16	14	86%	6.11	38%	0.38	2%	0.65	4%

F. Parks > 2 Acres in Size

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Doctors Park	2	0.8	39%	(0.8)	-38%	0.1	5%	0.9	42%
Little Nancy Creek Park	5	3.4	73%	(1.1)	-23%	0.7	15%	0.4	9%
Spink-Collins Park	26	19.5	74%	(5.6)	-21%	5.6	21%	0.0	0%
Riverside	6	4.3	71%	(1.2)	-20%	0.7	12%	0.5	8%
Rodney Cook Senior Park	15	1.2	8%	(2.4)	-16%	-7.2	-49%	9.6	66%
Swann Preserve	50	40.5	80%	(7.6)	-15%	7.0	14%	0.5	1%
Peachtree Battle Parkway	4	2.8	65%	(0.6)	-15%	0.1	3%	0.5	12%
Atlanta Memorial Park	60	32.2	54%	(8.6)	-14%	6.0	10%	2.6	4%
Chattahoochee Park	3	1.1	34%	(0.3)	-10%	0.0	-1%	0.4	11%
Tanyard Creek Urban Forest	6	4.8	76%	(0.6)	-10%	0.4	7%	0.2	3%
Beaverbrook Park	7	5.7	82%	(0.7)	-10%	0.5	7%	0.2	3%
Mantissa Road	3	2.2	85%	(0.2)	-10%	0.3	10%	0.0	0%
Tanyard Creek Park	16	9.5	59%	(1.5)	-9%	0.8	5%	0.7	4%
Edwin Place Park	4	3.5	83%	(0.4)	-9%	0.4	8%	0.0	1%
Shirley Place Park	4	2.9	65%	(0.4)	-9%	0.4	9%	0.0	0%
Selena S. Butler Park	5	0.5	9%	(0.5)	-8%	-1.0	-19%	1.5	28%
Falling Water	26	18.4	71%	(2.1)	-8%	2.0	8%	0.1	1%
Rockdale Park	63	40.9	65%	(5.1)	-8%	4.8	8%	0.3	0%

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Blue Heron Nature Preserve	21	9.8	47%	(1.6)	-8%	1.1	6%	0.5	2%
Greenbriar	7	5.5	80%	(0.5)	-8%	0.4	5%	0.2	2%
Emma Lane	6	4.3	69%	(0.5)	-7%	0.8	12%	-0.3	-5%
Southside Park	211	153.6	73%	(15.4)	-7%	20.4	10%	4.9	2%
Kirkwood Urban Forest	6	4.8	74%	(0.5)	-7%	0.3	5%	0.1	2%
Sunnybrook Park	2	2.0	92%	(0.1)	-6%	0.2	10%	0.1	6%
Vermont Road Park	2	1.7	81%	(0.1)	-6%	0.1	3%	0.1	3%
Tullwater Park	5	3.9	73%	(0.3)	-6%	0.1	2%	0.2	3%
Peachtree Hills Park	8	2.9	38%	(0.4)	-6%	-0.2	-3%	0.6	9%
Coventry Station CE	16	13.9	86%	(0.9)	-5%	0.9	5%	0.0	0%
Boulevard Crossing	22	2.6	12%	(1.1)	-5%	8.5	39%	-7.5	-34%
Indian Creek Park	4	3.3	82%	(0.2)	-4%	0.0	0%	0.2	4%
Klaus Park and Preserve in Bakers Ferry	10	8.5	89%	(0.4)	-4%	0.2	2%	0.2	2%
Morningside Nature Preserve	37	29.3	78%	(1.6)	-4%	5.5	15%	1.1	3%
Grant Park	131	59.7	46%	(5.6)	-4%	-12.8	-10%	9.7	7%
Frankie Allen Park	23	10.8	47%	(0.9)	-4%	-2.1	-9%	3.1	13%
Barbara A. McCoy Park	9	6.5	75%	(0.3)	-4%	0.4	5%	-0.1	-1%
Rosel Fann Park	19	10.0	54%	(0.7)	-4%	0.6	3%	0.1	1%
Lionel Hampton	49	45.0	91%	(1.7)	-3%	1.5	3%	0.3	1%

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Beecher Park	5	4.6	89%	(0.2)	-3%	0.1	1%	0.1	2%
Orme Park	6	4.9	78%	(0.2)	-3%	0.3	4%	-0.1	-1%
Herbert Taylor Park	26	21.0	80%	(0.8)	-3%	2.6	10%	1.2	5%
Virgilee Park	3	1.5	42%	(0.1)	-3%	0.0	1%	0.1	1%
Springlake Park	5	4.8	91%	(0.2)	-3%	0.4	8%	0.2	4%
Oak Grove Park	3	1.8	53%	(0.1)	-3%	-0.1	-2%	0.2	5%
Stone Hogan Park	11	9.4	87%	(0.3)	-3%	0.5	4%	-0.1	-1%
Alexander Park	11	10.2	93%	(0.3)	-3%	1.0	9%	0.3	3%
Mountain Way Commons	11	6.5	58%	(0.3)	-3%	0.3	3%	0.0	0%
Cumberlander	9	7.9	93%	(0.2)	-3%	0.1	1%	0.1	1%
Rev. James Orange Park at Oakland City	14	5.7	40%	(0.3)	-2%	0.2	1%	0.1	1%
Four Corners Park	5	1.4	29%	(0.1)	-2%	0.2	4%	-0.1	-2%
Empire Park	10	4.8	48%	(0.2)	-2%	0.5	5%	-0.3	-3%
Phoenix III Park	4	1.8	47%	(0.1)	-2%	-0.2	-6%	0.3	9%
Cleveland Avenue Park	5	2.4	45%	(0.1)	-2%	0.2	4%	-0.1	-2%
South Bend Park	75	47.1	62%	(1.4)	-2%	3.2	4%	0.2	0%
Deerwood Park	17	10.8	63%	(0.3)	-2%	-0.4	-2%	0.7	4%
Herbert Greene	61	56.2	92%	(0.9)	-1%	-0.1	0%	1.0	2%
Cascade Springs Nature Preserve	121	111.6	92%	(1.6)	-1%	1.3	1%	0.3	0%
Sibley Park	9	7.9	92%	(0.1)	-1%	0.7	8%	0.2	2%

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Sidney Marcus Park	3	1.9	69%	(0.0)	-1%	0.0	-1%	0.0	2%
Garden Hills Park	3	2.0	59%	(0.1)	-1%	0.0	1%	0.3	10%
Enota Park	9	5.5	63%	(0.1)	-1%	0.1	1%	0.0	0%
Lenox-Wildwood Park	8	7.3	86%	(0.1)	-1%	1.0	12%	0.1	1%
Underwood Hills Park	10	7.1	73%	(0.1)	-1%	1.2	13%	-0.1	-1%
Browns Mill Golf Course	165	33.3	20%	(1.6)	-1%	-1.4	-1%	3.0	2%
Chastain Memorial Park	250	102.6	41%	(1.9)	-1%	-14.3	-6%	18.1	7%
Winn Park	10	6.2	62%	(0.1)	-1%	0.3	3%	-0.2	-2%
Avery Park-Gilbert House	11	9.5	91%	(0.1)	-1%	0.9	9%	0.2	2%
Mozley Park	31	11.3	36%	(0.2)	-1%	0.2	1%	0.0	0%
Daniel Johnson Nature Preserve	8	6.7	83%	(0.0)	-1%	-0.1	-1%	0.1	2%
Campbellton Road Park	10	8.5	83%	(0.0)	0%	0.2	2%	-0.2	-2%
Drake Park	5	4.7	97%	(0.0)	0%	1.0	21%	0.0	0%
North Camp Creek Parkway NP	73	56.5	77%	0.3	0%	8.5	12%	1.2	2%
Pittman Park	14	3.5	26%	(0.0)	0%	0.1	1%	0.0	0%
Harper Park	14	7.3	54%	(0.0)	0%	-0.2	-2%	0.3	2%
Spring Valley Park	4	3.3	93%	(0.0)	0%	0.4	11%	0.1	3%
Shady Valley Park	11	6.7	60%	(0.1)	0%	0.1	1%	1.0	9%
Mayson Park	3	2.7	97%	(0.0)	0%	0.3	10%	0.0	2%

