Final Report

Assessing Urban Tree Canopy
in the City of Atlanta;
A Baseline Canopy Study

City of Atlanta
Department of Planning and Community Development
Arborist Division
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A Baseline Canopy Study

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Executive Summary

The Importance of Urban Trees and Forests

Urban trees provide a number of established aesthetic and environmental benefits for cities.

- Trees shade and cool paved surfaces and buildings, helping mitigate the "urban heat island" effect while reducing energy demands.
- Trees clean particulates from the air and soil, which helps decrease air and water pollution.
- Trees provide a stormwater management service by intercepting rainfall that would otherwise flow directly into water bodies and the drainage system, causing streambank erosion and potentially overwhelming the stormwater system, especially in areas with combined storm and sanitary sewers.
- Trees make neighborhoods and urban areas more livable by providing aesthetic, social and psychological benefits for residents.
- For many residents and visitors, Atlanta's mature and vibrant urban tree canopy is its signature environmental feature.

The urban forest (defined as the system of trees and other plants that grow individually, in small groups, or under forest conditions on public and private lands in cities, suburbs, and towns) is part of the larger ecological system, and provides many of the same benefits as natural forest systems, such as habitat for native pollinators, migrating birds, and other wildlife. Current estimates indicate that 80% of the US population lives in urban areas. As more rural land is urbanized, the role of urban forests and urban tree canopy becomes increasingly important.

Project at a Glance

The City of Atlanta contracted researchers at the Center for Geographic Information Systems (CGIS) and the Center for Quality Growth and Regional Development (CQGRD) at Georgia Tech to quantify the existing Urban Tree Canopy within the city boundary. Urban Tree Canopy (UTC) is defined as the layer of leaves, branches and stems of trees that cover the ground when viewed from above. The aim of the Atlanta UTC study is to help city decision-makers and stakeholders better understand and manage their forest resources.

Specific goals for this assessment were to (1) map urban tree canopy and other land cover across the city; (2) quantify tree cover for various geographies within the city (neighborhoods, NPUs, City Council Districts, parks, zoning, sub-watersheds, watersheds, stream buffers); (3) establish a baseline for measuring canopy change over time; (4) identify planting sites; and (5) summarize and make recommendations based on findings.

The research team identified and measured the existing tree canopy in the City of Atlanta through the analysis of high resolution, multi-spectral, "leaf-on" Quickbird satellite imagery obtained by the city in October 2008 from Digital Globe. The analysis was accomplished utilizing established and reliable land cover classification techniques. The project team also developed coverage area data for two other general land classes: non-tree vegetation and non-vegetation. An accuracy assessment was conducted to validate findings.

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Summary of Findings

The research team estimates that in October 2008, 47.9% (40,524 acres) of the land within the city limits was covered by urban tree canopy, 22.1 (18,722 acres) was covered by non-tree vegetation such as grass, shrubs, and other plants; and 30.0% (25,386 acres) was covered by non-vegetation such as paved surfaces and buildings.

Urban Tree Canopy in Atlanta

Urban tree canopy coverage varies significantly across Atlanta and is strongly related to zoning and land use, with the highest concentration of existing urban tree canopy located on residential property and the lowest concentration in the downtown area and along transportation corridors. Significant concentrations of tree cover are also found along some of Atlanta's stream corridors.
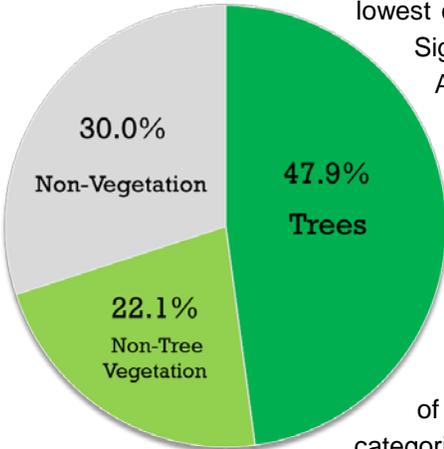
Canopy Distribution Across the City

- The majority of tree canopy within Atlanta's city limits (77%-31,194 acres) is on single-family residential land.
- Single-family land makes up 60.8% of the city's total land area.
- Multi-family residential land contains the second highest amount of the city's total canopy at 8%, followed by industrial at 6%; these categories make up 9.4% and 11.8% of the city's total land area, respectively.
- Parks contain approximately 4.9% (2,070 acres) of the city's total tree canopy; park land makes up 4.5% of the city's total area.

Canopy Concentration within Selected Geographies

- 61% of all single-family residential land is tree-covered.
- 40% of all multi-family residential land is tree-covered.
- 20% of all land zoned commercial is tree-covered.
- Densely developed areas such as downtown and the surrounding neighborhoods, as well as former Atlanta Housing Authority developments have less than 5% tree cover.
- Several neighborhoods in the north and southwest have more than 70% canopy coverage, particularly those along Nancy Creek and Utoy Creek.
- Among parks over 50 acres in size, canopy coverage ranges from a low of 18% at Lakewood to a high of 94% at Cascade Springs Nature Preserve.
- Canopy coverage for sub-watersheds ranges from a low of 18% in Proctor Creek to a high of 72% in Long Island Creek; canopy in 100-foot stream buffers ranges from a low of 35% along Intrenchment Creek to a high of 80% along North Utoy Creek with a city-wide average of 65%.
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Recommendations

The results of the Georgia Tech Urban Tree Canopy Assessment will benefit the City of Atlanta in multiple ways. 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.

• Establish baseline tree cover information from which the city can measure and track progress.

• Establish an Urban Forestry Master Plan for achieving canopy goals.

• Educate the public about tree canopy in Atlanta through an online, interactive map accessible from the city's website.

• Streamline the identification of potential planting locations based on derived ratios of tree canopy to non-tree vegetation.

• Inform sustainability efforts and policy decisions related to climate, water and air quality, tree preservation, and watershed protection.

• Establish a methodology to ensure comparability against results from future UTC studies.

The data generated by this research project will serve as a guide to Atlanta's policy makers, a resource for its citizens, and a tool for planners and others concerned about Atlanta's urban forest.

Figure 1: Aerial View of Midtown and Downtown

1. Introduction

1.1 Benefits of Urban Trees

Trees provide a number of established aesthetic and environmental benefits. In urban areas, trees can prevent or reduce flooding, erosion, and the "heat island" effect by lowering temperatures and energy demands. Trees clean particulates and other pollutants from the air, enhance privacy, and offer beauty and shade. Studies also have shown that the presence of trees in an urban environment provides mental health and social benefits such as reducing illness recovery time and lowering crime rates.

All trees, and especially trees adjacent to rivers and waterways (i.e., 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. Finally, forested areas in close proximity to surface water can 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, and is therefore located in a critical area for water quality. Specifically, the headwaters for several creeks in the Chattahoochee River Basin and the Ocmulgee River Basin originate within a fifteen-block radius of the downtown Five Points intersection.

Healthy watersheds are essential for providing clean drinking water, recreational activities, and wildlife habitat. Watershed protection is especially important in Atlanta, where surface water provides ninety-eight percent of the region's drinking water. Non-point source pollution (stormwater runoff) is one of the leading causes of water quality problems associated with 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, stormwater 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

Prior to this study, the City of Atlanta lacked measurable data quantifying the City's tree canopy cover. This has prevented the City from tracking changes in tree cover over time. To accurately assess tree cover within Atlanta, 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 the existing tree cover and establish accurate baseline tree canopy estimates within the City of Atlanta. This report and associated data provide a comprehensive baseline calculation of tree cover within the city boundaries of Atlanta. City-specific information is critical to better understand this asset, make informed policy decisions, manage the urban forest, and establish an effective Master Urban Forestry Plan.

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1.3 Research Objectives

The primary research objective was to quantify the existing tree canopy coverage in the City of Atlanta through analysis of high resolution, multi-spectral Quickbird satellite imagery obtained in October 2008. Secondary research objectives included using project results to summarize tree cover across multiple, smaller geographies such as stream corridors, zoning categories, watersheds, and parks, and to identify potential planting areas. Tertiary research objectives included dissemination of project results through a publicly accessible, online, interactive map and the establishment of protocols for replicable follow-up studies.

This research and baseline data will enable the City to monitor tree cover changes over time and make science-based policy decisions regarding Atlanta's forest cover. The new data provided by this research will enable the City to target efforts to protect tree cover and encourage the establishment of new vegetated areas in the locations where enhanced tree cover will provide the greatest benefits to water, air, and habitat protection, and where it will support a high 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 provides a review of the literature and a detailed explanation of the project research methodology. In Section 3, city-wide and sub-city research findings are presented in detail. Section 4 discusses opportunities for using project results to supplement current and future tree planting efforts. 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. Section 6 lists report references. Finally, full page maps and complete summary data tables containing findings across all geographies are included as Appendices.
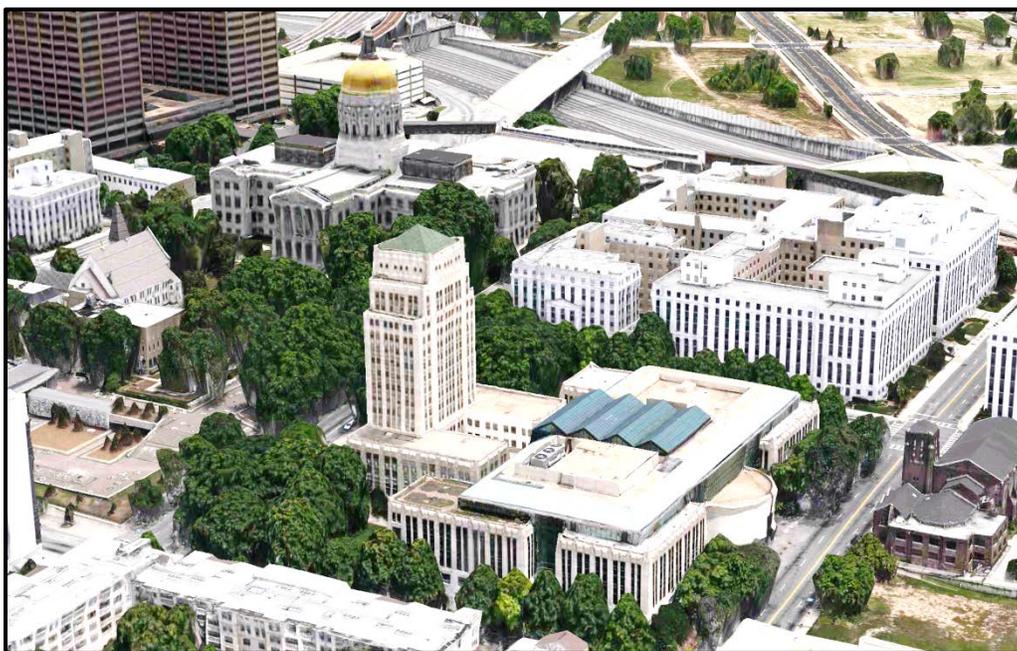
Figure 2: Oblique View of City Hall

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2. Project Methodology

2.1 Literature Review

The first step in developing the project methodology was a formal examination of eight peer-reviewed scientific journal articles describing remote sensing and GIS techniques used by other researchers around the world to identify (primarily) urban tree canopy and land cover (Table 1). The studies identified

Table 1: Summary of Land Cover Classification Research and Methodologies

Study	Study Area	Data Source	Methodologies	Results and Limitations
Barnoaiea, 2010	Vanatori Neamt Natural Park, Northeast Romania	Satellite and aerial imagery	Tree level analysis, sample plots, stand level analysis	Satellite imagery was preferred, although underestimated number of trees
Moskal, Styers & Halabisky, 2011	Rainier Valley, Seattle, Washington	QuickBird satellite imagery	Object-based image analysis (OBIA)	OBIA analysis most effective in classifying tree cover, less effective in classifying imperviousness
Sugumaran, Pavuluri & Zerr, 2003	Columbia, Missouri	Satellite and aerial imagery	Maximum likelihood methodology, classification and regression trees methodology	Data collected in September best for tree species classification, 1-m resolution best for shadow reduction
Cadenasso, Pickett & Schwarz, 2007	Baltimore City, Maryland	Aerial imagery and LiDAR data	Medium-scale classification methodology (HERCULES)	The study does not refer to satellite imagery
Fauvel, Chanussot & Benediktsson, 2006; Chanussot, Benediktsson & Fauvel, 2006	Reykjavik, Iceland	Satellite imagery	Feature extraction and classification (decision fusion)	Improvement in accuracy compared with neural networks for the possibilistic model
Moran, 2010	Urban landscape in Mato Grosso State, Brazil	QuickBird satellite imagery	Maximum likelihood classifier methodology, extraction and classification of homogeneous objects, and segmentation-based classification	The use of textures or segmentation can improve classification accuracy when compared with traditional per-pixel methods
Thapa & Murayana, 2009	Tsukuba City, Japan	ALOS visible and near-infrared satellite imagery	Unsupervised, supervised, fuzzy supervised, and GIS post-processing	Fuzzy supervised approaches are more accurate than supervised or unsupervised approaches, while GIS post-processing improves the accuracy further.
Zhou & Troy, 2008	Baltimore City & County, Maryland	LiDAR satellite imagery	Object-oriented segmentation and classification	Assigning pixels to objects prior to classification improves accuracy over pixel-based classification

useful methodologies for conducting the analysis of baseline tree canopy and land cover within the City of Atlanta. Detailed literature review findings are described in full in Appendix A.

Generally, addressing homogeneous texture and rectifying shadows are prevalent themes within the studies that focused on tree classification and identification. The studies on urban land cover classification emphasized the need to redefine the classification process, whether methodology-based or

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categorical. In short, these findings provided the project team with a better understanding of the opportunities and limitations of various methods that could be utilized to achieve research objectives for the City of Atlanta.

2.2 Establishing the Workflow

In addition to the literature review findings, the project team's prior experience in this discipline and the team's familiarity with the data and the study area helped in establishing research protocols and deciding which methods would be ultimately incorporated into the project. 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.

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. This combination of techniques, based on the literature review, prior experience, and familiarity with the data, substantially increased the accuracy of the tree classification and subsequent analyses.

The formalization of this process will serve as a standard that can be utilized and replicated in the future to establish changes in the City's tree canopy over time. As the City's technological capabilities and capacity continue to mature and grow, however, it will be necessary to reevaluate methods prior to the first update of the tree canopy baseline study.

The finalized imagery classification process is described in detail in the following sections.

2.3 Imagery Capture and Preparation

Imagery Capture

After review of the available imagery options, Digital Globe Inc.'s Quickbird satellite imagery was selected as the best option, primarily due to its high spectral and spatial resolution and use in other tree canopy assessments across the country (e.g., Los Angeles). Imagery was captured by the Quickbird satellite on two separate dates in October 2008, when the tree canopy was full. Good weather conditions allowed for successful capture of seven separate, cloud-free Quickbird satellite images covering the City of Atlanta. This extremely detailed 11-bit, 2-foot, pan-sharpened, 4-banded data (Red, Green, Blue and Near IR) served as the basis for all subsequent analyses.

Imagery Preparation

Initially, the project team's intent was to mosaic all imagery into one seamless image for the city prior to classification. However, after several iterative analyses, it became clear that a city-wide mosaic would compromise the integrity and quality of the individual images, primarily due to substantial spectral variation across images for specific classes. Therefore, each image was classified separately to ensure the best and most unadulterated results.

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2.4 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 grass or meadow but also includes shrubs, low lying vegetation, and kudzu
- **Non-Vegetation**: pavement, buildings, impervious surfaces, and bare soil
- **Shadow or Dark Areas**: building and tree shadow, 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 2011. 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 that as soon as 95% or more of the pixels remain in the same cluster between one iteration and the next, the utility should stop processing.
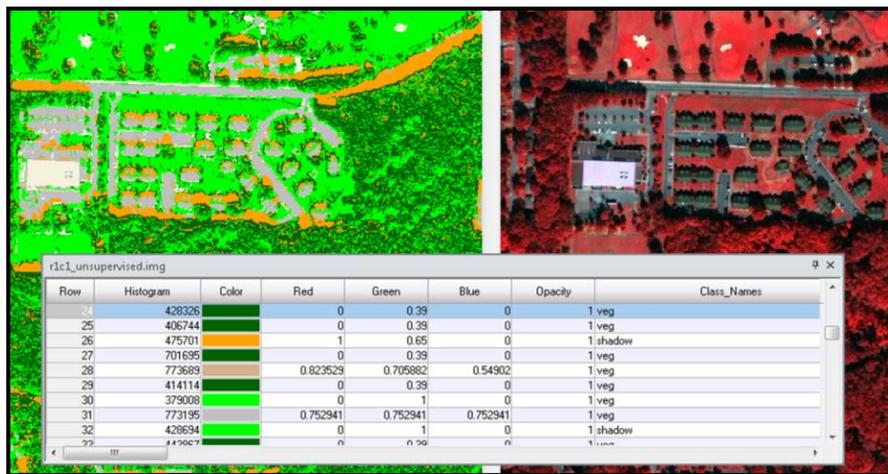
Figure 3: Recoding Unsupervised Land Cover Classification Results

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

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The resulting classification layers each contained 100 classes (Figure 3), 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 to 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 12% 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 observation, the project team extracted and reclassified only the shadow/dark areas of each image into 250 classes. Two iterations of the 250 class reclassification were performed. 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 confidently reclassify the shadow /dark areas into one of the other three classes.

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.

2.5 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 accuracy rate. The reference data consisted of Google Earth imagery from September 2009 and a limited number of site visits (< 25) for ground verification. The verification process also included comparing the newly created baseline canopy data with the previously completed Downtown Tree Inventory, a tree survey of downtown trees provided by the City.

Table 2 illustrates the results of the accuracy assessment, including overall and individual class accuracies and Kappa statistics. The Kappa coefficient expresses the proportionate reduction in error generated 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.

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Table 2: Classification Accuracy Assessment Report

Class Name	Class Totals	Number Correct	Users Accuracy	Conditional Kappa
Grass	51	42	82.35%	78.27%
Tree	138	134	97.10%	93.35%
Urban Light	47	47	100.00%	100.00%
Urban Dark	14	13	92.86%	92.43%
Totals	250	236		
Overall Classification Accuracy =			94.40%	
Overall Kappa* Statistics =			90.84%	

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 interpreters; and the low number of distinct land classes identified.

2.6 Calculating Tree and Land Cover Statistics

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)
- Neighborhoods
- Neighborhood Planning Units (NPU)
- City Council Districts
- Parks
- Zoning Categories
- Watersheds (HUC 12)
- Sub-Watersheds (HUC 14)
- 100-foot stream buffer

These calculations were accomplished using ESRI's ArcGIS Desktop 10.1 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 10.1 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 [1.9685 ft. x 1.9685 ft.]) * Sum of Tree Pixels in Zone

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

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3. Data Analysis and Findings

3.1 City-wide Tree and Land Cover Totals

Figure 4 depicts City-wide results of the land cover classification, with green representing tree canopy, tan representing non-tree vegetation, and red representing non-vegetation.
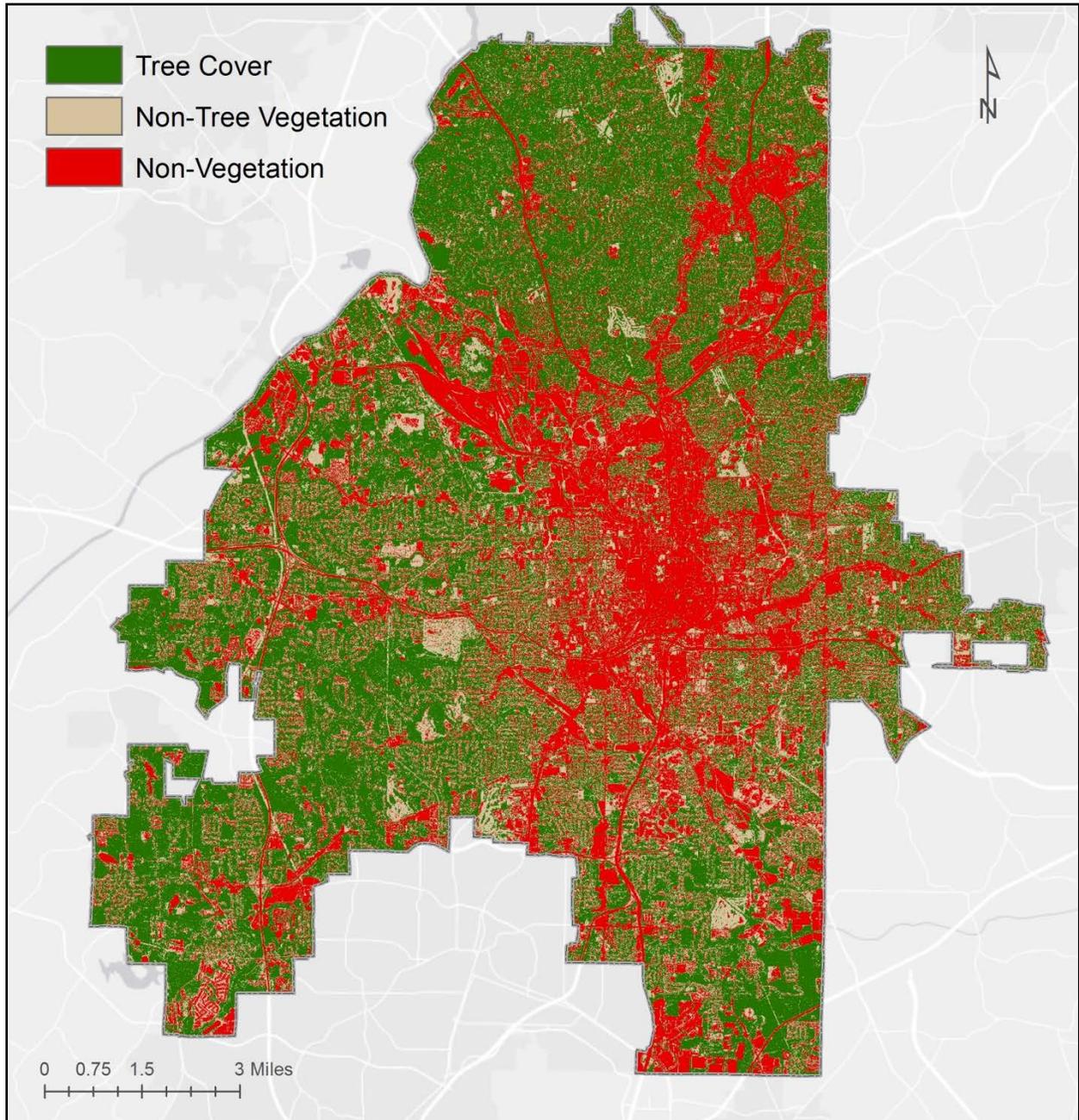
Figure 4: 2008 City of Atlanta Land Cover (Map)

Table 3 shows that almost half of the city (47.9% or 40,524 acres) is tree-covered while 22.1% of the land cover is non-tree vegetation (e.g., grass, meadow, shrubs, etc.), and 30.0% is non-vegetation.

Table 3: 2008 City-wide Land Cover Statistics

	Square Miles	Total Acres	Percentage Land Area
City of Atlanta 2008 (excludes airport area)	132	84,648	
Tree Canopy Cover (2008)	63	40,524	47.9 %
Non-Tree Vegetation	29	18,722	22.1 %
Non-Vegetation	40	25,386	30.0 %

As seen in Figures 4 and 5, trees dominate the landscape of the city at 47.9% canopy cover. The majority of tree cover is concentrated on the city's periphery, especially in the north and southwest, while downtown and the surrounding neighborhoods have much less tree cover. Industrial facilities, road and rail corridors, and areas of extensive commercial development also lack significant tree cover.

Non-tree vegetation represents 22.1% of the city land area (approximately 18,722 acres) and is distributed throughout the city (center graphic in Figure 5). Non-tree vegetation includes grass, shrubs, and other vegetation. Major concentrations of non-tree vegetation can be found in municipal parks with large fields, golf courses, cemeteries and capped landfills. The distribution of large vegetated areas without trees is evenly spread across the city. A significant number of smaller vegetated areas without trees are also scattered on across the city. These areas are underestimated to some extent since trees shade other vegetated and non-vegetated surfaces.

The red areas in Figure 5 represent the 30.0% of the city that is covered by non-vegetation, such as buildings, pavement, bare earth, and other impervious surfaces. Non-vegetated land is concentrated in the densest business districts and transportation corridors, as well as industrial areas (e.g., large rail yards). These non-vegetated areas, estimated to be approximately 25,386 acres, have limited tree planting potential.
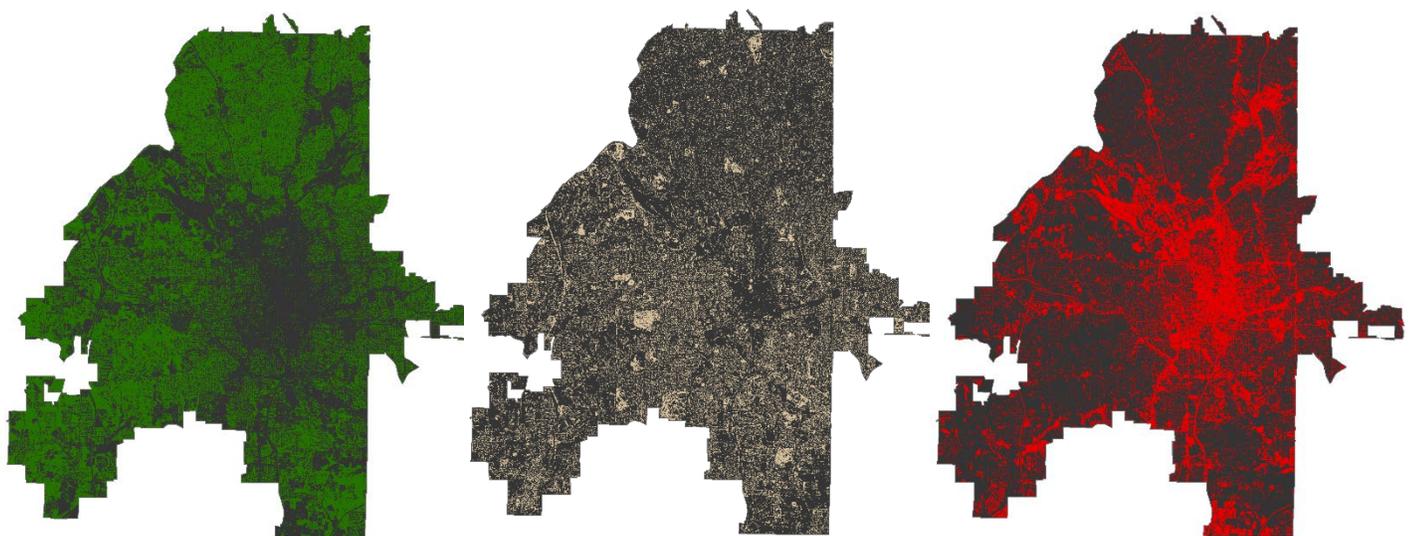
Figure 5: City of Atlanta - Tree, Non-Tree Vegetation, Non-Vegetation (Maps)

Figure 6 illustrates tree cover aggregated to a city-wide grid comprised of 500 ft. x 500 ft. (approximately 6-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 47.9%. 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 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 the largest commercial districts (Downtown, Midtown, and Buckhead) and industrial and transportation corridors.
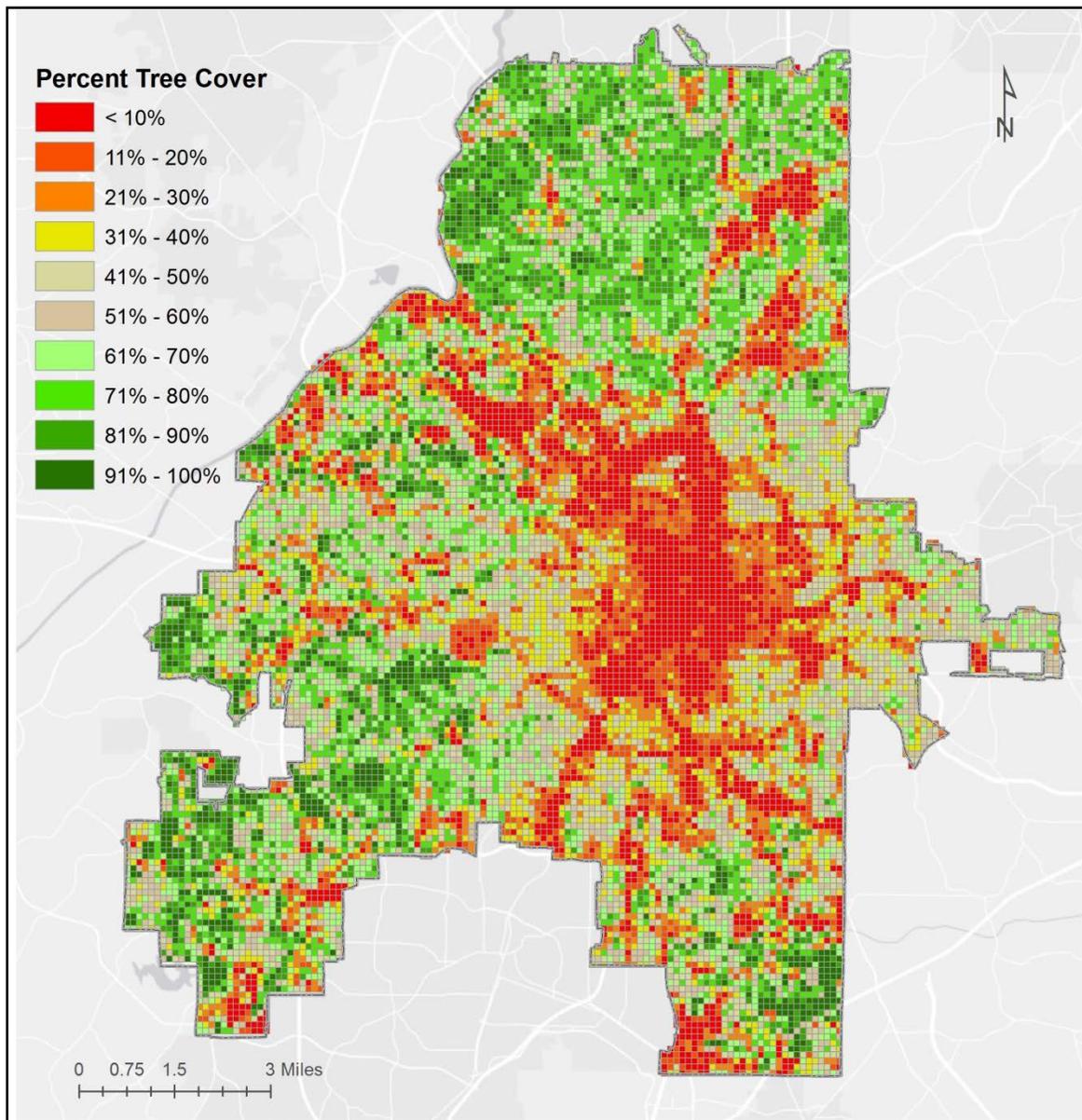
Figure 6: City-wide Tree Cover Grid (Map)

3.2 Other Geographies

In addition to city-wide statistics, the project team calculated the amount and percentage of tree and other land cover for several geographies across the city such as watersheds, neighborhoods, and City Council Districts. Summaries of these findings by geography are presented in this section.

Each geographic summary of findings contains the following descriptors:

1. **Map -** Maps depict percent tree cover for the specified geography. For each map, layer symbology (colors and numeric class breaks) have been standardized and are presented as a progression of tree cover values in increments of ten, starting with low values in red, progressing to tan in the middle and ending with high values in dark green.

2. **Table of each category -** Tables show land cover area in acres and as a percentage for the specified geography.

3. **Bar chart -** Bar charts show land cover area in acres and as a percentage for the specified geography.

4. **Table of city-wide comparisons** - Land cover summary statistics tables show land cover percentages for a various 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 means that 4% of the city's total area is comprised of tree cover found in that geography alone.

   - **"% Geography"** - 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 means that 16% of that geography'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 means that 8% of the city's total tree canopy area is comprised of tree cover found in that geography alone.

   The summary table format was adapted from data tables found in the 2011 City of Philadelphia's Urban Tree Canopy Report by the US Forest Service, the University of Vermont, and the City of Philadelphia.

5. **Findings -** Brief discussion of the findings.

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3.3 Neighborhood Planning Units (NPU)

There are 25 Neighborhood Planning Units (NPUs) in the City of Atlanta. Imagery was not captured for NPU Q which was not part of the city limits at project commencement (located north of NPU P).

Figure 7 shows the percent tree cover by NPU for the City of Atlanta.

Table 4 shows the acreage and percent tree cover by NPU.
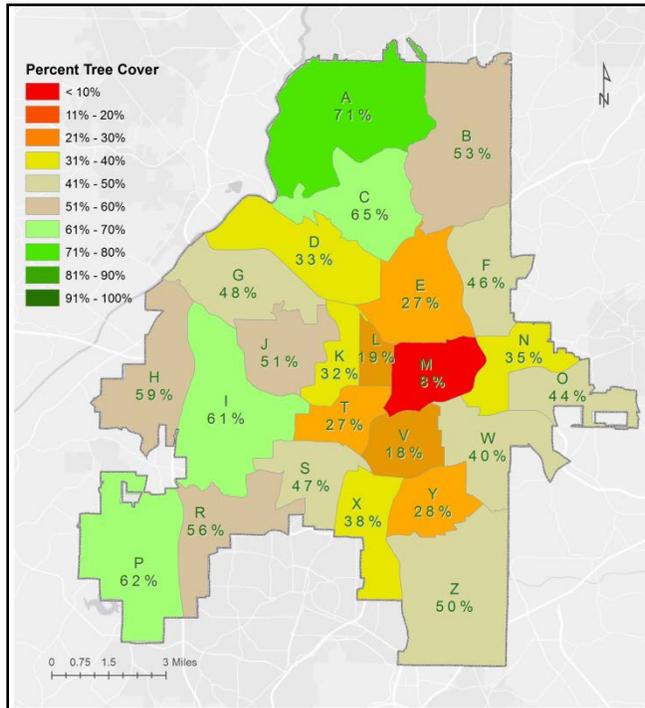
Figure 7: Percent Tree Cover by NPU (Map)

Table 4: Tree Cover Statistics by NPU

NPU	Area (acres)	Tree Cover (acres)	Tree Canopy (percent)
A	7,208	5,109	71%
C	3,872	2,518	65%
P	5,653	3,514	62%
I	6,046	3,677	61%
H	4,010	2,359	59%
R	3,447	1,921	56%
B	6,503	3,418	53%
J	2,813	1,421	51%
Z	6,686	3,349	50%
G	3,637	1,744	48%
S	2,481	1,159	47%
F	2,985	1,388	46%
O	2,173	947	44%
W	3,414	1,350	40%
X	2,573	976	38%
N	2,201	770	35%
D	4,093	1,367	33%
K	1,538	493	32%
Y	2,108	593	28%
T	1,755	477	27%
E	3,841	1,018	27%
L	813	153	19%
V	2,039	358	18%
M	2,448	196	8%
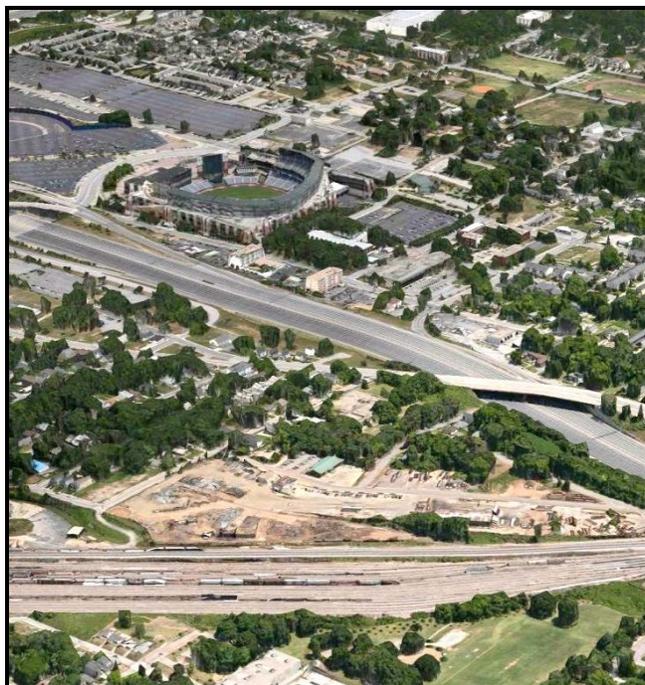
Figure 8: NPU V (Turner Field)

Figure 9 shows the percent land cover distribution by NPU in bar chart form, with total acres for each land cover type labeled in black on the associated land cover bar. Chart is in order of highest to lowest percentage of tree cover.
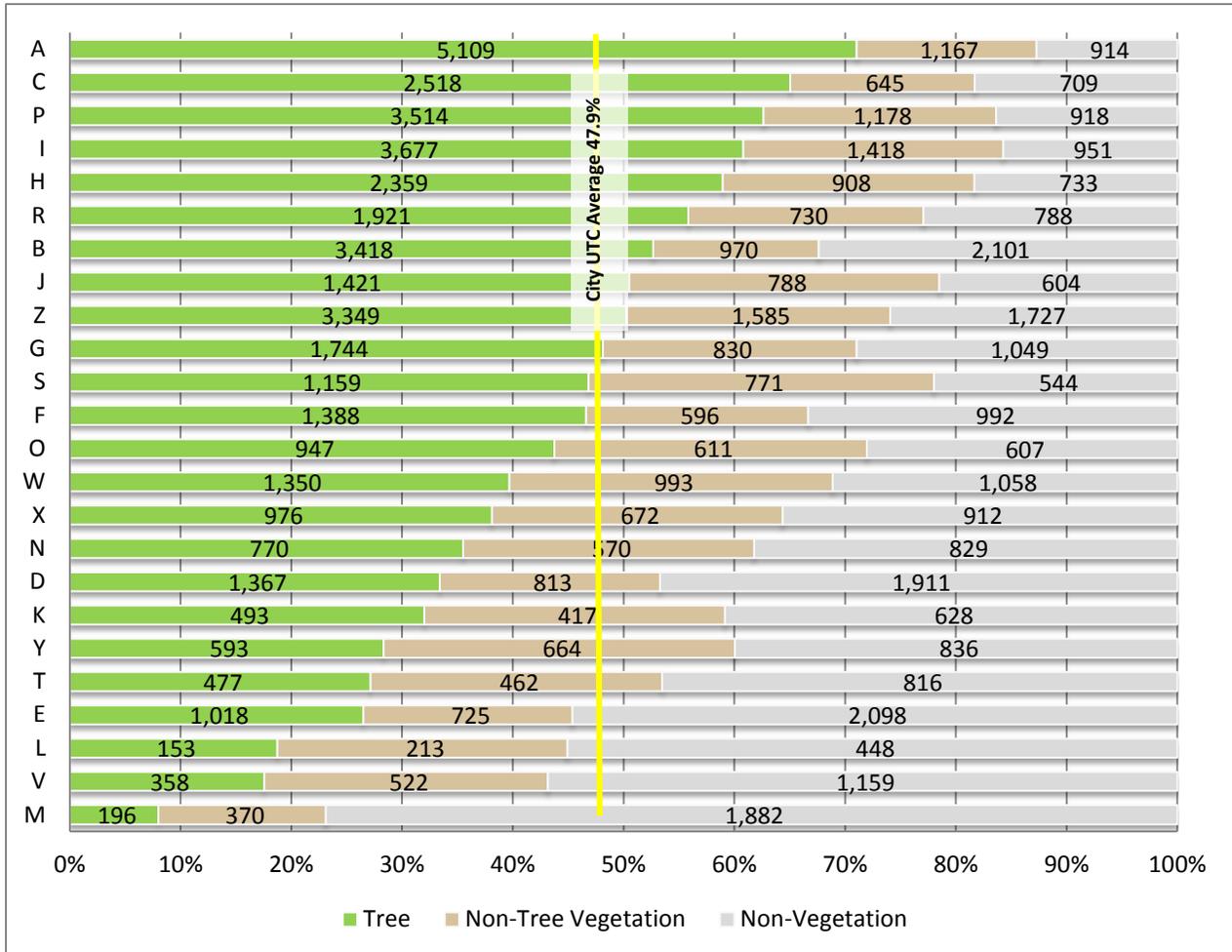
Figure 9: Land Cover Distribution by NPU

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. The largest NPU, A, is 5,109 acres and has the highest percentage of tree cover (71%) in the city. By contrast, NPU L is the smallest NPU and has the lowest total tree canopy area (153 acres), but it has only the third lowest percentage of tree canopy (19%) among the NPUs. NPU M in downtown has the lowest percentage of tree cover (8%) and the second lowest amount of tree-covered acreage (196 acres).