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
J.F. Kennedy Park	2	0.1	4%	0.0	0%	-1.7	-71%	1.7	72%
Dale Creek Park	3	2.8	93%	0.0	0%	0.3	9%	0.0	1%
Kathryn Johnston Memorial Park	3	1.1	33%	0.0	0%	0.3	11%	-0.3	-10%
Yonah Park	2	1.5	75%	0.0	0%	-0.1	-3%	0.1	3%
Lakewood Fairgrounds & HiFi Buys Amphitheater	120	22.5	19%	0.2	0%	-4.0	-3%	3.8	3%
Mayson Ravine	3	3.2	99%	0.0	0%	0.3	9%	0.1	2%
John Howell Memorial Park	3	2.0	65%	0.0	0%	-0.1	-2%	0.1	2%
Arthur Langford Jr Park	10	3.6	37%	0.0	0%	0.0	0%	0.0	0%
Ben Hill Park	23	10.0	44%	0.1	0%	-2.2	-10%	2.1	9%
John C. Burdine Center	4	1.2	28%	0.0	1%	0.6	14%	-0.6	-15%
Mary Shy Scott Park	24	19.0	78%	0.2	1%	0.2	1%	-0.4	-2%
Ansley Park	6	4.7	76%	0.1	1%	0.0	-1%	0.0	0%
Perkerson Park	49	29.2	60%	0.6	1%	-0.9	-2%	0.3	1%
Maddox Park	55	17.9	33%	0.7	1%	-0.1	0%	-3.7	-7%
Anderson Park	56	37.9	68%	0.8	1%	-4.0	-7%	3.2	6%
Isabel Gates Webster Park	14	10.6	76%	0.2	2%	-0.3	-2%	0.0	0%
Melvin Drive Park	52	44.6	85%	0.9	2%	-0.3	0%	-0.6	-1%
Adams Park	160	65.6	41%	3.0	2%	-2.4	-1%	-1.6	-1%
John A. White Park	112	52.2	47%	2.3	2%	-2.6	-2%	0.3	0%

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Emma Millican Park	13	10.0	77%	0.3	2%	-0.4	-3%	0.1	1%
Bessie Branham Park	7	1.6	25%	0.2	2%	-0.7	-10%	0.5	8%
Fort Peachtree Landings	15	9.5	64%	0.4	2%	0.6	4%	1.0	7%
A.D. Williams Park	10	6.3	60%	0.3	2%	0.9	8%	-1.1	-11%
Grove Park	17	6.7	39%	0.5	3%	-0.3	-2%	-0.1	-1%
McClatchey Park	5	3.2	65%	0.1	3%	-0.2	-4%	0.0	1%
J. Allen Couch Park	6	1.7	27%	0.2	4%	0.8	13%	-1.0	-16%
Center Hill Park	44	27.7	63%	1.6	4%	-0.8	-2%	-0.9	-2%
Westside Park	141	46.8	33%	5.4	4%	6.4	5%	-11.8	-8%
17th Street Park	2	2.1	93%	0.1	4%	0.3	12%	0.1	6%
Gun Club Park	42	39.3	94%	(0.2)	4%	2.9	7%	-0.1	0%
Candler Park	51	18.2	35%	2.1	4%	-2.9	-6%	0.9	2%
Tucson Trail Park	3	2.0	71%	0.1	4%	0.1	5%	-0.3	-9%
East Lake Park	10	3.7	36%	0.4	4%	-1.3	-13%	0.9	8%
Memorial Drive Greenway	5	0.5	11%	0.2	4%	2.5	56%	-2.7	-60%
Oakland Cemetery	48	13.4	28%	2.1	4%	-0.2	0%	-5.7	-12%
Haynes Manor Park	3	2.7	90%	0.1	5%	0.3	12%	0.2	7%
Rosa L. Burney Park	14	3.3	24%	0.7	5%	-0.8	-6%	0.2	1%
Outdoor Activity Center	22	17.7	81%	1.1	5%	-1.0	-5%	-0.1	-1%
Rawson-Washington Park	4	0.9	19%	0.2	5%	0.0	0%	-0.2	-5%

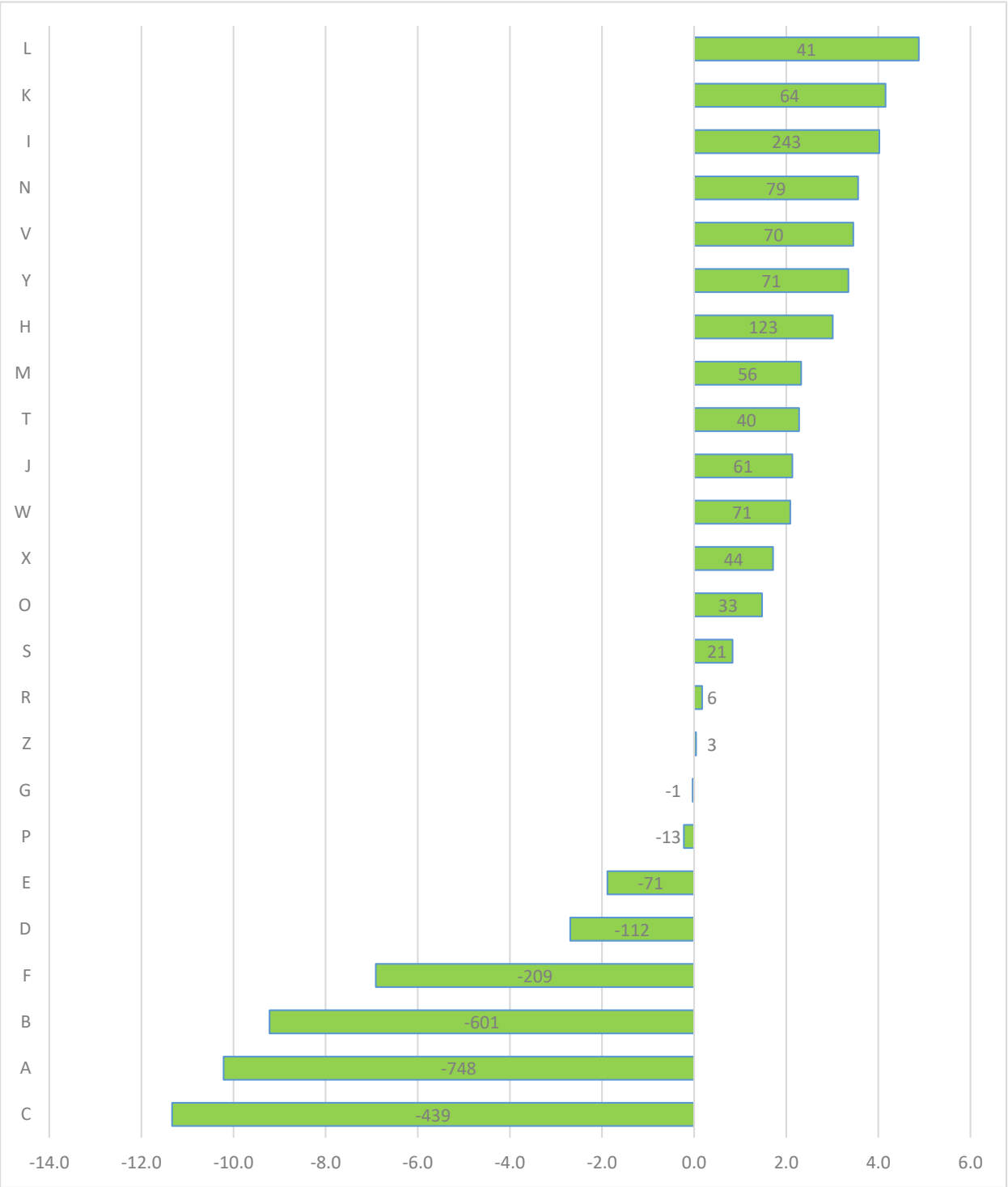
Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
West End Park	7	2.5	39%	0.3	5%	-0.3	-4%	0.0	-1%
Wilson Mill Park	37	24.9	68%	1.9	5%	-2.2	-6%	0.3	1%
West Manor Park	10	6.3	60%	0.5	5%	-0.7	-7%	0.2	2%
Thomasville Park	17	8.8	52%	0.9	5%	-1.2	-7%	0.3	2%
Robert W. Woodruff Park	3	1.1	34%	0.2	5%	-0.1	-2%	-0.1	-3%
Howard Park	10	8.8	91%	0.5	6%	0.8	9%	0.6	6%
South Atlanta Park	11	4.3	39%	0.6	6%	-1.0	-9%	0.3	3%
Collier Park	16	12.2	75%	1.0	6%	-1.2	-8%	0.3	2%
Coan Park	13	4.2	31%	0.8	6%	-1.4	-10%	0.6	4%
Chosewood Park	16	11.9	73%	1.0	6%	-1.1	-7%	0.0	0%
Washington Park	20	7.4	37%	1.3	6%	-1.1	-6%	-0.1	-1%
Gilliam Park	3	2.0	74%	0.2	7%	-0.3	-10%	0.1	3%
Whittier Mills Park	22	14.4	66%	1.5	7%	-1.2	-6%	-0.2	-1%
Adair Park II	11	1.8	17%	0.7	7%	-1.4	-13%	0.7	7%
Renaissance Park	6	3.8	67%	0.4	7%	-0.7	-13%	0.3	6%
Freedom Park	125	56.6	45%	9.2	7%	-16.7	-13%	-2.6	-2%
Brownwood Park	13	9.0	71%	0.9	7%	-1.1	-9%	0.2	2%
Lanier Boulevard Parkway	2	1.2	56%	0.2	7%	-0.2	-11%	0.1	4%
Piedmont Park	194	76.5	40%	15.0	8%	-9.5	-5%	-5.5	-3%
Central Park	17	5.4	31%	1.4	8%	-2.0	-12%	0.7	4%

Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Ella Mae Wade Brayboy Memorial Park	2	0.7	30%	0.2	8%	-0.2	-7%	0.0	-1%
English Park	9	5.9	63%	0.9	9%	-0.7	-7%	-1.2	-12%
Adair Park I	6	2.3	37%	0.6	9%	0.5	8%	-1.1	-17%
Iverson Park	2	1.0	49%	0.2	9%	-0.3	-13%	0.1	3%
D.H. Stanton Park	9	2.0	24%	0.8	10%	0.1	2%	-0.9	-11%
Bass Recreation Center	5	1.1	23%	0.5	11%	-0.5	-11%	0.0	0%
Springvale Park	4	2.8	65%	0.5	11%	-0.4	-10%	0.0	0%
Phoenix II Park	7	1.7	23%	0.8	11%	-0.7	-10%	0.0	-1%
Springdale Park	5	1.7	33%	0.6	11%	-0.3	-6%	-0.3	-5%
Lake Claire Park	5	3.5	71%	0.6	11%	-0.6	-11%	0.0	0%
Chattahoochee Trail	52	23.2	45%	5.9	11%	9.3	18%	1.3	3%
Walker Park	7	2.2	32%	0.9	13%	-1.0	-14%	0.0	1%
Historic Fourth Ward Park	19	3.5	19%	2.5	13%	1.8	10%	-4.3	-23%
Knight Park	3	1.9	70%	0.4	13%	-0.2	-6%	-0.2	-7%
Cleopas R. Johnson Park	4	1.4	34%	0.6	14%	-0.7	-15%	0.1	2%
Goldsboro Park	3	1.2	48%	0.4	14%	-0.3	-12%	0.0	-2%
Howell Park	2	1.1	51%	0.3	14%	-0.2	-9%	-0.1	-6%
Rose Circle Park	3	1.4	52%	0.4	15%	-0.3	-11%	-0.1	-5%
Shadyside Park	4	3.0	73%	0.6	15%	-0.5	-12%	-0.1	-3%

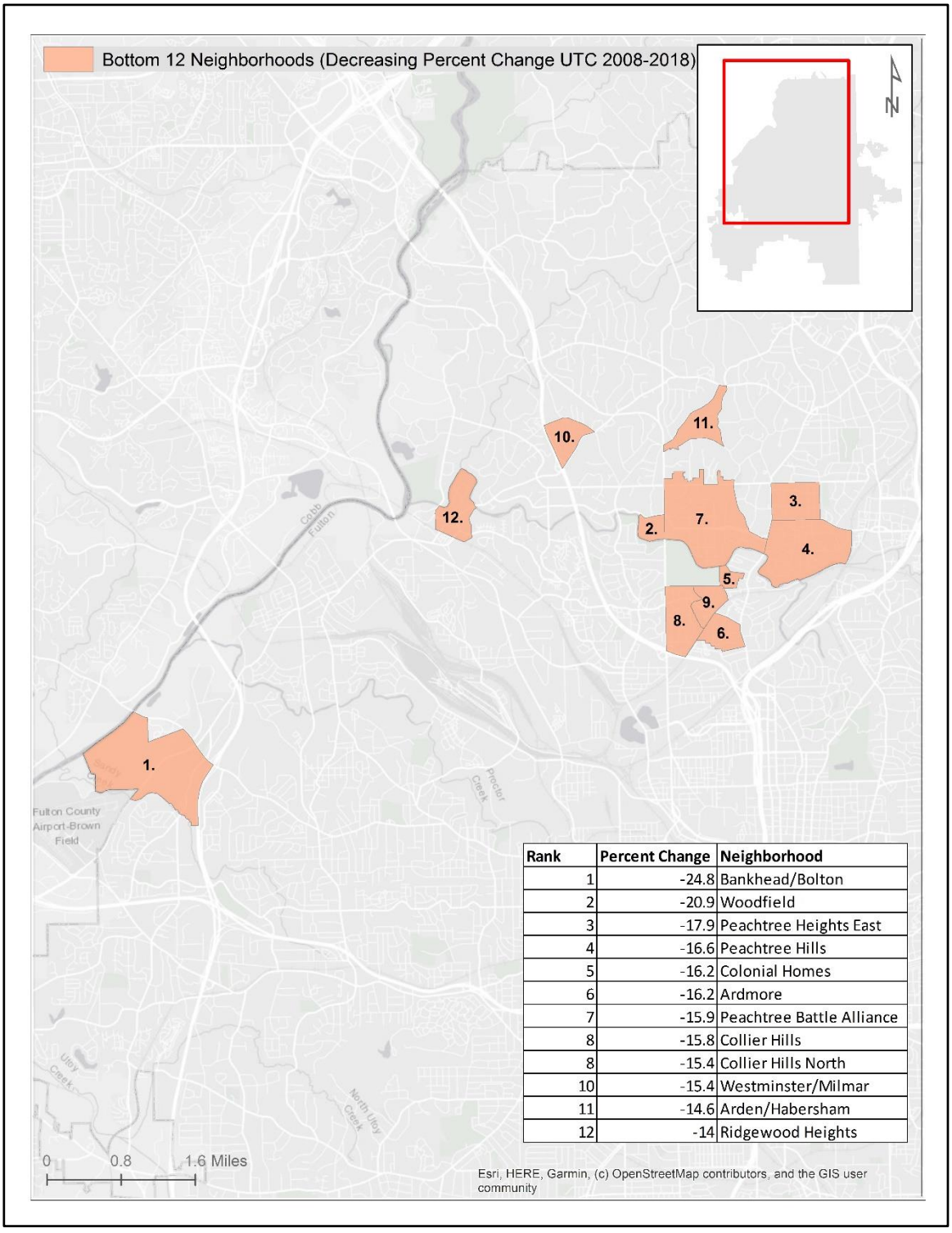
Park	Acres	Acres UTC 2018	% UTC 2018	Acres UTC Change	% UTC Change	Acres NTV Change	% NTV Change	Acres NV Channge	% NV Change
Lillian Cooper Shepherd Park	2	1.2	54%	0.4	16%	0.0	-1%	-0.3	-15%
Benteen Park	10	5.2	52%	1.6	16%	-1.2	-12%	-0.4	-4%
Adamsville Recrecreation Center	11	3.0	28%	1.8	17%	-1.0	-9%	-0.8	-7%
Lang-Carson Park	3	1.0	28%	0.6	17%	0.0	0%	-0.6	-17%
Dean Rusk Park	6	1.9	31%	1.4	23%	-0.5	-8%	-0.9	-15%
Cabbagetown Park	4	1.4	38%	1.0	27%	-0.7	-19%	-0.3	-8%

Appendix 6
Land Cover Change 2008-2018 Graphs by Selected Geographies

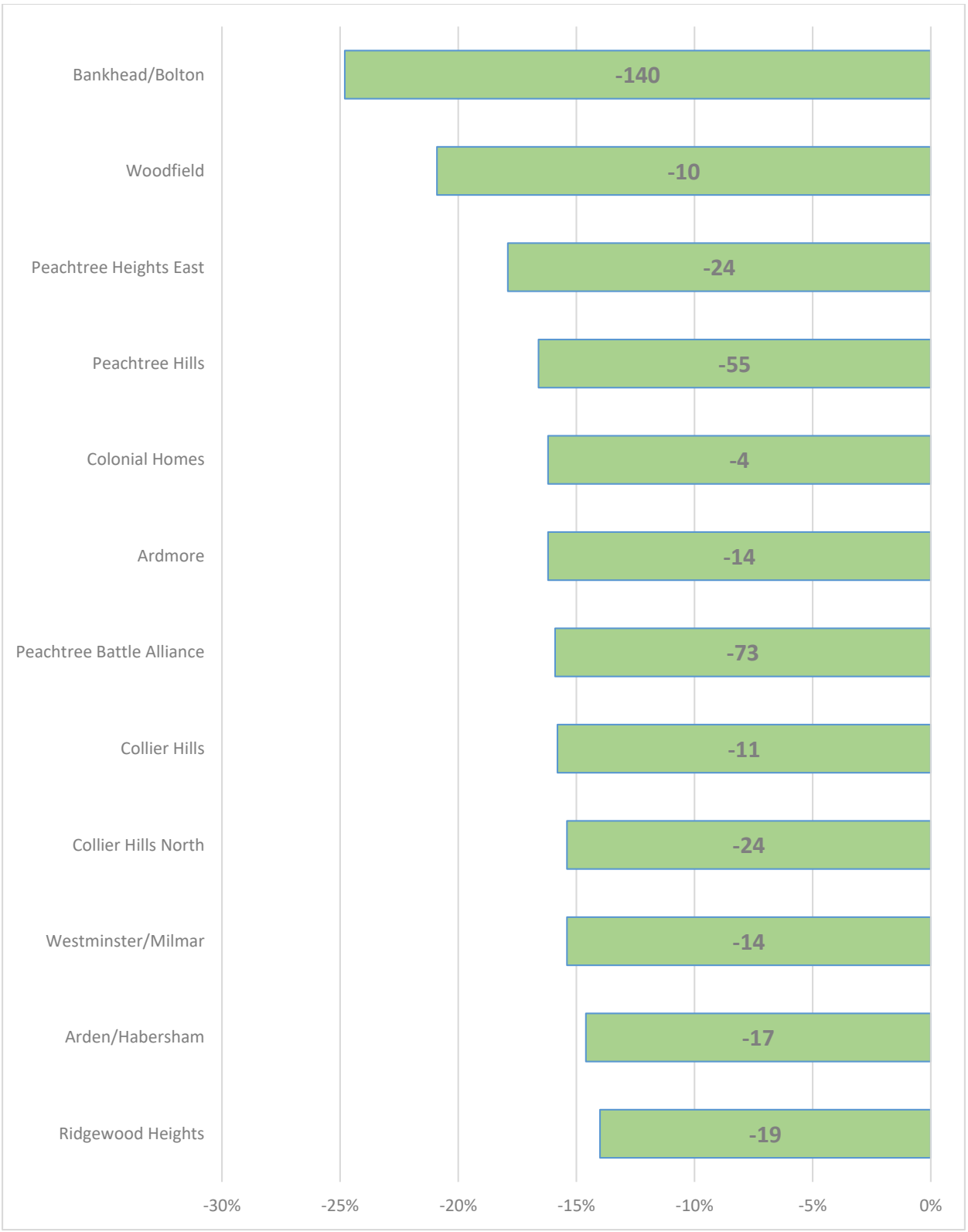
1. Neighborhood Planning Units (% Tree Cover Change – Acres Change in Bar)