Table 5 shows land cover summary statistics by NPU. NPUs L and M each have less than 0.5% of Atlanta's tree cover (% UTC). NPU Y has the highest percentage (32%) of non-tree vegetation ('% Geography), which suggests a high potential for planting trees.

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Table 5: Land Cover Summary Statistics by NPU

NPU	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% NPU	% UTC	% City Land	% NPU	% NTV	% City Land	% NPU	% NV
A	6%	71%	13%	1%	16%	6%	1%	13%	4%
B	4%	53%	8%	1%	15%	5%	2%	32%	8%
C	3%	65%	6%	1%	17%	3%	1%	18%	3%
D	2%	33%	3%	1%	20%	4%	2%	47%	8%
E	1%	27%	3%	1%	19%	4%	2%	55%	8%
F	2%	46%	3%	1%	20%	3%	1%	33%	4%
G	2%	48%	4%	1%	23%	4%	1%	29%	4%
H	3%	59%	6%	1%	23%	5%	1%	18%	3%
I	4%	61%	9%	2%	23%	8%	1%	16%	4%
J	2%	51%	4%	1%	28%	4%	1%	21%	2%
K	1%	32%	1%	0%	27%	2%	1%	41%	2%
L	0%	19%	0%	0%	26%	1%	1%	55%	2%
M	0%	8%	0%	0%	15%	2%	2%	77%	7%
N	1%	35%	2%	1%	26%	3%	1%	38%	3%
O	1%	44%	2%	1%	28%	3%	1%	28%	2%
P	4%	62%	9%	1%	21%	6%	1%	16%	4%
R	2%	56%	5%	1%	21%	4%	1%	23%	3%
S	1%	47%	3%	1%	31%	4%	1%	22%	2%
T	1%	27%	1%	1%	26%	2%	1%	47%	3%
V	0%	18%	1%	1%	26%	3%	1%	57%	5%
W	2%	40%	3%	1%	29%	5%	1%	31%	4%
X	1%	38%	2%	1%	26%	4%	1%	35%	4%
Y	1%	28%	1%	1%	32%	4%	1%	40%	3%
Z	4%	50%	8%	2%	24%	9%	2%	26%	7%

Interpreting the table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified geography. For example, a "% City Land" value of 6% for NPU A under the "Tree Cover" grouping means that 6% of the city's total area is comprised solely of tree cover found in NPU A.

- **"% NPU"** The percentage of the specified geography's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Geography" value of 71% for NPU A under the "Tree Cover" grouping means that 71% of NPU A's total area is tree-covered

- **"% Cover Type (UTC, NTV, NV)"** 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 13% for NPU A under the "Tree Cover" grouping means that 13% of the city's total tree canopy area is comprised of tree cover found in NPU A.

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3.4 Council Districts

Figure 10 and Table 6 illustrate tree cover across the City of Atlanta Council District boundaries. Tree cover percentages by City Council District range from a high of 66% canopy cover in District 8 to a low of 13% canopy cover in District 2. The council districts with the lowest tree cover percentages are concentrated in the center and eastern parts of the city.
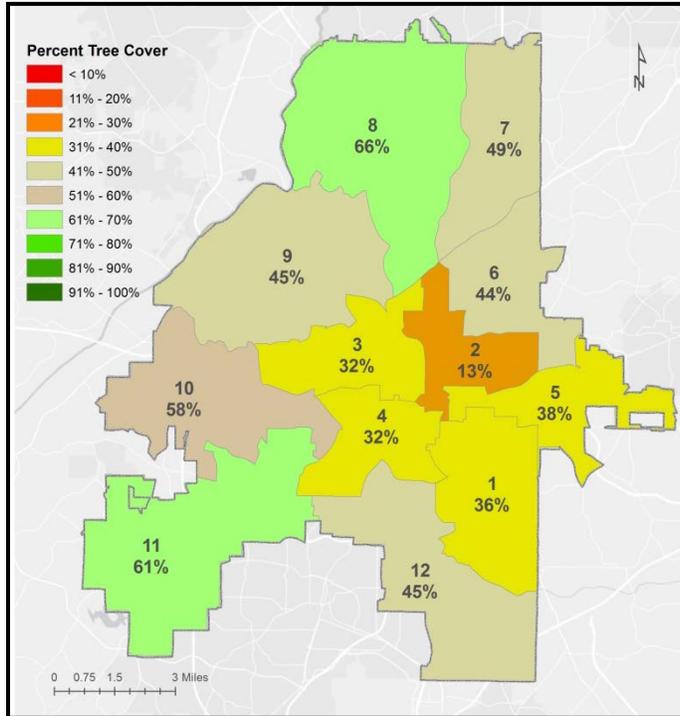
Figure 10: Percent Tree Cover by Council District (Map)

District	Area (acres)	Tree Canopy (percent)
8	12,417	66%
11	11,120	61%
10	7,670	58%
7	5,934	49%
9	10,614	45%
12	8,707	45%
6	4,941	44%
5	4,520	38%
1	6,237	36%
4	4,057	32%
3	4,698	32%
2	3,682	13%

Table 6: Tree Cover by Council District

District 8 is the largest district and has both the highest percentage and total acreage of tree cover, while District 2 is the smallest district and has the both the least acreage and lowest percentage of tree cover across all districts (see number of acres in black in Figure 11). Over 60% of land cover in District 2 is non-vegetation, which includes pavement, buildings, and other impervious surfaces with low potential for planting trees (Figure 11). Several districts have a high percentage of non-tree vegetation, which indicates potential tree planting areas. District 1 for example has a high percentage of

Figure 11: Land Cover Distribution by City Council District

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land with tree planting potential (non-tree vegetation), and Districts 3, 4, 5, and 6 have slightly lower percentages. District 2 has the largest amount of non-vegetated land area, indicating low potential for tree planting. Finding suitable areas to plant trees in this downtown District would be challenging without converting impervious area to pervious areas or utilizing innovative measures such as use of structural soils under pavement to enhance growing space for shade trees.

Table 7 shows land cover summary statistics for City Council Districts. The second largest contribution to Atlanta's total tree cover is in District 11, with 61% tree cover, representing 8% of the city's total area and 17% of the city's total tree cover. District 2 has the lowest percentage tree cover of all districts at 13%, which represents only 1% of Atlanta's total tree cover and less than 1% of Atlanta's total land area.

Table 7: Land Cover Summary Statistics by Council District

District	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% District	% UTC	% City Land	% District	% NTV	% City Land	% District	% NV
1	3%	36%	5%	2%	30%	10%	3%	34%	8%
2	1%	13%	1%	1%	18%	4%	3%	69%	10%
3	2%	32%	4%	1%	26%	7%	2%	42%	8%
4	2%	32%	3%	1%	26%	6%	2%	42%	7%
5	2%	38%	4%	1%	26%	6%	2%	36%	6%
6	3%	44%	5%	1%	23%	6%	2%	32%	6%
7	3%	49%	7%	1%	15%	5%	2%	35%	8%
8	10%	66%	20%	2%	16%	11%	3%	17%	9%
9	6%	45%	12%	3%	21%	12%	4%	33%	14%
10	5%	58%	11%	2%	24%	10%	2%	18%	5%
11	8%	61%	17%	3%	21%	13%	2%	17%	8%
12	5%	45%	10%	3%	25%	12%	3%	30%	10%

Interpreting the table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified geography. For example, a "% City Land" value of 3% for Council District 1 under the "Tree Cover" grouping means that 3% of the city's total area is comprised solely of tree cover found in Council District 1.

- **"% District"** The percentage of the specified geography's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Geography" value of 36% for Council District 1 under the "Tree Cover" grouping means that 36% of Council District's 1 total area is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** 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 5% for Council District 1 under the "Tree Cover" grouping means that 5% of the city's total tree canopy area is comprised of tree cover found in Council District 1.

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3.5 Neighborhoods

The City of Atlanta neighborhood GIS data layer contains 239 neighborhoods, ranging in size from ten acres (Colonial Homes) to over 2,700 acres (Ben Hill), with an average size of 310 acres. Many areas in the city are undesignated as neighborhoods (shown in black on Figure 10).
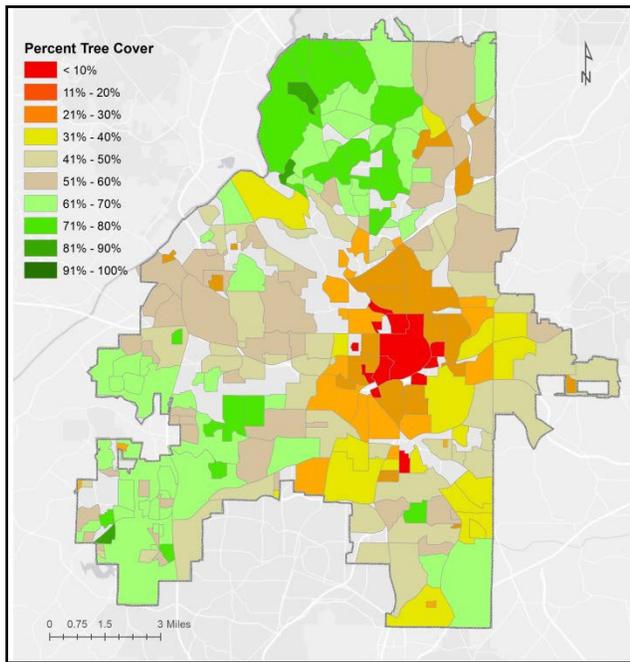
Figure 12: Percent Tree Cover by Neighborhood (Map)

Figure 12 illustrates the City of Atlanta neighborhoods color-coded by percent tree canopy cover.

Figure 13 shows land cover distribution for the dozen most tree-covered neighborhoods. The total acreage (2,172) of these twelve neighborhoods is similar to the total acreage (1,918) of the twelve least tree-covered neighborhoods seen in Figure 14. The difference in tree cover between these areas is dramatic -- each of the top twelve neighborhoods have more than 75% tree canopy and each of the twelve least tree-covered areas have less than 10% tree canopy.
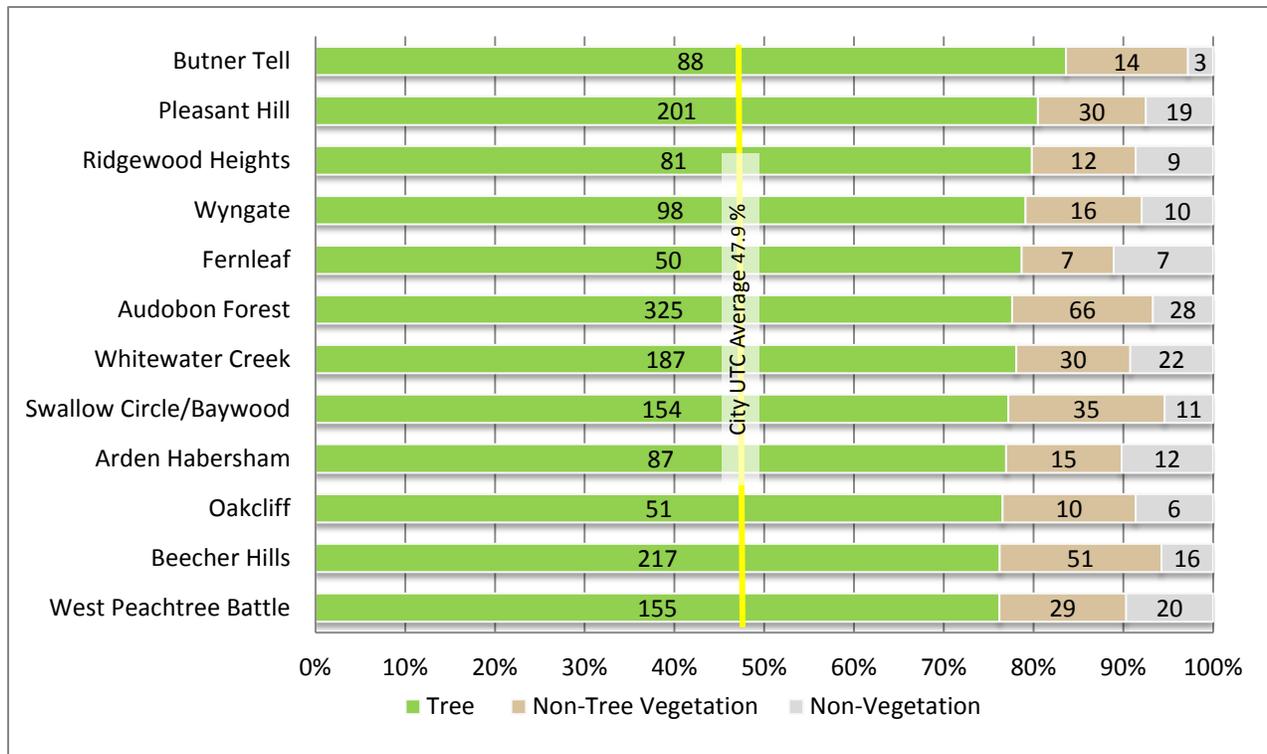
Figure 13: Land Cover Distribution for the Top 12 Tree-Covered Neighborhoods

The highest tree cover in any single neighborhood is in Butner Tell, which has tree canopy on 83% of its 105 acres. The largest neighborhood in the top twelve most tree-covered is Audobon Forest, which has tree canopy on more than 77% of its 419 acres. Overall, the top twelve neighborhoods average 77 percent tree cover, 7.5% non-vegetative cover, and just under 15% non-tree vegetative cover. Non-vegetative cover is an approximate measure of impervious surface, but likely is an underestimate since many buildings and paved areas are shaded by canopy. Similarly, areas of non-tree vegetative, such as many lawns, shrubs and smaller plants, are covered by tree canopy.
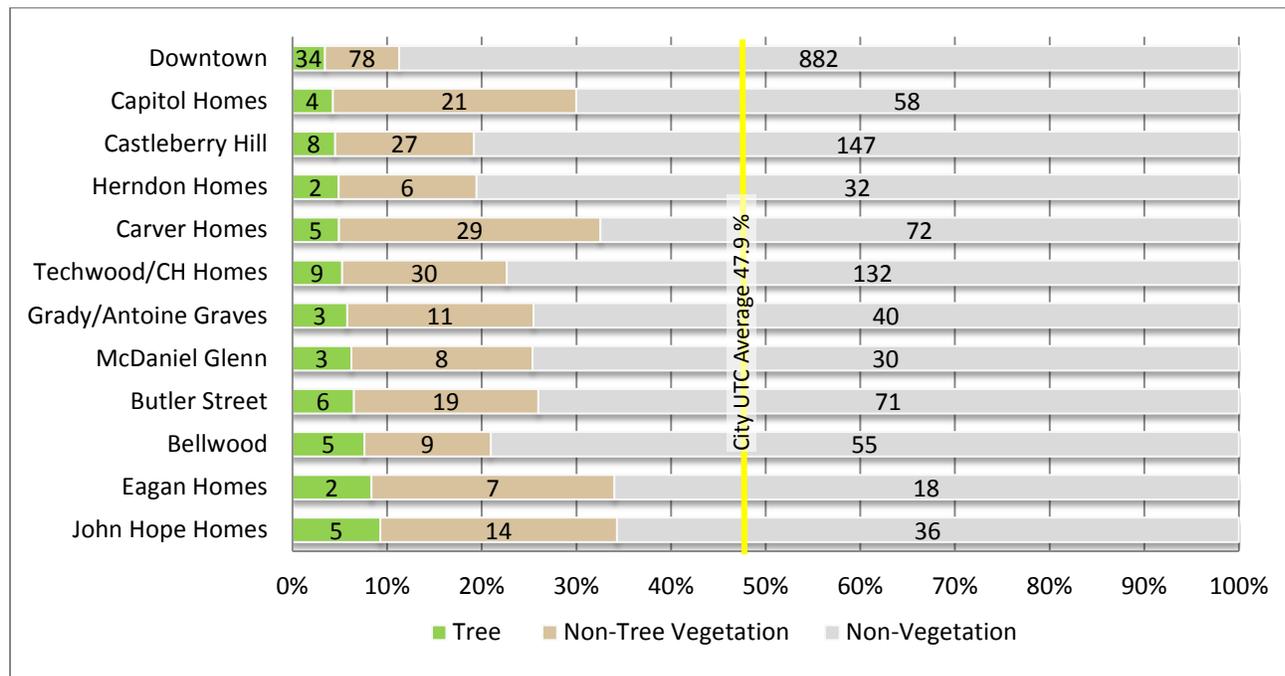
Figure 14: Land Cover Distribution for the Bottom 12 Tree-Covered Neighborhoods

Among the twelve least tree-covered neighborhoods (Figure 14), the average tree cover is four percent. Downtown is by far the largest neighborhood with low tree cover. Less than three percent of its 994 acres have tree canopy. Not surprisingly, the downtown neighborhood also has the most non-vegetated acreage of all neighborhoods (89%) a reflection of the concentration of large buildings, streets, and sidewalks, and limited park land. Over 400 acres of new trees would be needed downtown to attain the city tree cover average of 47.9%. However, only 78 acres (8% of the neighborhood's land area) are potentially available for planting (as indicated by the non-tree vegetated area shown in Figure 14). These 78 acres include all areas covered in grass, shrubs, or low vegetation and are not, of course, necessarily available for tree planting. Increasing the tree cover in the 994-acre downtown neighborhood would require converting impervious surfaces to pervious surfaces suitable for planting or other innovative measures such as use of structural soils under pavement to enhance the growing space for shade trees. Identification of vacant or underutilized city-owned downtown properties could also present options for large scale conversion of non-vegetated land to tree-covered.

Other neighborhoods among the dozen least tree-covered in Atlanta include Castleberry Hill (adjacent to downtown), Butler Street, Bellwood, and eight former public housing developments (Capitol Homes, Herndon Homes, Carver Homes, Techwood/Clark-Howell, Grady Homes, McDaniel Glenn, Eagan

Homes, and John Hope Homes). Each of these public housing developments was demolished under a 1996 policy that converted all public housing to mixed-income developments. All developments were demolished between 1994 and 2011 and subsequently re-developed during the same time period. Without further research, it is difficult to know the development status of any of these projects when the project data (i.e., satellite imagery) was collected in 2008.

Based solely on the amount of non-vegetated land in these areas (Figure 14), there is potential for tree planting [e.g., 21 acres (25%) in the former Capitol Homes; 29 acres (27%) in the former Carver Homes; and 30 acres (18%) in the former Techwood Homes]. These potential planting spaces, however, may have already been developed or planted with small trees. Additional investigation is needed to determine whether these non-vegetated areas represent viable planting areas.

While it is not possible to determine the reason for such low tree cover in the former public housing areas solely from project data, further study of areas with both the lowest and highest tree cover may be instructive in quantitatively measuring the impact of zoning, land development, and other decisions that affect tree preservation, tree planting, and canopy cover in the city.

Recapping significant findings represented in Figure 14:

1. Downtown Atlanta has the smallest percentage of tree canopy and the highest percentage of non-vegetated area of any neighborhood;
2. Most of the other least tree-covered neighborhoods are former public housing projects.

Table 8 shows tree cover statistics for the neighborhoods with the most tree canopy in terms of total area, not simply percent cover. Table 9 shows land cover summary statistics for the same neighborhoods. The tree cover area and percent cover table and land cover summary statistics table for all 267 neighborhoods can be found in Appendix E.

Table 8: Neighborhoods with the Most Acres of Trees

Neighborhood	Total Acres	Tree Acres	% UTC
Ben Hill	2742	1636	59.7%
Paces	1918	1392	72.6%
George High	1840	1164	63.2%
Mount Paran Northside	1355	984	72.6%
North Buckhead	1705	959	56.2%
Southwest	1281	822	64.2%
Morningside-Lenox Park	1468	789	53.7%
Boulder Park	1213	780	64.3%
Collier Heights	1263	728	57.6%
Chastain Park	1096	698	63.7%

Ben Hill, the largest of all the city's neighborhoods by almost 1000 acres, contains 4.45% of Atlanta's tree cover (1,636 acres), which covers 2.19% of Atlanta's total area. Ben Hill also has 21% of its land covered by non-tree vegetation, which may offer possibilities for planting ('% Neighborhood'), though this is lower than the 24% non-tree vegetation found in both Collier Heights and Chastain Park.

Table 9: Land Cover Summary Statistics for Neighborhoods with the Most Acres of Trees

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighborhood	% UTC	% City Land	% Neighborhood	% NTV	% City Land	% Neighborhood	% NV
Ben Hill	2.19%	60%	4.45%	0.75%	21%	3.41%	0.70%	19%	2.48%
Paces	1.87%	73%	3.78%	0.32%	12%	1.45%	0.36%	14%	1.29%
George High	1.56%	63%	3.16%	0.40%	16%	1.80%	0.47%	19%	1.69%
Mount Paran Northside	1.32%	73%	2.67%	0.30%	17%	1.37%	0.19%	11%	0.69%
North Buckhead	1.29%	56%	2.61%	0.32%	14%	1.45%	0.66%	29%	2.34%
Southwest	1.10%	64%	2.24%	0.31%	18%	1.40%	0.30%	18%	1.08%
Morningside-Lenox Park	1.06%	54%	2.14%	0.41%	21%	1.83%	0.48%	24%	1.70%
Boulder Park	1.05%	64%	2.12%	0.29%	18%	1.31%	0.27%	16%	0.95%
Collier Heights	0.98%	58%	1.98%	0.41%	24%	1.85%	0.31%	18%	1.10%
Chastain Park	0.94%	64%	1.90%	0.35%	24%	1.60%	0.18%	12%	0.63%

Interpreting the Land Cover Summary table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified neighborhood. For example, a "% City Land" value of 2.19% for Ben Hill under the "Tree Cover" grouping means that 2.19% of the City's total area is comprised solely of tree cover found in the Ben Hill neighborhood.

- **"% Neighborhood"** The percentage of the neighborhood's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Neighborhood" value of 36% for Ben Hill under the "Tree Cover" grouping means that 36% of the Ben Hill neighborhood's total area is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** The percentage of a cover type's total area that is covered by trees, non-tree vegetation, or non-vegetation in a specific neighborhood. For example, a "% UTC" value of 4.45% for Ben Hill under the "Tree Cover" grouping means that 4.45% of the city's total tree canopy area is comprised of tree cover found in the Ben Hill neighborhood.

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3.6 Zoning

The research team examined tree canopy cover for each zoning category to establish a baseline measure for tree cover for each zone. While the city utilizes many zoning subcategories, the project team aggregated zoning categories with similar land uses (e.g., C-1, C-2, and C-3 are all grouped under C-Commercial). Detailed descriptions of the individual zoning categories is found in Appendix F.
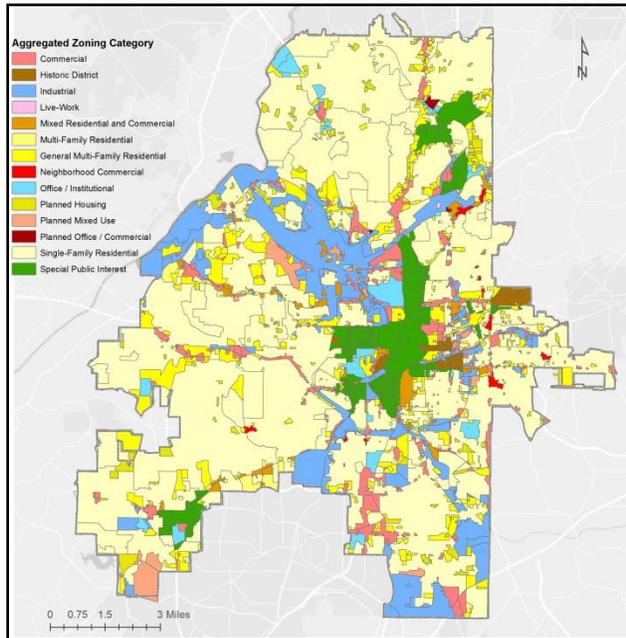
Figure 15: Aggregated Zoning Categories (Map)

Figure 15 illustrates the distribution of zoning categories across the city. Figure 16 illustrates the relative distribution of land cover within each zoning category, presented from highest to lowest canopy cover. Figure 17 shows the overall land area in acres for each aggregated zoning group.

Note that the majority of the city is zoned residential, with single-family residential as the largest zoning category (51,308 acres). The second largest zoning category is industrial, which constitutes a much smaller land area (9,904 acres). The third largest is multi-family residential (7,810 acres).
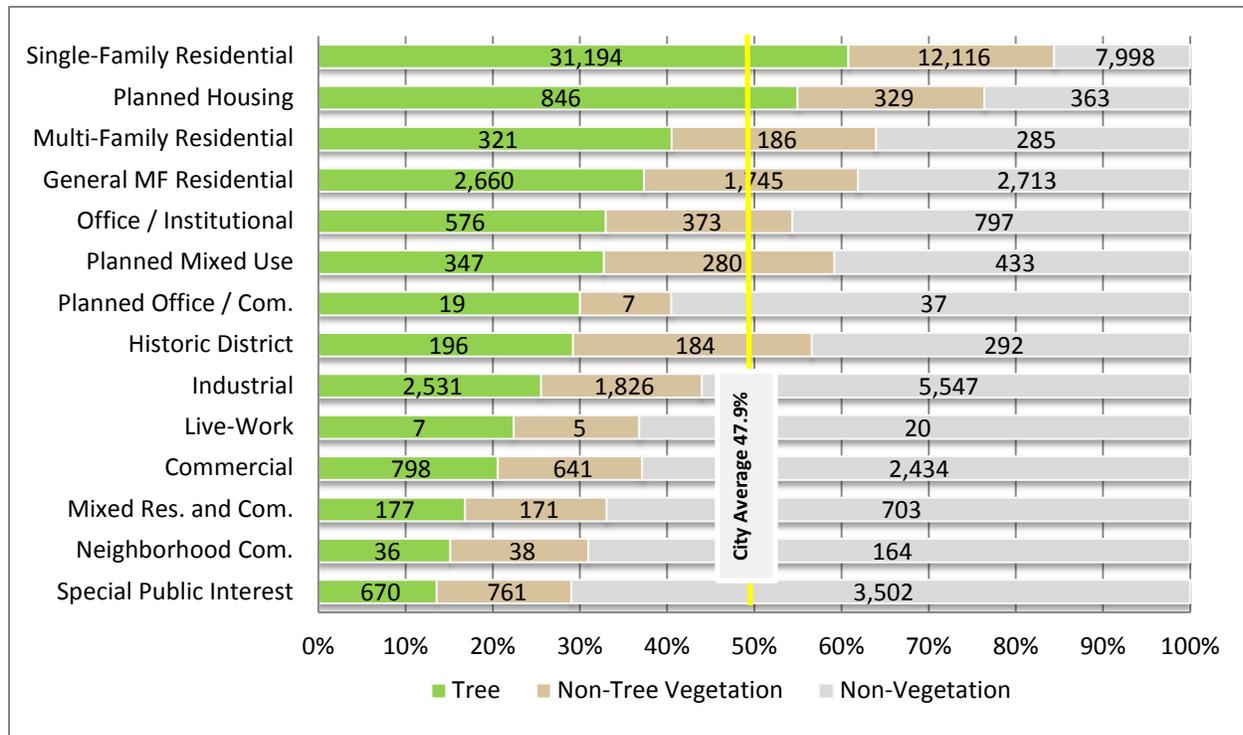
Figure 16: Land Cover Distribution by Zoning Category

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In addition to being the largest zoning category by far, residential property has more tree cover than any other zoning categories (e.g., 60.7% of single-family residential land is tree-covered and 55% of areas zoned for planned housing development are tree-covered, compared with commercially zoned land where 20.6% is tree-covered).   Only single-family residential (60.6%) and planned housing (54.7%) zoning categories have tree cover percentages above the city average of 47.9%. The lowest concentration of tree cover is in the areas zoned neighborhood commercial (15.1%) and special public interest (13.6%). 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; and residential areas such as Candler Park, Poncey-Highland, Home Park, Mechanicsville, and Historic West End/Adair Park.
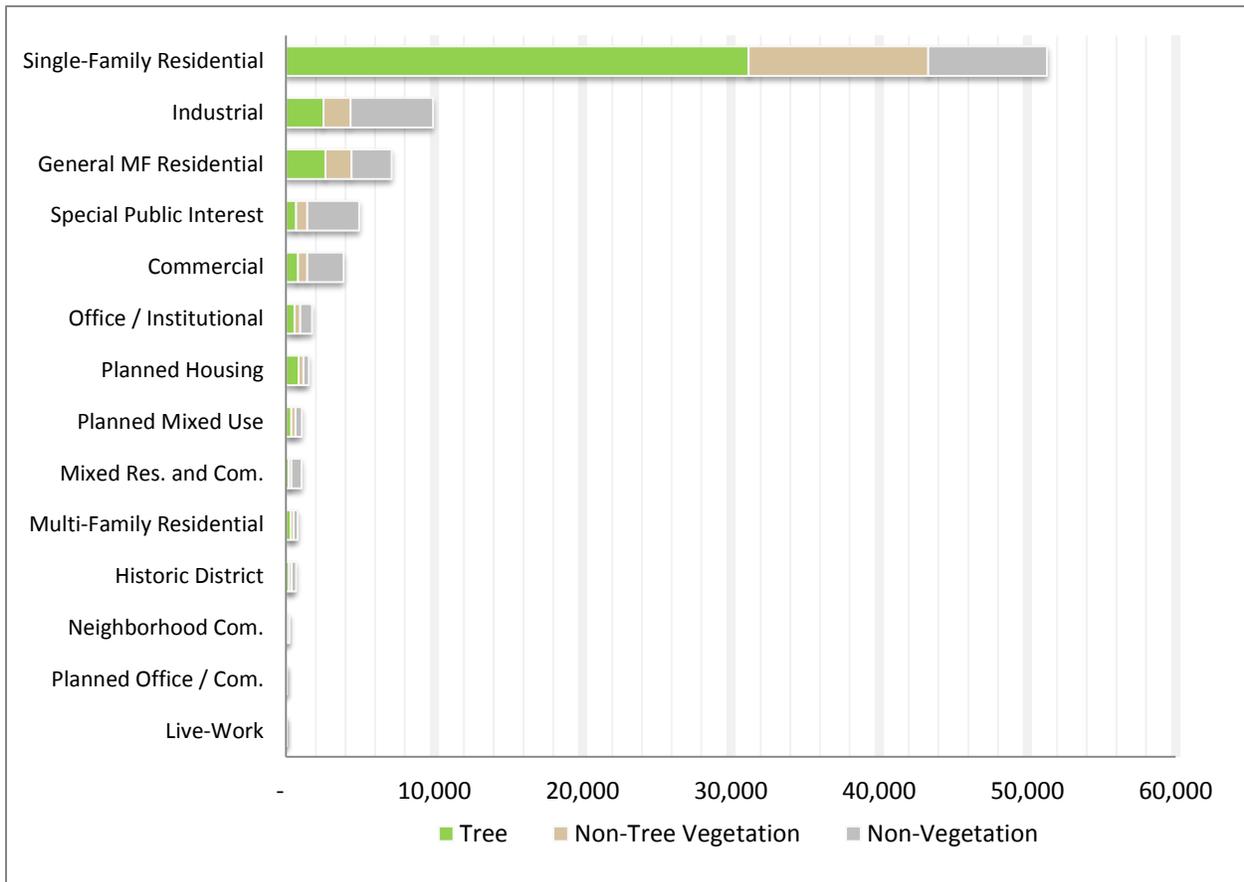
Figure 17: Land Cover Area in Acres by Aggregated Zoning Category

While tree cover makes up only 25.4% of the 9,904 acres with industrial zoning, this represents 2,531 acres of tree cover (and over 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 the city's zoning code. Further analyses of these properties may be instructive.

Table 10 shows land cover summary statistics by zoning category

Zoning Group	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Zoning	% UTC	% City Land	% Zoning	% NTV	% City Land	% Zoning	% NV
Commercial	0.94%	20.59%	1.98%	0.76%	16.54%	3.43%	2.88%	62.81%	9.63%
General Multi-Family Residential	3.14%	37.33%	6.59%	2.06%	24.48%	9.35%	3.21%	38.06%	10.73%
Historic District	0.23%	28.83%	0.49%	0.22%	27.05%	0.99%	0.34%	42.83%	1.15%
Industrial	2.99%	25.35%	6.27%	2.16%	18.29%	9.78%	6.55%	55.56%	21.94%
Live-Work	0.01%	22.42%	0.02%	0.01%	14.40%	0.02%	0.02%	63.18%	0.08%
Mixed Residential and Commercial	0.21%	16.82%	0.44%	0.20%	16.24%	0.92%	0.83%	66.81%	2.78%
Multi-Family Residential	0.38%	40.35%	0.79%	0.22%	23.36%	0.99%	0.34%	35.84%	1.13%
Neighborhood Commercial	0.04%	15.14%	0.09%	0.04%	15.84%	0.20%	0.19%	69.03%	0.65%
Office / Institutional	0.68%	32.98%	1.43%	0.44%	21.39%	2.00%	0.94%	45.62%	3.15%
Planned Housing	1.00%	54.72%	2.09%	0.39%	21.31%	1.76%	0.43%	23.49%	1.44%
Planned Mixed Use	0.41%	31.75%	0.86%	0.33%	25.65%	1.50%	0.51%	39.56%	1.71%
Planned Office / Commercial	0.02%	30.03%	0.05%	0.01%	10.47%	0.04%	0.04%	59.51%	0.15%
Single-Family Residential	36.86%	60.62%	77.25%	14.32%	23.55%	64.93%	9.45%	15.54%	31.63%
Special Public Interest	0.79%	13.59%	1.66%	0.90%	15.43%	4.08%	4.14%	70.98%	13.85%

Table 10: Land Cover Summary Statistics by Zoning Category

Interpreting the table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified zoning category. For example, a "% City Land" value of 36.86% for Single-Family Residential under the "Tree Cover" grouping means that 36.86% of the city's total area is comprised solely of tree cover found on land zoned single-family residential.

- **"% Zoning"** The percentage of the zoning category's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Zoning" value of 60.62% for Single-Family Residential under the "Tree Cover" grouping means that 60.62% of land zoned single-family residential is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** The percentage of a cover type's total area that is covered by trees, non-tree vegetation, or non-vegetation in a specific zoning category. For example, a "% UTC" value of 77.25% for Single-Family Residential under the "Tree Cover" grouping means that 77.25% of the city's total tree canopy area is comprised of tree cover found on land zoned single-family residential.

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Significant findings in Table 10:

- Most of the tree cover (77.25%) in the city is found on single-family residential land.

- The second greatest concentration of the city's tree cover is found on land zoned for multi-family residential use (6.6%) and industrial (6.3%).

- The lowest tree cover percentages are in the Special Public Interest (SPI) zoning areas (13.6%) and various other commercial categories.

- The greatest potential for planting is found on single-family residential land where 23.55% of land cover is non-tree vegetation (64.93% of all non-tree vegetation is located on single-family residenial land).

- Industrial and multi-family residential land have the next greatest potential for planting with non-tree vegetative cover percentages near 10%.

Zoning	# Zones	Acres	Tree (Acres)	Tree Canopy
R-1	2	1,533	1,202	78%
R-2	3	3,221	2,371	74%
R-2A	4	865	668	77%
R-2A-C	1	0	0	68%
R-2B	2	404	296	73%
R-3	29	12,582	8,639	69%
R-3A	2	327	224	69%
R-3C	2	12	6	48%
R-4	69	24,452	13,952	57%
R-4A	46	4,634	2,485	54%
R-4A-C	3	4	2	38%
R-4B	11	315	97	31%
R-4B-C	10	130	38	29%
R-4-C	4	45	25	55%
R-5	61	2,730	1,076	39%
R-5-C	12	206	70	34%
RG-1	6	111	34	31%
RG-1-C	4	31	14	46%
RG-2	118	1,811	683	38%
RG-2-C	56	533	288	54%
RG-3	137	3,248	1,220	38%
RG-3-C	96	634	207	33%
RG-4	21	333	72	21%
RG-4-C	22	136	32	23%
RG-5	9	81	18	22%
RG-5-C	7	26	10	39%
R-LC	50	93	36	39%
R-LC-C	46	91	44	48%

Table 11: Tree Cover by Residential Zoning Category

As previously illustrated in Figures 16 and 17, single-family residential, special public interest districts, industrial, commercial, and multi-family residential zones comprise the greatest area in the city. Most of the city's tree canopy is located on land zoned single-family residential; specifically over 31,000 acres of tree canopy are located in this category. This equates to 77% of all tree canopy in the city. Moreover, 60.6% of all land zoned single-family residential is covered by tree canopy. Residential land also has large percentages of non-tree vegetation, and historic district zoning offers one of the largest percentages of non-tree vegetation at over 27%. Special public interest zones, primarily the commercial SPIs, have the lowest tree canopy percentages (13.6%) and the highest percent of non-vegetation coverage (71.0%).

Additional examination of the distinct zoning categories within the larger zoning groupings provides more insight into the effects of policy decisions on tree cover. For example, Table 11 shows the acres of trees and percent tree cover in each distinct residential zone. Figure 18 shows the land cover area in acres by residential zoning category. The largest sub-category within single-family zoning is R-4. While most R-4 lots are approximately one-fifth of an acre (minimum lot size 0.21 acres), these lots total 24,452 acres (29% of the total land area in the city and almost

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half of the land zoned for single-family development in the city). The second largest sub-category within single-family zoning is R-3. Most R-3 lots are less than half of one acre (minimum lot size 0.41 acres). These lots total 12,582 acres (15% of total land area in the city and 24% of the land zoned for single-family development in the city). These calculations illustrate the significant potential cumulative impact of policies, regulations, and actions on small lots, which collectively make up a very large part of the city.
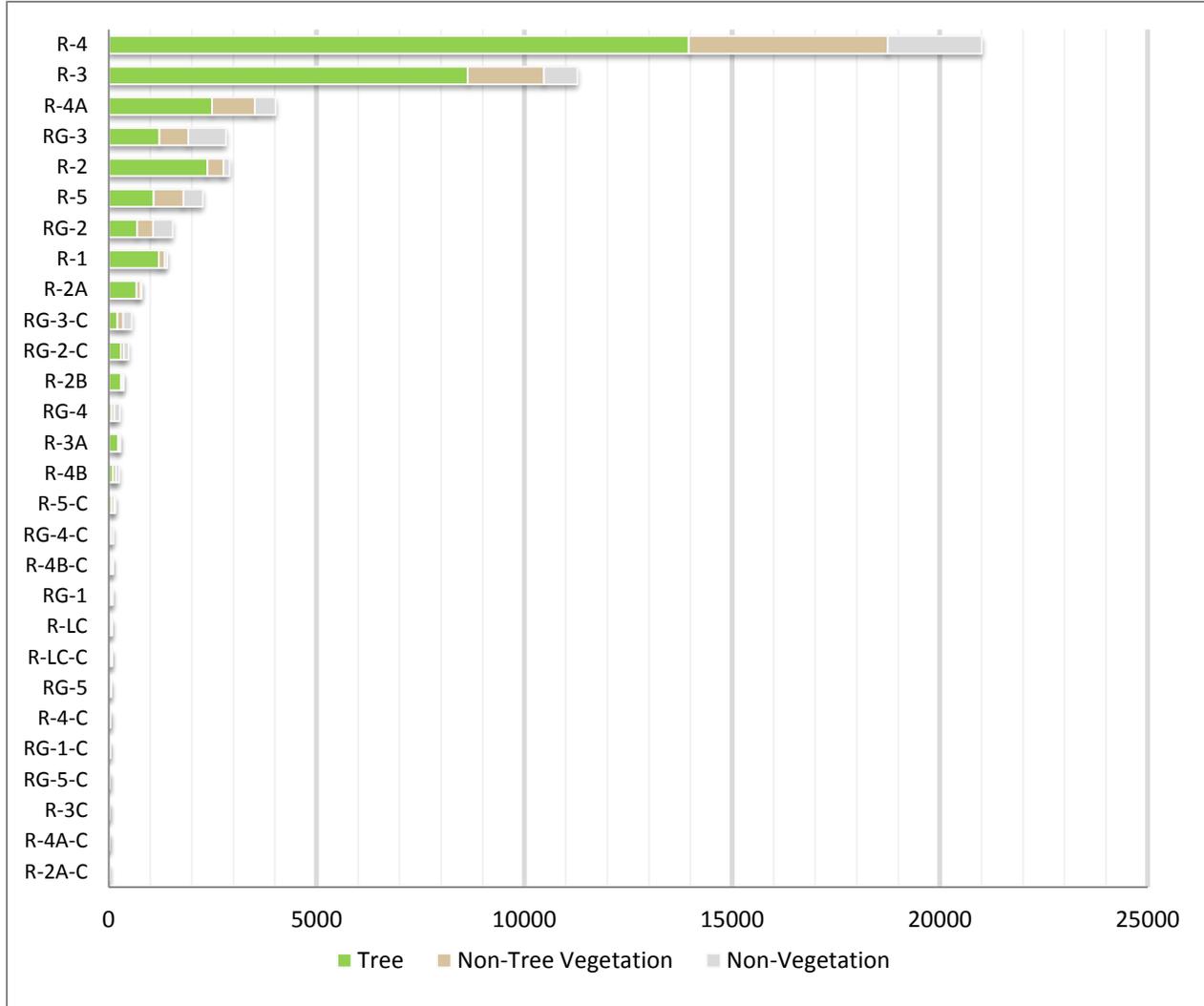
Figure 18: Land Cover Area in Acres by Residential Zoning Category

Note the wide variation in tree cover between residential categories. R-4 has the greatest amount of tree canopy in acres, though most R-3, R-2, and R-1 zones have higher percentages of tree canopy per zone. R1 through R4 are generally defined as single-family residential categories. R5 and RG zones represent multi-family residential and most have lower tree cover percentages than the remaining residential zones. RG-1 and R-4A-C stand out as having very high percentages of non-tree vegetation compared with other residential zones, while R-5 and RG-4-C have the highest percent non-vegetation cover. All zones ending in C have mixed commercial and the lowest tree cover percentages of all distinct residential zones. These findings imply that city policies permit larger portions of parcels to be developed on land

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zoned for multi-family than on parcels zoned for single-family development. If any commercial zoning is included, the residential zones lose more tree cover.

Further analysis of the distinct zones also will likely reveal disparities in tree cover by zoning category based on geographic location. For example, Table 11 shows 69 "zones" (one or more contiguous areas sharing a zoning designation) of R-4 zoned land in the city. These 69 zones, shown in Figure 19, range in size from .3 acres to approximately 3,000 acres. The average percent tree cover in R-4 is 57% yet the amount of tree cover per individual R-4 zone ranges widely, from a low of 11% in a small zone east of downtown to a high of 90% in a small zone located in SE Atlanta. These differences may reflect variation in topography, architectural styles, or socio-economic factors.
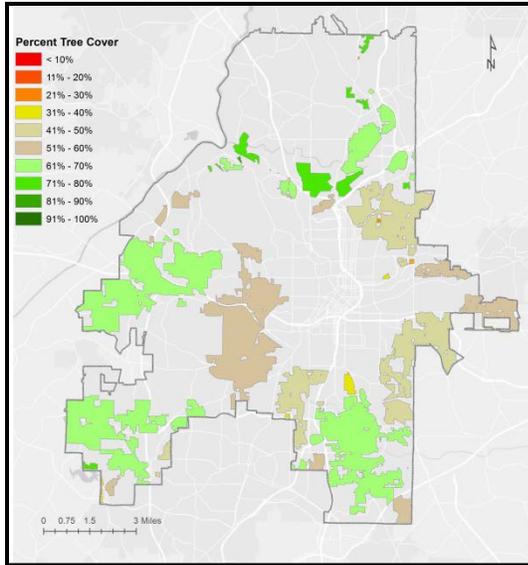
Figure 19: Tree Cover by Residential Zoning (Map)

The above findings are not unique to the residential zoning category. Each aggregated zoning category (commercial, industrial, etc.) shows wide variation in tree cover values between the distinct zoning categories (R-4, R-3, R-2, etc.) within a particular zoning group (residential). Furthermore, within a distinct zoning category (C-1, R-4, etc.), there is wide variation in the amount of tree cover between the same zones across the city, indicating that geography is a perhaps a better predictor of tree cover than zoning category alone. These findings illustrate the need to further examine project results by distinct zones within a given zoning category. This type of detailed analysis will help the city better understand the distribution and location of tree cover across and within the city's zoning categories. Land cover summary statistics for individual zones can be found in Appendix F.

Figure 20: Land Zoned R-3 Near Lionel Hampton Trail Entrance

Zoning designations in the City of Atlanta dictate the ratio of allowable building and impervious area to total area per parcel. The amount of allowable building and impervious area varies a great deal between and within zoning categories. This, in turn, has strong implications for tree canopy. The results or land cover effects of these ratios or zoning designations are evident in the zoning tables or charts produced as part of this report. Commercial and industrial zones, in general, allow much more building and impervious per parcel than do any residential zones and subsequently contain lower tree cover percentages than residential categories because of this. It appears that SPIs also allow significant amounts of a parcel's area to be developed. Multi-family residential zoning districts require less open space and impervious area than in single-family zoning areas. Evaluating the effect of zoning policies and requirements on development and retention of open space will yield a great deal of information about potential impact on tree cover.

3.7 Parks

There are 357 parks in the City of Atlanta, totaling approximately 3,800 acres (4.5% of the city's land

Figure 21: Percent Tree Cover for Selected Parks (Map)

area). These parks contain 2,070 acres of tree-covered land (4.9% of the city's tree canopy). Some parks, including nature preserves and newly acquired watershed properties, have almost 100% tree cover. Other parks, especially those downtown and those designed for specific uses such as golf courses or athletic fields, have very little tree cover. Overall, the average tree cover in parks is slightly above the average tree cover for the city as a whole. Figure 21 shows tree cover in Atlanta parks. In general, the percentage of tree cover within these parks increases with distance from the city center.

The City of Atlanta has 21 parks greater than 50 acres in size. Among these parks, the greatest number of acres of tree cover is found in Southside Park (179 acres), Cascade Springs Nature Preserve (113 acres), Chastain Park (106 acres), and Atlanta Memorial (92 acres). The highest percentage of tree cover (>90%) is found in Swann Preserve, Cascade Springs, Herbert Greene, and North Camp Creek Nature Preserve (Figure 22).
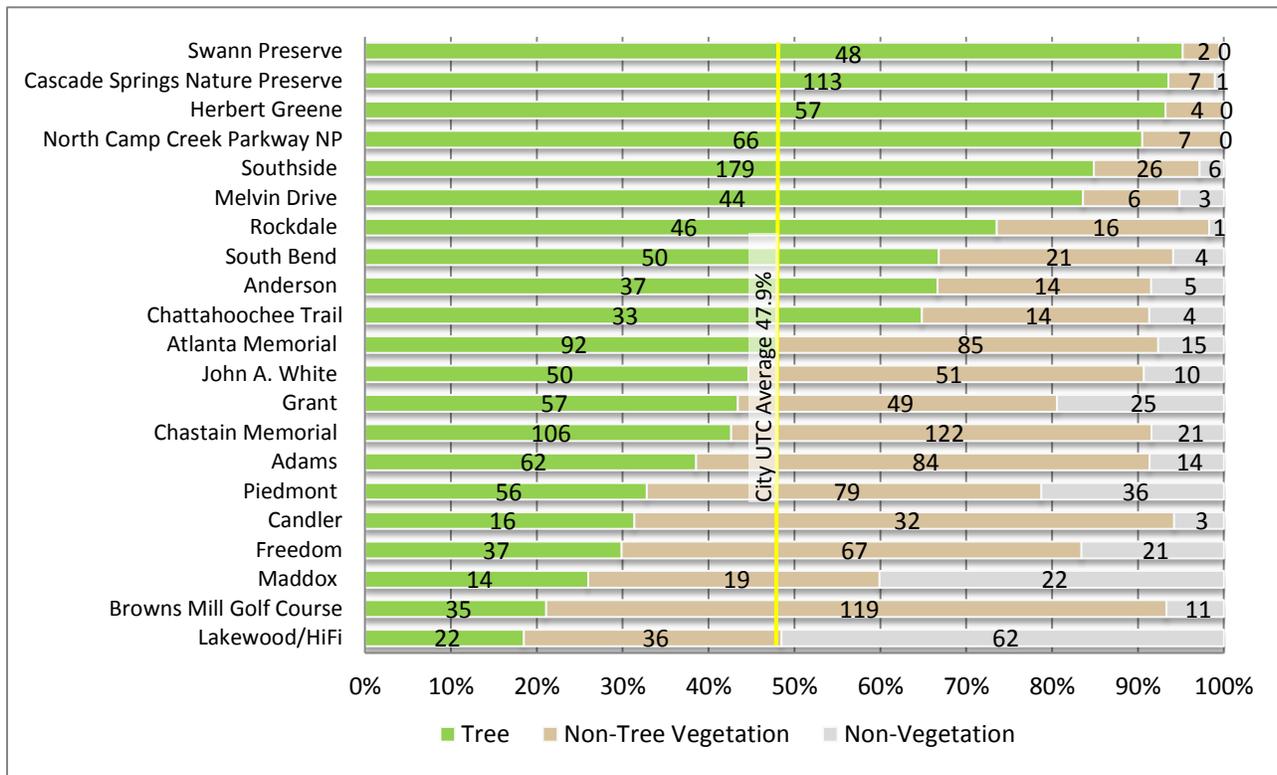
Figure 22: Land Cover Distribution for Parks > 50 acres

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Table 12 shows land cover summary statistics for the parks greater than 50 acres in size.

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Swann Preserve	0.06%	95.19%	2.32%	0.00%	4.25%	0.17%	0.00%	0.55%	0.06%
Cascade Springs Nature Preserve	0.13%	93.53%	5.46%	0.01%	5.42%	0.50%	0.00%	1.05%	0.28%
Herbert Greene	0.07%	93.21%	2.75%	0.00%	6.65%	0.31%	0.00%	0.14%	0.02%
North Camp Creek Parkway NP	0.08%	90.48%	3.20%	0.01%	9.20%	0.52%	0.00%	0.31%	0.05%
Southside Park	0.21%	84.85%	8.64%	0.03%	12.30%	1.99%	0.01%	2.85%	1.30%
Melvin Drive Park	0.05%	83.61%	2.11%	0.01%	11.21%	0.45%	0.00%	5.17%	0.59%
Rockdale Park	0.05%	73.55%	2.24%	0.02%	24.71%	1.20%	0.00%	1.73%	0.24%
South Bend Park	0.06%	66.77%	2.43%	0.02%	27.30%	1.58%	0.01%	5.90%	0.96%
Anderson Park	0.04%	66.67%	1.79%	0.02%	24.85%	1.07%	0.01%	8.48%	1.02%
Chattahoochee Trail	0.04%	64.21%	1.61%	0.02%	26.22%	1.05%	0.01%	8.62%	0.97%
Atlanta Memorial Park	0.11%	48.02%	4.43%	0.10%	44.32%	6.51%	0.02%	7.67%	3.17%
John A. White Park	0.06%	44.65%	2.41%	0.06%	46.02%	3.96%	0.01%	9.34%	2.26%
Grant Park	0.07%	43.41%	2.74%	0.06%	37.16%	3.73%	0.03%	19.43%	5.48%
Chastain Memorial Park	0.13%	42.62%	5.14%	0.14%	48.95%	9.40%	0.02%	8.43%	4.55%
Adams Park	0.07%	38.57%	2.97%	0.10%	52.76%	6.48%	0.02%	8.67%	2.99%
Piedmont Park	0.07%	32.81%	2.71%	0.09%	45.92%	6.04%	0.04%	21.27%	7.86%
Candler Park	0.02%	31.36%	0.78%	0.04%	62.86%	2.48%	0.00%	5.79%	0.64%
Freedom Park	0.04%	29.80%	1.80%	0.08%	53.38%	5.14%	0.02%	16.55%	4.48%
Maddox Park	0.02%	25.99%	0.69%	0.02%	33.93%	1.42%	0.03%	40.11%	4.74%
Browns Mill Golf Course	0.04%	21.11%	1.69%	0.14%	72.20%	9.18%	0.01%	6.69%	2.39%
Lakewood/HiFi	0.03%	18.50%	1.07%	0.04%	29.99%	2.77%	0.07%	51.52%	13.37%

Table 12: Land Cover Summary Statistics for Parks > 50 acres

Interpreting the table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified park. For example, a "% City Land" value of 0.06% for Swann Preserve under the "Tree Cover" grouping means that 0.06% of the city's total area is comprised solely of tree cover found in the Swann Preserve.

- **"% Park"** The percentage of the park's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Park" value of 95.19% for Swann Preserve under the "Tree Cover" grouping means that 95.19% of Swann Preserve is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** The percentage of a cover type's total area that is covered by trees, non-tree vegetation, or non-vegetation found in the specified park. For example, a "% UTC" value of 2.32% for Swann Preserve under the "Tree Cover" grouping means that 2.32% of the city's total tree canopy area is comprised of tree cover found in Swann Preserve.

As expected, tree cover is generally highest in nature preserves and parks with minimal facilities like Swann Preserve (95.2%), Cascade Springs (93.5%), and Southside (84.9%). Tree cover is lowest in large parks having specific uses. These large parks, with the exception of Maddox (25.9%) and Freedom (29.8%), each have primary uses that likely limit the potential for future tree planting such as golf in Candler Park (51 acres) and Browns Mill Park (160 acres), and the amphitheater in Lakewood (120 acres). Parks obviously are utilized for many purposes including activities that require large open areas as well as the preservation of forested areas and natural landscapes. Both Freedom Park and Maddox Park, however, seem to have adequate space for multiple purposes including potential additional tree planting, with 67 and 19 open acres respectively (Figure 17). Freedom Park, which was designed primarily as a series of connected trails surrounded by semi-open fields or lightly forested areas, may represent one of the largest potential planting areas on parkland, particularly some of the larger open areas around North Avenue, Freedom Parkway, and the Carter Center (Figure 23). The 67 vegetated acres without trees represents 53.4% of Freedom Park's total area.

Piedmont Park, another large park with low tree cover (approximately 30%), also has a large amount of non-tree vegetation (79 acres). Since the park provides open fields and large areas for passive recreation, replacing many of the open areas in Piedmont Park with trees may not be a viable option, but some areas potentially could be used for new tree plantings. Without additional plantings the overall tree cover will decrease over time.

Figure 23: Aerial View of Freedom Park

Given the large amount of public land with non-tree vegetation in proximity to downtown, further examination and evaluation of potential tree planting areas on public park land is warranted. In addition, given the reality that only approximately 5% (2,070 acres) of the city's tree cover is located in parks, extra effort should be made to maintain existing tree cover in city parks, while simultaneously maximizing tree planting in parks with minimal or low tree cover.

Fortunately, many of the city's newest parks are completely forested and located along stream corridors where environmental benefits are especially significant. Many of these new park properties were acquired by the City of Atlanta Watershed Department as part of an EPA-mandated consent decree in the late 1990's, which required the 25 million dollar purchase and protection of riparian land along designated priority stream segments.

Increasing parkland and maintaining and increasing tree cover in existing city parks is an important goal for the city, local non-profits, park conservancies, and volunteers in Atlanta.

Land cover statistics and summaries for the many parks smaller than 50 acres in the City of Atlanta are not presented in the body of this report. A complete list of all parks and their associated land cover statistics can be found in Appendix G.

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3.8 Stream Buffers

Trees and vegetation near streams (riparian buffers) provide erosion protection, flood control, and pollution prevention through streambank stabilization and the trapping of sediments, chemicals, and excess nutrients carried by stormwater into streams.

The state of Georgia's stream buffer ordinance prohibits development within 25 feet of a stream. Many municipalities require wider buffers, especially for streams above drinking water intakes. The City of Atlanta's steam buffer ordinance restricts disturbance of vegetation within 75 feet of streams. Establishment and active management of these ordinances are critical pieces for protecting water quality and stream and watershed health.

According to studies of the Chesapeake Bay area (2003, 2005, Goetz et al.), the best predictors of stream health are: a) the percentage of tree cover in the riparian zone (100-ft.stream buffer); and b) the percentage of impervious surface within a sub-watershed. A rating of excellent stream health requires no more than 6% impervious area within the sub-watershed and at least 65% tree cover within the riparian corridor. A rating of good stream health requires no more than 10% impervious area within the sub-watershed and at least 65% tree cover in the riparian corridor.

Figure 24: Atlanta's Major Streams (Map)

The City of Atlanta's major surface water feature, the Chattahoochee River, runs north to south, and a series of smaller streams flow east and west (Figure 24). Streams in the west and north flow westward, eventually draining into the Gulf of Mexico, while those in the south and east flow eastward, eventually draining in the Atlantic Ocean.

The research team conducted a preliminary review of tree canopy coverage within 25, 50 and 100 feet of Atlanta's major streams. However, visual inspection of the city-provided vector stream data (USGS National Hydrography Data) overlaid with the Quickbird satellite imagery revealed registration discrepancies between the datasets that precluded reliable estimates of tree cover in stream buffers of less than 100 feet. Additionally, the satellite images do not completely capture the Chattahoochee River corridor in many places, thereby prohibiting accurate riparian tree cover estimates along the

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Chattahoochee River. As a result, this section summarizes tree cover findings for only the 100-ft. stream buffers of the city's major streams, excluding the Chattahoochee River.

Figure 25 shows the city-wide average land cover acreages and percentages within 100 feet (riparian corridor) of the city's major streams.
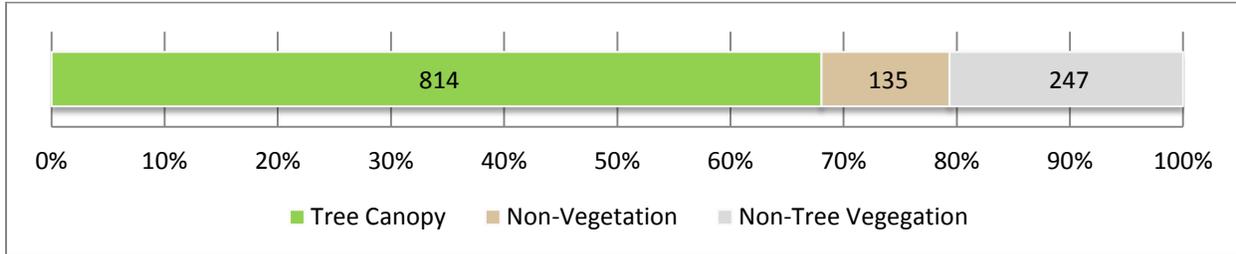
Figure 25: Riparian Corridor Land Cover Distribution

Figure 26 and Table 13 show stream-specific land cover distribution and summary statistics for the 100-foot stream buffer (riparian corridor).
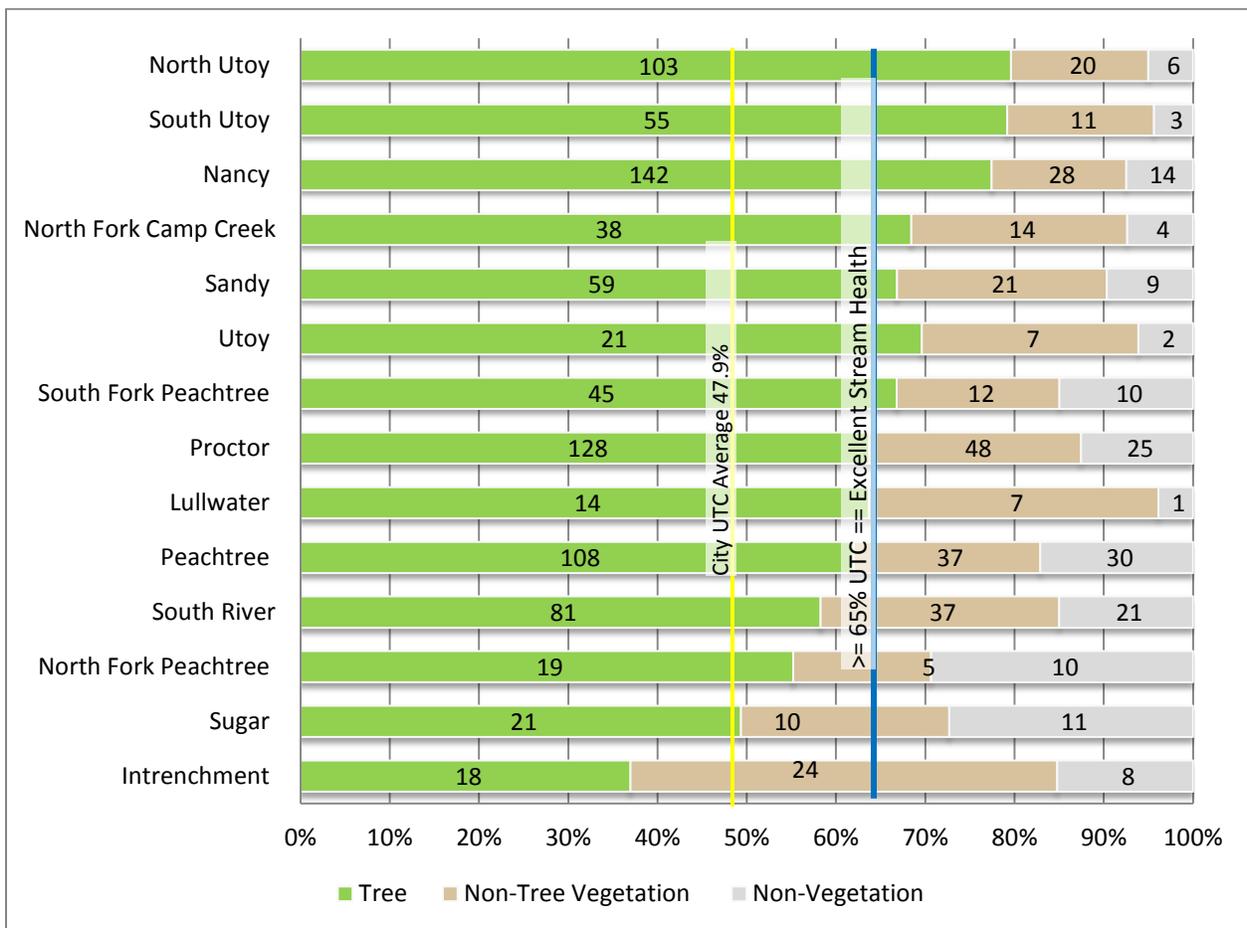
Figure 26: Riparian Land Cover Distribution for Selected Streams

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Table 13: Riparian Land Cover Summary Statistics for Selected Streams

Stream	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land in Buffer	% Stream Buffer	% UTC	% City Land in Buffer	% Stream Buffer	% NTV	% City Land in Buffer	% Stream Buffer	% NV
North Utoy Creek	9.2%	79.6%	14.8%	1.8%	15.4%	8.0%	0.6%	5.0%	4.5%
South Utoy Creek	4.9%	77.4%	7.9%	1.0%	16.1%	4.6%	0.3%	4.3%	2.1%
Nancy Creek	12.7%	76.1%	20.4%	2.5%	14.8%	11.1%	1.2%	7.4%	9.5%
North Fork Camp Creek	3.4%	68.4%	5.5%	1.2%	24.2%	5.4%	0.4%	7.4%	2.9%
Sandy Creek	5.3%	66.3%	8.5%	1.9%	23.3%	8.3%	0.8%	9.6%	5.9%
Utoy Creek	1.9%	66.1%	3.0%	0.6%	23.0%	2.9%	0.2%	5.8%	1.3%
South Fork Peachtree Creek	4.1%	66.0%	6.5%	1.1%	18.0%	5.0%	0.9%	14.8%	7.0%
Proctor Creek	11.5%	63.0%	18.4%	4.3%	23.5%	19.2%	2.3%	12.4%	17.4%
Lullwater Creek	1.3%	61.7%	2.0%	0.6%	31.4%	2.9%	0.1%	3.8%	0.6%
Peachtree Creek	9.7%	59.2%	15.6%	3.3%	20.0%	14.7%	2.7%	16.3%	20.7%
South River Creek	7.3%	55.3%	11.7%	3.3%	25.4%	15.0%	1.9%	14.2%	14.5%
North Fork Peachtree Creek	1.7%	53.0%	2.8%	0.5%	14.8%	2.2%	0.9%	28.2%	7.2%
Sugar Creek	1.9%	48.5%	3.0%	0.9%	22.9%	3.9%	1.0%	26.9%	8.0%
Intrenchment Creejk	1.6%	36.4%	2.6%	2.1%	47.1%	9.5%	0.7%	15.0%	5.2%

Interpreting the table:

- **"% City Land in Buffer"** The percentage of the total area of all 100-foot stream buffers that is covered by trees, non-tree vegetation, or non-vegetation in the specified riparian corridor. For example, a "% city Land" value of 9.2% for North Utoy Creek under the "Tree Cover" grouping means that 9.2% of the city's riparian corridor is comprised solely of tree cover found in the North Utoy Creek's 100-ft. stream buffer.

- **"% Stream Buffer"** The percentage of the specified stream buffer's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Stream Buffer" value of 79.6% for North Utoy creek under the "Tree Cover" grouping means that 79.6% of North Utoy's riparian corridor is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** The percentage of a cover type's total riparian corridor area that is covered by trees, non-tree vegetation, or non-vegetation from a specified corridor. For example, a "% UTC" value of 14.8% for North Utoy Creek under the "Tree Cover" grouping means that 14.8% of the city's total riparian tree canopy area is comprised of tree cover found in the North Utoy creek riparian corridor.

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The average tree cover in the riparian corridor for all streams in the city is 66%. However, the percentage of riparian tree cover varies a great deal among Atlanta's streams, ranging from a high of almost 80% along North Utoy Creek to a low of 36.5% along Intrenchment Creek. Most of the streams with higher riparian tree cover values have large segments which flow through single-family residential neighborhoods while the streams with the least riparian cover have large segments flowing through industrial or commercial land. While all of the streams' riparian areas have space for potential planting, a few streams' riparian areas contain a significant amount of non-vegetated (impervious) areas, specifically Sugar (26.9%) and North Fork Peachtree Creek (28.2%). Because of this limitation, increasing the tree cover percentages for these streams may be difficult.
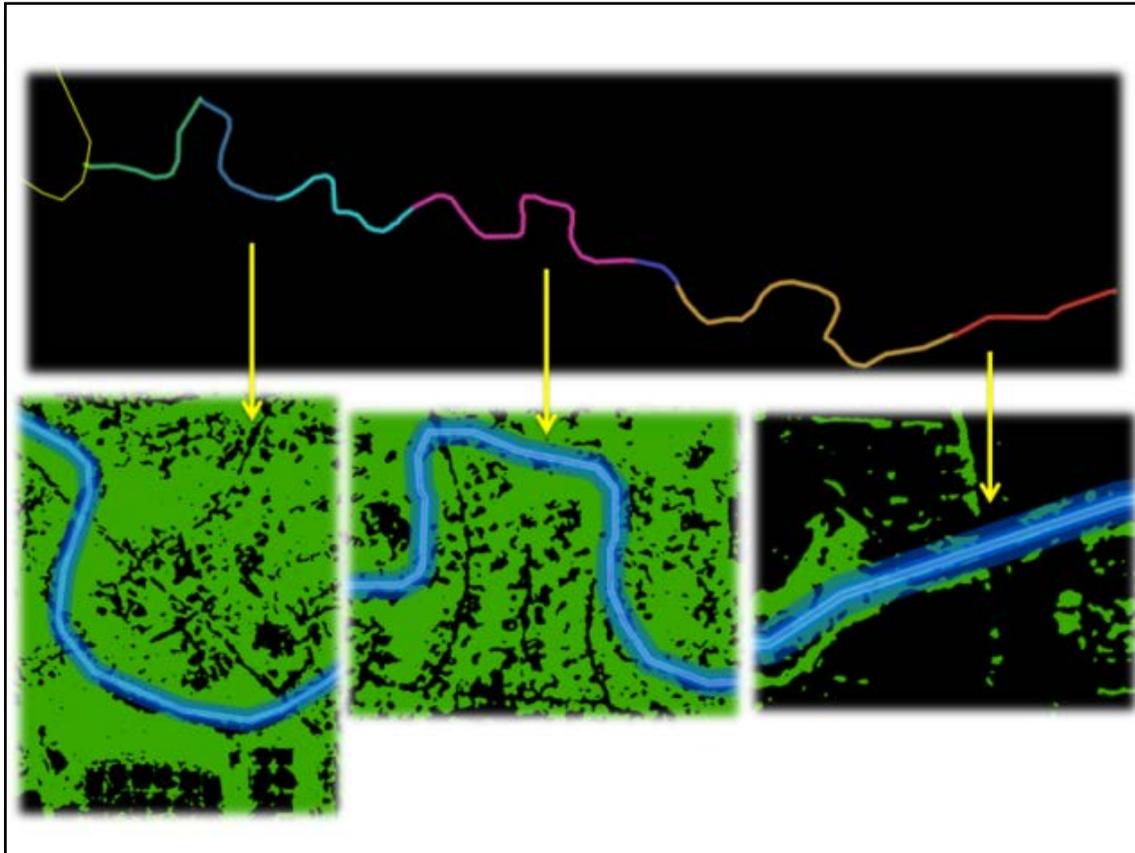
Figure 27: Tree Cover Variation by Riparian Segment for Peachtree Creek

While the city-wide average tree cover percentage in the riparian corridor appears to be significant, as do many of the averages for the individual streams, the configuration or spatial distribution of the tree cover along any given stream segment needs further examination for fuller characterization and effective planning. A graphic example of the riparian tree cover (green) differences between selected Peachtree Creek stream segments (multi-color) is illustrated in Figure 27. The riparian tree cover in the easternmost stream segment is visibly less dense than the other two segments. The lack of cover in this segment is likely the result of a variety of factors such as land use, historic stream buffer ordinances, and zoning policies to name a few. Regardless, this type of analysis and level of detail, which unfortunately is beyond the scope of this project, is necessary for effective stream buffer planning, a critical step towards maximizing watershed health and function in the city and region.

3.9 Watersheds

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 ten basins that are approximately the same size as the United States Geologic Survey's (USGS) Hydrologic Unit Code (HUC 12) category (Figure 28). 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 recently 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
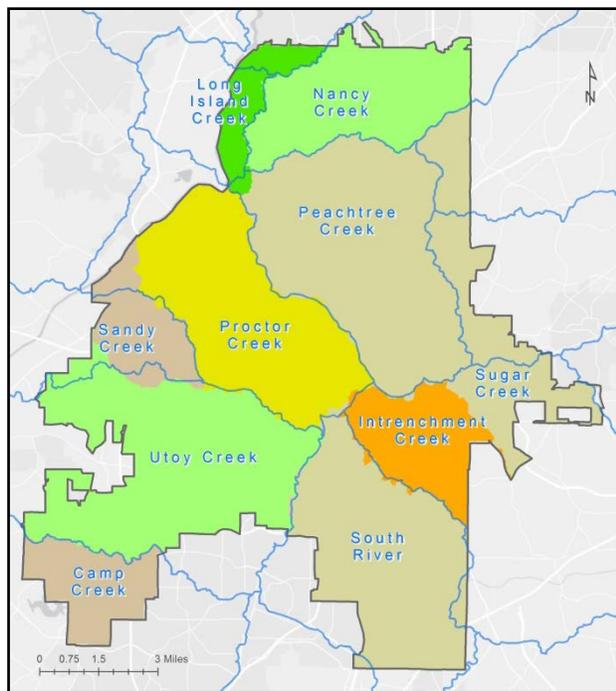
Figure 28: City of Atlanta Watersheds (Map)

Table 14 and Figure 29 illustrate the tree cover of Atlanta's HUC 12 watersheds ordered from greatest to least percent canopy.

Watershed	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)
Long Island Creek	2,318	1,673	72%
Nancy Creek	8,002	5,152	64%
Utoy Creek	14,981	9,290	62%
Camp Creek	3,805	2,109	55%
Sandy Creek	3,575	1,891	53%
South River	3,001	1,346	45%
Sugar Creek	11,925	4,996	42%
Peachtree Creek	19,554	8,108	41%
Proctor Creek	12,056	4,716	39%
Intrenchment Creek	4,862	1,370	28%

Table 14: Tree Cover by Watershed

The watersheds' percent tree canopy ranges from 72% for Long Island Creek to 28% for Intrenchment Creek, with most watersheds between 41% and 58%. Utoy Creek and Peachtree Creek are the largest watersheds, and Long Island Creek is the smallest.

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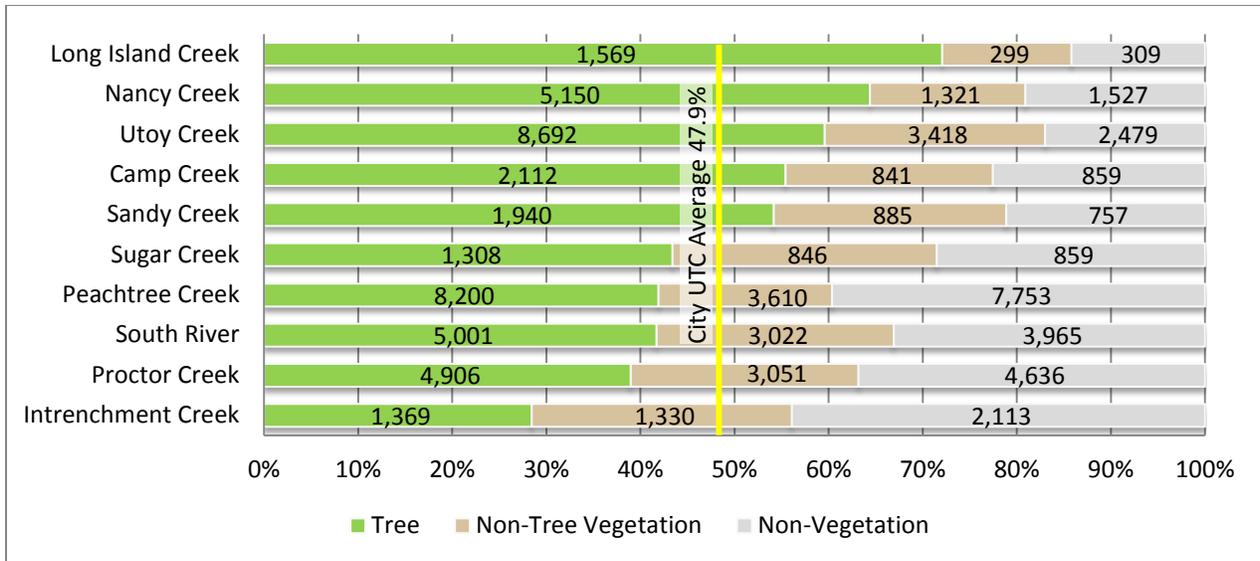
Figure 29: Land Cover Distribution by Watershed

Figure 30 shows each watershed's location and percent tree cover. Generally, the watersheds with the most tree cover are in the north (e.g., Long Island Creek and Nancy Creek) and west (e.g., Utoy Creek), whereas those with the least tree cover are closer to the central business district (e.g., Intrenchment Creek) or in the northwest (e.g., Proctor Creek). This corresponds with findings from the neighborhood and zoning analysis -- the most tree-covered watersheds are comprised primarily of large lot, single-family residences, and the least tree-covered watersheds are downtown (e.g., Intrenchment Creek) and along industrial and commercial corridors (e.g., Proctor Creek). The tree cover percentage in Proctor Creek watershed is quite low, which is cause for concern because it includes a large area of shoreline on the Chattahoochee River, the primary drinking water source for the region. Greater tree cover within a watershed, especially in close proximity to streams, filters and slows down storm water runoff, reducing water pollution, stream bank erosion, and stream sedimentation, all important factors contributing to water quality.
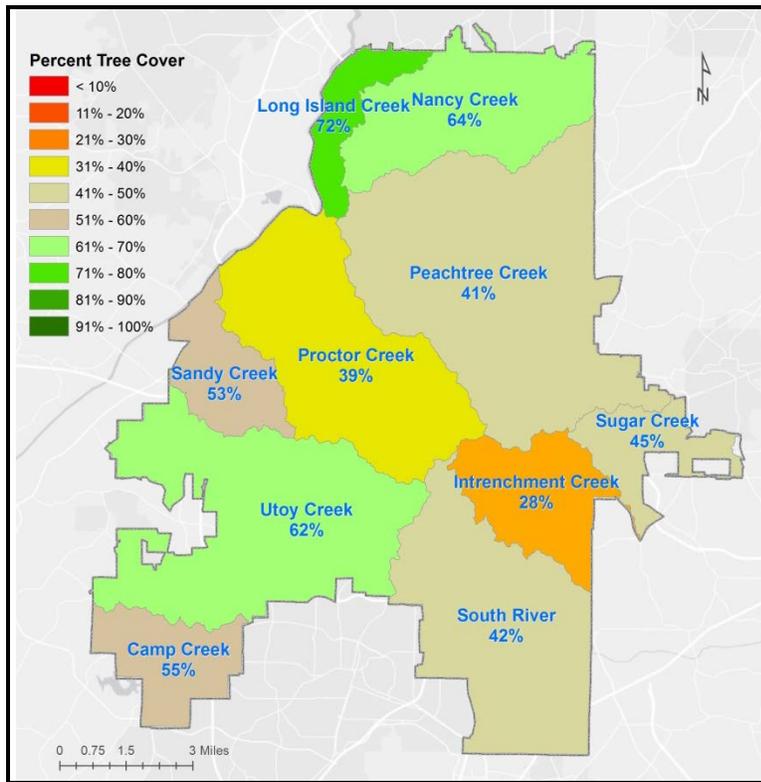
Figure 30: Percent Tree Cover by Watershed (Map)

Table 15 provides land cover summary statistics by watershed. Sugar Creek and Intrenchment Creek have the greatest tree planting potential because they have the highest percentage of non-tree vegetation cover (28% each, as noted under "% Watershed", followed by South River, Sandy Creek, Proctor Creek, Utoy, and Camp Creek which all have more than 20% non-tree vegetation cover). Looking at the watersheds with the lowest tree cover percentages reveals some issues of concern, particularly in the Peachtree Creek watershed, one of the city's largest, where the percentage of land potentially available for planting is low (18%) and the percentage of non-vegetation is very high (40%). Intrenchment and Proctor Creek watersheds also have very low tree cover percentages, with Intrenchment being the sole watershed with more non-vegetation (44%) than tree cover (28%).