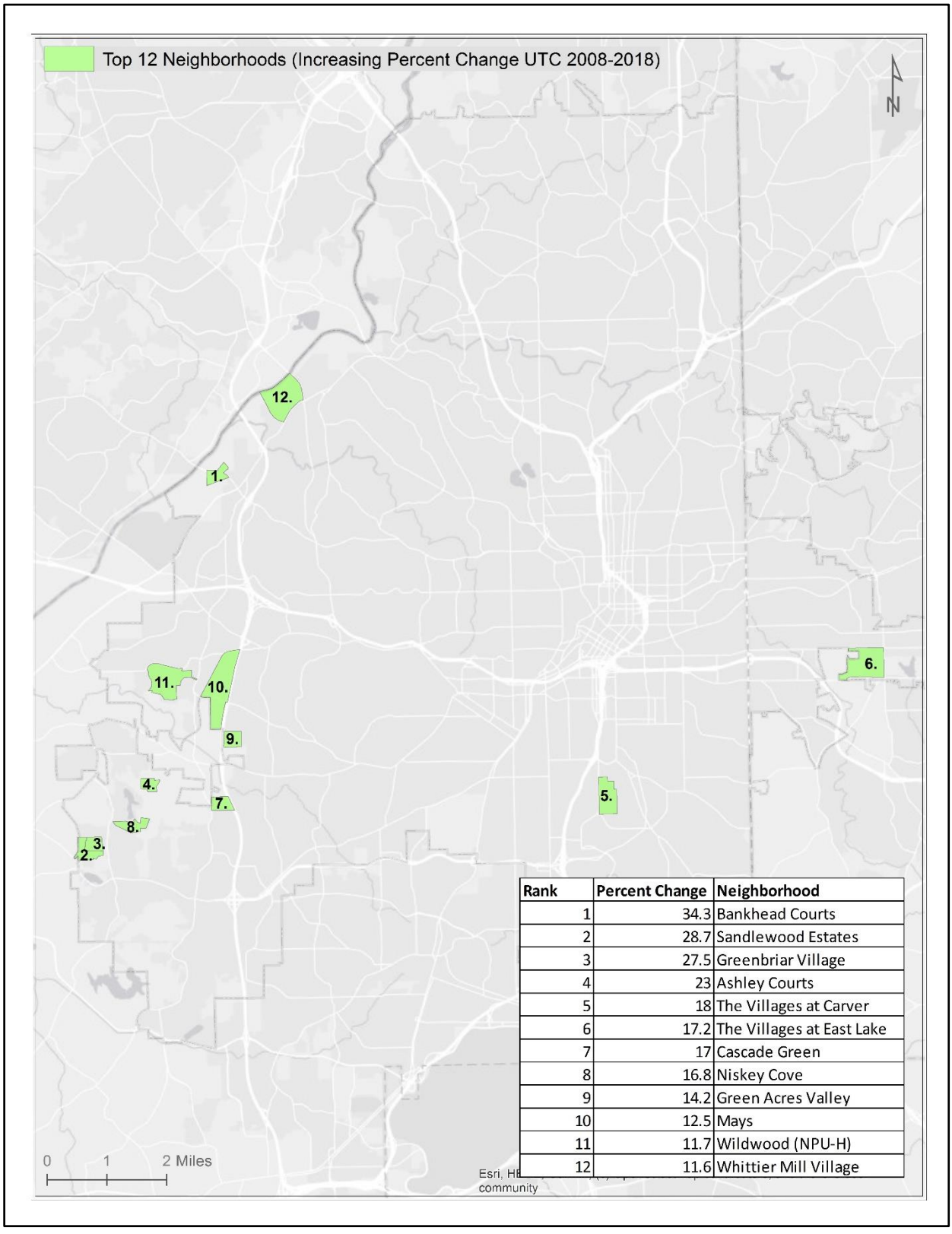
2. Neighborhoods – Tree canopy change in percent change and change in acres – only top and bottom 12 are shown due to large number of neighborhoods in the city



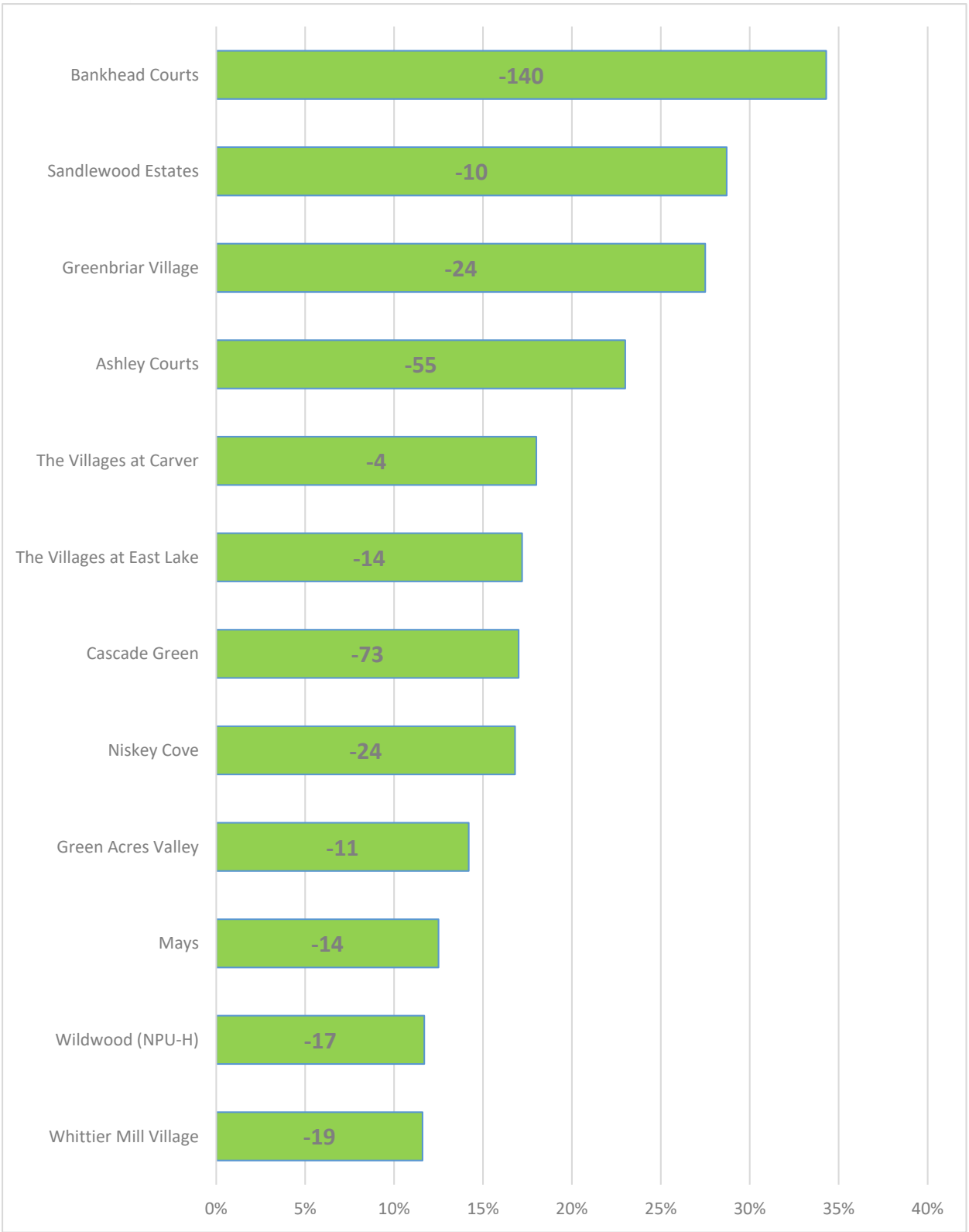
Rank	Percent Change	Neighborhood
1	-24.8	Bankhead/Bolton
2	-20.9	Woodfield
3	-17.9	Peachtree Heights East
4	-16.6	Peachtree Hills
5	-16.2	Colonial Homes
6	-16.2	Ardmore
7	-15.9	Peachtree Battle Alliance
8	-15.8	Collier Hills
8	-15.4	Collier Hills North
10	-15.4	Westminster/Milmar
11	-14.6	Arden/Habersham
12	-14	Ridgewood Heights



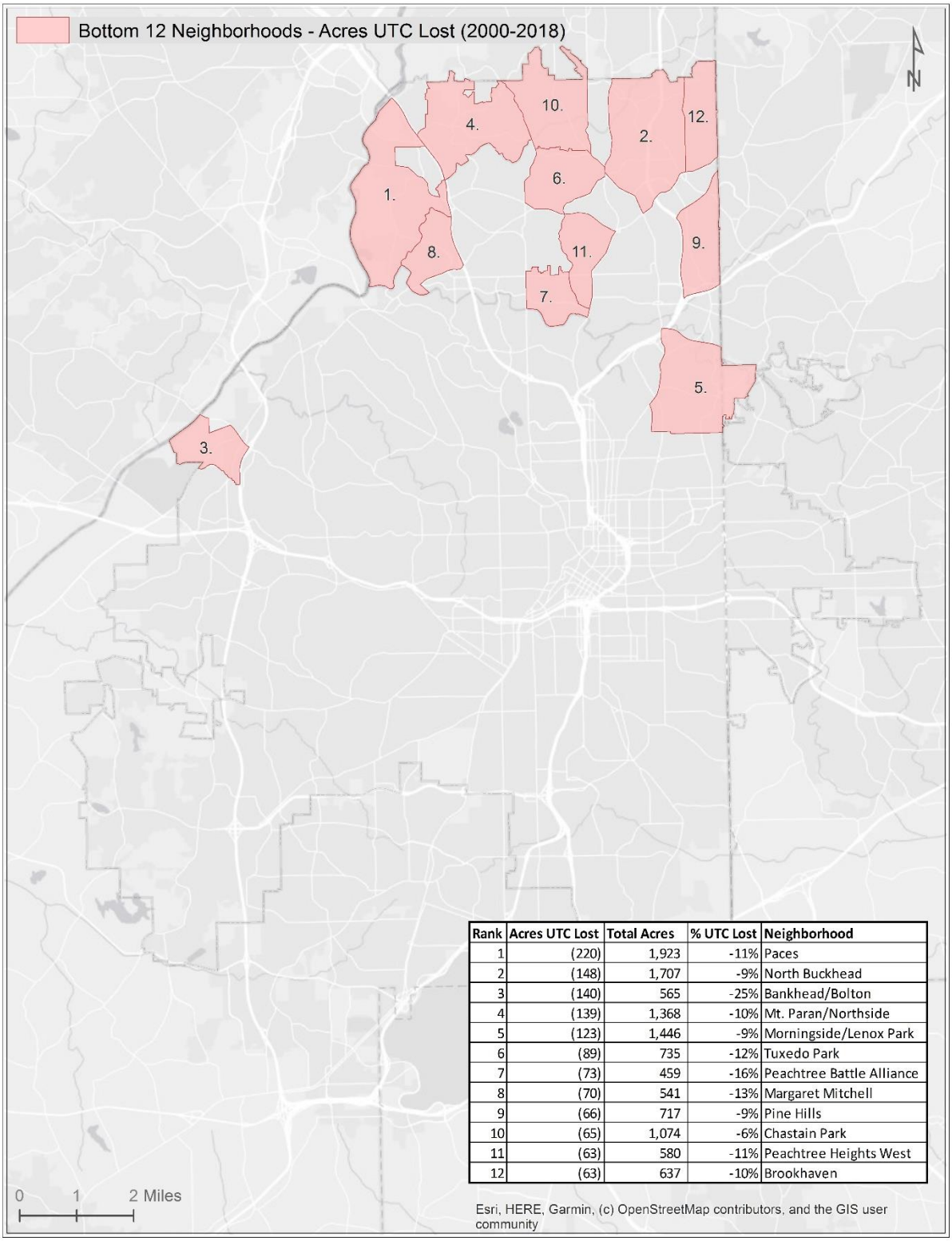
Bottom 12 Neighborhoods Percent Tree Canopy Lost 2008-2018 (Acres lost in bar)



Rank	Percent Change	Neighborhood
1	34.3	Bankhead Courts
2	28.7	Sandlewood Estates
3	27.5	Greenbriar Village
4	23	Ashley Courts
5	18	The Villages at Carver
6	17.2	The Villages at East Lake
7	17	Cascade Green
8	16.8	Niskey Cove
9	14.2	Green Acres Valley
10	12.5	Mays
11	11.7	Wildwood (NPU-H)
12	11.6	Whittier Mill Village

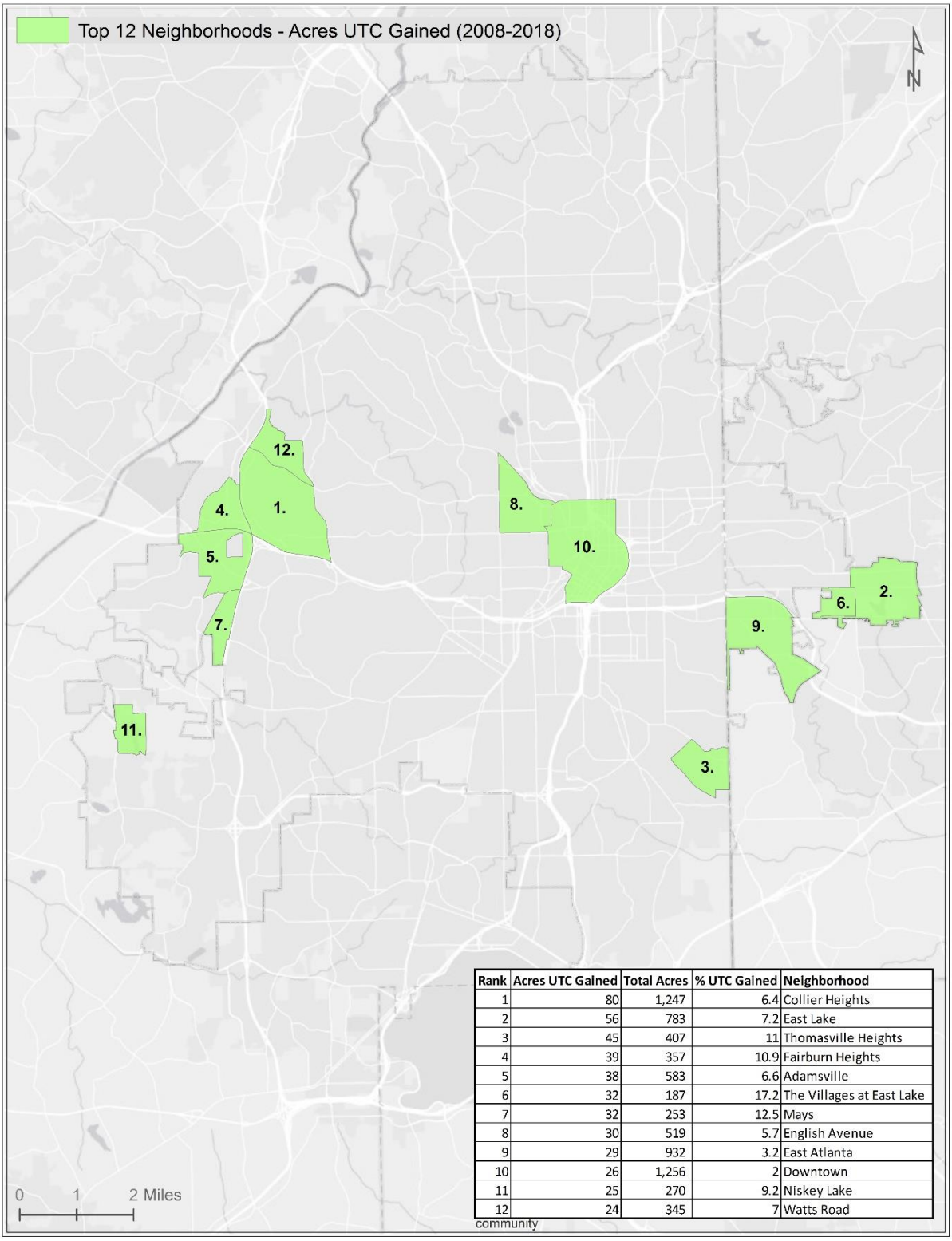


Top 12 Neighborhoods Percent Tree Canopy Gained 2008-2018 (Acres gained in bar)