While examination of tree cover at the watershed level is important and provides valuable information, smaller area analyses will help the city better understand the geographic distribution of tree cover within watersheds and subsequently help with targeted planting and other interventions.

Table 15: Land Cover Summary Statistics by Watershed

Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Watershed	% UTC	% City Land	% Watershed	% NTV	% City Land	% Watershed	% NV
Long Island Creek	2.0%	72.2%	4.1%	0.4%	13.7%	1.7%	0.4%	14.2%	1.3%
Nancy Creek	6.1%	64.4%	12.7%	1.6%	16.6%	7.0%	1.8%	19.1%	6.0%
Utoy Creek	11.0%	62.0%	22.9%	4.3%	24.4%	19.4%	3.1%	17.6%	10.4%
Camp Creek	2.5%	55.4%	5.2%	1.0%	22.2%	4.5%	1.0%	22.4%	3.4%
Sandy Creek	2.2%	52.9%	4.7%	1.0%	23.6%	4.5%	1.0%	23.5%	3.3%
South River	1.6%	44.9%	3.3%	1.2%	32.2%	5.1%	1.1%	30.3%	3.6%
Sugar Creek	5.9%	41.9%	12.3%	3.6%	25.3%	16.0%	4.7%	32.9%	15.4%
Peachtree Creek	9.6%	41.5%	19.9%	4.3%	18.4%	19.1%	9.3%	40.1%	30.9%
Proctor Creek	5.6%	39.1%	11.6%	3.5%	24.7%	15.8%	5.2%	36.2%	17.2%
Intrenchment Creek	1.6%	28.2%	3.4%	1.6%	27.5%	7.1%	2.6%	44.3%	8.5%

Interpreting the table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified watershed. For example, a "% City Land" value of 2.0% for Long Island Creek watershed under the "Tree Cover" grouping means that 2.0% of the city's total area is comprised solely of tree cover in the Long Island Creek watershed.

- **"% Watershed"** The percentage of the watershed's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Watershed" value of 72.2% for Long Island Creek watershed under the "Tree Cover" grouping means that 72.2% of land in the Long Island Creek watershed is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** The percentage of a cover type's total area that is covered by trees, non-tree vegetation, or non-vegetation in a specific watershed. For example, a "% UTC" value of 4.1% for Long Island Creek under the "Tree Cover" grouping means that 4.1% of the city's total tree canopy area is comprised of tree cover found in the Long Island Creek watershed.

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3.10 Sub-Watersheds

As described above, the City of Atlanta watershed department recently created drainage basins or sub-watershed boundaries more detailed than the HUC12 USGS delineated boundaries. Each Atlanta HUC 12 watershed is composed of nested sub-watersheds as illustrated in Figure 31.   Most sub-watersheds are between 1,500 and 4,000 acres.

Figure 32 shows percent tree cover by sub-watershed. Sub-watershed areas and corresponding tree canopy cover percentages are shown in Table 16. Land cover area and percent cover by sub-watershed can are illustrated in Figure 33.
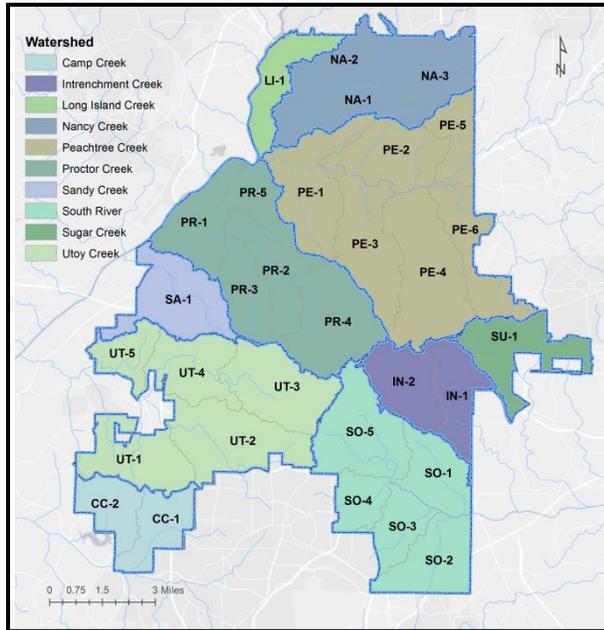
Figure 31: Sub-Watershed Boundaries (Map)

Figure 32: Percent Tree Cover by Sub-Watershed (Map)

Table 16: Tree Canopy Statistics by Sub-Watershed

Watershed	Sub-Watershed	Total Acres	Tree Acres	% Tree Canopy
Long Island Creek	LI-1	2178	1569	72%
Nancy Creek	NA-2	2736	1907	70%
Camp Creek	CC-2	1798	1219	68%
Utoy Creek	UT-5	1489	1017	68%
Utoy Creek	UT-1	2994	1922	64%
Nancy Creek	NA-1	2617	1655	63%
Peachtree Creek	PE-2	3026	1849	61%
Nancy Creek	NA-3	2646	1588	60%
Utoy Creek	UT-4	2562	1539	60%
Utoy Creek	UT-2	3980	2325	58%
South River	SO-2	2704	1505	56%
Proctor Creek	PR-3	1950	1067	55%
Sandy Creek	SA-1	3582	1940	54%
Utoy Creek	UT-3	3565	1888	53%
Peachtree Creek	PE-1	3818	1931	51%
Peachtree Creek	PE-6	2620	1304	50%
Proctor Creek	PR-2	2515	1247	50%
South River	SO-3	1691	835	49%
South River	SO-4	1419	636	45%
Camp Creek	CC-1	2014	893	44%
Peachtree Creek	PE-5	1675	729	44%
Proctor Creek	PR-1	2723	1203	44%
Sugar Creek	SU-1	3014	1308	43%
South River	SO-1	2287	868	38%
Intrenchment Creek	IN-1	2270	770	34%
Proctor Creek	PR-5	1458	463	32%
Peachtree Creek	PE-4	4911	1479	30%
South River	SO-5	3887	1156	30%
Peachtree Creek	PE-3	3514	909	26%
Intrenchment Creek	IN-2	2542	599	24%
Proctor Creek	PR-4	3947	926	23%

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Figure 33: Land Cover Distribution by Sub-watershed

Land cover summary statistics by sub-watershed are shown in Table 17. These statistics provide information on land cover by sub-watershed as it relates to the city as a whole, to the sub-watershed itself, and to the individual land cover categories.

Table 17: Land Cover Summary Statistics by Sub-Watershed

Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Sub-Watershed	% UTC	% City Land	% Sub-Watershed	% NTV	% City Land	% Sub-Watershed	% NV
LI-1	1.9%	72.1%	3.9%	0.4%	13.7%	1.6%	0.4%	14.2%	1.2%
NA-2	2.3%	69.7%	4.7%	0.6%	17.8%	2.6%	0.4%	12.5%	1.4%
CC-2	1.4%	67.8%	3.0%	0.4%	19.9%	1.9%	0.3%	12.3%	0.9%
UT-5	1.2%	68.3%	2.5%	0.3%	18.8%	1.5%	0.2%	12.9%	0.8%
UT-1	2.3%	64.2%	4.8%	0.7%	19.7%	3.2%	0.6%	16.1%	1.9%
NA-1	2.0%	63.2%	4.1%	0.5%	15.5%	2.2%	0.7%	21.3%	2.2%
PE-2	2.2%	61.1%	4.6%	0.5%	14.8%	2.4%	0.9%	24.1%	2.9%
NA-3	1.9%	60.0%	3.9%	0.5%	16.2%	2.3%	0.7%	23.7%	2.5%
UT-4	1.8%	60.1%	3.8%	0.7%	21.7%	3.0%	0.6%	18.2%	1.8%
UT-2	2.8%	58.4%	5.8%	1.2%	24.3%	5.2%	0.8%	17.2%	2.7%
SO-2	1.8%	55.7%	3.7%	0.6%	17.3%	2.5%	0.9%	27.0%	2.9%
PR-3	1.3%	54.7%	2.7%	0.6%	27.5%	2.9%	0.4%	17.8%	1.4%
SA-1	2.3%	54.2%	4.8%	1.1%	24.7%	4.8%	0.9%	21.1%	3.0%
UT-3	2.2%	53.0%	4.7%	1.2%	28.8%	5.5%	0.8%	18.3%	2.6%
PE-1	2.3%	50.6%	4.8%	0.7%	16.2%	3.3%	1.5%	33.2%	5.0%
PE-6	1.5%	49.7%	3.2%	0.7%	23.7%	3.3%	0.8%	26.6%	2.8%
PR-2	1.5%	49.6%	3.1%	0.8%	26.0%	3.5%	0.7%	24.4%	2.4%
SO-3	1.0%	49.4%	2.1%	0.6%	27.5%	2.5%	0.5%	23.1%	1.5%
SO-4	0.8%	44.8%	1.6%	0.4%	23.2%	1.8%	0.5%	31.9%	1.8%
CC-1	1.1%	44.3%	2.2%	0.6%	24.0%	2.6%	0.8%	31.6%	2.5%
PE-5	0.9%	43.5%	1.8%	0.3%	14.3%	1.3%	0.8%	42.2%	2.8%
PR-1	1.4%	44.2%	3.0%	0.8%	23.4%	3.4%	1.1%	32.5%	3.5%
SU-1	1.6%	43.4%	3.3%	1.0%	28.1%	4.5%	1.0%	28.5%	3.4%
SO-1	1.0%	38.0%	2.2%	0.8%	29.5%	3.6%	0.9%	32.5%	2.9%
IN-1	0.9%	33.9%	1.9%	0.8%	28.6%	3.5%	1.0%	37.5%	3.4%
PR-5	0.6%	31.8%	1.2%	0.3%	17.2%	1.3%	0.9%	51.1%	2.9%
PE-4	1.8%	30.1%	3.7%	1.3%	21.5%	5.7%	2.8%	48.4%	9.4%
SO-5	1.4%	29.7%	2.9%	1.3%	27.9%	5.8%	2.0%	42.4%	6.5%
PE-3	1.1%	25.9%	2.3%	0.7%	17.8%	3.4%	2.4%	56.3%	7.8%
IN-2	0.7%	23.6%	1.5%	0.8%	26.8%	3.7%	1.5%	49.6%	5.0%
PR-4	1.1%	23.5%	2.3%	1.2%	24.7%	5.2%	2.4%	51.9%	8.1%

Interpreting the table:

- **"% City Land"** The percentage of the city's total area that is covered by trees, non-tree vegetation, or non-vegetation in the specified sub-watershed. For example, a "% City Land" value of 1.9 % for LI-1 sub-watershed under the "Tree Cover" grouping means that 1.9 % of the city's total area is comprised solely of tree cover in the LI-1 sub- watershed.

- **"% Sub-Watershed"** The percentage of the watershed's total area that is covered by trees, non-tree vegetation, or non-vegetation. For example, a "% Sub-Watershed" value of 72.1%

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for LI-1 sub-watershed under the "Tree Cover" grouping means that 72.1% of land in the LI-1 sub-watershed is tree-covered.

- **"% Cover Type (UTC, NTV, NV)"** The percentage of a cover type's total area that is covered by trees, non-tree vegetation, or non-vegetation in a specific sub-watershed. For example, a "% UTC" value of 3.9% for LI-1 under the "Tree Cover" grouping means that 3.9% of the city's total tree canopy area is comprised of tree cover found in the LI-1 sub-watershed.

Looking at the collective sub-watershed figures and tables reveals many interesting findings. Of the three sub-watersheds (LI-1, PR-1, and SA-1) with significant land area along the Chattahoochee River, only two have above city-average tree cover percentages (LI-1 and SA-1). LI-1 has the highest tree cover percentage of all sub-watersheds at 72% while SA-1 has 54% tree cover. The third sub-watershed bordering the Chattahoochee River, PR-1, has 44% tree cover. This tree cover in proximity to the Chattahoochee River certainly provides some valuable ecological services important to maintaining Atlanta's water quality. However, based on water quality research (2003, 2005, Goetz et. al.), the high percentages of non-vegetated areas in most of Atlanta's sub-watersheds would preclude excellent or high water quality ratings. None of the City of Atlanta's streams would receive a rating of excellent (which requires less than 6% impervious area in the sub-watershed). In addition, only three streams (Utoy, Nancy, and Camp Creek) are close to meeting the sub-watershed impervious surface values associated with good stream ratings, which is less than 10% impervious area (Figure 34).
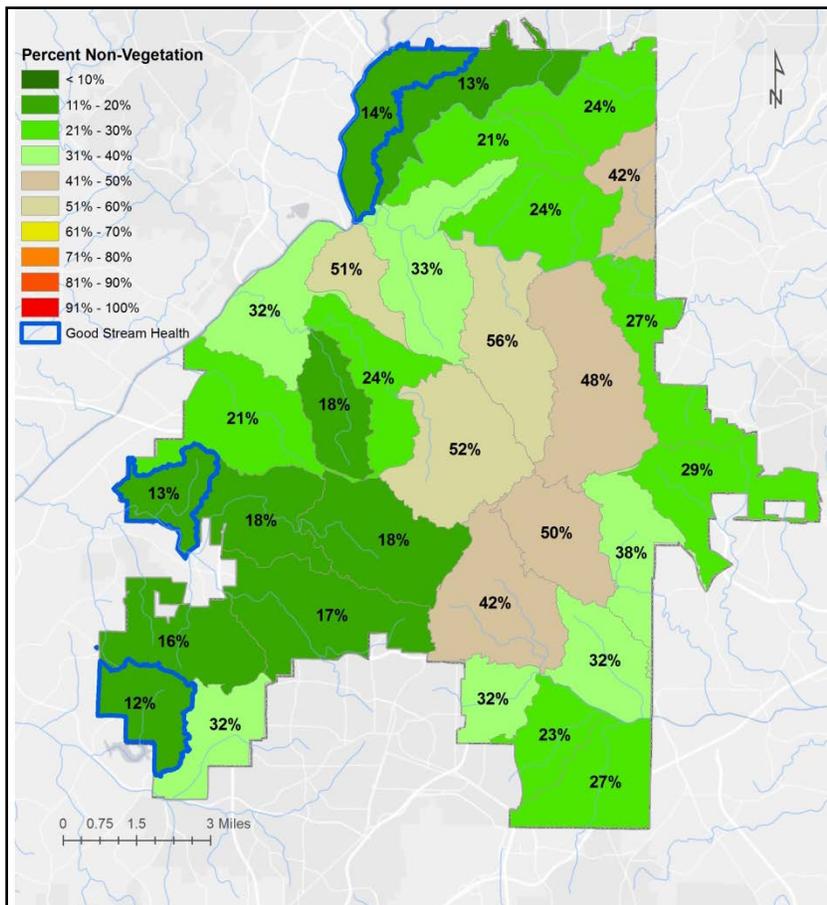
Figure 34: Percent Non-Vegetation by Sub-Watershed (Map)

While these metrics and guidelines may or may not accurately predict the health of individual streams and sub-watersheds in Atlanta, the relationship between the amount of impervious surface and tree cover in any given watershed undoubtedly affects the volume and speed of stormwater runoff, the extent of erosion, the deposition of sediment, and subsequently the water quality and environmental health of surface water and the natural system.

3.11 Comparing Atlanta with Other Cities

The research team identified and reviewed recent tree canopy studies for 18 US cities (Appendix I). Though the data collection methods and analytic procedures vary between studies and therefore limit accurate and reliable comparisons between cities, results from these studies provide an opportunity to make general comparisons of Atlanta's estimated tree canopy coverage and those of other U.S. cities.
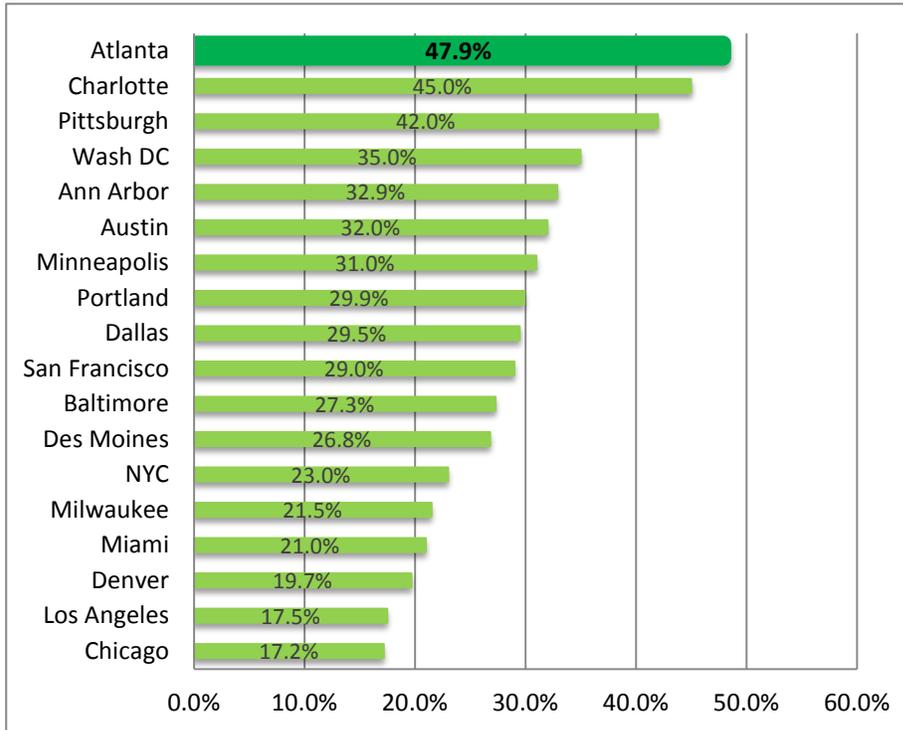
Figure 35: Percent Tree Canopy Estimates for 18 U.S. Cities
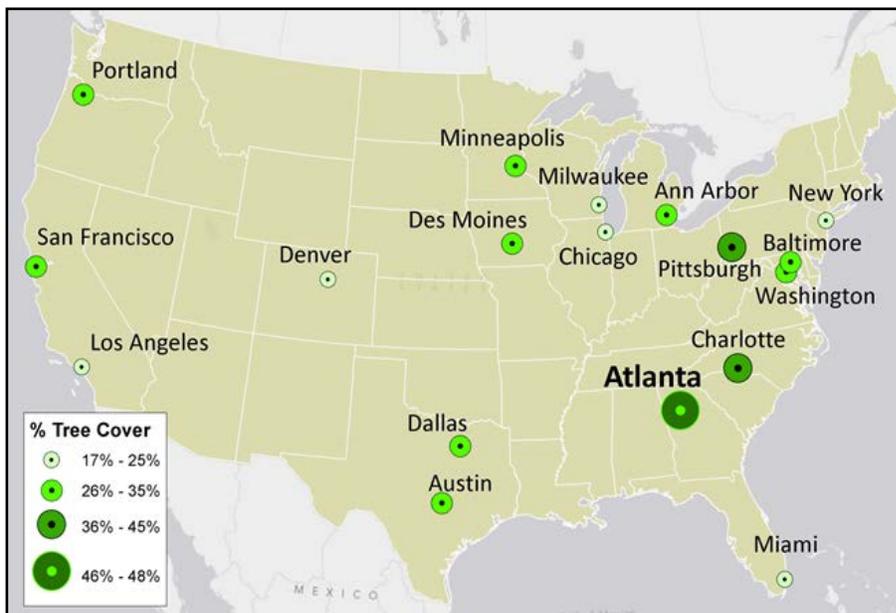
Figure 36: Percent Tree Canopy Estimates for 18 U.S. Cities (Map)

Among the 18 cities examined (Figures 35 and 36), tree canopy ranged from approximately 17% in Chicago to a high of 47.9% in Atlanta. Numerous factors affect tree canopy for a given area, including geographic location, size, land use patterns within the city, population density, tree planting and preservation policies, and climate. As might be expected, the greatest tree cover is found in lower density cities located in naturally forested regions (e.g., East Coast including Atlanta where the natural tree cover would approach 100%). Cities with large parks and public land (e.g., Minneapolis and Washington, D.C.) and those with large single-family lots within the city limits (e.g., Charlotte and Atlanta) also have high tree canopy percentages in comparison to other cities examined.

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4. Targeted Tree Planting

4.1 Potential Planting Index

Identification of viable tree planting sites across the city is a daunting task regardless of method since many factors contribute to the success or failure of tree planting. To supplement current City of Atlanta planting efforts, the project team has created a Potential Planting Index (PPI) using the aggregate land cover grid to identify areas with a high amount of non-tree vegetation and a low amount of tree cover. The Potential Planting Index is a per grid-cell measure of the ratio of tree cover to non-vegetative cover where:

PPI = % Tree Cover - % Non-Vegetative Cover

PPI values range from +1 to -1 with positive values indicating large areas of non-vegetation and negative values indicating densely tree-covered areas. Figure 37 depicts the changes in vegetative cover across the index. Each individual square represents approximately one grid cell or six acres in the city.
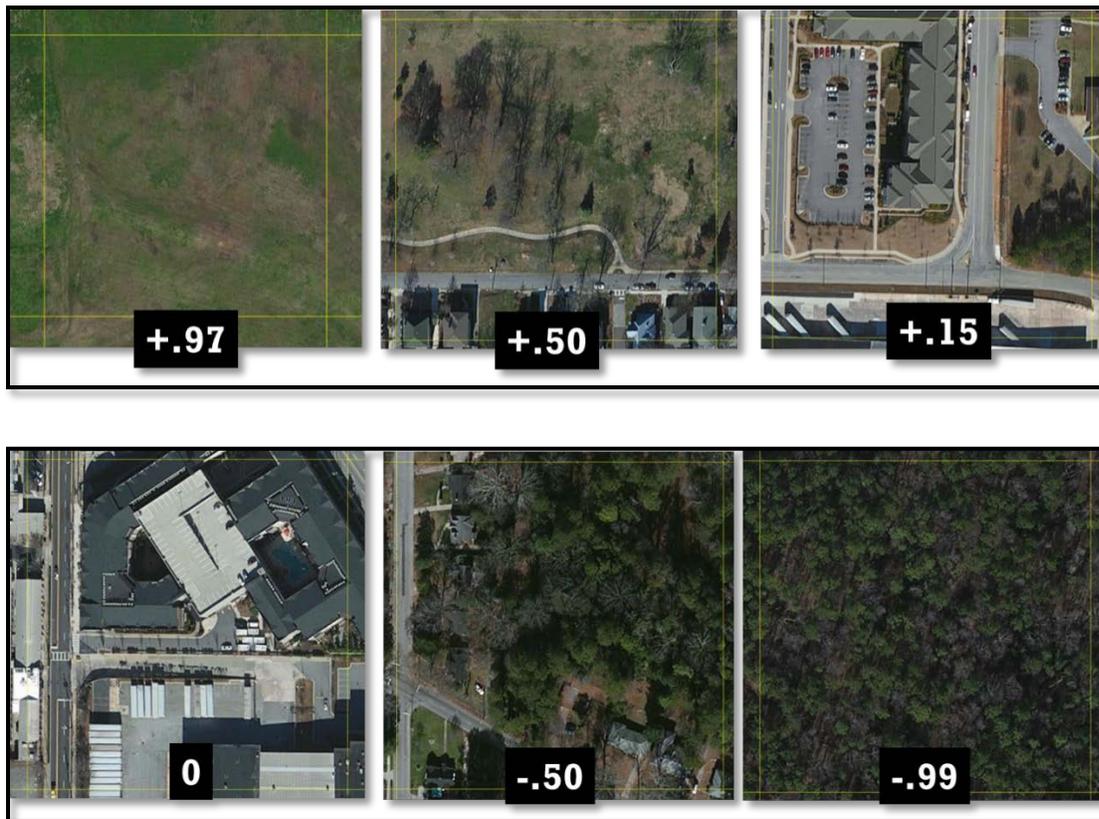
Figure 37: Potential Planting Index - Range of Values

Notice how certain PPI values correspond to the predominance of certain land cover types. High PPI values correspond to non-treed, highly vegetative areas, usually capped landfills, golf courses and large open areas. Values close to zero tend to be covered by non-vegetation. Large negative PPI values indicate heavily forested areas.

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General PPI trends and their associated values are described in Table 19.

PPI Value	Description
-1 to - .50	Heavily treed (25% max potential planting area per grid cell)
- .50 to -..25	Moderately treed (37% max potential planting area per grid cell)
-.25 to - .15	Lightly Treed (42% max potential planting area per grid cell)
- .15 to 15	Primarily non-vegetation planting (57% max potential planting area per grid cell)
.15 to .25	Minimal large scale planting area (62% max potential planting area per grid cell)
.25 to .50	Good potential for planting – (74% max potential planting area per grid cell)
.50 to 1	Large areas of non-tree vegetation – large scale planting (99% max potential)

Table 18: Potential Planting Index Trends

4.2 Using the Potential Planting Index

There are several ways the city could use the Potential Planting Index to prioritize planting areas. One method is described below:

A.   Display grid cells based on a desired PPI

Figure 38: PPI Values >= .25 (3D Map)

In Figure 38, grid cells with a PPI value greater than or equal to .25 are shown, and they total approximately 2,300 acres of land. These areas theoretically could be targeted for additional tree planting. Generally, these grid cells represent areas with a relatively low percentage of tree cover and a high percentage of non-tree vegetation. Grid cell height corresponds to PPI score. Grid cells with PPI values close to 1 are the tallest and contain close to 100% non-tree vegetation. These cells represent areas with the greatest planting potential. Grid cell color represents percent tree cover, where dark green grid cells contain less than 5% tree cover (i.e., high need) and light green grid cells contain up to 36% tree cover (i.e., less need).

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B. Differentiate between public/private/restricted lands
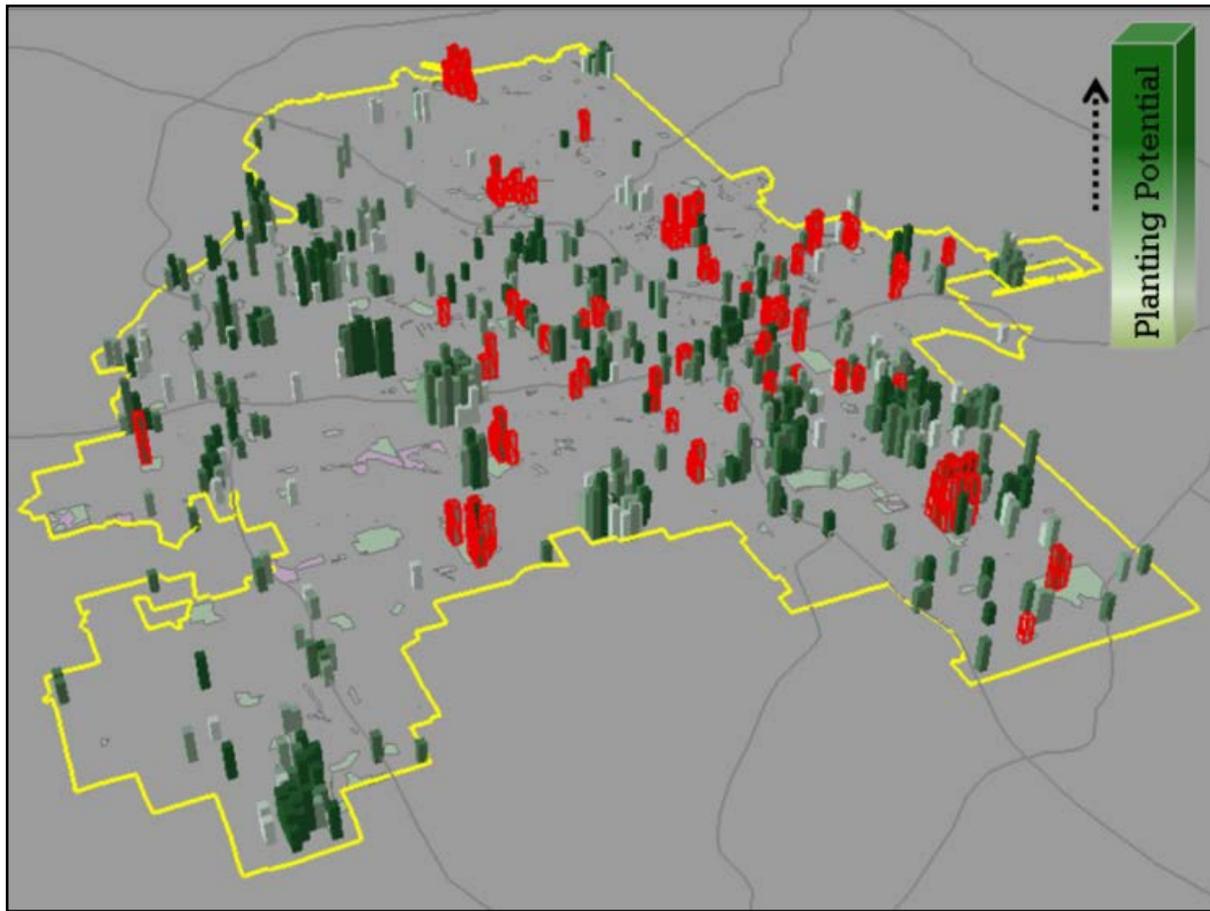
Figure 39: PPI and Parks Overlay (3D Map)

It is very important to identify the location of all non-tree vegetation in the city as these areas serve as a good estimate for the maximum amount of land that could potentially be converted to tree cover. However, common sense dictates that not all non-tree vegetated land will be converted to forest. Furthermore, not all potential planting areas can be evaluated equally for their tree planting potential due to existing use, ownership, and regulatory restrictions. Consequently, differentiation between land ownership and other variables should be performed to identify areas for targeted public or private planting campaigns. It is also important to identify restricted areas or land unlikely to be used for tree planting. These objectives can easily be accomplished by overlaying the PPI grid with various GIS layers (e.g., cemeteries, golf courses, landfills, parks, etc.).

For example, in Figure 39, the red areas represent grid cells located on existing park lands. This equates to 500 acres or roughly 20% of the grid cells with a PPI > .25. Many of these parks contain golf courses or ball fields and will not likely serve as tree planting areas. Further analysis would likely show that many of the remaining large, contiguous areas with high planting potential area are restricted, private lands such as cemeteries, private golf courses, landfills and other areas unlikely to be used as potential planting areas.

C. Visually inspect target areas by overlaying grid cells with aerial photography and/or other geographies

In Figure 40, Graphic 1 shows grid cells color coded by PPI values (low to high PPI = red to green) overlaid with NPU boundaries. The area of interest (black box) is located in NPU Y, east of I-75. Graphic 2 provides a more detailed view of the same area with a focus on the center grid cell. Visual inspection of the selected grid cell in Graphic 3 shows a very lightly forested residential neighborhood with planting opportunities in the right-of-way or on private residential property.

Figure 40: Visual Inspection of Targeted PPI Areas

While the PPI may overestimate the amount of land that could realistically be converted to trees, it provides a quantifiable estimate of the maximum amount of land that *theoretically* could be used for tree planting.

5. Recommendations and Conclusion

5.1 Discussion of Results

The canopy study found that in October 2008, 47.9% (40,524 acres) of land within the city limits was shaded by urban tree canopy. The study also showed that 22.1% (18,722 acres) was covered by non-tree vegetation such as grass, shrubs, and other plants while 30.0% (25,386 acres) was covered by non-vegetation such as buildings and paved surfaces. At 47.9%, the overall percentage of tree canopy is the highest among 18 major cities that have evaluated urban tree canopy in recent years, reflecting Atlanta's natural setting in a Piedmont forest, its residential development patterns, and its favorable climate, as well as its longstanding tree preservation and planting policies.

The study shows that the majority of tree cover is concentrated on the city's periphery and is heaviest in the north and southeast, particularly in residential neighborhoods and along stream corridors. 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 239 neighborhoods, with an average tree canopy of 77 % in the dozen most-canopied neighborhoods, and an average tree canopy of only 4 % in the dozen least-canopied neighborhoods.

Not surprisingly, many of the areas with the least tree canopy also have the least amount of potential planting area, as indicated by a low percentage of non-tree vegetation and a high percentage of non-vegetated areas. For example, downtown is the largest neighborhood (995 acres) with a low percentage of tree cover (3%), but because the majority of the area has non-vegetative cover such as large buildings, streets, and sidewalks (89%), and a small amount of non-tree vegetation (8%), potential planting space is quite limited. Increasing the tree cover downtown and in other areas with low tree cover and limited potential planting space (e.g., Buckhead Village, Butler Street, Castleberry Hill, Herndon Homes, Home Park, Lenox Superblock, Lindbergh Morosgo, McDaniel Glenn, Midtown, and Techwood) (statistics listed in Appendix E) would require innovative and progressive measures such as use of structural soils under pavement or land development policies which promote greenspace preservation. Increasing tree cover in areas outside of these low tree planting potential areas may be required in order to offset the low tree cover in these areas and thereby maintain or increase the current overall average tree cover for the city.

In contrast, some neighborhoods with lower tree cover (<20%) may have space sufficient for reforestation efforts, as indicated by higher percentages of land with non-tree vegetation (>20%) (e.g., Amal Heights, Atlanta University, Bedford Pine, Betmar La Villa, Cabbage Town, Carver Homes, Eagan Homes, East Lake Meadows, Georgia Tech, Grady Homes, Harris Chiles, John Hope Homes, Jonesboro South, Mechanicsville, Old Fourth Ward, Summerhill, U-Rescue Villa, and Vine City).

The strong impact of zoning and land use on the distribution of tree canopy is also evident from the study findings. Most of the city's tree canopy is found on single-family residential property (77.25%).   The second highest concentration of canopy is found on land zoned for multi-family residential use (6.6%) followed by industrial use (6.3%). One of the lowest contributions to the city's tree canopy (1.66%) is in areas zoned as Special Public Interest (SPI) which includes both commercial areas (e.g., Central Core, Buckhead Commercial Core, Midtown, Piedmont Avenue, Buckhead Peachtree Corridor, Greenbriar, and Memorial Drive/Oakland Cemetery) and neighborhoods such as Historic West End, Mechanicsville, Home Park, Poncey-Highland, and Cander Park. SPI Districts comprise a total of 4,933 acres.

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Tree cover along streams is important because of the positive impact tree cover in proximity to streams has on water quality and stream health. The overall average tree cover in the city's stream buffers was relatively high (66%). According to research, both "excellent" and "good" water quality ratings require at least 65% tree canopy within a stream's 100-foot buffer. However, tree cover in riparian corridors varied a great deal among Atlanta's streams, and while tree cover for many streams exceeded the threshold, many streams fell far below. In addition, impervious cover within the sub-watershed surrounding a stream should not exceed 6% to ensure an "excellent" water quality rating, and none of Atlanta's streams met this requirement. Three streams (Utoy, Nancy, and Camp Creek) are close to meeting the impervious surface values associated with "good" stream ratings (less than 10% impervious area).

Further analysis of the study findings will help inform policy development and tree planting efforts. Additional analyses of sub-watersheds, riparian corridors, zoning categories, parks, and neighborhoods with the lowest tree cover, and potential planting locations will be particularly useful for providing information about the need for targeted planting and potential policy strategies for maintaining and increasing canopy cover.

5.2 Policy Recommendations

Atlanta's tree ordinance was initiated in 1977, with revisions and additions in 1995, 2001, and 2002. The ordinance requires that trees be preserved where possible. When healthy trees must be removed for construction or other purposes and there is not enough space to plant replacement trees, property owners contribute to a Tree Trust Fund for planting additional trees throughout the city. Trees removed from public property must be replaced on an inch-for-inch basis. Atlanta's policies are consistent with those of many cities across the country which have initiated programs to both protect and increase tree canopy.

The U.S. Conference of Mayors reviewed tree canopy policies in 135 US cities (US Conference of Mayors, *Protecting and Developing the Urban Tree Canopy,* 2008). Ninety-five percent of these cities have ordinances governing tree management, with 63% of the ordinances addressing tree removal on privately-owned land and 38% addressing tree planting on private land.

Below are several overarching policies based in best management practices of various canopy management programs of cities across the country.

- **Set canopy goals -** Setting city-wide goals for tree canopy cover directs municipal efforts and policies. Decatur, Georgia has proposed a city-wide goal of 55% tree cover to be achieved by 2039 (City of Decatur, 2014).
  Results of the baseline study will enable Atlanta to assess canopy throughout the city and set appropriate goals for the city as a whole and for various land uses within the city.
- **Monitor conditions and progress toward goals -** Monitor progress periodically. Utilize tree inventories on public land and remote sensing (e.g., satellite imagery) to assess and evaluate effect of City of Atlanta policies towards reaching goals.
  Having established a baseline, Atlanta will now be able to accurately monitor changes over time.

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- **Support tree planting on public and private property, and along public rights-of-way -** Many cities use public funds to plant trees on public property. Charlotte, N.C. also uses a tree mitigation fund as a revenue source for purchasing and conserving forested land. Developers pay into the fund if they cannot protect or replant a sufficient number of trees on particular sites. (www.wfae.org, *City Makes First Land Purchase from Tree Mitigation Fund*, November 28, 2013).

  Atlanta utilizes recompense funds to plant trees on public property, in the right-of-way, and on private property within 15 feet of the right-of-way; the city does not currently use recompense funds to purchase forested land. Atlanta may need to seek additional public inventory suitable for planting or protecting existing forests.

- **Establish partnerships with non-profit organizations and private individuals and organizations -** Many cities partner with non-profits to educate the public about the benefits of and proper care for trees. The City of Charlotte also trains utility crews to protect tree trunks and roots when conducting maintenance to prevent or minimize tree damage (City of Charlotte, 2011. US Conference of Mayors, 2008).

  Atlanta partners with non-profit organizations and community groups for education projects and tree planting.

- **Plan for threats** - Severe storms, droughts, pests, and diseases can all harm the urban tree canopy. Planning for contingencies can provide a faster, more effective response that reduces the harm to the urban tree canopy.

  The City conducted a large-scale inventory of downtown public trees in 2011 and identified tree species subject to pests and other known threats. The city should consider conducting similar inventories in other areas of the city. The city will develop an Urban Forestry Master Plan, which will incorporate findings of the past tree inventory as well as this study to address urban canopy tree management risk and reduction.

5.3 Conclusion

The Baseline Canopy Study marks the first comprehensive detailed analysis of tree canopy within Atlanta's city limits. Until now, the City lacked measurable data for quantifying the city's tree canopy cover. 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:

- Establish a baseline so that changes in tree canopy over time can be measured;
- Inform goals and policies for maintaining and increasing tree canopy throughout the city;
- Provide data for establishing a refined Urban Forestry Management plan;
- Identify potential planting locations (based on areas with low tree cover but with relatively large areas of impervious surfaces such as lawns and non-tree vegetation);
- Offer public information about tree canopy throughout Atlanta on an interactive map; and
- Establish methodology to ensure comparability of results from future urban tree canopy studies.

The Baseline Canopy Study is important for an accurate understanding of the distribution of the tree canopy throughout the city, which is the first step in better planning for how to maintain and increase the benefits of the canopy for all Atlantans.

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6. References

Atlanta Tree Conservation Commission (2013) Home. Accessed May 31, 2013. Retrieved from
    http://www.atlantatreecommission.com/home.

Barnoaiea, I. (2010). Forest structure analysis on very high resolution images. *AES Bioflux: Advances in Environmental Sciences- International Journal of the Bioflux Society, 2*(2), 239-251. Retrieved from ehis.ebscohost.com.

Cadenasso, M. L., Pickett, S. T. A., & Schwarz, K. (2007). Spatial heterogeneity in urban ecosystems: reconceptualizing land cover and a framework for classification. *Frontiers in Ecology and the Environment, 5*(2), 80-88. Retrieved from www.esajournals.org

Chanussot, J., Benediktsson, J. A., & Fauvel, M. (2006). Classification of Remote Sensing Images From Urban Areas Using a Fuzzy Possibilistic Model. *IEEE Transactions on Geoscience and Remote Sensing, 3*(1), 2828-2838. Retrieved from ieeexplore.ieee.org.