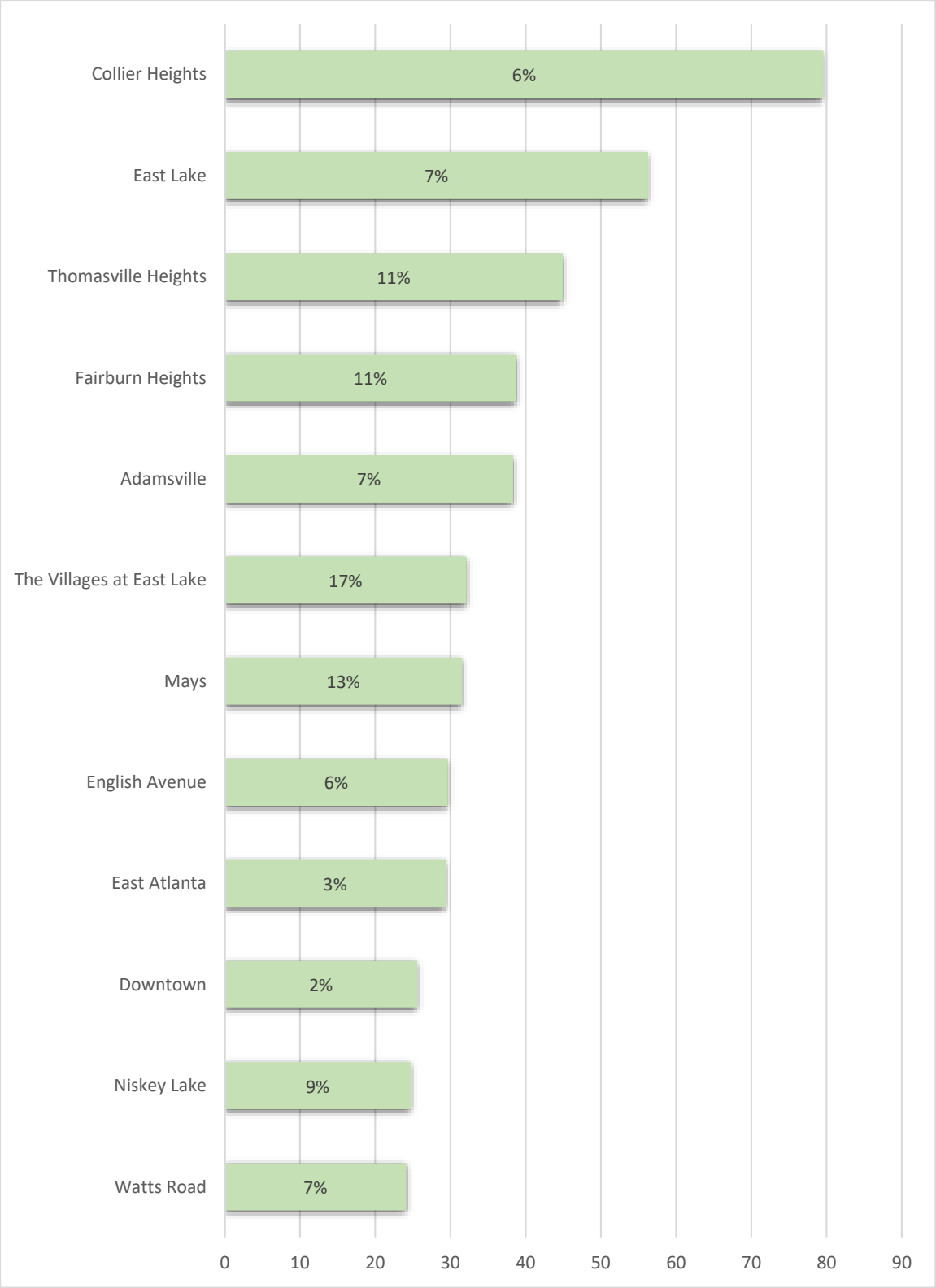
Rank	Acres UTC Lost	Total Acres	% UTC Lost	Neighborhood
1	(220)	1,923	-11%	Paces
2	(148)	1,707	-9%	North Buckhead
3	(140)	565	-25%	Bankhead/Bolton
4	(139)	1,368	-10%	Mt. Paran/Northside
5	(123)	1,446	-9%	Morningside/Lenox Park
6	(89)	735	-12%	Tuxedo Park
7	(73)	459	-16%	Peachtree Battle Alliance
8	(70)	541	-13%	Margaret Mitchell
9	(66)	717	-9%	Pine Hills
10	(65)	1,074	-6%	Chastain Park
11	(63)	580	-11%	Peachtree Heights West
12	(63)	637	-10%	Brookhaven

Bottom 12 Neighborhoods Acres Tree Canopy Lost 2008-2018 (Percent change in bar)



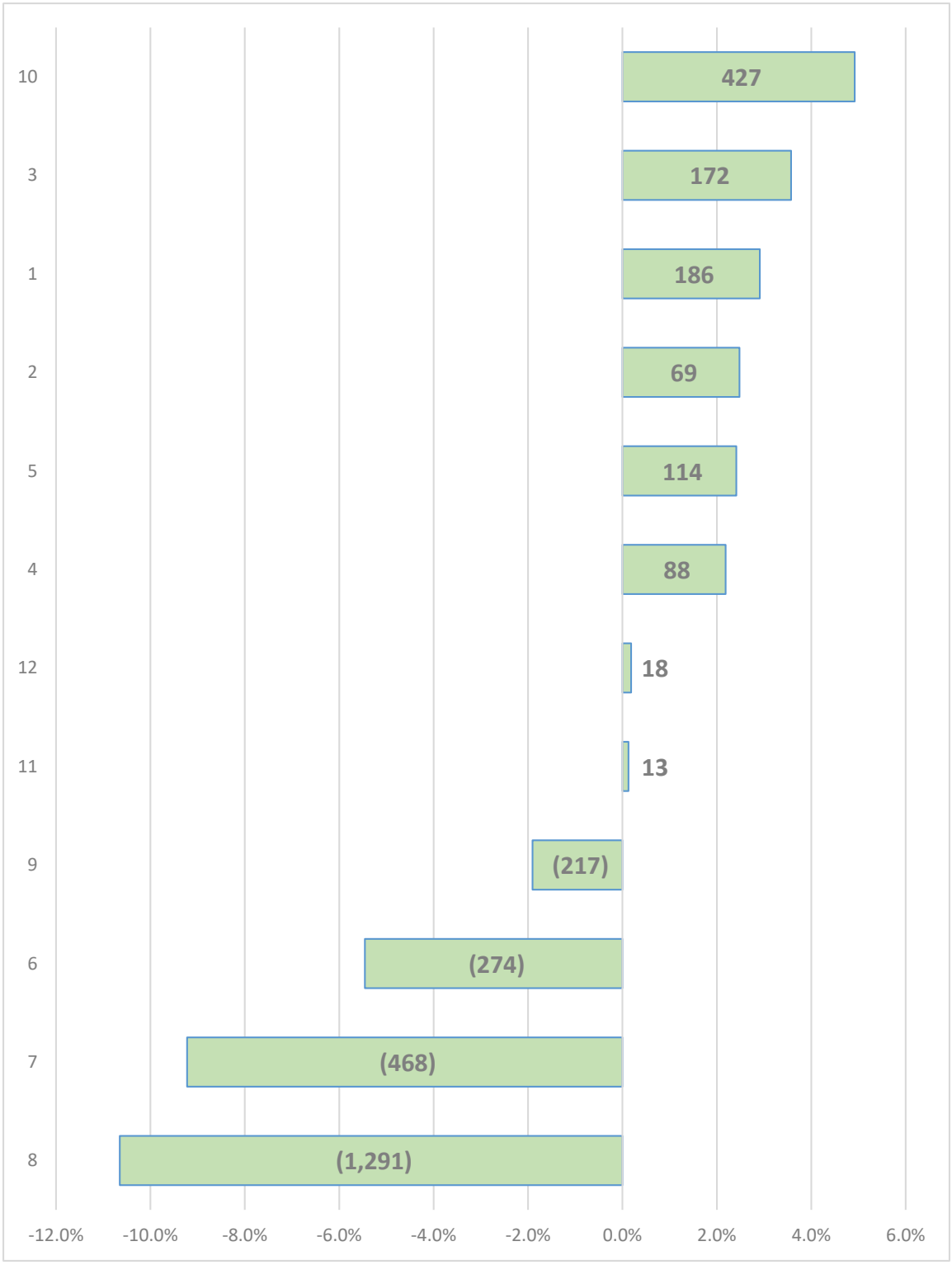
Rank	Acres UTC Gained	Total Acres	% UTC Gained	Neighborhood
1	80	1,247	6.4	Collier Heights
2	56	783	7.2	East Lake
3	45	407	11	Thomasville Heights
4	39	357	10.9	Fairburn Heights
5	38	583	6.6	Adamsville
6	32	187	17.2	The Villages at East Lake
7	32	253	12.5	Mays
8	30	519	5.7	English Avenue
9	29	932	3.2	East Atlanta
10	26	1,256	2	Downtown
11	25	270	9.2	Niskey Lake
12	24	345	7	Watts Road

community

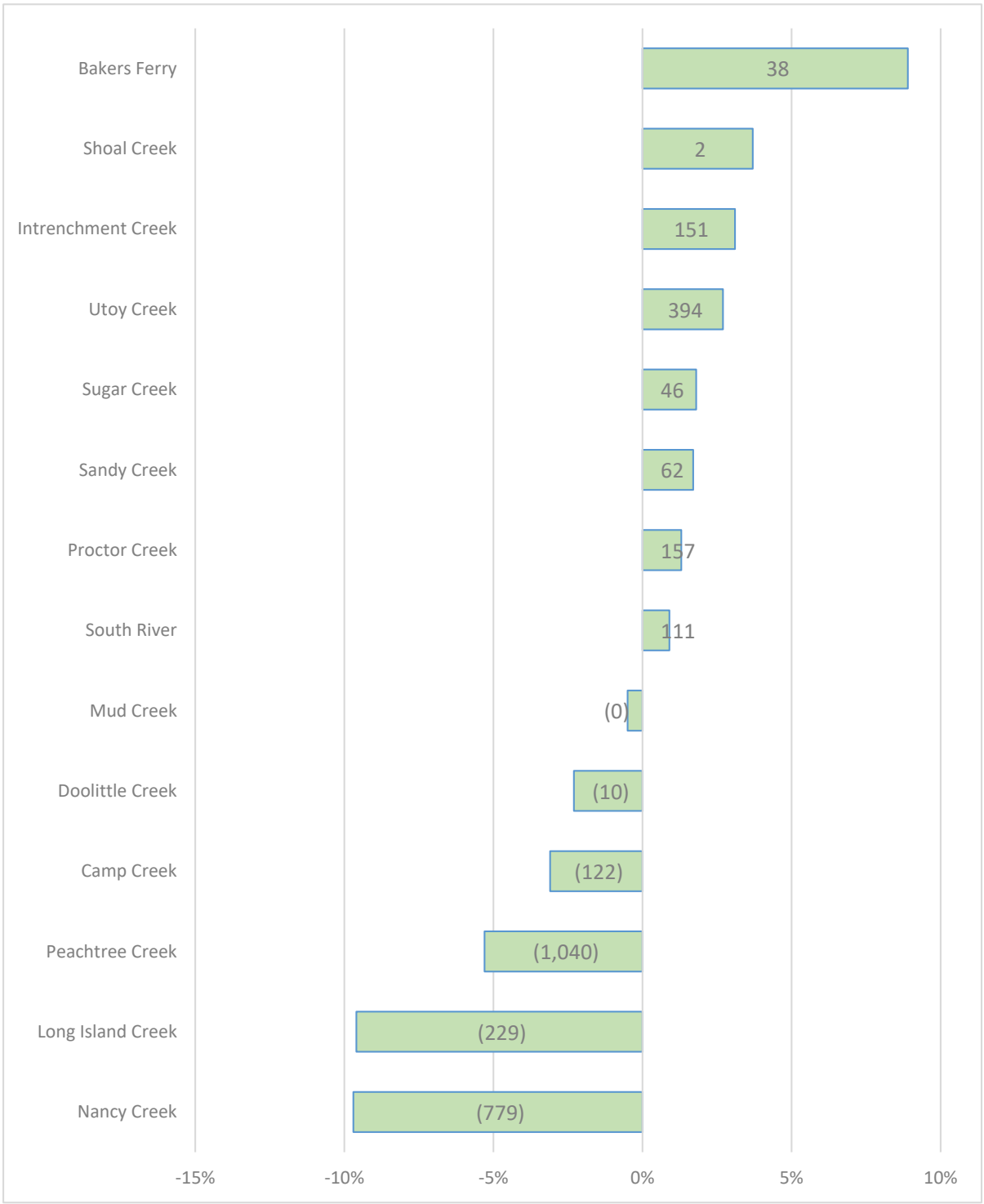


Top 12 Neighborhoods Acres Tree Canopy Gained 2008-2018 (Percent change in bar)

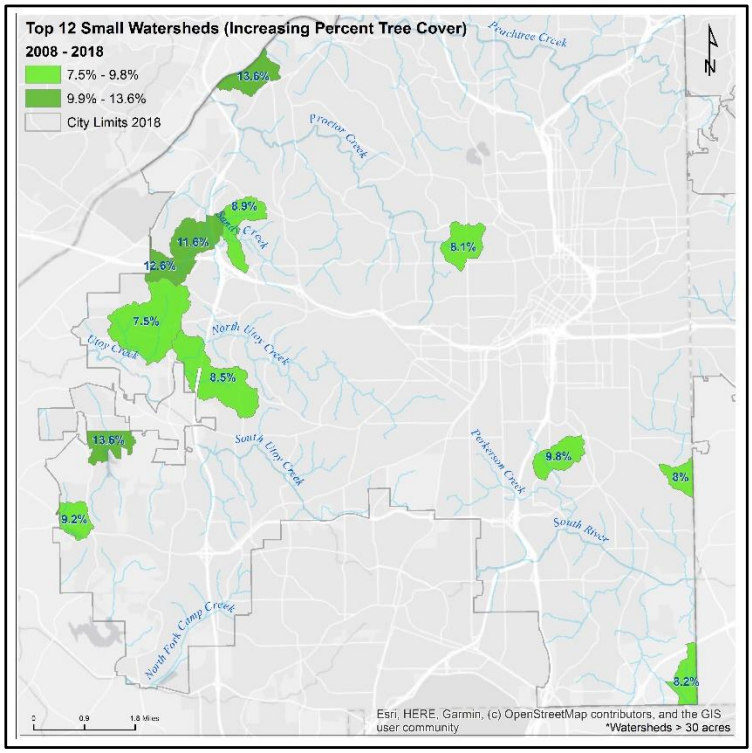
3. City Council Districts - (% Tree Cover Change – Acres Change in Bar)