City of Charlotte (n.d.). "NC Tree Ordinance Guidelines: Payment in Lieu." Retrieved from http://charmeck.org/city/charlotte/epm/Services/LandDevelopment/trees/Tree%20Ordinance%20 Guidelines/Pay%20in%20Lieu%20GL.pdf.

City of Charlotte (2011). Preserving and Enhancing Our "City of Trees" Through Establishment of a Tree Canopy Goal Goal "50% in 2050." Retrieved from http://charmeck.org/city/charlotte/cityclerk/councilrelated/documents/agenda%20attachments/07- 23-2012%20bus%20meeting/01%2007-23-2012.pdf.

City of Decatur (2014). "Proposed Tree Ordinance – SUMMARY AS OF 1/6/14." Accessed February 25, 2014. Retrieved from http://www.decaturga.com/Modules/ShowDocument.aspx?documentid=4698.

Environmental Protection Agency, 2007. Multi-Resolution Land Characteristics Consortium (MRLC). August 30, 2007. Accessed May 30, 2013. Retrieved from http://www.epa.gov/mrlc/.

Fauvel, M., Chanussot, J., & Benediktsson, J. A. (2006). Decision Fusion for the Classification   of Urban Remote Sensing Images. *IEEE Transactions on Geoscience and Remote Sensing, 44*(10), 2828-2838. Retrieved from ieeexplore.ieee.org.

Goetz, S et Al (2003) IKONOS Imagery for Resource Management: Tree Cover, impervious surfaces and riparian buffer analysis in the Mid-Atlantic region, *Remote Sensing of Environment 88,* 195-208

Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. 2007. Completion of the 2001 National Land Cover Database for the Conterminous United States. Photogrammetric Engineering and Remote Sensing, Vol. 73, No. 4, pp 337-341.

Moran, E. F. (2010). Land Cover Classification in a Complex Urban-Rural Landscape with Quickbird Imagery. *Photogrammetric Engineering and Remote Sensing 76* (10), 1159-1168.

Moskal, L. M., Styers, D. M., & Halabisky, M. (2011). Monitoring Urban Tree Cover Using Object-Based Image Analysis and Public Domain Remotely Sensed Data. *Remote Sensing 3*, 2243-2262. doi: 10.3390/rs3102243

O'Neil-Dunne, J. A Report of the city of Philadelphia's Existing and Possible Tree Canopy, *City of Philadelphia,* March 2011, 1-12

Snyder, M, Goetz, S, & Wright, R. Stream Health Rankings Predicted by Satellite Derived Land Cover Metrics. *Journal of the American Water Resources Associatio*n, June 2005, 659-677

Sugumaran, R., Pavuluri, M. K., & Zerr, D. (2003). The Use of High-Resolution Imagery for Identification of Urban Climax Forest Species using Traditional and Rule-Base   Classification Approach. *IEEE Transactions on Geoscience and Remote Sensing, 41*(9),   1933-1939. Retrieved from ieeexplore.ieee.org

US Conference of Mayors (2008). *Protecting and Developing the Urban Tree Canopy*. Accessed May 31, 2013. Retrieved from http://www.usmayors.org/trees/treefinalreport2008.pdf.

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Appendix A: Literature Review

This literature review discusses the classification methodologies that the project team reviewed to develop the methodology for the process.

Barnoaiea (2010) conducted a forest structure analysis comparing IKONOS 2 satellite imagery with aerial imagery of Vanatori Neamt Natural Park in northeast Romania. Both sets of images were ortho-rectified and geo-referenced in the Land Parcel Identification System (LPIS). The separate spectral bands of the IKONOS 2 imagery were merged with the panchromatic bands via ERDAS IMAGINE's resolution merge function, which produced an image with a 1 meter resolution. The sample plot of the aerial imagery is 1 hectare.

Barnoaiea (2010) analyzed the validity of the findings based on three viewpoints: tree level analysis, sample plot level analysis, and stand level analysis. Tree level analysis uses the position of the trees and the image pixel. One difficulty with this level of analysis is that the upper tree crowns can cover and disguise the lower tree crowns. For sample plot level analysis, the average data from the ground and from the IKONOS 2 images was plotted and compared. The last comparison, stand level analysis, compared four different stands using only ground data. The primary challenge of stand level analysis is that one must generalize based on sample data.

Overall, the study favored the IKONOS 2 imagery over the aerial imagery. However, shortcomings were listed for both. The satellite imagery underestimated the number of trees because some of the upper crowns obscured the visibility of the lower crowns. The main issue with the use of aerial imagery was the high off-nadir angle that occurred during the flights.

Moskal, Styers, & Halabisky (2011) reported on a study conducted by the city of Seattle to determine baseline tree cover before planned tree cover increases were implemented as part of the city's Environmental Action Agenda. The Native Communities Development Corporation (NCDC) conducted an object-based image analysis (OBIA) for land cover classification using QuickBird satellite imagery. One of the main objectives of this study was to create an OBIA algorithm that was flexible enough to be reproducible on different dates and in different locations and that was accurate for a variety of spatial and spectral resolutions.

In the Seattle area, both evergreen and deciduous trees are present. The specific study area, Rainier Valley, has both of these types of trees along with extensive residential and commercial development. For this study, NCDC used two satellite images from different years but both from leaf-on summer months. NCDC developed classifications via pre-determined sets from other studies. They compared the satellite images with building and parcel shapefiles to identify building footprints and locations. The algorithm used both hyperspatial true color and near-infrared imagery in visual interpretation.

One specific technique used in this method is Grey Level Co-occurrence Matrix (GLCM), which helps with homogeneity texture. This includes "'Proximity to other classes' and 'Shared relative border to other classes,' which helped improve individual class accuracy" (p. 2252). An outside image analyst not originally involved in the classification process also then conducted an accuracy assessment to reduce bias. Finally, the researchers conducted field sampling of data in order to further assess accuracy.

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Overall, the OBIA algorithm methodology proved to classify imperviousness the least effectively and tree cover the most effectively. Limited spectral bands accounted for much of the study's error. Other errors occurred due to comparison of imagery from different dates. The algorithm was also less successful at identifying and classifying smaller trees. The algorithm frequently classified smaller trees as grass and shrubs.

Sugumaran, Pavuluri, & Zerr (2003) aimed to develop a tree canopy classification methodology for preservation purposes for the planning department of Columbia, Missouri using high spatial resolution satellite and airborne images. Like other studies, this study attempts to address the difficulties in shadow occurrence in the imagery. Using IKONOS and airborne images from all four seasons, they classified objects with maximum likelihood (ML) methodology, as well as classification and regression trees (CART) methodology.

The IKONOS imagery was enhanced from a 4-meter to a 1-meter resolution using the principal component (PC) rule. Pixels were selected from tree canopies for training data; each was selected if it was exposed to sunlight and not in a shadow. Overall classification incorporated a combination of ML, a parametric algorithm, and CART, which combines spectral information with statistical information. Sugumaran, Pavuluri, & Zerr (2003) reduced the shadow effect by smoothing a raw image in a smaller window. However, the higher the resolution of the imagery, the more a shadow effect was present. Another interesting aspect that can account for misclassification is difference in leaf age; variously aged leaves can exhibit different spectral values. In conclusion, the authors found that the imagery from September was easiest to use in tree species classification, and that 1-meter resolution was the best for shadow reduction efforts.

Cadenasso, Pickett, & Schwarz (2007) discuss a new categorization methodology for classifying land cover. This article addresses the need for better classification methods for heterogeneous land cover of urban areas through a review of multiple methodologies. The first technique described is the Anderson schematic, a coarse-scale classification system, which aims to standardize the classification process to make it applicable to the entire United States. A drawback of this methodology is that it does not fully address the complex and quickly changing land cover of urban areas enough because the overall classification area being analyzed is so vast. Cadenasso, Pickett, & Schwarz (2007) next discuss a fine-scale classification approach of using ecotopes, which "identify unique combinations of land forms, management, and cover types" at very fine resolutions (Cadenasso, Pickett, & Schwarz, 2007, p. 83). However, ecotopes only utilize the biotic characteristics of an urban area.

To remedy the inadequacies of both coarse-scale and fine-scale methodologies, Cadenasso, Pickett, & Schwarz (2007) suggest a medium-scale classification methodology, High Ecological Resolution Classification for Urban Landscapes and Environmental Systems (HERCULES). HERCULES uses various ranges of land cover types that are housed within the greater categories. For instance, within the bare soil category, the ranges, or sub categories, include absent, present to 10% cover, 11-35% cover, 36-75% cover, and 75% cover. Thus, all possible combinations of land cover are accounted for utilizing this method. The main shortcoming of this article is that the study only refers to aerial images and uses LiDAR (light detection and ranging) for classification purposes instead of satellite imagery.

Fauvel, Chanussot, & Benediktsson (2006) address the need for a more automated algorithm for classifying urban land cover. Currently, no classification methodology outperforms others. Thus, the

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authors propose a new methodology using aspects from several existing methodologies, which they call decision fusion. It is defined as "the process of fusing information from several individual data sources after each data source has undergone a preliminary classification" (p. 2828). This methodology is based on fuzzy sets and possibility theory. They specifically use IKONOS imagery with morphological filters for feature extraction. The classification decision is made after both models are run in order to achieve a higher rate of accuracy. If one classification method has errors, the fusion process allows for correction.

Three different classification combinations are accounted for: conjunctive combination, disjunctive combination, and compromise combination. Conjunctive combination refers to sources with high conflict, disjunctive combination refers to sources with low conflict, and compromise combination refers to sources with partial conflict. Source reliability, however, should always be taken into account. Contextual dependent operators should be implemented to remedy all three types of source combination.

Fauvel, Chanussot, & Benediktsson's (2006) fusion scheme creates individual fuzzy sets for each class in each source. Then, the degree of fuzziness is computed for each fuzzy set and normalized with a previously determined factor. The contextual dependent operator is then applied, and the image is classified based on the "highest resulting membership degree" (p. 2833). In practice, the fuzzy classifying methodology worked best for the building, vegetation, and shadow classes, while a neural network classifier worked better for streets and roads. Overall, the authors state that, even though they only used two types of classification methodologies in their decision fusion, more types of classification methodologies could be beneficial.

In another article, Chanussot, Benediktsson, & Fauvel (2006) put forth a two-step methodology: feature extraction and classification of large buildings, houses, open areas, large roads, streets, and shadows using IKONOS imagery. The feature extraction step is based on granulometries, which are believed by the authors to provide better classification outcomes in urban areas specifically as compared to rural areas. Morphological filters are used to create a DMP, or differential morphological profile. This gives the spectrum of each pixel a pattern. The classification step two is based on a fuzzy interpretation of the possibilistic model using the 16-dimensional vector that the DMP gives each pixel.

Chanussot, Benediktsson, & Fauvel (2006) note that "[f]uzzy sets theory is the appropriate frame to handle imprecise or uncertain information" given by the DMP because the objects in the imagery do not have perfectly sharp edges (p. 41). Furthermore, it is difficult to strictly differentiate land cover types. To remedy this, the authors propose using possibility distributions which define each class based on a range of values. The harder to determine points in the middle are then ranked by likelihood of class. For example, a value of 14 would be ranked as a large building while a value of 10 would be ranked closer to a smaller building. However, "[s]ince the cores of the different possibility distributions are not necessarily disjoint, one pixel can be considered as possibly belonging to several different classes" (Chanussot, Benediktsson, & Fauvel, 2006b, p. 42).

Contrast also is considered in the classification process. Different types of objects are given different degrees of contrast. For instance, a shadow has a much higher contrast possibility than a road. After this step, the object size and contrast information are concatenated to pick the class of land cover. Overall, the fuzzy interpretation of the DMP and the possibilistic model did not attain 100%accuracy in land cover classification, but accuracy increased from 40.3% using a neural network model to 52.1% accuracy using

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the proposed model. Like many other studies have stated, the accuracy could be greatly increased with expert knowledge of the area.

Moran (2010) describes the use of Quickbird imagery to classify land cover in an urban landscape in Mato Grosso State, Brazil. Moran's study is particularly relevant due to the use of Quickbird imagery, which is consistent with the type of data that the City of Atlanta has acquired. This study utilized several classification methods, including the maximum likelihood classifier (MLC) method, the extraction and classification of homogeneous objects (ECHO) and segmentation-based classification. This study aimed to identify the most salient classification system using sample plots, which were selected based on interpretation of the false color composite. Impervious surface cover was classified based on spectral value.

More specifically, Moran utilized four classification strategies: MLC using Quickbird bands 2, 3 and 4, MLC using bands 2, 3, and 4 and two textural images, ECHO using bands 2, 3, and 4, and MLC based on segmentation mean-spectral value images of bands 2, 3, and 4. Quickbird band 1 images were not included due to the time required for data processing. To conduct accuracy assessment for this study, 300 test samples were selected and assigned a class value (noting the prevalence of the error matrix approach in previous studies). The results of this study indicated that the classification strategy utilizing two textural images improved the accuracy of land cover classification. The ECHO strategy improved accuracy by 6%, the MLC method improved accuracy by 11.7% (resulting in an 87% overall accuracy), and the segmentation method improved accuracy by 12.7% (resulting in an 88% overall accuracy). This research indicates that the use of textures or segmentation can improve classification accuracy when compared with traditional per-pixel methods.

Thapa and Murayana (2009) apply a series of algorithmic approaches to land cover classification. They apply their methodology to ALOS satellite imagery with a resolution of 10m over Tsukuba City, Japan. Tsukuba City is a municipality on the urban fringe of Tokyo which has a mix of land cover types including forested, agricultural, and urban. Thapa and Murayana (2009) first apply an unsupervised classification approach, in which the computer determines class boundaries and assigns pixels to each class. In post-processing, the researchers determine the land uses of the classes assigned by the computer. Next, they apply a supervised approach, in which they train the program to identify a set of pre-defined classes. The final approach used is a fuzzy supervised approach, in which the program determines a pixel's value by a membership function which measures "whether it is closer to one class than another" (Thapa and Murayana 2009). This allows an individual pixel to be assigned to more than one classification.

The fuzzy supervised approach was found to improve the accuracy of the classification by allowing for greater heterogeneity between and within the pixels. The fuzzy supervised approach achieved an accuracy of 87.67%, compared to accuracy levels of 83.67% and 75.33% for the supervised and unsupervised approaches respectively. The final methodology applied by Thapa and Murayana (2009) was a GIS post-processing method which overlaid the results of the previous approaches and classified pixels that were in agreement between the three methodologies. This identified most homogenous pixels, while heterogeneous pixels were less likely to be assigned. The fuzzy supervised approach was applied to these pixels. This approach yielded a slight improvement in accuracy over the fuzzy supervised approach to 89.33%. The authors conclude that in heterogeneous and complex urban settings, the combination of multiple classification methods will yield the best results.

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Appendix B: City-Wide Statistics

Table 19: City-wide Tree Canopy Cover Area and Percent Cover

	Square Miles	Total Acres	Percentage Land Area
City of Atlanta	132	84,737	
Tree Canopy Cover (2008)	63	40,524	47.9 %
Non-Tree Vegetation	23	18,722	22.1 %
Non-Vegetation	40	25,386	30.0 %
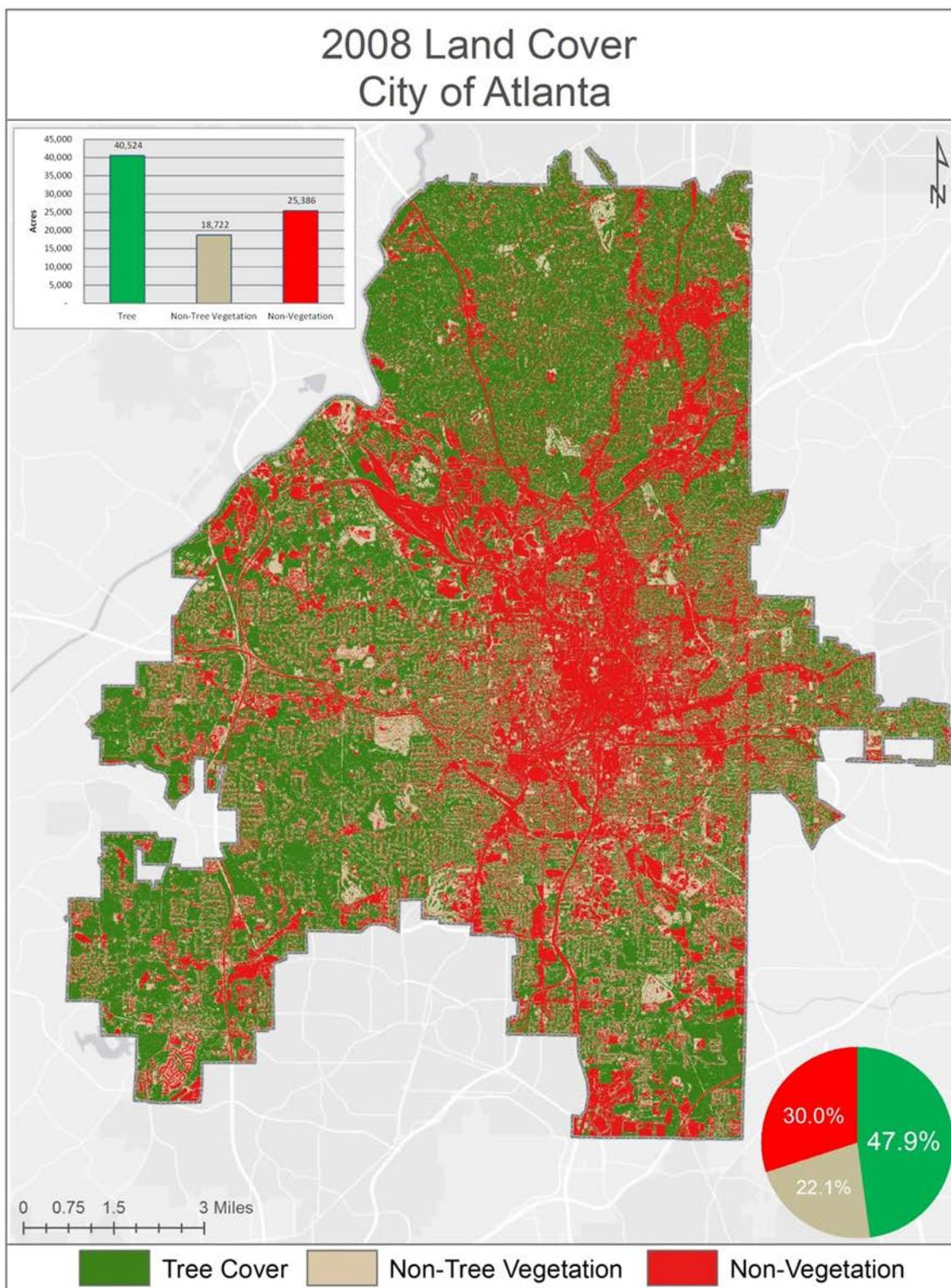
Figure 41: City of Atlanta 2008 Land Cover Map
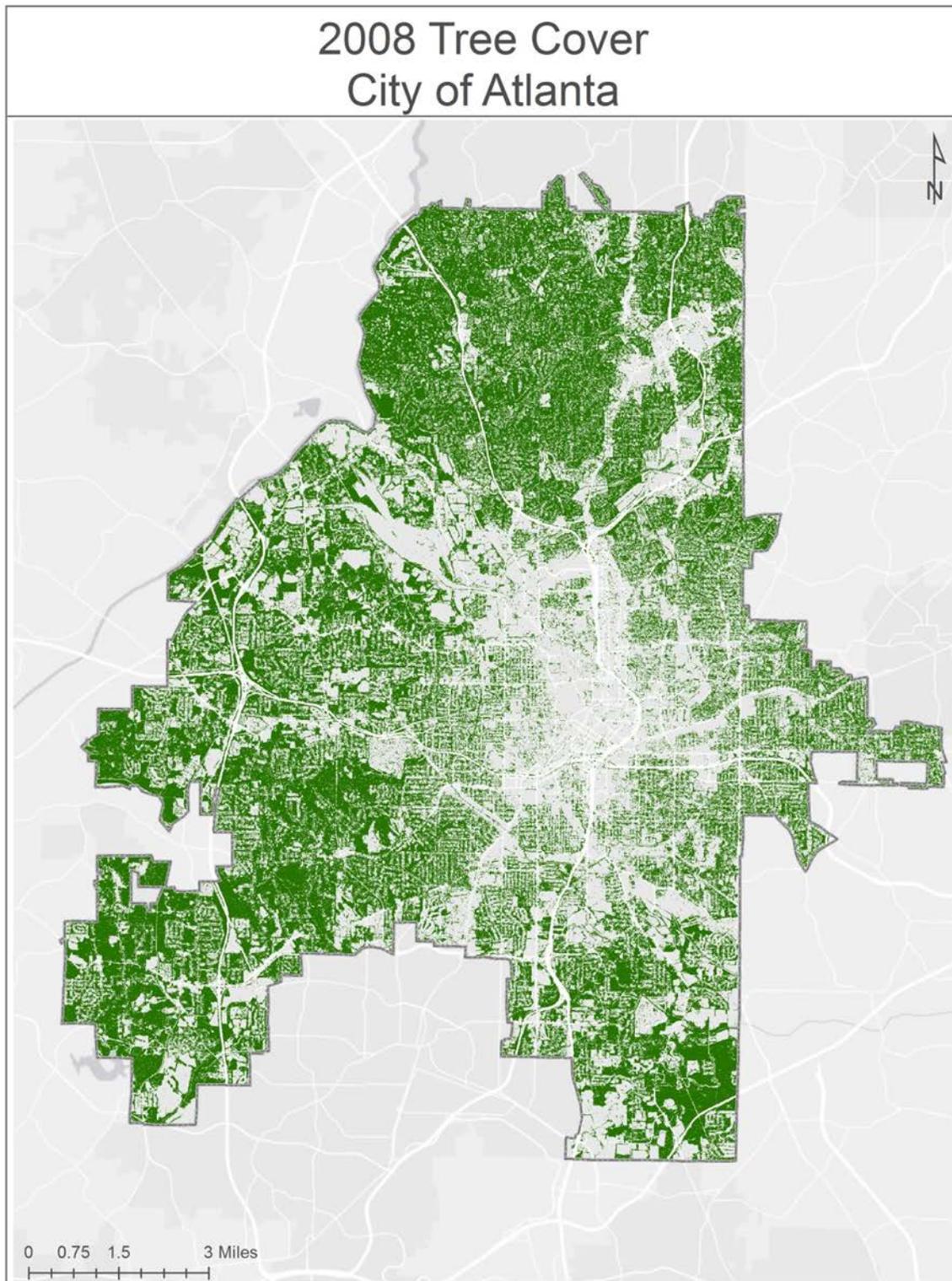
Figure 42: City of Atlanta 2008 Tree Cover Map
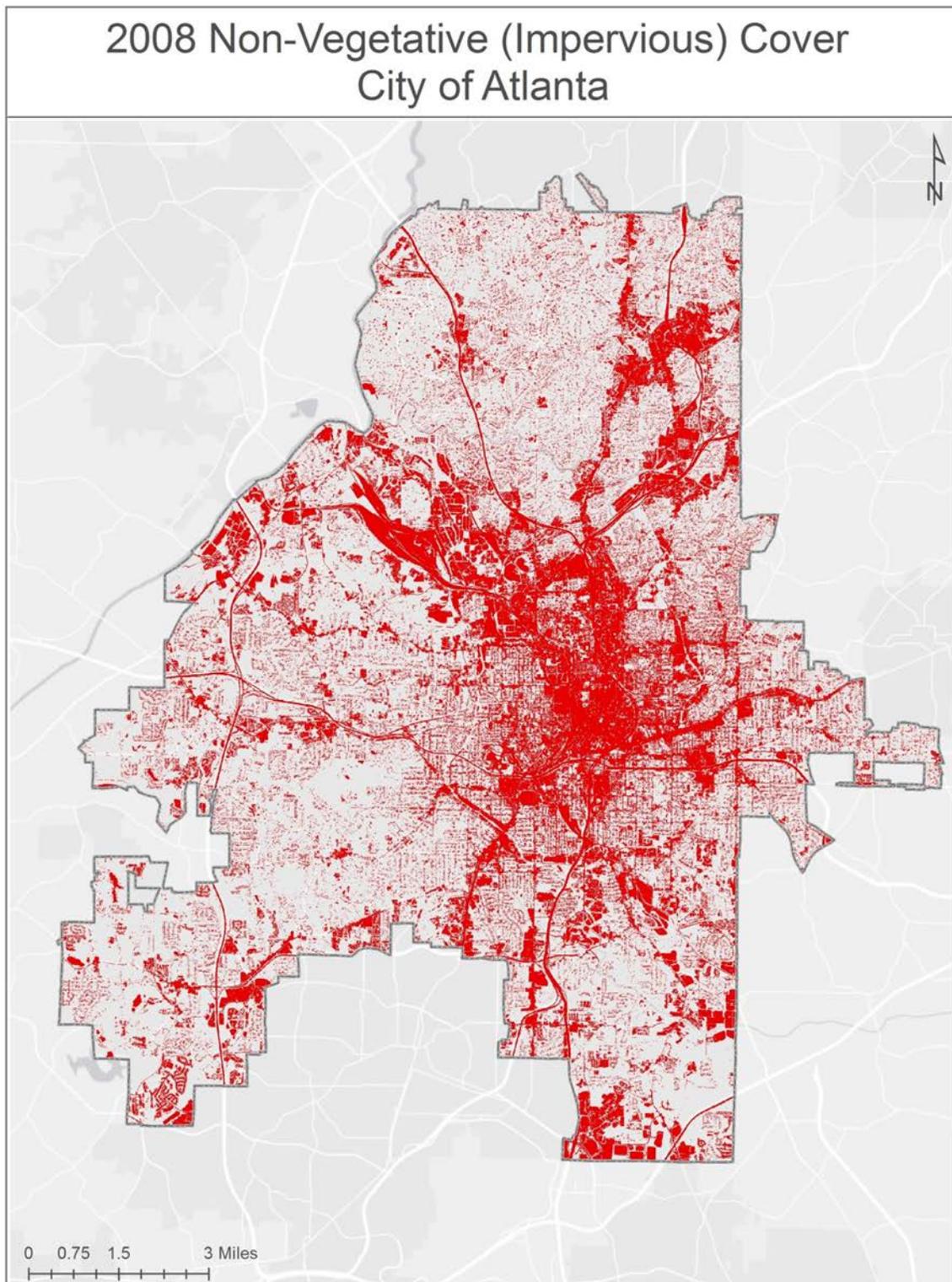
Figure 43: City of Atlanta 2008 Non Vegetative Cover (Impervious) Map
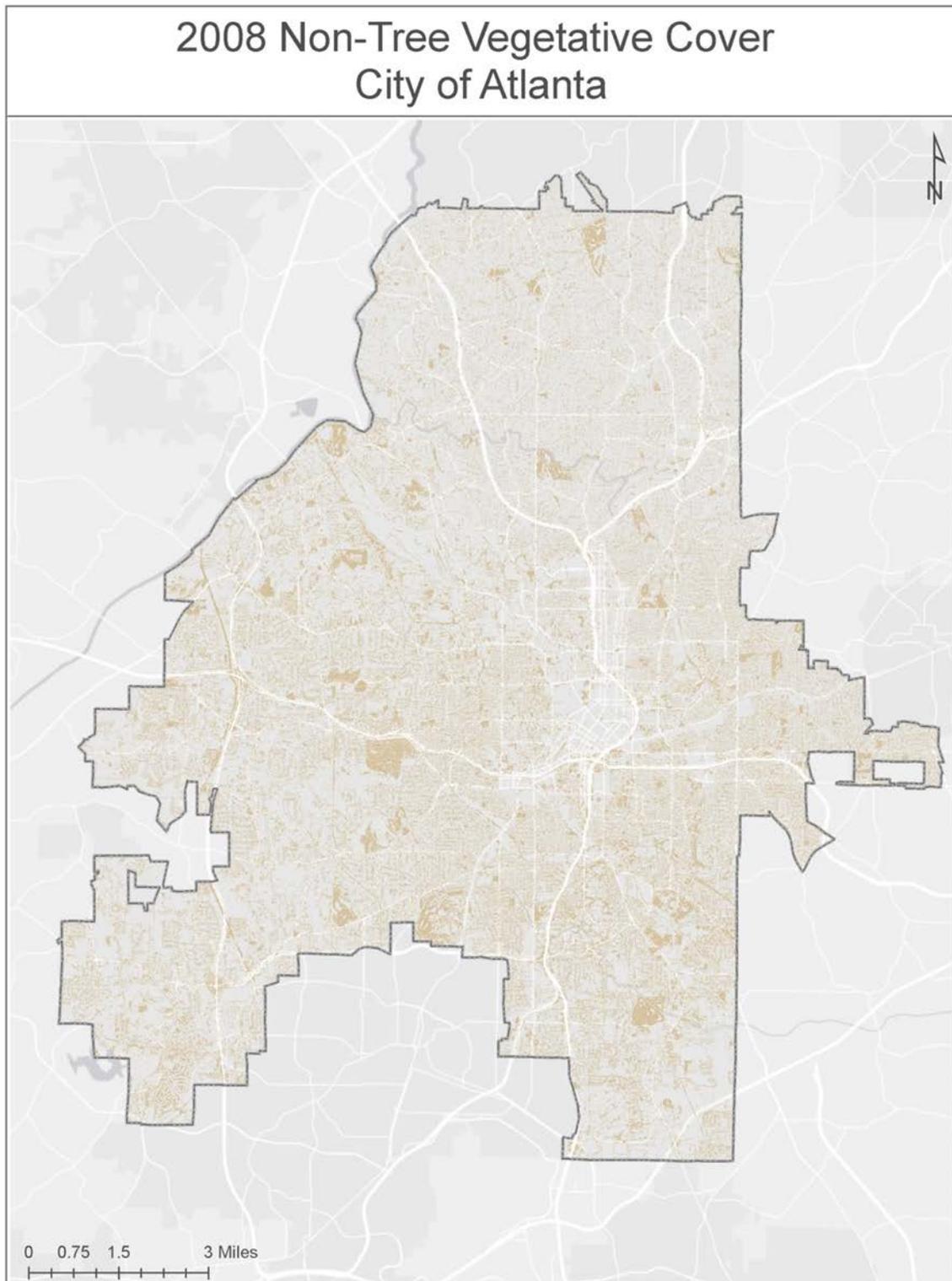
Figure 44: City of Atlanta 2008 Non-Tree Vegetative Cover Map
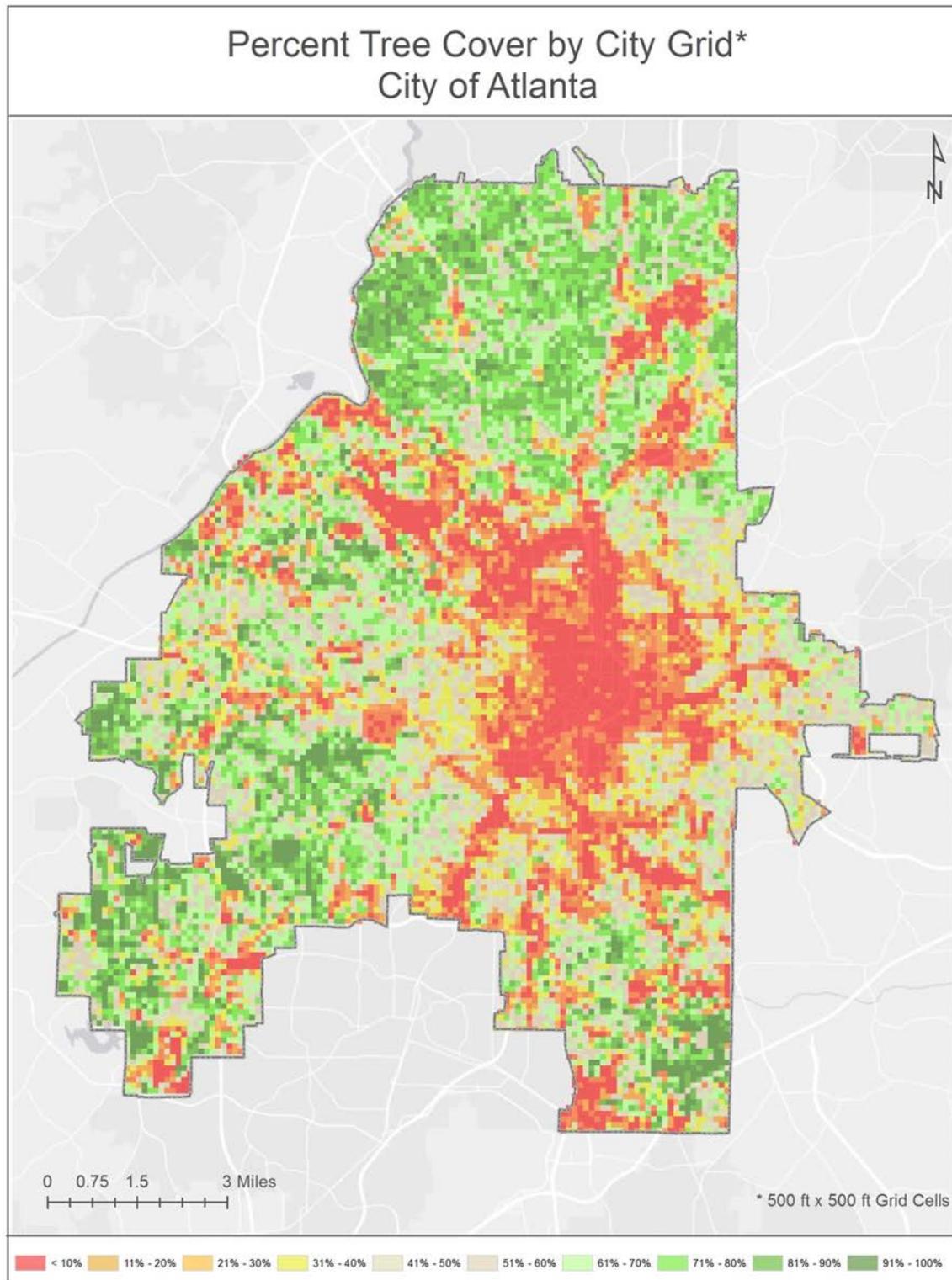
Figure 45: City of Atlanta 2008 Percent Tree Cover Grid Map

Appendix C: Neighborhood Planning Units

Table 20: Land Cover Area and Percent Cover by Neighborhood Planning Unit

NPU	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
A	7,208	5,109	71%	1,167	16%	914	13%
B	6,503	3,418	53%	970	15%	2,101	32%
C	3,872	2,518	65%	645	17%	709	18%
D	4,093	1,367	33%	813	20%	1,911	47%
E	3,841	1,018	27%	725	19%	2,098	55%
F	2,985	1,388	46%	596	20%	992	33%
G	3,637	1,744	48%	830	23%	1,049	29%
H	4,010	2,359	59%	908	23%	733	18%
I	6,046	3,677	61%	1,418	23%	951	16%
J	2,813	1,421	51%	788	28%	604	21%
K	1,538	493	32%	417	27%	628	41%
L	813	153	19%	213	26%	448	55%
M	2,448	196	8%	370	15%	1,882	77%
N	2,201	770	35%	570	26%	829	38%
O	2,173	947	44%	611	28%	607	28%
P	5,653	3,514	62%	1,178	21%	918	16%
R	3,447	1,921	56%	730	21%	788	23%
S	2,481	1,159	47%	771	31%	544	22%
T	1,755	477	27%	462	26%	816	47%
V	2,039	358	18%	522	26%	1,159	57%
W	3,414	1,350	40%	993	29%	1,058	31%
X	2,573	976	38%	672	26%	912	35%
Y	2,108	593	28%	664	32%	836	40%
Z	6,686	3,349	50%	1,585	24%	1,727	26%

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Table 21: Land Cover Summary Statistics by Neighborhood Planning Unit

NPU	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% NPU	% UTC	% City Land	% NPU	% NTV	% City Land	% NPU	% NV
A	6%	71%	13%	1%	16%	6%	1%	13%	4%
B	4%	53%	8%	1%	15%	5%	2%	32%	8%
C	3%	65%	6%	1%	17%	3%	1%	18%	3%
D	2%	33%	3%	1%	20%	4%	2%	47%	8%
E	1%	27%	3%	1%	19%	4%	2%	55%	8%
F	2%	46%	3%	1%	20%	3%	1%	33%	4%
G	2%	48%	4%	1%	23%	4%	1%	29%	4%
H	3%	59%	6%	1%	23%	5%	1%	18%	3%
I	4%	61%	9%	2%	23%	8%	1%	16%	4%
J	2%	51%	4%	1%	28%	4%	1%	21%	2%
K	1%	32%	1%	0%	27%	2%	1%	41%	2%
L	0%	19%	0%	0%	26%	1%	1%	55%	2%
M	0%	8%	0%	0%	15%	2%	2%	77%	7%
N	1%	35%	2%	1%	26%	3%	1%	38%	3%
O	1%	44%	2%	1%	28%	3%	1%	28%	2%
P	4%	62%	9%	1%	21%	6%	1%	16%	4%
R	2%	56%	5%	1%	21%	4%	1%	23%	3%
S	1%	47%	3%	1%	31%	4%	1%	22%	2%
T	1%	27%	1%	1%	26%	2%	1%	47%	3%
V	0%	18%	1%	1%	26%	3%	1%	57%	5%
W	2%	40%	3%	1%	29%	5%	1%	31%	4%
X	1%	38%	2%	1%	26%	4%	1%	35%	4%
Y	1%	28%	1%	1%	32%	4%	1%	40%	3%
Z	4%	50%	8%	2%	24%	9%	2%	26%	7%

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Figure 46: City of Atlanta 2008 Percent Tree Cover by NPU Map

Appendix D: Council Districts

Table 22: Land Cover Area and Percent Cover by Council District

District	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
1	6,237	2,217	36%	1,880	30%	2,140	34%
2	3,682	483	13%	657	18%	2,543	69%
3	4,698	1,488	32%	1,224	26%	1,987	42%
4	4,057	1,296	32%	1,040	26%	1,721	42%
5	4,520	1,703	38%	1,156	26%	1,628	36%
6	4,941	2,169	44%	1,148	23%	1,604	32%
7	5,934	2,928	49%	883	15%	2,097	35%
8	12,417	8,171	66%	2,008	16%	2,166	17%
9	10,614	4,782	45%	2,263	21%	3,511	33%
10	7,670	4,430	58%	1,847	24%	1,375	18%
11	11,120	6,807	61%	2,362	21%	1,901	17%
12	8,707	3,899	45%	2,180	25%	2,604	30%

Table 23: Land Cover Summary Statistics by Council District

District	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Council District	% UTC	% City Land	% Council District	% NTV	% City Land	% Council District	% NV
1	3%	36%	5%	2%	30%	10%	3%	34%	8%
2	1%	13%	1%	1%	18%	4%	3%	69%	10%
3	2%	32%	4%	1%	26%	7%	2%	42%	8%
4	2%	32%	3%	1%	26%	6%	2%	42%	7%
5	2%	38%	4%	1%	26%	6%	2%	36%	6%
6	3%	44%	5%	1%	23%	6%	2%	32%	6%
7	3%	49%	7%	1%	15%	5%	2%	35%	8%
8	10%	66%	20%	2%	16%	11%	3%	17%	9%
9	6%	45%	12%	3%	21%	12%	4%	33%	14%
10	5%	58%	11%	2%	24%	10%	2%	18%	5%
11	8%	61%	17%	3%	21%	13%	2%	17%	8%
12	5%	45%	10%	3%	25%	12%	3%	30%	10%

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Figure 47: City of Atlanta 2008 Percent Tree Cover by Council District Map

Appendix E: Neighborhoods

Table 24: Land Cover Area and Percent Cover by Neighborhood

Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Adair Park	260	64	25%	67	26%	129	50%
Adams Park	628	372	59%	187	30%	69	11%
Adamsville	596	289	48%	164	27%	143	24%
Almond Park	473	332	70%	94	20%	47	10%
Amal Heights	42	8	18%	21	50%	13	31%
Ansley Park	332	152	46%	102	31%	79	24%
Arden Habersham	114	87	77%	15	13%	12	10%
Ardmore/26th Street	45	31	69%	6	13%	8	18%
Argonne Forest	169	115	68%	30	18%	24	14%
Arlington Estates	187	105	56%	48	26%	32	17%
Ashview Heights	172	47	27%	56	33%	69	40%
Atkins Park	35	12	34%	10	28%	13	37%
Atlanta University	314	42	13%	76	24%	196	63%
Audobon Forest	418	325	78%	66	16%	28	7%
Audobon Forest West	102	77	76%	17	17%	7	7%
Baker Hills	177	102	58%	49	28%	26	15%
Bankhead	45	13	28%	12	27%	20	45%
Bankhead Courts	50	6	12%	17	33%	27	55%
Bankhead-Bolton	574	336	59%	106	19%	100	17%
Bedford Pine	261	47	18%	61	23%	153	59%
Beecher Hills	285	217	76%	51	18%	16	6%
Bellwood	70	5	8%	9	13%	55	79%
Ben Hill	2742	1636	60%	563	21%	520	19%
Ben Hill Acres	94	57	60%	19	20%	19	20%
Ben Hill Forest	96	72	76%	16	17%	7	7%
Ben Hill Pines	41	22	52%	13	31%	7	17%
Ben Hill Terrace	211	145	69%	42	20%	25	12%
Benteen	80	32	40%	25	31%	23	29%
Berkeley Park	213	53	25%	35	17%	125	59%
Betmar La Villa	67	13	19%	25	37%	30	44%
Blair Villa/Poole Creek	838	308	37%	133	16%	391	47%
Blandtown	109	25	23%	31	28%	53	49%
Bolton	1151	446	39%	302	26%	394	34%

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Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Bolton Hills	51	31	61%	13	26%	7	13%
Boulder Park	1213	780	64%	216	18%	199	16%
Boulevard Heights	125	46	37%	44	35%	35	28%
Bowen Homes	92	17	18%	38	42%	36	40%
Brandon	263	197	75%	30	12%	36	14%
Brentwood	55	29	53%	20	36%	6	11%
Briar Glen	66	36	55%	18	27%	12	18%
Brookhaven	657	403	61%	128	19%	106	16%
Brookwood	34	9	27%	4	13%	21	60%
Brookwood Hills	183	112	61%	27	15%	44	24%
Browns Mill Park	643	274	43%	252	39%	117	18%
Buckhead Forest	201	67	33%	27	13%	107	53%
Buckhead Village	252	34	14%	25	10%	193	77%
Bush Mountain	50	28	56%	14	29%	7	15%
Butler Street	96	6	6%	19	19%	71	74%
Butner Tell	105	88	83%	14	14%	3	3%
Cabbage Town	98	16	16%	23	24%	59	60%
Campbellton Road	428	193	45%	84	20%	148	35%
Campground/Rux Road	67	41	62%	16	23%	10	15%
Candler Park	411	160	39%	134	33%	117	28%
Capitol Homes	82	4	4%	21	26%	58	70%
Capitol View	367	132	36%	107	29%	128	35%
Capitol View Manor	146	64	44%	43	30%	39	27%
Carey Park	157	81	52%	45	29%	30	19%
Carroll Heights	265	148	56%	75	28%	41	16%
Carver Hills	183	104	57%	55	30%	24	13%
Carver Homes	106	5	5%	29	28%	72	67%
Cascade Heights	705	497	70%	133	19%	75	11%
Cascade Road	672	372	55%	204	30%	97	14%
Castleberry Hill	182	8	5%	27	15%	147	81%
Castlewood	264	196	74%	34	13%	33	13%
Center Hill	699	329	47%	224	32%	146	21%
Chalet Woods	102	59	58%	29	28%	14	14%
Channing Valley	72	40	56%	13	18%	19	27%
Chastain Park	1096	698	64%	265	24%	132	12%
Choosewood Park	197	83	42%	66	34%	48	24%
Collier Heights	1263	728	58%	305	24%	230	18%

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Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Collier Hills	115	83	72%	18	16%	14	12%
Collier Hills North	88	64	72%	15	17%	9	11%
Colonial Homes	11	4	38%	3	29%	3	33%
Cross Creek	178	93	52%	37	21%	48	27%
Custer Ave/McDonough/Guic	335	153	46%	105	31%	77	23%
Deerwood	93	42	45%	35	37%	16	18%
Dixie Hills	472	252	53%	132	28%	88	19%
Downtown	995	34	3%	78	8%	882	89%
Druid Hills	341	162	48%	99	29%	67	20%
Eagan Homes	27	2	8%	7	26%	18	66%
East Ardley Road	66	37	56%	19	29%	10	15%
East Atlanta	951	441	46%	264	28%	230	24%
East Chastain Park	354	209	59%	49	14%	95	27%
East Lake	611	302	50%	173	28%	103	17%
East Lake Meadows	91	15	16%	38	42%	38	42%
Edgewood	566	179	32%	156	28%	231	41%
Elmco Estates	90	64	71%	18	20%	8	9%
Englewood Manor	15	4	27%	4	27%	7	46%
English Avenue	329	76	23%	91	28%	162	49%
Fairburn Avenue	108	75	70%	22	21%	10	9%
Fairburn Heights	342	177	52%	97	28%	69	20%
Fairburn Road/Wisteria La	83	58	70%	20	24%	6	7%
Fairview Acres	123	84	68%	24	20%	14	12%
Fernleaf	64	50	79%	7	10%	7	11%
Florida Heights	231	104	45%	66	29%	61	26%
Fort McPherson	519	123	24%	229	44%	156	30%
Fort Valley	21	6	30%	6	28%	9	41%
Garden Hills	481	273	57%	85	18%	123	26%
George High	1840	1164	63%	297	16%	354	19%
Georgia Tech	367	55	15%	82	22%	230	63%
Gilbert Gardens	27	7	28%	13	48%	7	25%
Glenrose Heights	869	375	43%	192	22%	301	35%
Grady/Antoine Graves	54	3	6%	11	20%	40	75%
Grant Park	1097	355	32%	318	29%	424	39%
Green Acres Valley	49	27	56%	15	31%	7	14%
Green Forest Acres	102	56	55%	29	29%	16	16%

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Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Greenbriar	847	385	45%	165	20%	296	35%
Greenbriar Village	40	17	42%	11	26%	9	21%
Grove Park	1035	577	56%	264	26%	192	19%
Hammond Park	317	135	43%	83	26%	96	30%
Hanover West	113	76	67%	17	15%	20	18%
Harland Terrace	266	114	43%	46	17%	107	40%
Harris Chiles	91	15	16%	24	27%	52	57%
Harvel Homes Community	21	10	50%	6	29%	4	21%
Haynes Manor	422	309	73%	71	17%	43	10%
Heritage Valley	202	125	62%	49	24%	28	14%
Herndon Homes	40	2	5%	6	15%	32	81%
High Point	66	18	28%	20	30%	28	42%
Hills Park	141	65	46%	28	20%	47	34%
Hollywood Homes	19	3	15%	5	27%	11	58%
Home Park	620	86	14%	95	15%	439	71%
Hunter Hills	323	140	43%	97	30%	85	26%
Inman Park	369	114	31%	98	27%	157	43%
Ivan Hill	51	35	68%	11	22%	5	10%
John Hope Homes	55	5	9%	14	25%	36	66%
Jonesboro North	32	18	58%	7	24%	6	18%
Jonesboro South	18	3	16%	8	42%	7	42%
Joyland	87	27	31%	32	37%	28	32%
Just Us	18	7	40%	5	30%	6	31%
Kimberley Courts	39	10	27%	10	26%	18	47%
Kings Forest	84	46	55%	25	30%	13	15%
Kingswood	424	298	70%	78	18%	49	11%
Kirkwood	965	465	48%	255	26%	244	25%
Knight Park	261	53	20%	54	21%	155	59%
Lake Claire	325	179	55%	71	22%	65	20%
Lake Coral Estates	22	13	59%	6	25%	4	16%
Lake Jan Estates	23	10	45%	6	26%	7	29%
Lakewood	312	181	58%	93	30%	39	12%
Lakewood Heights	793	314	40%	229	29%	250	31%
Laurens Valley	122	90	74%	23	19%	9	7%
Leila Valley	316	111	35%	91	29%	115	36%
Lenox Superblock	99	14	14%	13	13%	72	72%
Lincoln Homes	163	72	44%	32	20%	59	36%

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Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Lindbergh Morosgo	244	42	17%	32	13%	170	70%
Lindridge-Martin Manor	438	200	46%	66	15%	171	39%
Loring Heights	156	63	40%	37	24%	56	36%
Magnum Manor	151	89	59%	39	26%	22	15%
Margaret Mitchell	530	356	67%	88	17%	86	16%
McDaniel Glenn	41	3	6%	8	19%	30	75%
Meadowbrook Forest	61	37	61%	17	27%	7	12%
Mechanicsville	399	55	14%	98	25%	246	62%
Melwood	27	18	67%	6	24%	2	9%
Memorial Park	91	64	70%	14	15%	14	15%
Midtown	993	166	17%	146	15%	680	69%
Monroe Heights	32	17	55%	9	27%	6	18%
Morningside-Lenox Park	1468	789	54%	302	21%	356	24%
Mount Paran Northside	1355	984	73%	226	17%	143	11%
Mount Paran Parkway	110	83	75%	16	14%	12	11%
Mozley Park	274	112	41%	87	32%	75	27%
Mt. Gilead Woods	36	24	66%	9	25%	3	9%
Niskey Cove	54	31	58%	15	27%	8	15%
Niskey Lake	227	144	63%	36	16%	35	16%
North Buckhead	1705	959	56%	239	14%	489	29%
Norwood Manor	331	128	39%	99	30%	104	31%
Oakcliff	67	51	77%	10	15%	6	9%
Oakland City	635	254	40%	172	27%	209	33%
Old Fourth Ward	445	69	15%	109	24%	267	60%
Orchard Knob	294	182	62%	73	25%	39	13%
Ormewood Park	507	218	43%	144	28%	145	29%
Paces	1918	1392	73%	240	12%	270	14%
Pamond Park	47	25	53%	14	31%	7	16%
Peachtree Heights East	134	87	65%	18	14%	28	21%
Peachtree Heights West	498	348	70%	75	15%	75	15%
Peachtree Hills	344	203	59%	54	16%	87	25%
Peachtree Park	306	169	55%	38	12%	99	32%
Penelope Neighbors	104	41	40%	38	37%	25	24%
Peoplestown	296	76	26%	95	32%	125	42%
Perkerson Park	405	183	45%	86	21%	129	32%

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Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Perry Homes	212	85	40%	60	28%	66	31%
Peyton Forest	155	96	62%	37	24%	22	14%
Piedmont Heights	301	127	42%	50	16%	125	41%
Pine Hills	646	380	59%	97	15%	157	24%
Pittsburgh	429	99	23%	109	25%	221	51%
Pleasant Hill	250	201	81%	30	12%	19	7%
Polar Rock	300	157	52%	86	29%	57	19%
Poncey Highlands	259	67	26%	70	27%	121	47%
Randall Mill	192	121	63%	30	16%	41	21%
Rebel Valley Forest	112	39	35%	25	22%	49	43%
Reynoldstown	372	75	20%	80	21%	217	58%
Ridgecrest Forest	97	64	66%	23	24%	10	10%
Ridgedale Park	118	56	48%	21	18%	40	34%
Ridgewood Heights	101	81	80%	12	12%	9	9%
Riverside	446	268	60%	101	23%	73	16%
Rockdale	290	151	52%	71	25%	68	23%
Rosedale Heights	194	112	58%	47	24%	34	18%
Rue Royal	22	14	64%	6	27%	2	9%
Sandlewood Estates	32	9	27%	7	22%	8	26%
Scotts Crossing	133	61	46%	23	17%	50	37%
Sherwood Forest	209	107	51%	41	19%	61	29%
South Atlanta	142	49	34%	51	36%	42	30%
South Tuxedo Park	203	128	63%	31	15%	44	22%
Southwest	1281	822	64%	232	18%	227	18%
Springlake	142	99	69%	21	15%	23	16%
St. Charles Greenwood	134	39	29%	26	20%	69	51%
Summerhill	323	35	11%	88	27%	200	62%
Swallow Circle/Baywood	200	154	77%	35	17%	11	5%
Sylvan Hills	1031	347	34%	290	28%	393	38%
Tampa Park	17	11	62%	5	26%	2	12%
Techwood/Clark Howell Hom	171	9	5%	30	17%	132	77%
Thomasville Heights	407	153	37%	144	35%	110	27%
Tuxedo Park	733	549	75%	107	15%	77	10%
Underwood Hills	422	195	46%	63	15%	164	39%
U-Rescue Villa	20	3	15%	7	35%	10	50%
Venetian Hills	618	383	62%	156	25%	79	13%

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Neighborhood	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Vine City	191	37	19%	60	31%	95	50%
Virginia-Highland	541	231	43%	135	25%	172	32%
Washington Park	164	55	33%	49	30%	61	37%
Watts Road	386	203	52%	83	21%	101	26%
West End	700	183	26%	173	25%	344	49%
West Lake	169	90	53%	46	27%	33	19%
West Manor	173	111	64%	40	23%	22	13%
West Paces Ferry/Northsid	425	283	67%	65	15%	76	18%
West Peachtree Battle	204	155	76%	29	14%	20	10%
Westhaven	146	67	46%	31	21%	47	32%
Westminster Milmar	90	59	65%	14	15%	18	19%
Westover Plantation	60	41	68%	8	13%	12	20%
Westview	398	177	44%	112	28%	109	27%
Westwood Terrace	141	89	63%	36	26%	16	11%
Whitewater Creek	241	187	77%	30	13%	22	9%
Whittier Village	137	62	45%	40	29%	34	25%
Wildwood	171	104	61%	39	23%	28	16%
Wildwood Forest	56	32	57%	15	27%	7	13%
WildwoodC	207	133	64%	29	14%	46	22%
Wilson Mill Meadows	242	157	65%	51	21%	35	15%
Wisteria Gardens	109	59	54%	30	28%	19	18%
Woodfield	75	56	75%	9	12%	9	12%
Woodland Hills	96	45	47%	27	28%	23	24%
Wyngate	124	98	79%	16	13%	10	8%

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Table 25: Land Cover Summary Statistics by Neighborhood

Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Adair Park	0.09%	25%	0.18%	0.09%	26%	0.40%	0.17%	50%	0.61%
Adams Park	0.50%	59%	1.01%	0.25%	30%	1.13%	0.09%	11%	0.33%
Adamsville	0.39%	48%	0.79%	0.22%	27%	0.99%	0.19%	24%	0.68%
Almond Park	0.45%	70%	0.90%	0.13%	20%	0.57%	0.06%	10%	0.23%
Amal Heights	0.01%	18%	0.02%	0.03%	50%	0.13%	0.02%	31%	0.06%
Ansley Park	0.20%	46%	0.41%	0.14%	31%	0.62%	0.11%	24%	0.38%
Arden Habersham	0.12%	77%	0.24%	0.02%	13%	0.09%	0.02%	10%	0.06%
Ardmore/26th Street	0.04%	69%	0.08%	0.01%	13%	0.03%	0.01%	18%	0.04%
Argonne Forest	0.15%	68%	0.31%	0.04%	18%	0.18%	0.03%	14%	0.11%
Arlington Estates	0.14%	56%	0.28%	0.06%	26%	0.29%	0.04%	17%	0.15%
Ashview Heights	0.06%	27%	0.13%	0.08%	33%	0.34%	0.09%	40%	0.33%
Atkins Park	0.02%	34%	0.03%	0.01%	28%	0.06%	0.02%	37%	0.06%
Atlanta University	0.06%	13%	0.11%	0.10%	24%	0.46%	0.26%	63%	0.94%
Audobon Forest	0.44%	78%	0.88%	0.09%	16%	0.40%	0.04%	7%	0.13%
Audobon Forest West	0.10%	76%	0.21%	0.02%	17%	0.10%	0.01%	7%	0.04%
Baker Hills	0.14%	58%	0.28%	0.07%	28%	0.30%	0.04%	15%	0.13%
Bankhead	0.02%	28%	0.03%	0.02%	27%	0.07%	0.03%	45%	0.10%
Bankhead Courts	0.01%	12%	0.02%	0.02%	33%	0.10%	0.04%	55%	0.13%
Bankhead-Bolton	0.45%	59%	0.91%	0.14%	19%	0.64%	0.13%	17%	0.48%
Bedford Pine	0.06%	18%	0.13%	0.08%	23%	0.37%	0.21%	59%	0.73%
Beecher Hills	0.29%	76%	0.59%	0.07%	18%	0.31%	0.02%	6%	0.08%
Bellwood	0.01%	8%	0.01%	0.01%	13%	0.06%	0.07%	79%	0.26%
Ben Hill	2.19%	60%	4.45%	0.75%	21%	3.41%	0.70%	19%	2.48%
Ben Hill Acres	0.08%	60%	0.15%	0.03%	20%	0.11%	0.03%	20%	0.09%
Ben Hill Forest	0.10%	76%	0.20%	0.02%	17%	0.10%	0.01%	7%	0.03%
Ben Hill Pines	0.03%	52%	0.06%	0.02%	31%	0.08%	0.01%	17%	0.03%
Ben Hill Terrace	0.19%	69%	0.39%	0.06%	20%	0.25%	0.03%	12%	0.12%
Benteen	0.04%	40%	0.09%	0.03%	31%	0.15%	0.03%	29%	0.11%
Berkeley Park	0.07%	25%	0.14%	0.05%	17%	0.21%	0.17%	59%	0.60%
Betmar La Villa	0.02%	19%	0.03%	0.03%	37%	0.15%	0.04%	44%	0.14%
Blair Villa/Poole Creek	0.41%	37%	0.84%	0.18%	16%	0.80%	0.52%	47%	1.87%
Blandtown	0.03%	23%	0.07%	0.04%	28%	0.18%	0.07%	49%	0.25%
Bolton	0.60%	39%	1.21%	0.41%	26%	1.83%	0.53%	34%	1.88%
Bolton Hills	0.04%	61%	0.08%	0.02%	26%	0.08%	0.01%	13%	0.03%
Boulder Park	1.05%	64%	2.12%	0.29%	18%	1.31%	0.27%	16%	0.95%

*Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study*

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Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Boulevard Heights	0.06%	37%	0.12%	0.06%	35%	0.27%	0.05%	28%	0.17%
Bowen Homes	0.02%	18%	0.05%	0.05%	42%	0.23%	0.05%	40%	0.17%
Brandon	0.26%	75%	0.53%	0.04%	12%	0.18%	0.05%	14%	0.17%
Brentwood	0.04%	53%	0.08%	0.03%	36%	0.12%	0.01%	11%	0.03%
Briar Glen	0.05%	55%	0.10%	0.02%	27%	0.11%	0.02%	18%	0.06%
Brookhaven	0.54%	61%	1.10%	0.17%	19%	0.78%	0.14%	16%	0.51%
Brookwood	0.01%	27%	0.03%	0.01%	13%	0.03%	0.03%	60%	0.10%
Brookwood Hills	0.15%	61%	0.31%	0.04%	15%	0.16%	0.06%	24%	0.21%
Browns Mill Park	0.37%	43%	0.75%	0.34%	39%	1.52%	0.16%	18%	0.56%
Buckhead Forest	0.09%	33%	0.18%	0.04%	13%	0.16%	0.14%	53%	0.51%
Buckhead Village	0.05%	14%	0.09%	0.03%	10%	0.15%	0.26%	77%	0.92%
Bush Mountain	0.04%	56%	0.08%	0.02%	29%	0.09%	0.01%	15%	0.04%
Butler Street	0.01%	6%	0.02%	0.03%	19%	0.11%	0.10%	74%	0.34%
Butner Tell	0.12%	83%	0.24%	0.02%	14%	0.09%	0.00%	3%	0.01%
Cabbage Town	0.02%	16%	0.04%	0.03%	24%	0.14%	0.08%	60%	0.28%
Campbellton Road	0.26%	45%	0.52%	0.11%	20%	0.51%	0.20%	35%	0.71%
Campground/Rux Road	0.06%	62%	0.11%	0.02%	23%	0.09%	0.01%	15%	0.05%
Candler Park	0.21%	39%	0.43%	0.18%	33%	0.81%	0.16%	28%	0.56%
Capitol Homes	0.00%	4%	0.01%	0.03%	26%	0.13%	0.08%	70%	0.27%
Capitol View	0.18%	36%	0.36%	0.14%	29%	0.65%	0.17%	35%	0.61%
Capitol View Manor	0.09%	44%	0.17%	0.06%	30%	0.26%	0.05%	27%	0.19%
Carey Park	0.11%	52%	0.22%	0.06%	29%	0.27%	0.04%	19%	0.15%
Carroll Heights	0.20%	56%	0.40%	0.10%	28%	0.45%	0.06%	16%	0.20%
Carver Hills	0.14%	57%	0.28%	0.07%	30%	0.33%	0.03%	13%	0.11%
Carver Homes	0.01%	5%	0.01%	0.04%	28%	0.18%	0.10%	67%	0.34%
Cascade Heights	0.67%	70%	1.35%	0.18%	19%	0.81%	0.10%	11%	0.36%
Cascade Road	0.50%	55%	1.01%	0.27%	30%	1.23%	0.13%	14%	0.46%
Castleberry Hill	0.01%	5%	0.02%	0.04%	15%	0.16%	0.20%	81%	0.70%
Castlewood	0.26%	74%	0.53%	0.05%	13%	0.21%	0.04%	13%	0.16%
Center Hill	0.44%	47%	0.89%	0.30%	32%	1.36%	0.20%	21%	0.70%
Chalet Woods	0.08%	58%	0.16%	0.04%	28%	0.17%	0.02%	14%	0.07%
Channing Valley	0.05%	56%	0.11%	0.02%	18%	0.08%	0.03%	27%	0.09%
Chastain Park	0.94%	64%	1.90%	0.35%	24%	1.60%	0.18%	12%	0.63%
Choosewood Park	0.11%	42%	0.22%	0.09%	34%	0.40%	0.06%	24%	0.23%
Collier Heights	0.98%	58%	1.98%	0.41%	24%	1.85%	0.31%	18%	1.10%
Collier Hills	0.11%	72%	0.23%	0.02%	16%	0.11%	0.02%	12%	0.07%
Collier Hills North	0.09%	72%	0.17%	0.02%	17%	0.09%	0.01%	11%	0.05%

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Colonial Homes	0.01%	38%	0.01%	0.00%	29%	0.02%	0.00%	33%	0.02%
Cross Creek	0.13%	52%	0.25%	0.05%	21%	0.22%	0.06%	27%	0.23%
Custer Ave/McDonough/Guic	0.21%	46%	0.42%	0.14%	31%	0.64%	0.10%	23%	0.37%
Deerwood	0.06%	45%	0.11%	0.05%	37%	0.21%	0.02%	18%	0.08%
Dixie Hills	0.34%	53%	0.68%	0.18%	28%	0.80%	0.12%	19%	0.42%
Downtown	0.05%	3%	0.09%	0.10%	8%	0.47%	1.18%	89%	4.22%
Druid Hills	0.22%	48%	0.44%	0.13%	29%	0.60%	0.09%	20%	0.32%
Eagan Homes	0.00%	8%	0.01%	0.01%	26%	0.04%	0.02%	66%	0.09%
East Ardley Road	0.05%	56%	0.10%	0.03%	29%	0.11%	0.01%	15%	0.05%
East Atlanta	0.59%	46%	1.20%	0.35%	28%	1.60%	0.31%	24%	1.10%
East Chastain Park	0.28%	59%	0.57%	0.07%	14%	0.30%	0.13%	27%	0.45%
East Lake	0.41%	50%	0.82%	0.23%	28%	1.05%	0.14%	17%	0.49%
East Lake Meadows	0.02%	16%	0.04%	0.05%	42%	0.23%	0.05%	42%	0.18%
Edgewood	0.24%	32%	0.49%	0.21%	28%	0.94%	0.31%	41%	1.11%
Elmco Estates	0.09%	71%	0.17%	0.02%	20%	0.11%	0.01%	9%	0.04%
Englewood Manor	0.01%	27%	0.01%	0.01%	27%	0.02%	0.01%	46%	0.03%
English Avenue	0.10%	23%	0.21%	0.12%	28%	0.55%	0.22%	49%	0.78%
Fairburn Avenue	0.10%	70%	0.20%	0.03%	21%	0.14%	0.01%	9%	0.05%
Fairburn Heights	0.24%	52%	0.48%	0.13%	28%	0.58%	0.09%	20%	0.33%
Fairburn Road/Wisteria La	0.08%	70%	0.16%	0.03%	24%	0.12%	0.01%	7%	0.03%
Fairview Acres	0.11%	68%	0.23%	0.03%	20%	0.15%	0.02%	12%	0.07%
Fernleaf	0.07%	79%	0.14%	0.01%	10%	0.04%	0.01%	11%	0.03%
Florida Heights	0.14%	45%	0.28%	0.09%	29%	0.40%	0.08%	26%	0.29%
Fort McPherson	0.17%	24%	0.34%	0.31%	44%	1.38%	0.21%	30%	0.74%
Fort Valley	0.01%	30%	0.02%	0.01%	28%	0.04%	0.01%	41%	0.04%
Garden Hills	0.37%	57%	0.74%	0.11%	18%	0.52%	0.16%	26%	0.59%
George High	1.56%	63%	3.16%	0.40%	16%	1.80%	0.47%	19%	1.69%
Georgia Tech	0.07%	15%	0.15%	0.11%	22%	0.50%	0.31%	63%	1.10%
Gilbert Gardens	0.01%	28%	0.02%	0.02%	48%	0.08%	0.01%	25%	0.03%
Glenrose Heights	0.50%	43%	1.02%	0.26%	22%	1.16%	0.40%	35%	1.44%
Grady/Antoine Graves	0.00%	6%	0.01%	0.01%	20%	0.06%	0.05%	75%	0.19%
Grant Park	0.48%	32%	0.97%	0.43%	29%	1.92%	0.57%	39%	2.03%
Green Acres Valley	0.04%	56%	0.07%	0.02%	31%	0.09%	0.01%	14%	0.03%
Green Forest Acres	0.08%	55%	0.15%	0.04%	29%	0.18%	0.02%	16%	0.08%
Greenbriar	0.52%	45%	1.05%	0.22%	20%	1.00%	0.40%	35%	1.41%
Greenbriar Village	0.02%	42%	0.05%	0.01%	26%	0.06%	0.01%	21%	0.04%

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Grove Park	0.77%	56%	1.57%	0.35%	26%	1.60%	0.26%	19%	0.92%
Hammond Park	0.18%	43%	0.37%	0.11%	26%	0.50%	0.13%	30%	0.46%
Hanover West	0.10%	67%	0.21%	0.02%	15%	0.10%	0.03%	18%	0.10%
Harland Terrace	0.15%	43%	0.31%	0.06%	17%	0.28%	0.14%	40%	0.51%
Harris Chiles	0.02%	16%	0.04%	0.03%	27%	0.15%	0.07%	57%	0.25%
Harvel Homes Community	0.01%	50%	0.03%	0.01%	29%	0.04%	0.01%	21%	0.02%
Haynes Manor	0.41%	73%	0.84%	0.10%	17%	0.43%	0.06%	10%	0.20%
Heritage Valley	0.17%	62%	0.34%	0.07%	24%	0.30%	0.04%	14%	0.13%
Herndon Homes	0.00%	5%	0.01%	0.01%	15%	0.04%	0.04%	81%	0.15%
High Point	0.02%	28%	0.05%	0.03%	30%	0.12%	0.04%	42%	0.13%
Hills Park	0.09%	46%	0.18%	0.04%	20%	0.17%	0.06%	34%	0.23%
Hollywood Homes	0.00%	15%	0.01%	0.01%	27%	0.03%	0.01%	58%	0.05%
Home Park	0.12%	14%	0.23%	0.13%	15%	0.57%	0.59%	71%	2.10%
Hunter Hills	0.19%	43%	0.38%	0.13%	30%	0.59%	0.11%	26%	0.41%
Inman Park	0.15%	31%	0.31%	0.13%	27%	0.59%	0.21%	43%	0.75%
Ivan Hill	0.05%	68%	0.09%	0.02%	22%	0.07%	0.01%	10%	0.02%
John Hope Homes	0.01%	9%	0.01%	0.02%	25%	0.08%	0.05%	66%	0.17%
Jonesboro North	0.02%	58%	0.05%	0.01%	24%	0.05%	0.01%	18%	0.03%
Jonesboro South	0.00%	16%	0.01%	0.01%	42%	0.05%	0.01%	42%	0.04%
Joyland	0.04%	31%	0.07%	0.04%	37%	0.19%	0.04%	32%	0.13%
Just Us	0.01%	40%	0.02%	0.01%	30%	0.03%	0.01%	31%	0.03%
Kimberley Courts	0.01%	27%	0.03%	0.01%	26%	0.06%	0.02%	47%	0.09%
Kings Forest	0.06%	55%	0.13%	0.03%	30%	0.15%	0.02%	15%	0.06%
Kingswood	0.40%	70%	0.81%	0.10%	18%	0.47%	0.07%	11%	0.23%
Kirkwood	0.62%	48%	1.26%	0.34%	26%	1.54%	0.33%	25%	1.17%
Knight Park	0.07%	20%	0.14%	0.07%	21%	0.32%	0.21%	59%	0.74%
Lake Claire	0.24%	55%	0.49%	0.09%	22%	0.43%	0.09%	20%	0.31%
Lake Coral Estates	0.02%	59%	0.04%	0.01%	25%	0.03%	0.00%	16%	0.02%
Lake Jan Estates	0.01%	45%	0.03%	0.01%	26%	0.04%	0.01%	29%	0.03%
Lakewood	0.24%	58%	0.49%	0.12%	30%	0.56%	0.05%	12%	0.19%
Lakewood Heights	0.42%	40%	0.85%	0.31%	29%	1.39%	0.33%	31%	1.19%
Laurens Valley	0.12%	74%	0.24%	0.03%	19%	0.14%	0.01%	7%	0.04%
Leila Valley	0.15%	35%	0.30%	0.12%	29%	0.55%	0.15%	36%	0.55%
Lenox Superblock	0.02%	14%	0.04%	0.02%	13%	0.08%	0.10%	72%	0.34%
Lincoln Homes	0.10%	44%	0.20%	0.04%	20%	0.19%	0.08%	36%	0.28%
Lindbergh Morosgo	0.06%	17%	0.11%	0.04%	13%	0.20%	0.23%	70%	0.81%

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Lindridge-Martin Manor	0.27%	46%	0.54%	0.09%	15%	0.40%	0.23%	39%	0.82%
Loring Heights	0.08%	40%	0.17%	0.05%	24%	0.23%	0.07%	36%	0.27%
Magnum Manor	0.12%	59%	0.24%	0.05%	26%	0.24%	0.03%	15%	0.11%
Margaret Mitchell	0.48%	67%	0.97%	0.12%	17%	0.53%	0.12%	16%	0.41%
McDaniel Glenn	0.00%	6%	0.01%	0.01%	19%	0.05%	0.04%	75%	0.15%
Meadowbrook Forest	0.05%	61%	0.10%	0.02%	27%	0.10%	0.01%	12%	0.03%
Mechanicsville	0.07%	14%	0.15%	0.13%	25%	0.59%	0.33%	62%	1.18%
Melwood	0.02%	67%	0.05%	0.01%	24%	0.04%	0.00%	9%	0.01%
Memorial Park	0.09%	70%	0.17%	0.02%	15%	0.08%	0.02%	15%	0.06%
Midtown	0.22%	17%	0.45%	0.20%	15%	0.88%	0.91%	69%	3.25%
Monroe Heights	0.02%	55%	0.05%	0.01%	27%	0.05%	0.01%	18%	0.03%
Morningside-Lenox Park	1.06%	54%	2.14%	0.41%	21%	1.83%	0.48%	24%	1.70%
Mount Paran Northside	1.32%	73%	2.67%	0.30%	17%	1.37%	0.19%	11%	0.69%
Mount Paran Parkway	0.11%	75%	0.22%	0.02%	14%	0.10%	0.02%	11%	0.06%
Mozley Park	0.15%	41%	0.30%	0.12%	32%	0.53%	0.10%	27%	0.36%
Mt. Gilead Woods	0.03%	66%	0.06%	0.01%	25%	0.05%	0.00%	9%	0.01%
Niskey Cove	0.04%	58%	0.09%	0.02%	27%	0.09%	0.01%	15%	0.04%
Niskey Lake	0.19%	63%	0.39%	0.05%	16%	0.22%	0.05%	16%	0.17%
North Buckhead	1.29%	56%	2.61%	0.32%	14%	1.45%	0.66%	29%	2.34%
Norwood Manor	0.17%	39%	0.35%	0.13%	30%	0.60%	0.14%	31%	0.50%
Oakcliff	0.07%	77%	0.14%	0.01%	15%	0.06%	0.01%	9%	0.03%
Oakland City	0.34%	40%	0.69%	0.23%	27%	1.04%	0.28%	33%	1.00%
Old Fourth Ward	0.09%	15%	0.19%	0.15%	24%	0.66%	0.36%	60%	1.28%
Orchard Knob	0.24%	62%	0.49%	0.10%	25%	0.44%	0.05%	13%	0.19%
Ormewood Park	0.29%	43%	0.59%	0.19%	28%	0.87%	0.20%	29%	0.70%
Paces	1.87%	73%	3.78%	0.32%	12%	1.45%	0.36%	14%	1.29%
Pamond Park	0.03%	53%	0.07%	0.02%	31%	0.09%	0.01%	16%	0.04%
Peachtree Heights East	0.12%	65%	0.24%	0.02%	14%	0.11%	0.04%	21%	0.13%
Peachtree Heights West	0.47%	70%	0.95%	0.10%	15%	0.45%	0.10%	15%	0.36%
Peachtree Hills	0.27%	59%	0.55%	0.07%	16%	0.33%	0.12%	25%	0.42%
Peachtree Park	0.23%	55%	0.46%	0.05%	12%	0.23%	0.13%	32%	0.47%
Penelope Neighbors	0.06%	40%	0.11%	0.05%	37%	0.23%	0.03%	24%	0.12%
Peoplestown	0.10%	26%	0.21%	0.13%	32%	0.58%	0.17%	42%	0.60%
Perkerson Park	0.25%	45%	0.50%	0.12%	21%	0.52%	0.17%	32%	0.62%
Perry Homes	0.11%	40%	0.23%	0.08%	28%	0.36%	0.09%	31%	0.32%
Peyton Forest	0.13%	62%	0.26%	0.05%	24%	0.22%	0.03%	14%	0.10%

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Piedmont Heights	0.17%	42%	0.34%	0.07%	16%	0.30%	0.17%	41%	0.60%
Pine Hills	0.51%	59%	1.03%	0.13%	15%	0.59%	0.21%	24%	0.75%
Pittsburgh	0.13%	23%	0.27%	0.15%	25%	0.66%	0.30%	51%	1.06%
Pleasant Hill	0.27%	81%	0.55%	0.04%	12%	0.18%	0.03%	7%	0.09%
Polar Rock	0.21%	52%	0.43%	0.12%	29%	0.52%	0.08%	19%	0.27%
Poncey Highlands	0.09%	26%	0.18%	0.09%	27%	0.42%	0.16%	47%	0.58%
Randall Mill	0.16%	63%	0.33%	0.04%	16%	0.18%	0.06%	21%	0.20%
Rebel Valley Forest	0.05%	35%	0.11%	0.03%	22%	0.15%	0.07%	43%	0.23%
Reynoldstown	0.10%	20%	0.20%	0.11%	21%	0.48%	0.29%	58%	1.04%
Ridgecrest Forest	0.09%	66%	0.17%	0.03%	24%	0.14%	0.01%	10%	0.05%
Ridgedale Park	0.08%	48%	0.15%	0.03%	18%	0.13%	0.05%	34%	0.19%
Ridgewood Heights	0.11%	80%	0.22%	0.02%	12%	0.07%	0.01%	9%	0.04%
Riverside	0.36%	60%	0.73%	0.14%	23%	0.61%	0.10%	16%	0.35%
Rockdale	0.20%	52%	0.41%	0.10%	25%	0.43%	0.09%	23%	0.33%
Rosedale Heights	0.15%	58%	0.31%	0.06%	24%	0.29%	0.05%	18%	0.16%
Rue Royal	0.02%	64%	0.04%	0.01%	27%	0.04%	0.00%	9%	0.01%
Sandlewood Estates	0.01%	27%	0.02%	0.01%	22%	0.04%	0.01%	26%	0.04%
Scotts Crossing	0.08%	46%	0.17%	0.03%	17%	0.14%	0.07%	37%	0.24%
Sherwood Forest	0.14%	51%	0.29%	0.05%	19%	0.25%	0.08%	29%	0.29%
South Atlanta	0.07%	34%	0.13%	0.07%	36%	0.31%	0.06%	30%	0.20%
South Tuxedo Park	0.17%	63%	0.35%	0.04%	15%	0.19%	0.06%	22%	0.21%
Southwest	1.10%	64%	2.24%	0.31%	18%	1.40%	0.30%	18%	1.08%
Springlake	0.13%	69%	0.27%	0.03%	15%	0.13%	0.03%	16%	0.11%
St. Charles Greenwood	0.05%	29%	0.11%	0.04%	20%	0.16%	0.09%	51%	0.33%
Summerhill	0.05%	11%	0.10%	0.12%	27%	0.53%	0.27%	62%	0.96%
Swallow Circle/Baywood	0.21%	77%	0.42%	0.05%	17%	0.21%	0.01%	5%	0.05%
Sylvan Hills	0.47%	34%	0.94%	0.39%	28%	1.75%	0.53%	38%	1.88%
Tampa Park	0.01%	62%	0.03%	0.01%	26%	0.03%	0.00%	12%	0.01%
Techwood/Clark Howell Hom	0.01%	5%	0.02%	0.04%	17%	0.18%	0.18%	77%	0.63%
Thomasville Heights	0.20%	37%	0.41%	0.19%	35%	0.87%	0.15%	27%	0.53%
Tuxedo Park	0.74%	75%	1.49%	0.14%	15%	0.65%	0.10%	10%	0.37%
Underwood Hills	0.26%	46%	0.53%	0.08%	15%	0.38%	0.22%	39%	0.78%
U-Rescue Villa	0.00%	15%	0.01%	0.01%	35%	0.04%	0.01%	50%	0.05%
Venetian Hills	0.51%	62%	1.04%	0.21%	25%	0.95%	0.11%	13%	0.38%
Vine City	0.05%	19%	0.10%	0.08%	31%	0.36%	0.13%	50%	0.45%
Virginia-Highland	0.31%	43%	0.63%	0.18%	25%	0.82%	0.23%	32%	0.82%