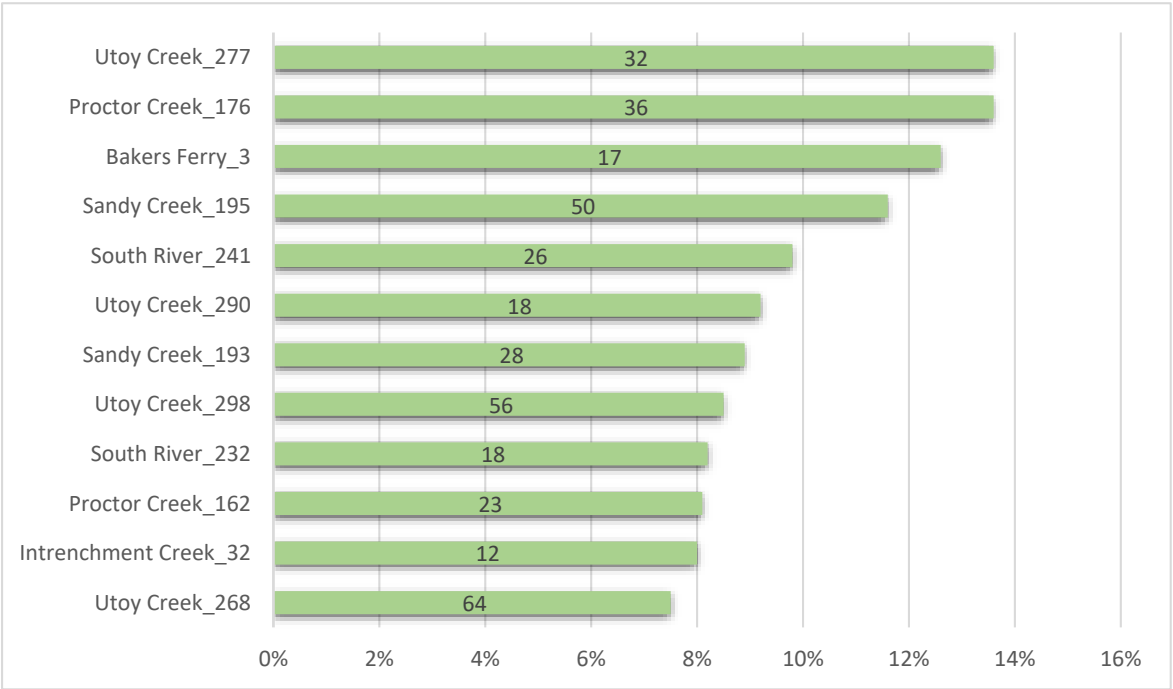


4. Watersheds - (% Tree Cover Change – Acres Change in Bar)

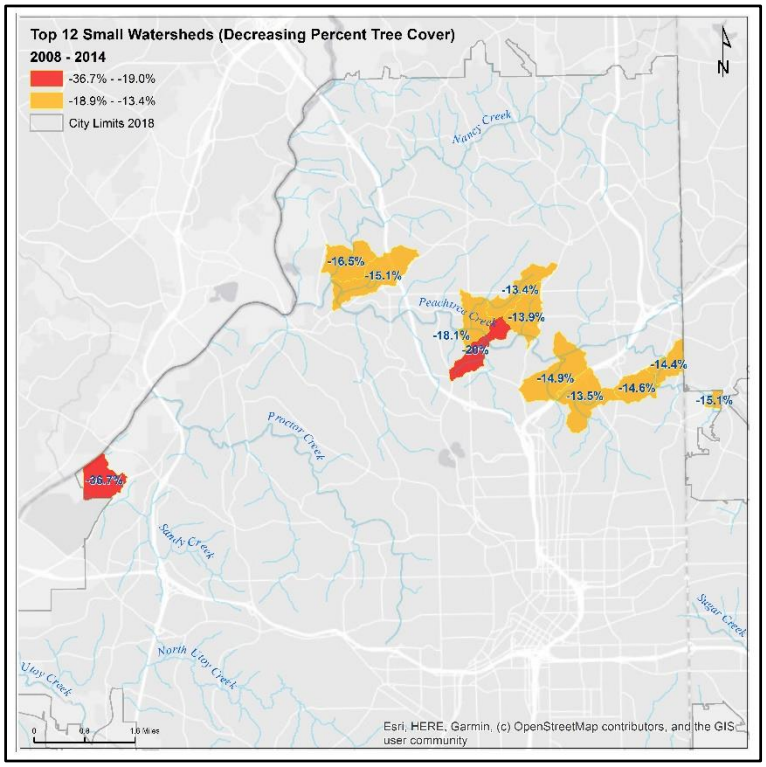


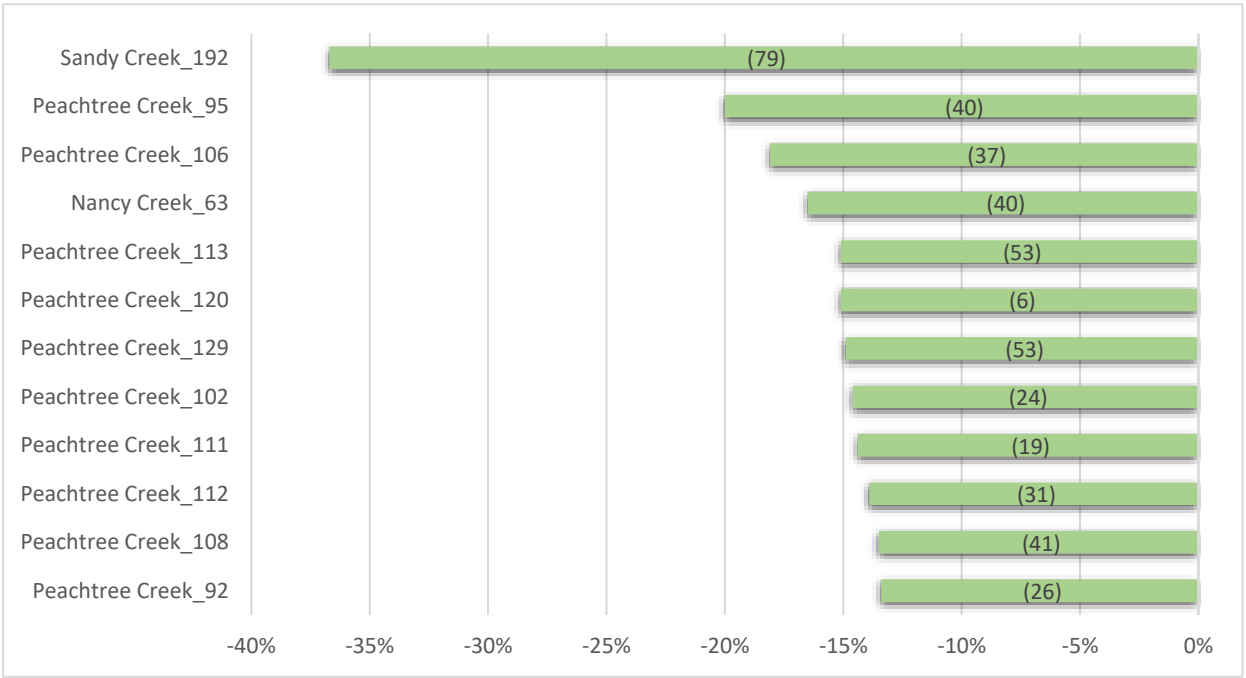
5. Small Watersheds – Due to the large number of small watersheds, only the twelve top and bottom small watersheds gaining or losing percent tree canopy are shown below.





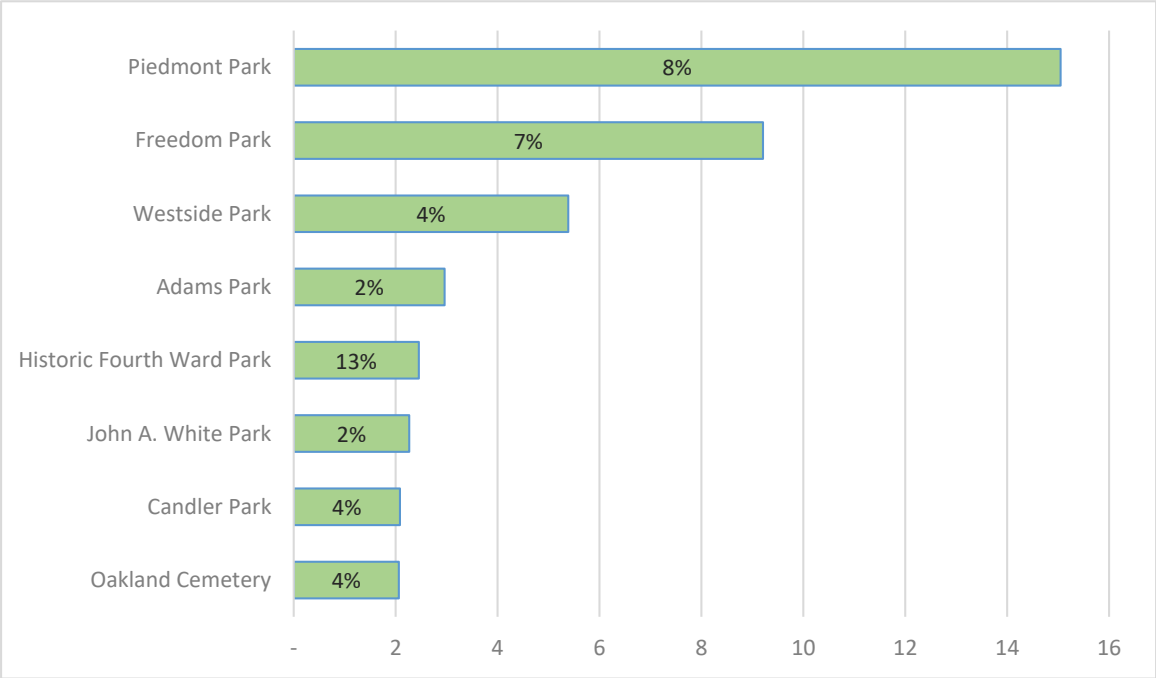
Top 12 Small Watersheds Showing Gain in Percent Tree Canopy – Acres Gained in Bar (2008-2018)



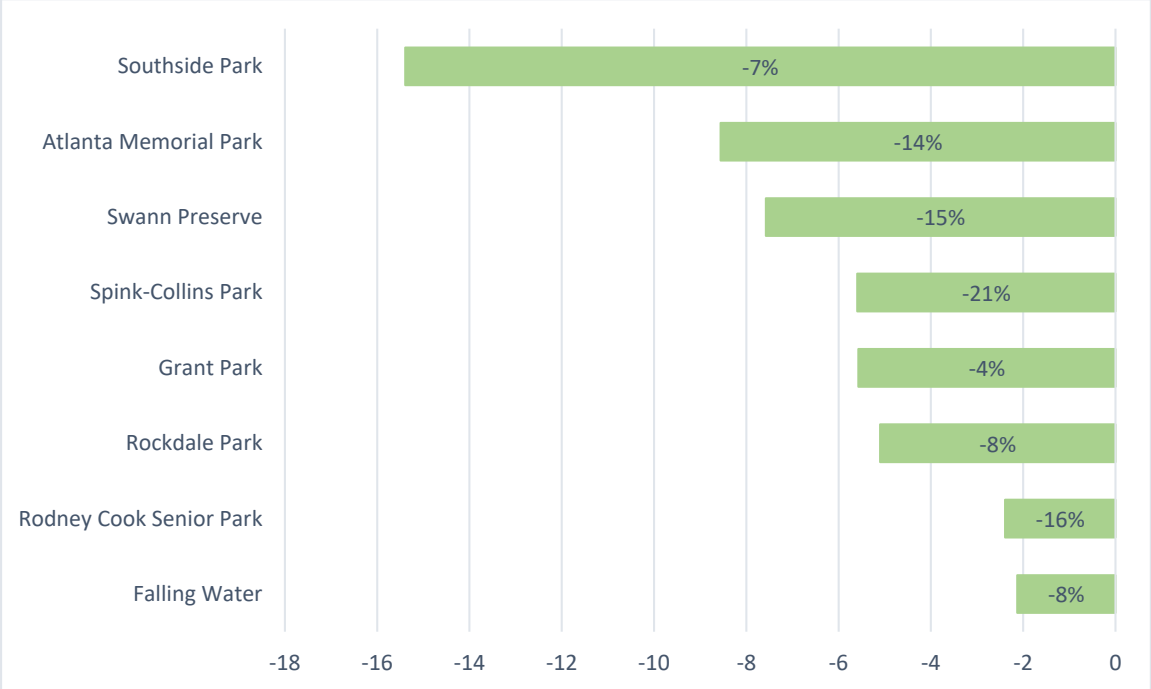


Bottom 12 Small Watersheds Showing Loss in Percent Tree Canopy - Acres Lost in Bar (2008-2018)

6. Parks – Due to the large number of parks and wide range in size, only parks with canopy change of greater or less than 2.5 acres are shown below with percent change 2008-2018 inside bar.



Parks Gaining Over 2.5 Acres of Tree Canopy (2008-2018)



Parks Losing More Than 2 Acres of Tree Canopy (2008-2018)