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Neighborhood	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Neighbor-hood	% UTC	% City Land	% Neighbor-hood	% NTV	% City Land	% Neighbor-hood	% NV
Washington Park	0.07%	33%	0.15%	0.07%	30%	0.30%	0.08%	37%	0.29%
Watts Road	0.27%	52%	0.55%	0.11%	21%	0.50%	0.14%	26%	0.48%
West End	0.25%	26%	0.50%	0.23%	25%	1.05%	0.46%	49%	1.64%
West Lake	0.12%	53%	0.24%	0.06%	27%	0.28%	0.04%	19%	0.16%
West Manor	0.15%	64%	0.30%	0.05%	23%	0.24%	0.03%	13%	0.11%
West Paces Ferry/Northsid	0.38%	67%	0.77%	0.09%	15%	0.39%	0.10%	18%	0.36%
West Peachtree Battle	0.21%	76%	0.42%	0.04%	14%	0.17%	0.03%	10%	0.09%
Westhaven	0.09%	46%	0.18%	0.04%	21%	0.19%	0.06%	32%	0.23%
Westminster Milmar	0.08%	65%	0.16%	0.02%	15%	0.08%	0.02%	19%	0.08%
Westover Plantation	0.05%	68%	0.11%	0.01%	13%	0.05%	0.02%	20%	0.06%
Westview	0.24%	44%	0.48%	0.15%	28%	0.68%	0.15%	27%	0.52%
Westwood Terrace	0.12%	63%	0.24%	0.05%	26%	0.22%	0.02%	11%	0.08%
Whitewater Creek	0.25%	77%	0.51%	0.04%	13%	0.18%	0.03%	9%	0.11%
Whittier Village	0.08%	45%	0.17%	0.05%	29%	0.24%	0.05%	25%	0.16%
Wildwood	0.14%	61%	0.28%	0.05%	23%	0.23%	0.04%	16%	0.13%
Wildwood Forest	0.04%	57%	0.09%	0.02%	27%	0.09%	0.01%	13%	0.04%
WildwoodC	0.18%	64%	0.36%	0.04%	14%	0.17%	0.06%	22%	0.22%
Wilson Mill Meadows	0.21%	65%	0.43%	0.07%	21%	0.31%	0.05%	15%	0.17%
Wisteria Gardens	0.08%	54%	0.16%	0.04%	28%	0.18%	0.03%	18%	0.09%
Woodfield	0.08%	75%	0.15%	0.01%	12%	0.06%	0.01%	12%	0.04%
Woodland Hills	0.06%	47%	0.12%	0.04%	28%	0.17%	0.03%	24%	0.11%
Wyngate	0.13%	79%	0.27%	0.02%	13%	0.10%	0.01%	8%	0.05%

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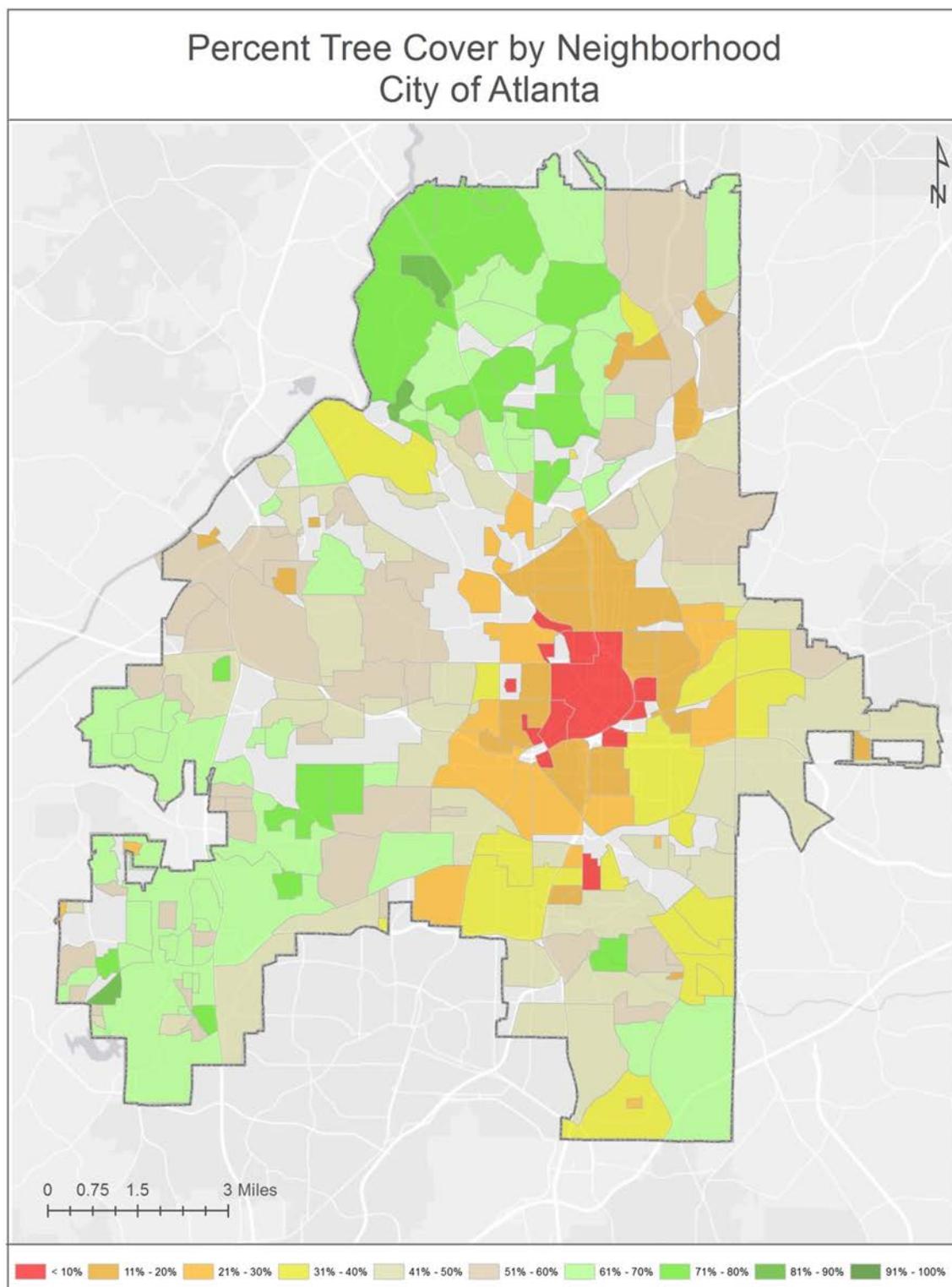
Figure 48: City of Atlanta 2008 Percent Tree Cover by Neighborhood Map

Appendix F: Zoning

Table 26: Land Cover Area and Percent Cover by Zoning Category

Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
C-1	184	1,742	372	21%	313	18%	1,055	61%
C-1-C	129	561	187	33%	102	18%	271	48%
C-2	73	710	141	20%	111	16%	458	65%
C-2-C	54	139	31	23%	25	18%	83	59%
C-3	12	263	27	10%	28	11%	208	79%
C-3-C	24	197	20	10%	25	13%	151	77%
C-4	3	94	15	16%	23	24%	57	60%
C-4-C	4	156	3	2%	11	7%	142	91%
C-5	1	3	0	3%	0	12%	2	85%
C-5-C	2	11	1	8%	2	23%	7	69%
HC-20A SA1	1	14	0	2%	1	6%	13	92%
HC-20A SA2	1	2	0	10%	0	17%	1	73%
HC-20A SA3	1	61	15	24%	20	32%	27	44%
HC-20A SA4	5	3	0	16%	1	19%	2	65%
HC-20A SA4-C	1	1	0	7%	0	19%	1	73%
HC-20A SA5	3	25	1	2%	2	9%	23	89%
HC-20B	2	316	154	49%	96	30%	58	18%
HC-20C SA1	1	6	1	11%	1	26%	4	63%
HC-20C SA2	1	26	5	19%	6	25%	15	57%
HC-20C SA3	3	32	2	7%	8	25%	22	68%
HC-20C SA3-C	1	0	0	42%	0	33%	0	24%
HC-20C SA4	1	19	1	4%	2	10%	17	86%
HC-20C SA5	2	42	1	3%	3	8%	37	89%
HC-20D	1	21	6	30%	10	46%	5	24%
HC-20E	1	50	8	15%	24	48%	19	37%
HC-20N SA1	1	53	2	5%	9	16%	42	79%
HC-20N SA2	3	10	0	2%	1	9%	9	89%
I-1	112	3,910	873	22%	768	20%	2,253	58%
I-1-C	42	740	335	45%	127	17%	278	38%

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Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
I-2	37	5,144	1,288	25%	901	18%	2,893	56%
I-2-C	12	188	36	19%	29	16%	123	65%
LW	7	27	6	22%	4	14%	17	64%
LW-C	2	4	1	23%	1	19%	2	58%
MR-2	8	132	86	65%	27	20%	19	14%
MR-2-C	9	62	22	36%	17	28%	22	36%
MR-3	21	90	36	41%	22	24%	32	35%
MR-3-C	20	106	44	41%	27	26%	35	33%
MR-4A	13	58	9	15%	12	21%	37	64%
MR-4A-C	15	280	89	32%	64	23%	123	44%
MR-4B	7	46	30	66%	9	21%	6	14%
MR-4B-C	2	3	1	23%	1	33%	1	43%
MR-5A	1	3	0	3%	0	5%	3	92%
MR-5A-C	3	14	3	22%	6	40%	5	38%
MRC-1	13	149	37	25%	27	18%	86	57%
MRC-1-C	17	83	19	23%	18	22%	44	54%
MRC-2	7	79	32	41%	19	24%	28	35%
MRC-2-C	13	206	48	23%	32	15%	126	61%
MRC-3	2	11	1	11%	2	20%	8	69%
MRC-3-C	31	524	39	7%	74	14%	411	78%
NC-1	1	29	2	8%	6	20%	21	72%
NC-10 SA1	1	2	0	15%	0	14%	1	72%
NC-10 SA2	1	1	0	30%	0	19%	0	51%
NC-11	1	6	0	8%	1	9%	5	83%
NC-12 SA1	1	8	0	4%	1	6%	7	89%
NC-12 SA2	1	1	0	20%	0	10%	0	69%
NC-13	1	1	0	23%	0	12%	1	64%
NC-2	1	55	7	12%	9	17%	39	71%
NC-3	1	22	6	28%	3	16%	12	57%
NC-4	1	25	5	20%	3	12%	17	68%
NC-5	1	44	8	19%	7	15%	29	66%
NC-6	1	27	4	16%	5	18%	18	67%
NC-7	3	1	0	24%	0	25%	1	51%
NC-7C	1	0	0	18%	0	54%	0	27%

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Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
NC-8	1	8	1	13%	1	17%	6	70%
NC-9	1	7	0	6%	1	16%	5	78%
O-I	45	1,473	447	30%	333	23%	693	47%
O-I-C	30	274	129	47%	41	15%	104	38%
PD-H	141	1,471	797	54%	309	21%	357	24%
PD-H1	3	37	29	77%	5	14%	3	9%
PD-H2	3	10	6	57%	2	18%	2	25%
PD-MU	28	1,094	347	32%	280	26%	433	40%
PD-OC	4	63	19	30%	7	10%	37	60%
PDH	1	28	14	51%	13	47%	1	2%
R-1	2	1,533	1,203	78%	185	12%	133	9%
R-2	3	3,221	2,372	74%	499	15%	337	10%
R-2A	4	865	668	77%	130	15%	67	8%
R-2A-C	1	0	0	68%	0	30%	0	2%
R-2B	2	404	296	73%	59	15%	48	12%
R-3	29	12,582	8,640	69%	2,394	19%	1,505	12%
R-3A	2	327	224	69%	51	16%	52	16%
R-3C	2	12	6	48%	2	18%	4	34%
R-4	69	24,452	13,987	57%	6,426	26%	3,956	16%
R-4-C	4	45	25	55%	7	15%	13	30%
R-4A	46	4,634	2,488	54%	1,286	28%	860	19%
R-4A-C	3	4	2	38%	2	40%	1	22%
R-4B	11	315	97	31%	93	30%	124	39%
R-4B-C	10	130	38	29%	46	36%	45	35%
R-5	61	2,730	1,078	39%	868	32%	783	29%
R-5-C	12	206	70	34%	67	33%	68	33%
R-LC	50	93	36	39%	20	21%	37	40%
R-LC-C	46	91	44	48%	17	18%	31	34%
RG-1	6	111	34	31%	45	40%	32	29%
RG-1-C	4	31	14	46%	8	25%	9	29%
RG-2	118	1,811	685	38%	473	26%	649	36%
RG-2-C	56	533	288	54%	92	17%	152	29%
RG-3	137	3,248	1,221	38%	811	25%	1,215	37%
RG-3-C	96	634	207	33%	163	26%	263	41%
RG-4	21	333	72	22%	77	23%	184	55%
RG-4-C	22	136	32	23%	23	17%	79	58%
RG-5	9	81	18	22%	12	15%	51	63%
RG-5-C	7	26	10	39%	4	16%	12	45%

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Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
SPI-1 SA1	1	796	26	3%	58	7%	713	90%
SPI-1 SA2	1	60	2	4%	5	8%	53	88%
SPI-1 SA3	1	42	2	5%	4	9%	37	86%
SPI-1 SA4	1	76	17	22%	14	19%	45	59%
SPI-1 SA5	1	87	5	6%	19	22%	63	72%
SPI-1 SA6	1	42	1	2%	2	4%	40	94%
SPI-1 SA7	1	33	1	2%	1	4%	31	94%
SPI-11 SA1	1	20	0	2%	4	21%	15	77%
SPI-11 SA10	1	13	5	44%	3	26%	4	30%
SPI-11 SA11	2	4	1	14%	2	44%	2	42%
SPI-11 SA12	2	41	2	6%	7	18%	31	76%
SPI-11 SA2	1	19	2	9%	3	17%	14	74%
SPI-11 SA3	3	55	8	15%	13	23%	34	62%
SPI-11 SA4	1	17	5	28%	4	24%	8	48%
SPI-11 SA5	1	33	10	32%	8	26%	14	43%
SPI-11 SA6	1	129	44	34%	35	27%	50	39%
SPI-11 SA7	1	130	30	23%	44	34%	56	43%
SPI-11 SA8	11	75	13	18%	23	30%	39	52%
SPI-11 SA9	5	17	4	22%	4	24%	9	54%
SPI-12 SA1	1	350	26	7%	25	7%	299	85%
SPI-12 SA2	1	53	13	24%	9	16%	32	60%
SPI-12 SA3	1	13	2	13%	3	22%	8	65%
SPI-15 SA1	1	28	3	11%	2	6%	23	83%
SPI-15 SA2	2	24	2	9%	3	12%	19	79%
SPI-15 SA3	1	92	7	7%	7	8%	78	85%
SPI-15 SA4	1	16	5	33%	2	13%	9	54%
SPI-15 SA5	1	9	4	47%	2	17%	3	36%
SPI-15 SA6	1	26	11	42%	5	19%	10	39%

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Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
SPI-15 SA7	1	18	3	14%	3	17%	12	68%
SPI-15 SA8	1	70	9	13%	15	22%	46	65%
SPI-16 SA1	4	559	42	7%	59	11%	458	82%
SPI-16 SA1C	1	0	0	15%	0	30%	0	55%
SPI-16 SA2	1	18	4	20%	4	20%	11	60%
SPI-16 SA2 JSTA	1	15	2	15%	2	10%	11	75%
SPI-16 SA3	1	22	2	8%	3	12%	17	80%
SPI-17 SA1	1	4	1	16%	1	23%	3	61%
SPI-17 SA2	1	15	1	8%	2	12%	12	80%
SPI-17 SA3	1	5	0	9%	1	10%	4	81%
SPI-17 SA4	2	31	8	26%	6	21%	16	53%
SPI-18 SA1	5	58	6	10%	14	25%	37	65%
SPI-18 SA10	1	74	8	10%	18	24%	49	66%
SPI-18 SA2	1	46	3	7%	9	19%	34	74%
SPI-18 SA3	3	22	2	7%	4	18%	17	75%
SPI-18 SA4	5	48	7	15%	14	30%	27	56%
SPI-18 SA5	2	65	16	25%	19	29%	30	46%
SPI-18 SA6	3	38	10	27%	12	31%	16	43%
SPI-18 SA7	3	23	3	14%	8	33%	12	53%
SPI-18 SA8	2	57	3	6%	4	7%	50	87%
SPI-18 SA9	1	16	1	9%	4	23%	11	68%
SPI-20 SA1	1	141	30	21%	21	15%	91	64%
SPI-20 SA2	6	106	25	24%	19	18%	62	58%
SPI-20 SA3	2	32	5	16%	6	20%	21	65%
SPI-20 SA4	2	66	27	41%	12	18%	27	41%
SPI-20 SA5	4	153	85	56%	26	17%	41	27%
SPI-20 SA6	1	15	11	75%	3	20%	1	5%

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Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
SPI-21 SA1	1	14	0	1%	0	2%	14	97%
SPI-21 SA10	1	41	1	2%	3	6%	37	91%
SPI-21 SA2	4	52	2	5%	6	11%	44	85%
SPI-21 SA3	3	18	1	5%	2	10%	15	85%
SPI-21 SA4	4	20	2	8%	2	11%	16	81%
SPI-21 SA5	4	33	3	9%	6	19%	24	72%
SPI-21 SA6	2	8	2	21%	3	36%	3	44%
SPI-21 SA7	1	9	3	38%	4	44%	2	18%
SPI-21 SA8	3	59	10	17%	15	25%	35	58%
SPI-21 SA9	2	40	2	4%	4	11%	34	85%
SPI-22 SA1	1	14	0	3%	1	10%	12	87%
SPI-22 SA2	1	22	1	3%	7	33%	14	63%
SPI-22 SA3	1	53	2	3%	11	20%	41	77%
SPI-22 SA4	1	63	5	8%	10	17%	47	75%
SPI-22 TSA	1	18	1	8%	3	15%	14	77%
SPI-5 SA1	1	23	8	34%	12	51%	4	15%
SPI-5 SA2	1	1	0	27%	0	40%	0	34%
SPI-5 SA3	5	6	2	39%	2	32%	2	29%
SPI-6 SA1	1	4	1	40%	2	51%	0	9%
SPI-6 SA2	2	17	6	35%	8	50%	2	14%
SPI-6 SA3	1	8	2	24%	4	46%	2	30%
SPI-6 SA4	1	4	1	14%	2	55%	1	30%
SPI-7 SA1	1	31	6	20%	19	63%	5	17%
SPI-7 SA2A	1	5	2	46%	1	19%	2	35%
SPI-7 SA2B	1	1	0	10%	0	28%	1	62%
SPI-7 SA2C	1	7	3	38%	2	33%	2	29%
SPI-7 SA3	1	2	0	6%	1	22%	2	72%
SPI-9 SA1	1	130	8	6%	11	8%	112	86%

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Zone	# of Zones	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
SPI-9 SA2	3	82	9	11%	6	7%	67	82%
SPI-9 SA3	3	85	18	22%	12	15%	54	64%
SPI-9 SA4	1	46	3	7%	3	6%	40	87%

Table 27: Detailed Zoning Descriptions

Zone	Group	Description
C-1	Commercial	Community business
C-1-C	Commercial	Community business
C-2	Commercial	Commercial service
C-2-C	Commercial	Commercial service
C-3	Commercial	Commercial residtl
C-3-C	Commercial	Commercial residtl
C-4	Commercial	Ctrl area comm resid
C-4-C	Commercial	Ctrl area comm resid
C-5	Commercial	Ctrl bus dist support
C-5-C	Commercial	Ctrl bus dist support
HC-20A SA1	Historic District	Historic
HC-20A SA2	Historic District	Historic
HC-20A SA3	Historic District	Historic
HC-20A SA4	Historic District	Historic
HC-20A SA4-C	Historic District	Historic
HC-20A SA5	Historic District	Historic
HC-20B	Historic District	Historic
HC-20C SA1	Historic District	Historic
HC-20C SA2	Historic District	Historic
HC-20C SA3	Historic District	Historic
HC-20C SA3-C	Historic District	Historic
HC-20C SA4	Historic District	Historic
HC-20C SA5	Historic District	Historic
HC-20D	Historic District	Historic
HC-20E	Historic District	Historic
HC-20N SA1	Historic District	Historic
HC-20N SA2	Historic District	Historic
I-1	Industrial	Light industrial
I-1-C	Industrial	Light industrial

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Zone	Group	Description
I-2	Industrial	Heavy industrial
I-2-C	Industrial	Heavy industrial
LW	Live-Work	Live-work
LW-C	Live-Work	Live-work
MR-2	Multi-Family Residential	Multi-family res.
MR-2-C	Multi-Family Residential	Multi-family res.
MR-3	Multi-Family Residential	Multi-family res.
MR-3-C	Multi-Family Residential	Multi-family res.
MR-4A	Multi-Family Residential	Multi-family res.
MR-4A-C	Multi-Family Residential	Multi-family res.
MR-4B	Multi-Family Residential	Multi-family res.
MR-4B-C	Multi-Family Residential	Multi-family res.
MR-5A	Multi-Family Residential	Multi-family res.
MR-5A-C	Multi-Family Residental	Multi-family res.
MRC-1	Mixed Residential and Commercial	Mixed Residential and Commercial
MRC-1-C	Mixed Residential and Commercial	Mixed Residential and Commercial
MRC-2	Mixed Residential and Commercial	Mixed Residential and Commercial
MRC-2-C	Mixed Residential and Commercial	Mixed Residential and Commercial
MRC-3	Mixed Residential and Commercial	Mixed Residential and Commercial
MRC-3-C	Mixed Residential and Commercial	Mixed Residential and Commercial
NC-1	Neighborhood Commercial	Neighborhood commercial
NC-10 SA1	Neighborhood Commercial	Neighborhood commercial
NC-10 SA2	Neighborhood Commercial	Neighborhood commercial
NC-11	Neighborhood Commercial	Neighborhood commercial
NC-12 SA1	Neighborhood Commercial	Neighborhood commercial
NC-12 SA2	Neighborhood Commercial	Neighborhood commercial
NC-13	Neighborhood Commercial	Neighborhood commercial
NC-2	Neighborhood Commercial	Neighborhood commercial
NC-3	Neighborhood Commercial	Neighborhood commercial
NC-4	Neighborhood Commercial	Neighborhood commercial
NC-5	Neighborhood Commercial	Neighborhood commercial
NC-6	Neighborhood Commercial	Neighborhood commercial
NC-7	Neighborhood Commercial	Neighborhood commercial
NC-7C	Neighborhood Commercial	Neighborhood commercial
NC-8	Neighborhood Commercial	Neighborhood commercial
NC-9	Neighborhood Commercial	Neighborhood commercial
O-I	Office / Institutional	Office institutional
O-I-C	Office / Institutional	Office institutional
PD-H	Planned Housing	Planned hsg dev

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Zone	Group	Description
PD-H1	Planned Housing	Planned hsg dev
PD-H2	Planned Housing	Planned hsg dev
PD-MU	Planned Mixed Use	Mixed use plnd dev
PD-OC	Planned Office / Commercial	Offc-comm plnd dev
PDH	Planned Housing	Planned hsg dev
R-1	Residential	Sngl fam 2 acres
R-2	Residential	Sngl fam 1 acre
R-2A	Residential	Sngl fam .69 acre
R-2A-C	Residential	Sngl fam .69 acre
R-2B	Residential	Sngl fam .64 acre
R-3	Residential	Sngl fam .41 acre
R-3A	Residential	Sngl fam .41 acre
R-3C	Residential	Sngl fam
R-4	Residential	Sngl fam .21 acre
R-4-C	Residential	Sngl fam .21 acre
R-4A	Residential	Sngl fam .21 acre
R-4A-C	Residential	Sngl fam .21 acre
R-4B	Residential	Sngl fam .21 acre
R-4B-C	Residential	Sngl fam .21 acre
R-5	Residential	Two fam .17 acre
R-5-C	Residential	Two fam .17 acre
R-LC	General Multi-Family Residential	MF Res with limited commercial
R-LC-C	General Multi-Family Residential	MF Res with limited commercial
RG-1	General Multi-Family Residential	General MF res
RG-1-C	General Multi-Family Residential	General MF res
RG-2	General Multi-Family Residential	General MF res
RG-2-C	General Multi-Family Residential	General MF res
RG-3	General Multi-Family Residential	General MF res
RG-3-C	General Multi-Family Residential	General MF res
RG-4	General Multi-Family Residential	General MF res
RG-4-C	General Multi-Family Residential	General MF res
RG-5	General Multi-Family Residential	General MF res
RG-5-C	General Multi-Family Residential	General MF res
SPI-1 SA1	Special Public Interest	Spcl Pbl Int - Core
SPI-1 SA2	Special Public Interest	Spcl Pbl Int - Core
SPI-1 SA3	Special Public Interest	Spcl Pbl Int - Core
SPI-1 SA4	Special Public Interest	Spcl Pbl Int - Core
SPI-1 SA5	Special Public Interest	Spcl Pbl Int - Core
SPI-1 SA6	Special Public Interest	Spcl Pbl Int - Core

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Zone	Group	Description
SPI-1 SA7	Special Public Interest	Spcl Pbl Int - Core
SPI-11 SA1	Special Public Interest	SPI - Vine Ashby
SPI-11 SA10	Special Public Interest	SPI - Vine Ashby
SPI-11 SA11	Special Public Interest	SPI - Vine Ashby
SPI-11 SA12	Special Public Interest	SPI - Vine Ashby
SPI-11 SA2	Special Public Interest	SPI - Vine Ashby
SPI-11 SA3	Special Public Interest	SPI - Vine Ashby
SPI-11 SA4	Special Public Interest	SPI - Vine Ashby
SPI-11 SA5	Special Public Interest	SPI - Vine Ashby
SPI-11 SA6	Special Public Interest	SPI - Vine Ashby
SPI-11 SA7	Special Public Interest	SPI - Vine Ashby
SPI-11 SA8	Special Public Interest	SPI - Vine Ashby
SPI-11 SA9	Special Public Interest	SPI - Vine Ashby
SPI-12 SA1	Special Public Interest	SPI - Buckhd/Lenox
SPI-12 SA2	Special Public Interest	SPI - Buckhd/Lenox
SPI-12 SA3	Special Public Interest	SPI - Buckhd/Lenox
SPI-15 SA1	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA2	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA3	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA4	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA5	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA6	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA7	Special Public Interest	SPI - Lindbergh Trnst
SPI-15 SA8	Special Public Interest	SPI - Lindbergh Trnst
SPI-16 SA1	Special Public Interest	SPI - Midtown
SPI-16 SA1C	Special Public Interest	SPI - Midtown
SPI-16 SA2	Special Public Interest	SPI - Midtown
SPI-16 SA2 JSTA	Special Public Interest	SPI - Midtown
SPI-16 SA3	Special Public Interest	SPI - Midtown
SPI-17 SA1	Special Public Interest	SPI - Piedmont
SPI-17 SA2	Special Public Interest	SPI - Piedmont
SPI-17 SA3	Special Public Interest	SPI - Piedmont
SPI-17 SA4	Special Public Interest	SPI - Piedmont
SPI-18 SA1	Special Public Interest	SPI - Mechanicsville
SPI-18 SA10	Special Public Interest	SPI - Mechanicsville
SPI-18 SA2	Special Public Interest	SPI - Mechanicsville
SPI-18 SA3	Special Public Interest	SPI - Mechanicsville
SPI-18 SA4	Special Public Interest	SPI - Mechanicsville

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Zone	Group	Description
SPI-18 SA5	Special Public Interest	SPI - Mechanicsville
SPI-18 SA6	Special Public Interest	SPI - Mechanicsville
SPI-18 SA7	Special Public Interest	SPI - Mechanicsville
SPI-18 SA8	Special Public Interest	SPI - Mechanicsville
SPI-18 SA9	Special Public Interest	SPI - Mechanicsville
SPI-20 SA1	Special Public Interest	SPI - Greenbriar
SPI-20 SA2	Special Public Interest	SPI - Greenbriar
SPI-20 SA3	Special Public Interest	SPI - Greenbriar
SPI-20 SA4	Special Public Interest	SPI - Greenbriar
SPI-20 SA5	Special Public Interest	SPI - Greenbriar
SPI-20 SA6	Special Public Interest	SPI - Greenbriar
SPI-21 SA1	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA10	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA2	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA3	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA4	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA5	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA6	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA7	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA8	Special Public Interest	SPI - Ht W.EndAdai
SPI-21 SA9	Special Public Interest	SPI - Ht W.EndAdai
SPI-22 SA1	Special Public Interest	SPI - Mem.Dr./Oklnd
SPI-22 SA2	Special Public Interest	SPI - Mem.Dr./Oklnd
SPI-22 SA3	Special Public Interest	SPI - Mem.Dr./Oklnd
SPI-22 SA4	Special Public Interest	SPI - Mem.Dr./Oklnd
SPI-22 TSA	Special Public Interest	SPI - Mem.Dr./Oklnd
SPI-5 SA1	Special Public Interest	SPI - Inman Park
SPI-5 SA2	Special Public Interest	SPI - Inman Park
SPI-5 SA3	Special Public Interest	SPI - Inman Park
SPI-6 SA1	Special Public Interest	SPI - Poncey High
SPI-6 SA2	Special Public Interest	SPI - Poncey High
SPI-6 SA3	Special Public Interest	SPI - Poncey High
SPI-6 SA4	Special Public Interest	SPI - Poncey High
SPI-7 SA1	Special Public Interest	SPI - Candler Park
SPI-7 SA2A	Special Public Interest	SPI - Candler Park
SPI-7 SA2B	Special Public Interest	SPI - Candler Park
SPI-7 SA2C	Special Public Interest	SPI - Candler Park
SPI-7 SA3	Special Public Interest	SPI - Candler Park
SPI-9 SA1	Special Public Interest	SPI - Buckhd Cmrcial

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Table 28: Land Cover Area and Percent Cover by Aggregated Zoning Category

Zoning Group	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Commercial	3,876	798	21%	641	17%	2,434	63%
General Multi-Family Residential	7,127	2,660	37%	1,745	24%	2,713	38%
Historic District	681	196	29%	184	27%	292	43%
Industrial	9,983	2,531	25%	1,826	18%	5,547	56%
Live-Work	31	7	22%	5	14%	20	63%
Mixed Residential and Commercial	1,052	177	17%	171	16%	703	67%
Multi-Family Residential	795	321	40%	186	23%	285	36%
Neighborhood Commercial	237	36	15%	38	16%	164	69%
Office / Institutional	1,746	576	33%	373	21%	797	46%
Planned Housing	1,546	846	55%	329	21%	363	23%
Planned Mixed Use	1,094	347	32%	280	26%	433	40%
Planned Office / Commercial	63	19	30%	7	10%	37	60%
SF Residential	51,458	31,194	61%	12,116	24%	7,998	16%
Special Public Interest	4,933	670	14%	761	15%	3,502	71%

Table 29: Land Cover Area and Percent Cover by Special Public Interest Zone

Zoning Description	SPI Category	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
SPI - Buckhd Cmrcial	Commercial	343	39	11%	31	9%	273	80%
SPI - Buckhd/Lenox	Commercial	416	40	10%	37	9%	339	81%
SPI - Greenbriar	Commercial	513	183	36%	87	17%	242	47%
SPI - Lindbergh Trnst	Commercial	284	44	16%	39	14%	201	71%
SPI - Mem.Dr./Oklnd	Commercial	171	9	6%	33	19%	129	75%
SPI - Midtown	Commercial	613	49	8%	67	11%	497	81%
SPI - Piedmont	Commercial	55	10	19%	10	17%	35	64%
SPI - Candler Park	Residential	47	12	25%	23	50%	12	25%
SPI - Ht W.EndAdai	Residential	294	25	9%	45	15%	224	76%
SPI - Inman Park	Residential	30	10	35%	14	46%	6	19%
SPI - Mechanicsville	Residential	447	59	13%	105	24%	283	63%
SPI - Poncey High	Residential	32	10	30%	16	50%	6	20%

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| SPI - Vine Ashby | Residential | 552 | 125 | 23% | 151 | 27% | 276 | 50% |

Table 30: Land Cover Summary Statistics by Aggregated Zoning Group

Zoning Group	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Zoning	% UTC	% City Land	% Zoning	% NTV	% City Land	% Zoning	% NV
Commercial	0.94%	20.59%	1.98%	0.76%	16.54%	3.43%	2.88%	62.81%	9.63%
General Multi-Family Residential	3.14%	37.33%	6.59%	2.06%	24.48%	9.35%	3.21%	38.06%	10.73%
Historic District	0.23%	28.83%	0.49%	0.22%	27.05%	0.99%	0.34%	42.83%	1.15%
Industrial	2.99%	25.35%	6.27%	2.16%	18.29%	9.78%	6.55%	55.56%	21.94%
Live-Work	0.01%	22.42%	0.02%	0.01%	14.40%	0.02%	0.02%	63.18%	0.08%
Mixed Residential and Commercial	0.21%	16.82%	0.44%	0.20%	16.24%	0.92%	0.83%	66.81%	2.78%
Multi-Family Residential	0.38%	40.35%	0.79%	0.22%	23.36%	0.99%	0.34%	35.84%	1.13%
Neighborhood Commercial	0.04%	15.14%	0.09%	0.04%	15.84%	0.20%	0.19%	69.03%	0.65%
Office / Institutional	0.68%	32.98%	1.43%	0.44%	21.39%	2.00%	0.94%	45.62%	3.15%
Planned Housing	1.00%	54.72%	2.09%	0.39%	21.31%	1.76%	0.43%	23.49%	1.44%
Planned Mixed Use	0.41%	31.75%	0.86%	0.33%	25.65%	1.50%	0.51%	39.56%	1.71%
Planned Office / Commercial	0.02%	30.03%	0.05%	0.01%	10.47%	0.04%	0.04%	59.51%	0.15%
Residential	36.86%	60.62%	77.25%	14.32%	23.55%	64.93%	9.45%	15.54%	31.63%
Special Public Interest	0.79%	13.59%	1.66%	0.90%	15.43%	4.08%	4.14%	70.98%	13.85%

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Appendix G: Parks

Table 31: Land Cover Area and Percent Cover by Park

Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
17th Street Park	2.3	2	88%	0.2	8%	0.1	3%
25th Street Beauty Spot	0.1	0	37%	0	29%	0	35%
A.D. Williams Park	10.5	6	57%	2.6	25%	1.9	18%
Abner Place Park	0.4	0.2	49%	0.1	37%	0.1	14%
Adair Park I	6.3	1.8	28%	3	48%	1.5	24%
Adair Park II	10.6	1.1	10%	7.9	75%	1.6	15%
Adams Park	159.7	61.6	39%	84.3	53%	13.8	9%
Adamsville Park (Old)	1.4	0.5	37%	0.3	22%	0.6	41%
Adamsville Recreation Center	10.9	1.2	11%	2.9	26%	6.8	62%
Adamsville Triangle	0	-	0%	0	30%	0	69%
Alexander Park	10.9	10.5	96%	0.4	4%	0	0%
Anderson Park	55.7	37.2	67%	13.8	25%	4.7	8%
Ansley Park	6.1	4.6	75%	1	16%	0.5	9%
Arbor Park	0.4	0.2	59%	0.1	40%	0	1%
Ardmore Park	1.7	1.4	83%	0.2	15%	0	3%
Arlington Circle Beauty Spot	0.9	0.8	93%	0.1	7%	0	0%
Arlington Circle Playlot	0.5	0.5	94%	0	5%	-	0%
Arthur Langford Jr Park	9.9	3.6	36%	4.3	44%	2	20%
Ashby Circle Playlot	0.9	0.5	55%	0.3	37%	0.1	9%
Ashview Triangle	0.1	0.1	47%	0	24%	0	29%
Atlanta Memorial Park	190.9	91.7	48%	84.6	44%	14.6	8%
Atwood Street Park	0	0	38%	0	52%	0	11%
Avery Park-Gilbert House	10.5	9.6	91%	0.9	8%	0	0%
Avery-E. Park Lane Triangle	0	0	100%	-	0%	-	0%
Barbara A. McCoy Park	8.7	6.8	79%	1.7	19%	0.2	2%
Barclay Median	0.3	0.2	66%	0.1	31%	0	3%
Bass Recreation Center	1.1	0.1	12%	0.4	41%	0.5	46%
Beaverbrook Park	7	6.4	91%	0.6	8%	0	1%
Beech Valley Triangle	0.4	0.3	89%	0	10%	0	1%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Beecher Park	5.2	4.8	93%	0.4	7%	-	0%
Beecher Triangle	0	-	0%	0	26%	0	74%
Ben Hill Park	22.9	9.9	43%	6.9	30%	6.1	26%
Benoit	1	0.3	33%	0.6	63%	0	5%
Benteen Park	10	3.6	36%	5.4	54%	1	10%
Benton Place Garden	0	0	81%	0	18%	-	0%
Bessie Branham Park	6.7	1.5	22%	3.4	51%	1.8	27%
Beverly-Avery Circle	0	0	101%	-	0%	-	0%
Beverly-Avery Triangle	0	0	50%	0	22%	0	28%
Beverly-Montgomery Ferry Triangle	0	0	2%	0	80%	0	18%
Beverly-Polo Triangle	0	0	97%	0	2%	-	0%
Billings Circle	0	-	0%	0	75%	0	25%
Birchwood-Arlene Triangle	0	0	38%	0	58%	0	4%
Blue Heron Nature Preserve	10.7	8.3	77%	1.1	10%	1.3	12%
Bonnie Brae Park	0.2	0	14%	0.1	66%	0	20%
Boone and West Lake	1.3	0.7	56%	0.3	27%	0.2	17%
Boulevard Crossing	21.7	3.7	17%	8.5	39%	9.5	44%
Boulevard-Angier Park	0.2	0.2	89%	0	11%	-	0%
Broadland and West Conway Park	0.1	0	55%	0	33%	0	12%
Brookline Park	0.1	0	25%	0	73%	0	1%
Browns Mill Golf Course	165.3	34.9	21%	119.4	72%	11.1	7%
Browns Mill/McWilliams Park	0	-	0%	0	60%	0	42%
Brownwood Park	12.7	8.1	64%	3.9	31%	0.7	5%
Cabbagetown Park	3.7	0.4	11%	2.3	64%	0.9	25%
Campbellton Road Park	10.2	8.5	84%	0.8	8%	0.8	8%
Candler Park	51.2	16.1	31%	32.2	63%	3	6%
Carver Circle	0	-	0%	0	26%	0	74%
Cascade Springs Nature Preserve	120.9	113	94%	6.5	5%	1.3	1%
Castlewood Triangle	0.4	0.3	78%	0.1	20%	0	2%
Cativo and Dogwood Beauty Spot	0	0	0%	0	80%	0	20%
Cativo Circle	0	0	32%	0	29%	0	39%
Center Hill Park	43.6	26.1	60%	13.2	30%	4.4	10%

Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Central Park	17.4	4.1	23%	10.7	61%	2.6	15%
Channing Valley Park	0.6	0.5	87%	0.1	13%	-	0%
Charles Allen Median	0.3	0.2	56%	0.1	16%	0.1	28%
Charles L. Harper Memorial Park	1.1	0.4	41%	0.3	27%	0.4	33%
Charles Loudermilk Park	0.5	0.1	22%	0.2	47%	0.2	30%
Chastain Memorial Park	249.7	106.4	43%	122.2	49%	21	8%
Chatham and Avon Park	0	-	0%	0	66%	0	35%
Chattahoochee Park	3.2	1.4	44%	1.4	44%	0.4	12%
Chattahoochee Trail	51.8	33.3	64%	13.6	26%	4.5	9%
Chosewood Park	16.3	10.8	66%	5	31%	0.5	3%
Cleopas R. Johnson Park	4.3	0.9	20%	2.5	59%	0.9	21%
Cleveland Avenue Park	5.3	2.5	47%	1.8	34%	1	19%
Club Drive Park	0.1	0.1	67%	0	33%	-	0%
Coan Park	13.3	3.3	25%	7.6	58%	2.3	17%
Collier Park	16.2	11.2	69%	4.2	26%	0.8	5%
Collum Circle Beauty Spot	0	0	3%	0	31%	0	66%
Coventry Station CE	16.1	14.8	92%	1.2	8%	0.1	1%
Cumberlander	8.5	8.1	95%	0.4	4%	0	0%
D.H. Stanton Park	8.6	1.2	14%	5	58%	2.4	28%
Dale Creek Park	3	2.8	93%	0.2	6%	0	0%
Daniel Johnson Nature Preserve	8.1	6.8	84%	1.2	15%	0	1%
Darlington Circle Park	0.1	0.1	89%	0	7%	0	3%
Davidson and Lakehaven Park	0	0	35%	0	54%	0	11%
Dean Rusk Park	6	0.5	8%	3.1	52%	2.4	39%
Deerwood Park	17.2	11.1	65%	5.4	31%	0.7	4%
Dellwood Park	1.4	0.5	36%	0.5	40%	0.3	24%
Delta Park	0.2	0.1	58%	0.1	39%	0	3%
Dill Avenue Park	0.1	0.1	71%	0	21%	0	7%
Dollar Mill Median	0.2	0.1	50%	0.1	35%	0	15%
Drake Park	4.9	4.8	97%	0.1	3%	0	0%
E. Club and Lakehaven Park	0	-	0%	0	31%	0	69%
E. Pine Valley and W. Pine Valley Park	0	0	97%	-	0%	-	0%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
E. Rock Springs Triangle	0.1	0	40%	0	35%	0	26%
East Andrews and Roswell Park	0	-	0%	0	24%	0	75%
East Brookhaven and Lakehaven Park	0	0	38%	0	35%	0	27%
East Lake Park	10.4	3.3	32%	6.4	61%	0.8	7%
Eastwood/Emerson Triangle	0	0	95%	0	5%	-	0%
Edgewater Circle	0	0	100%	0	2%	-	0%
Edwin Place Park	4.3	3.9	92%	0.3	8%	0	0%
Elinor Place Park	0.6	0.4	67%	0.2	33%	-	0%
Ellsworth Park	1.3	1	81%	0.1	11%	0.1	7%
Emma Lane	6.3	4.8	77%	0.9	14%	0.6	9%
Emma Millican Park	10.7	8	75%	2.5	24%	0.2	2%
Empire Park	10.1	5	50%	4.3	43%	0.7	7%
English Park	9.5	4.1	43%	3.6	38%	1.8	19%
Enota Place Park	3	1.9	64%	1	34%	0.1	2%
Esther Peachey Lefever	0.7	0.3	44%	0.3	47%	0.1	8%
Eubanks (The Prado) Park	1.4	1.1	81%	0.2	18%	0	2%
Falling Water	25.8	20.5	79%	3.6	14%	1.8	7%
Findley Plaza	0.1	-	0%	0	1%	0.1	99%
Fire Station #5 Park	0.1	0	49%	0	35%	0	16%
Folk Art (Courtland) Park	0.5	-	0%	-	0%	0.5	100%
Folk Art (Piedmont) Park	0.3	-	0%	-	0%	0.3	100%
Fountain Drive #1	0	-	0%	-	0%	0	104%
Fountain Drive #2	0	-	0%	0	24%	0	75%
Fountainebleau Beauty Spot	0	0	72%	0	29%	-	0%
Four Corners Park	4.8	1.5	31%	2.8	58%	0.5	11%
Frankie Allen Park	23.1	11.7	51%	8.5	37%	2.9	12%
Freedom Park	125.2	37.3	30%	66.9	53%	20.7	17%
Fulton-Pryor Island	0.1	0	19%	0.1	54%	0	27%
Garden Hills Park	3.4	2.4	70%	0.6	17%	0.4	13%
Georgia Hill Center	3.1	1	32%	0.9	30%	1.2	38%
Gertrude Place	1.1	0.6	54%	0.5	43%	0	3%
Gilliam Park	2.7	1.8	68%	0.8	28%	0.1	4%
Glenwood Triangle	0.1	-	0%	0	58%	0	42%
Goldsboro Park	2.5	0.9	34%	1	39%	0.7	27%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Gordon-White Park	1.9	0	1%	0.6	32%	1.2	67%
Grant Park	130.5	56.7	43%	48.5	37%	25.4	19%
Green Leaf Circle	1	0.3	26%	0.7	68%	0.1	6%
Greenbriar	6.9	6	88%	0.8	12%	0	0%
Greenwood-Charles Allen Triangle	0	0	92%	0	7%	0	1%
Grove Park	17.3	6.3	36%	8.6	49%	2.5	14%
Gun Club Park	41.7	39.1	94%	2.4	6%	0.2	0%
Hardy Ivy Park	0.6	0.1	27%	0.2	32%	0.2	41%
Harold Avenue Place	0.5	0.4	82%	0.1	18%	-	0%
Harper Park	13.6	7.4	54%	4.9	36%	1.3	10%
Harwell Heights Park	24.4	18.7	77%	4.3	17%	1.4	6%
Havilon Triangle	0.3	0.3	93%	0	7%	-	0%
Haynes Manor Park	3	2.6	86%	0.4	13%	0	1%
Helen Drive Park	0	0	57%	0	17%	0	26%
Herbert Greene	61.2	57	93%	4.1	7%	0.1	0%
Herbert Taylor Park	26.2	21.7	83%	3.6	14%	0.8	3%
Heritage (Founder's) Park	0.7	0	7%	0.4	65%	0.2	28%
Hickory Grove Park	0.4	0.4	99%	0	1%	-	0%
Hillside at Northside Drive Park	0.4	0.2	50%	0.2	49%	0	1%
Historic Fourth Ward Park	18.5	1.1	6%	4.8	26%	12.6	68%
Holderness/Lucile Park	0.2	0	9%	0.1	80%	0	11%
Home Park	1.7	0.5	31%	0.5	30%	0.7	39%
Homestead Park	0.2	0.1	85%	0	13%	0	1%
Howard Park	5.1	0	0%	0	0%	-	0%
Howell Mill at Beaverbrook Park	0	0	62%	0	35%	0	3%
Howell Mill at Glenbrook Park	0	0	94%	0	4%	0	1%
Howell Park	2.1	0.8	37%	1	47%	0.3	16%
Hurt Park	1.9	0.6	34%	0.7	40%	0.5	26%
Inman Circle at 17th St Park	0	-	0%	0	35%	0	66%
Inman Park	0.3	0.2	71%	0.1	25%	0	4%
Inman Park Trolley Barn	0.7	0.3	44%	0.1	16%	0.3	41%
Isabel Gates Webster Park	14	10.4	74%	2.8	20%	0.8	6%
Iverson Park	2	0.8	39%	1.1	53%	0.2	8%
J. Allen Couch Park	6.4	1.5	23%	3.5	55%	1.4	21%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
J.D. Sims Recreation Center	0.8	0.2	20%	0.2	27%	0.4	53%
J.F. Kennedy Park	2.4	0.1	4%	1.9	77%	0.5	19%
Jacci Fuller Woodland Garden Park	0.6	0.6	86%	0.1	14%	0	0%
John A. White Park	111.9	50	45%	51.5	46%	10.4	9%
John C. Burdine Center	4.3	1.1	27%	1.5	35%	1.6	39%
John Calhoun Park	0.3	0.1	42%	0.1	46%	0	12%
John Howell Memorial Park	3.1	2	64%	0.7	23%	0.4	13%
John Wesley Dobbs Park	1.4	0.2	12%	0.5	36%	0.7	52%
Jonesboro Triangle	0.2	0.1	42%	0.1	51%	0	7%
Kimpson Park	0.4	0.1	26%	0.3	70%	0	4%
Kirkwood Greenway	6.3	5.1	81%	1.2	19%	0	0%
Knight Park	2.7	1.5	57%	0.8	31%	0.3	13%
Lafayette-15th Street Triangle	0	-	0%	0	53%	0	47%
Lake Claire Park	4.9	2.9	60%	1.6	32%	0.4	9%
Lakewood/HiFi	120.1	22.2	19%	36	30%	61.9	52%
Lang-Carson Park	3.4	0.4	11%	1.3	40%	1.7	49%
Lanier Boulevard Parkway	2.1	1	48%	0.8	36%	0.3	16%
Larchmont Circle	0	0	12%	0	70%	0	19%
Leathers Circle	0.1	0	0%	0	44%	0	56%
Lenox and Johnson Road Park	0	0	29%	0	26%	0	44%
Lenox Beauty Spot	0.1	-	0%	0	24%	0.1	75%
Lenox-Wildwood Park	8.5	7.4	87%	0.7	9%	0.4	4%
Lillian Cooper Shepherd Park	2.3	0.9	39%	0.9	39%	0.5	23%
Lionel Hampton	49.3	46.7	95%	2.6	5%	0	0%
Little Nancy Creek Park	4.6	4.5	97%	0.1	2%	0.1	1%
Loring Heights Park	1.9	1.5	79%	0.3	14%	0.1	7%
M.L.K. Center	10.4	0.8	7%	3	29%	6.6	64%
Maddox Park	54.6	14.2	26%	18.5	34%	21.9	40%
Maddox-Avery Triangle	0	-	0%	0	57%	0	42%
Magnum and Lynhurst Park	0.1	0	17%	0.1	53%	0	29%
Manigault Street Playlot	0.2	0.2	90%	0	6%	0	4%
Mantissa Road	2.6	2.4	95%	0.1	3%	0.1	2%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Margaret Mitchell Square	0	0	3%	0	15%	0	82%
Marietta Street Island	0.2	0	0%	0	3%	0.2	97%
Matilda Place Park	1.3	1	81%	0.2	17%	0	3%
Mayflower Beauty Spot	0.3	0.1	47%	0.1	29%	0.1	24%
Mayor's #1 Park	0.2	0.1	48%	0.1	28%	0.1	24%
Mayson Park	2.8	2.7	97%	0.1	2%	0	1%
Mayson Ravine	3.2	3.2	99%	0	1%	-	0%
McClatchey Park	4.9	3.1	62%	1.1	23%	0.7	15%
McKay Circle	0	0	100%	-	0%	-	0%
McKinley-Wilson Circle	0.1	0	88%	0	4%	0	9%
Melvin Drive Park	52.3	43.7	84%	5.9	11%	2.7	5%
Memorial Drive Greenway	4.5	0.3	7%	0.6	14%	3.6	79%
Mims Park	14.5	3.6	25%	8.9	61%	2.1	14%
Mitchell-Haynes Park	0.1	0	19%	0	44%	0	37%
Montgomery Ferry/Golf Cir. Triangle	0	-	0%	0	11%	0	90%
Monument Beauty Spot	0	0	49%	0	22%	0	29%
Moores Mill-Northside Pkwy Triangle	0	0	31%	0	53%	0	16%
Moreland Avenue Planters	0.1	0	28%	0	53%	0	19%
Morgan-Boulevard Park	0.4	0.1	34%	0.2	45%	0.1	22%
Morningside Nature Preserve	34.6	29.1	84%	3.8	11%	1.6	5%
Morningside Recreation Center	4.9	1	20%	1	20%	2.9	60%
Mornington Circle	0.2	0.1	42%	0.1	37%	0	20%
Mozley Park	31.4	11.4	36%	14.7	47%	5.3	17%
Mt. Paran and Northside Park	0.2	0.2	74%	0	18%	0	7%
Mt. Paran Rd. at Cave Rd. Triangle	0.2	0.2	88%	0	8%	0	4%
Noble Park	0.3	0.2	71%	0.1	29%	-	0%
North Buckhead Park	0.1	0	5%	0.1	51%	0.1	43%
North Camp Creek Parkway NP	73.2	66.2	90%	6.7	9%	0.2	0%
North Evelyn Place Park	0.9	0.2	26%	0.5	61%	0.1	13%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
North Highland Terrace Park	0	-	0%	0	31%	0	69%
Northcliffe and Brookview Park	0	0	81%	0	18%	0	1%
Oak Grove Park	3.4	1.9	56%	1.2	36%	0.3	8%
Oak Knoll I Park	1.1	1	93%	0.1	7%	0	0%
Oak Knoll II Park	0.6	0.4	75%	0.1	23%	0	2%
Oakland Cemetery	47.7	7.4	16%	23.7	50%	16.7	35%
Oakview I Park	0.5	0.1	26%	0.3	61%	0.1	13%
Oakview II Park	0.6	0.2	26%	0.3	55%	0.1	19%
Ontario Park	0.1	-	0%	0	60%	0	40%
Oriole Park	0.1	0	29%	0.1	68%	0	4%
Orme Park	6.3	5.1	81%	0.9	14%	0.3	5%
Orme Triangle	0	0	39%	0	23%	0	39%
Ormond-Grant Park	1.3	0.6	46%	0.6	49%	0.1	6%
Outdoor Activity Center	21.7	16.6	77%	4.7	22%	0.4	2%
Parkway-Angier Park	0.5	0.1	29%	0.3	66%	0	5%
Parkway-Merritts Park	0.7	0.5	68%	0.2	23%	0.1	9%
Parkway-Wabash Park	0.6	0.2	36%	0.2	34%	0.2	30%
Peachtree at 15th St. Park	0.1	-	0%	-	0%	0.1	100%
Peachtree Battle Parkway	4.2	3.4	80%	0.8	19%	0.1	2%
Peachtree Cir. at 15th St. Triangle	0.1	0	38%	0	34%	0	27%
Peachtree Hills Park	7.5	3.3	44%	3.3	45%	0.9	12%
Pelham Road Park	0.1	0.1	88%	0	11%	0	1%
Perkerson Park	48.6	28.5	59%	16.3	33%	3.8	8%
Pershing Point Park	0.3	0.1	42%	0	11%	0.2	48%
Pharr Circle Park	0.3	0.2	64%	0.1	24%	0	12%
Phoenix II Park	7.1	0.9	13%	4.8	67%	1.5	20%
Phoenix III Park	3.8	1.9	49%	1.8	48%	0.1	4%
Piedmont Heights Park	0	0	37%	0	21%	0	42%
Piedmont Park	170.9	56.1	33%	78.5	46%	36.4	21%
Piedmont Road Triangle	0	0	101%	-	0%	-	0%
Piedmont-Avery Triangle	0	0	7%	0	65%	0	28%
Pinetree and Brentwood Park	0.1	0.1	100%	-	0%	-	0%
Pittman Park	13.8	3.6	26%	7.3	53%	2.9	21%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Pollard and Albany Beauty Spot	0.1	0	39%	0	48%	0	12%
Prado at 17th St Triangle	0.1	0.1	62%	0	17%	0	21%
Prado at Inman Circle Park	0.4	0.2	49%	0.1	36%	0.1	15%
Prado-Maddox Triangle	0.1	-	0%	0	38%	0.1	62%
Prado-Peachtree Circle Triangle	0.1	0	13%	0	52%	0	39%
Prado-Piedmont Beauty Spot	0.1	0	27%	0.1	51%	0	21%
Prado-South Prado Circle	0	-	0%	0	13%	0	88%
Prado-Westminster Triangle	0.1	-	0%	0	56%	0	45%
Prairie View Beauty Spot	0	0	30%	0	54%	0	15%
Proctor Village Park	2.5	0.8	32%	1.4	55%	0.3	12%
Pryor-Tucker Playlot	0.2	0.1	48%	0.1	47%	0	5%
Queen and White Beauty Spot	0	0	72%	0	28%	0	0%
Ralph David Abernathy Median	0.3	0	11%	0	8%	0.2	81%
Ralph David Abernathy Plaza	0.3	0	0%	0.1	33%	0.2	67%
Ranier Circle	0	0	103%	-	0%	-	0%
Rawson-Washington Park	4.5	0.7	15%	2.2	50%	1.6	36%
Ray Kluka Memorial Park	0	0	94%	0	5%	0	0%
Rebel Valley Playlot	1.4	0.8	55%	0.6	40%	0.1	4%
Renaissance Park	5.7	3.5	61%	2.1	38%	0.1	1%
Rev. James Orange Park at Oakland City	14.5	6.1	42%	6.5	45%	1.9	13%
Riverside	6	5.4	91%	0.5	9%	0	0%
Robert W. Woodruff Park	3.3	0.9	29%	1.2	37%	1.1	35%
Robin Lane Park	0	-	0%	-	0%	0	101%
Rockdale Park	63.1	46.4	74%	15.6	25%	1.1	2%
Rosa L. Burney Park	13.7	2.7	19%	7.6	55%	3.4	25%
Rose Circle Park	2.7	1	37%	1.3	49%	0.4	14%
Rose Circle Triangle	0.2	0.1	37%	0.1	37%	0.1	26%
Rosel Fann Park	18.5	10.6	57%	4.1	22%	3.8	20%
Roseland Cemetery	0.2	0.2	100%	-	0%	-	0%
Rumson and Pinetree Park	0	0	5%	0	23%	0	72%
Rumson Road Circle	0	0	25%	0	8%	0	67%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Sandpiper Circle	0.1	0	3%	0	59%	0	38%
Sandtown Triangle	0.1	0	24%	0.1	68%	0	9%
Sara J. Gonzalez Park	1.4	1.1	78%	0.2	16%	0.1	6%
Selena S. Butler Park	3.6	0.7	19%	2	56%	0.9	25%
Shady Valley Park	11.3	7.9	70%	3.1	27%	0.3	3%
Shadyside Park	4.1	2.4	58%	1.2	30%	0.5	12%
Shirley Place Park	4.5	3.3	74%	1	22%	0.2	4%
Sibley Park	8.5	8	94%	0.6	7%	-	0%
Sidney Marcus Park	2.7	1.9	71%	0.7	27%	0.1	2%
Smith Park	0.4	0.1	25%	0.3	71%	0	4%
South Atlanta Park	11	3.6	33%	5.8	53%	1.6	15%
South Bend Park	75.4	50.4	67%	20.6	27%	4.5	6%
South Evelyn Place Park	1	0.3	34%	0.6	61%	0	4%
South Gordon Triangle	0	-	0%	-	0%	0	99%
Southside Park	210.8	178.9	85%	25.9	12%	6	3%
Spellman-Morehouse Beauty Spot	0	-	0%	0	13%	0	87%
Spink-Collins Park	26.2	25.1	96%	0.6	2%	0.5	2%
Spring Valley Jewish Corner	0.1	0	41%	0	27%	0	32%
Spring Valley Park	3.5	3.3	94%	0.2	6%	0	0%
Springdale Park	5.2	1.1	21%	3.4	65%	0.7	13%
Springlake Park	5.3	5	94%	0.3	6%	0	0%
Springvale Park	4.3	2.3	54%	1.4	34%	0.5	12%
Stafford Circle Park	0	0	22%	0	57%	0	20%
Stafford Street Park	0.1	0	25%	0.1	53%	0	21%
Stephanie Drive Park	0.4	0.2	49%	0.2	47%	0	4%
Stone Hogan Park	10.8	9.7	90%	0.6	6%	0.4	4%
Stoney Point Park	0.2	0	3%	0	22%	0.1	75%
Summerhill Triangle	0.6	0.3	46%	0.2	35%	0.1	18%
Sunken Garden Park	0.9	0.6	64%	0.3	31%	0	5%
Sunnybrook Park	2.2	2.2	99%	0	1%	0	0%
Swann Preserve	50.4	48	95%	2.1	4%	0.3	1%
Sylvan Circle Playlot	0.5	0.2	45%	0.2	45%	0	10%
Tanyard Creek Park	15.9	10.9	69%	4.5	29%	0.4	3%
Tanyard Creek Urban Forest	6.3	5.4	86%	0.5	8%	0.3	5%

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Tennyson Circle	0	0	79%	0	20%	-	0%
Thomasville Park	16.8	7.8	47%	6.4	38%	2.6	15%
Todd Street Triangle	0	0	53%	0	16%	0	28%
Torrence Circle	0	-	0%	0	20%	0	81%
Tremont Playlot	0.2	0.1	44%	0.1	53%	0	3%
Tucson Trail Park	2.8	1.9	67%	0.5	19%	0.4	14%
Tullwater Park	5.4	4.2	79%	0.9	17%	0.2	5%
Underwood Hills Park	9.7	7.2	74%	1.8	19%	0.7	7%
Valley Road and Habersham Park	0	0	77%	0	19%	0	4%
Vedado-Greenwood Triangle	0.1	0	60%	0	37%	-	0%
Veltre Circle	0.2	0.1	45%	0.1	55%	-	0%
Verbena Street Playlot	0.7	0.1	7%	0.4	62%	0.2	30%
Vermont Road Park	2.1	1.8	87%	0.2	8%	0.1	5%
Vine City Park	1.5	0.1	9%	0.6	38%	0.8	53%
Virgilee Park	3.5	1.6	45%	1.8	50%	0.2	5%
Virginia Highland Triangle	0.1	0	23%	0	20%	0	56%
Walker Park	6.7	1.3	19%	4.8	72%	0.6	9%
Walton Spring Park	0.2	0	2%	0	12%	0.2	87%
Washington Park	19.9	6.2	31%	9.3	46%	4.5	23%
Welch Street Park	0.2	0.1	59%	0.1	40%	0	1%
West End Park	6.5	2.2	34%	3.6	55%	0.8	12%
West Manor Park	10.5	5.7	55%	3.4	33%	1.3	12%
West Wesley Park	1.1	1.1	94%	0.1	6%	0	0%
Westminster Park	0	-	0%	-	0%	0	100%
Westside Park	10.8	3.1	29%	2.6	24%	5.1	48%
Whetstone Creek Park	1.8	1.4	80%	0.3	18%	0	2%
Whittier Mills Park	21.6	12.9	60%	8.2	38%	0.5	2%
Wildwood Gardens Park	1.6	1.3	80%	0.2	13%	0.1	6%
Wildwood Place	0	0	78%	0	22%	-	0%
Willard and Gordon Park	0.1	0.1	76%	0	14%	0	10%
Wilson Mill Park	36.7	23	63%	11.7	32%	2	6%
Wilson Park Triangle	0.1	0.1	65%	0	35%	-	0%
Windsor Street Park	1.1	0.2	22%	0.7	68%	0.1	10%
Winn Park	10	6.3	63%	3.1	31%	0.7	7%

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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Name	Park Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Yonah Park	2	1.5	76%	0.5	23%	0	1%
Zimmer Drive Circle	0	-	0%	-	0%	-	0%

Table 32: Land Cover Summary Statistics for All Parks

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
17th Street Park	0.0%	88.4%	0.1%	0.0%	8.3%	0.0%	0.0%	3.2%	0.0%
25th Street Beauty Spot	0.0%	37.2%	0.0%	0.0%	28.8%	0.0%	0.0%	34.6%	0.0%
A.D. Williams Park	0.0%	57.5%	0.3%	0.0%	24.7%	0.2%	0.0%	17.8%	0.4%
Abner Place Park	0.0%	49.1%	0.0%	0.0%	37.2%	0.0%	0.0%	13.8%	0.0%
Adair Park I	0.0%	28.1%	0.1%	0.0%	48.1%	0.2%	0.0%	23.8%	0.3%
Adair Park II	0.0%	10.2%	0.1%	0.0%	74.5%	0.6%	0.0%	15.3%	0.3%
Adams Park	0.1%	38.6%	3.0%	0.1%	52.8%	6.5%	0.0%	8.7%	3.0%
Adamsville Park (Old)	0.0%	36.6%	0.0%	0.0%	22.5%	0.0%	0.0%	40.9%	0.1%
Adamsville Recrecreation Center	0.0%	11.2%	0.1%	0.0%	26.5%	0.2%	0.0%	62.3%	1.5%
Adamsville Triangle	0.0%	0.0%	0.0%	0.0%	29.8%	0.0%	0.0%	68.9%	0.0%
Alexander Park	0.0%	96.1%	0.5%	0.0%	3.8%	0.0%	0.0%	0.1%	0.0%
Anderson Park	0.0%	66.7%	1.8%	0.0%	24.8%	1.1%	0.0%	8.5%	1.0%
Ansley Park	0.0%	75.4%	0.2%	0.0%	15.9%	0.1%	0.0%	8.7%	0.1%
Arbor Park	0.0%	58.6%	0.0%	0.0%	39.6%	0.0%	0.0%	1.2%	0.0%
Ardmore Park	0.0%	82.5%	0.1%	0.0%	14.6%	0.0%	0.0%	2.8%	0.0%
Arlington Circle Beauty Spot	0.0%	92.5%	0.0%	0.0%	7.1%	0.0%	0.0%	0.4%	0.0%
Arlington Circle Playlot	0.0%	93.9%	0.0%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%
Arthur Langford Jr Park	0.0%	36.4%	0.2%	0.0%	43.8%	0.3%	0.0%	19.8%	0.4%
Ashby Circle Playlot	0.0%	55.1%	0.0%	0.0%	36.7%	0.0%	0.0%	8.6%	0.0%
Ashview Triangle	0.0%	46.6%	0.0%	0.0%	24.4%	0.0%	0.0%	28.9%	0.0%
Atlanta Memorial Park	0.1%	48.0%	4.4%	0.1%	44.3%	6.5%	0.0%	7.7%	3.2%
Atwood Street Park	0.0%	37.8%	0.0%	0.0%	51.6%	0.0%	0.0%	10.8%	0.0%
Avery Park-Gilbert House	0.0%	91.3%	0.5%	0.0%	8.3%	0.1%	0.0%	0.3%	0.0%
Avery-E. Park Lane Triangle	0.0%	99.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barbara A. McCoy Park	0.0%	78.6%	0.3%	0.0%	19.0%	0.1%	0.0%	2.3%	0.0%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Barclay Median	0.0%	66.0%	0.0%	0.0%	30.5%	0.0%	0.0%	3.4%	0.0%
Bass Recreation Center	0.0%	12.4%	0.0%	0.0%	41.5%	0.0%	0.0%	46.2%	0.1%
Beaverbrook Park	0.0%	91.4%	0.3%	0.0%	8.0%	0.0%	0.0%	0.6%	0.0%
Beech Valley Triangle	0.0%	88.8%	0.0%	0.0%	9.9%	0.0%	0.0%	1.4%	0.0%
Beecher Park	0.0%	92.7%	0.2%	0.0%	7.3%	0.0%	0.0%	0.0%	0.0%
Beecher Triangle	0.0%	0.0%	0.0%	0.0%	25.7%	0.0%	0.0%	73.9%	0.0%
Ben Hill Park	0.0%	43.4%	0.5%	0.0%	30.1%	0.5%	0.0%	26.4%	1.3%
Benoit	0.0%	32.8%	0.0%	0.0%	62.5%	0.0%	0.0%	4.7%	0.0%
Benteen Park	0.0%	35.8%	0.2%	0.0%	53.8%	0.4%	0.0%	10.4%	0.2%
Benton Place Garden	0.0%	80.8%	0.0%	0.0%	18.3%	0.0%	0.0%	0.0%	0.0%
Bessie Branham Park	0.0%	22.1%	0.1%	0.0%	51.4%	0.3%	0.0%	26.7%	0.4%
Beverly-Avery Circle	0.0%	100.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Beverly-Avery Triangle	0.0%	50.1%	0.0%	0.0%	21.6%	0.0%	0.0%	28.3%	0.0%
Beverly-Montgomery Ferry Triangle	0.0%	2.5%	0.0%	0.0%	80.0%	0.0%	0.0%	18.1%	0.0%
Beverly-Polo Triangle	0.0%	97.3%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%
Billings Circle	0.0%	0.0%	0.0%	0.0%	75.1%	0.0%	0.0%	24.7%	0.0%
Birchwood-Arlene Triangle	0.0%	37.8%	0.0%	0.0%	58.3%	0.0%	0.0%	3.9%	0.0%
Blue Heron Nature Preserve	0.0%	77.4%	0.4%	0.0%	10.3%	0.1%	0.0%	12.3%	0.3%
Bonnie Brae Park	0.0%	13.8%	0.0%	0.0%	65.7%	0.0%	0.0%	20.3%	0.0%
Boone and West Lake	0.0%	55.9%	0.0%	0.0%	26.9%	0.0%	0.0%	17.2%	0.0%
Boulevard Crossing	0.0%	17.1%	0.2%	0.0%	39.0%	0.7%	0.0%	43.9%	2.1%
Boulevard-Angier Park	0.0%	89.3%	0.0%	0.0%	10.6%	0.0%	0.0%	0.0%	0.0%
Broadland and West Conway Park	0.0%	55.3%	0.0%	0.0%	32.7%	0.0%	0.0%	11.9%	0.0%
Brookline Park	0.0%	25.3%	0.0%	0.0%	72.9%	0.0%	0.0%	1.0%	0.0%
Browns Mill Golf Course	0.0%	21.1%	1.7%	0.1%	72.2%	9.2%	0.0%	6.7%	2.4%
Browns Mill/McWilliams Park	0.0%	0.0%	0.0%	0.0%	60.3%	0.0%	0.0%	41.7%	0.0%
Brownwood Park	0.0%	63.9%	0.4%	0.0%	30.8%	0.3%	0.0%	5.4%	0.1%
Cabbagetown Park	0.0%	11.2%	0.0%	0.0%	64.2%	0.2%	0.0%	24.6%	0.2%
Campbellton Road Park	0.0%	83.9%	0.4%	0.0%	8.1%	0.1%	0.0%	8.0%	0.2%
Candler Park	0.0%	31.4%	0.8%	0.0%	62.9%	2.5%	0.0%	5.8%	0.6%
Carver Circle	0.0%	0.0%	0.0%	0.0%	26.2%	0.0%	0.0%	73.6%	0.0%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Cascade Springs Nature Preserve	0.1%	93.5%	5.5%	0.0%	5.4%	0.5%	0.0%	1.1%	0.3%
Castlewood Triangle	0.0%	78.1%	0.0%	0.0%	20.4%	0.0%	0.0%	1.5%	0.0%
Cativo and Dogwood Beauty Spot	0.0%	0.4%	0.0%	0.0%	79.7%	0.0%	0.0%	20.3%	0.0%
Cativo Circle	0.0%	31.8%	0.0%	0.0%	28.9%	0.0%	0.0%	39.4%	0.0%
Center Hill Park	0.0%	59.8%	1.3%	0.0%	30.2%	1.0%	0.0%	10.0%	0.9%
Central Park	0.0%	23.4%	0.2%	0.0%	61.5%	0.8%	0.0%	15.1%	0.6%
Channing Valley Park	0.0%	86.9%	0.0%	0.0%	13.1%	0.0%	0.0%	0.0%	0.0%
Charles Allen Median	0.0%	55.9%	0.0%	0.0%	15.6%	0.0%	0.0%	28.3%	0.0%
Charles L. Harper Memorial Park	0.0%	40.6%	0.0%	0.0%	26.6%	0.0%	0.0%	32.7%	0.1%
Charles Loudermilk Park	0.0%	22.3%	0.0%	0.0%	47.4%	0.0%	0.0%	30.3%	0.0%
Chastain Memorial Park	0.1%	42.6%	5.1%	0.1%	48.9%	9.4%	0.0%	8.4%	4.6%
Chatham and Avon Park	0.0%	0.0%	0.0%	0.0%	65.6%	0.0%	0.0%	34.6%	0.0%
Chattahoochee Park	0.0%	43.8%	0.1%	0.0%	43.8%	0.1%	0.0%	12.3%	0.1%
Chattahoochee Trail	0.0%	64.2%	1.6%	0.0%	26.2%	1.0%	0.0%	8.6%	1.0%
Chosewood Park	0.0%	66.4%	0.5%	0.0%	30.6%	0.4%	0.0%	2.9%	0.1%
Cleopas R. Johnson Park	0.0%	20.1%	0.0%	0.0%	59.2%	0.2%	0.0%	20.6%	0.2%
Cleveland Avenue Park	0.0%	47.0%	0.1%	0.0%	34.3%	0.1%	0.0%	18.7%	0.2%
Club Drive Park	0.0%	67.3%	0.0%	0.0%	32.7%	0.0%	0.0%	0.0%	0.0%
Coan Park	0.0%	25.3%	0.2%	0.0%	57.7%	0.6%	0.0%	17.0%	0.5%
Collier Park	0.0%	69.2%	0.5%	0.0%	26.0%	0.3%	0.0%	4.8%	0.2%
Collum Circle Beauty Spot	0.0%	2.7%	0.0%	0.0%	31.3%	0.0%	0.0%	66.0%	0.0%
Coventry Station CE	0.0%	91.7%	0.7%	0.0%	7.5%	0.1%	0.0%	0.8%	0.0%
Cumberlander	0.0%	95.5%	0.4%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%
D.H. Stanton Park	0.0%	13.7%	0.1%	0.0%	58.1%	0.4%	0.0%	28.2%	0.5%
Dale Creek Park	0.0%	93.0%	0.1%	0.0%	6.5%	0.0%	0.0%	0.5%	0.0%
Daniel Johnson Nature Preserve	0.0%	83.8%	0.3%	0.0%	15.4%	0.1%	0.0%	0.5%	0.0%
Darlington Circle Park	0.0%	89.3%	0.0%	0.0%	7.2%	0.0%	0.0%	3.2%	0.0%
Davidson and Lakehaven Park	0.0%	35.3%	0.0%	0.0%	53.7%	0.0%	0.0%	10.7%	0.0%
Dean Rusk Park	0.0%	8.0%	0.0%	0.0%	52.3%	0.2%	0.0%	39.4%	0.5%
Deerwood Park	0.0%	64.7%	0.5%	0.0%	31.2%	0.4%	0.0%	4.1%	0.2%
Dellwood Park	0.0%	35.8%	0.0%	0.0%	40.2%	0.0%	0.0%	24.0%	0.1%
Delta Park	0.0%	57.8%	0.0%	0.0%	39.4%	0.0%	0.0%	2.7%	0.0%

Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Dill Avenue Park	0.0%	70.7%	0.0%	0.0%	21.2%	0.0%	0.0%	7.4%	0.0%
Dollar Mill Median	0.0%	50.2%	0.0%	0.0%	34.9%	0.0%	0.0%	14.9%	0.0%
Drake Park	0.0%	97.1%	0.2%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%
E. Club and Lakehaven Park	0.0%	0.0%	0.0%	0.0%	30.9%	0.0%	0.0%	69.4%	0.0%
E. Pine Valley and W. Pine Valley Park	0.0%	97.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E. Rock Springs Triangle	0.0%	39.9%	0.0%	0.0%	35.1%	0.0%	0.0%	25.5%	0.0%
East Brookhaven and Lakehaven Park	0.0%	38.1%	0.0%	0.0%	34.6%	0.0%	0.0%	26.7%	0.0%
East Lake Park	0.0%	31.7%	0.2%	0.0%	60.9%	0.5%	0.0%	7.4%	0.2%
Eastwood/Emerson Triangle	0.0%	94.8%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%
Edgewater Circle	0.0%	99.6%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%
Edwin Place Park	0.0%	91.8%	0.2%	0.0%	7.9%	0.0%	0.0%	0.5%	0.0%
Elinor Place Park	0.0%	66.7%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%
Ellsworth Park	0.0%	81.3%	0.0%	0.0%	11.3%	0.0%	0.0%	7.4%	0.0%
Emma Lane	0.0%	76.7%	0.2%	0.0%	14.2%	0.1%	0.0%	9.1%	0.1%
Emma Millican Park	0.0%	74.8%	0.4%	0.0%	23.6%	0.2%	0.0%	1.6%	0.0%
Empire Park	0.0%	49.7%	0.2%	0.0%	43.1%	0.3%	0.0%	7.2%	0.2%
English Park	0.0%	43.0%	0.2%	0.0%	38.3%	0.3%	0.0%	18.7%	0.4%
Enota Place Park	0.0%	64.1%	0.1%	0.0%	33.5%	0.1%	0.0%	2.4%	0.0%
Esther Peachey Lefever	0.0%	44.3%	0.0%	0.0%	47.3%	0.0%	0.0%	8.4%	0.0%
Eubanks (The Prado) Park	0.0%	80.5%	0.1%	0.0%	18.0%	0.0%	0.0%	1.5%	0.0%
Falling Water	0.0%	79.3%	1.0%	0.0%	13.8%	0.3%	0.0%	6.9%	0.4%
Findley Plaza	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	98.8%	0.0%
Fire Station #5 Park	0.0%	49.2%	0.0%	0.0%	35.2%	0.0%	0.0%	15.8%	0.0%
Folk Art (Courtland) Park	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.1%
Folk Art (Piedmont) Park	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.1%
Fountain Drive #1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	104.3%	0.0%
Fountain Drive #2	0.0%	0.0%	0.0%	0.0%	24.1%	0.0%	0.0%	75.2%	0.0%
Fountainebleau Beauty Spot	0.0%	71.6%	0.0%	0.0%	29.2%	0.0%	0.0%	0.0%	0.0%
Four Corners Park	0.0%	31.3%	0.1%	0.0%	57.6%	0.2%	0.0%	11.1%	0.1%
Frankie Allen Park	0.0%	50.8%	0.6%	0.0%	36.7%	0.7%	0.0%	12.5%	0.6%
Freedom Park	0.0%	29.8%	1.8%	0.1%	53.4%	5.1%	0.0%	16.5%	4.5%
Fulton-Pryor Island	0.0%	19.2%	0.0%	0.0%	53.6%	0.0%	0.0%	27.2%	0.0%
Garden Hills Park	0.0%	69.9%	0.1%	0.0%	17.4%	0.0%	0.0%	12.6%	0.1%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Georgia Hill Center	0.0%	32.0%	0.0%	0.0%	30.2%	0.1%	0.0%	37.8%	0.3%
Gertrude Place	0.0%	53.5%	0.0%	0.0%	43.3%	0.0%	0.0%	3.1%	0.0%
Gilliam Park	0.0%	67.8%	0.1%	0.0%	28.2%	0.1%	0.0%	4.0%	0.0%
Glenwood Triangle	0.0%	0.0%	0.0%	0.0%	57.6%	0.0%	0.0%	41.9%	0.0%
Goldsboro Park	0.0%	34.1%	0.0%	0.0%	39.3%	0.1%	0.0%	26.6%	0.1%
Gordon-White Park	0.0%	1.0%	0.0%	0.0%	31.7%	0.0%	0.0%	67.3%	0.3%
Grant Park	0.1%	43.4%	2.7%	0.1%	37.2%	3.7%	0.0%	19.4%	5.5%
Green Leaf Circle	0.0%	25.7%	0.0%	0.0%	68.1%	0.1%	0.0%	6.2%	0.0%
Greenbriar	0.0%	87.6%	0.3%	0.0%	12.1%	0.1%	0.0%	0.3%	0.0%
Greenwood-Charles Allen Triangle	0.0%	91.9%	0.0%	0.0%	7.0%	0.0%	0.0%	0.7%	0.0%
Grove Park	0.0%	36.1%	0.3%	0.0%	49.5%	0.7%	0.0%	14.5%	0.5%
Gun Club Park	0.0%	93.7%	1.9%	0.0%	5.8%	0.2%	0.0%	0.4%	0.0%
Hardy Ivy Park	0.0%	26.8%	0.0%	0.0%	32.1%	0.0%	0.0%	41.1%	0.0%
Harold Avenue Place	0.0%	81.6%	0.0%	0.0%	18.5%	0.0%	0.0%	0.0%	0.0%
Harper Park	0.0%	54.4%	0.4%	0.0%	36.0%	0.4%	0.0%	9.6%	0.3%
Harwell Heights Park	0.0%	76.7%	0.9%	0.0%	17.5%	0.3%	0.0%	5.8%	0.3%
Havilon Triangle	0.0%	93.2%	0.0%	0.0%	6.8%	0.0%	0.0%	0.0%	0.0%
Haynes Manor Park	0.0%	86.0%	0.1%	0.0%	13.2%	0.0%	0.0%	0.8%	0.0%
Helen Drive Park	0.0%	57.1%	0.0%	0.0%	17.3%	0.0%	0.0%	25.5%	0.0%
Herbert Greene	0.1%	93.2%	2.8%	0.0%	6.6%	0.3%	0.0%	0.1%	0.0%
Herbert Taylor Park	0.0%	83.1%	1.0%	0.0%	13.9%	0.3%	0.0%	3.1%	0.2%
Heritage (Founder's) Park	0.0%	7.3%	0.0%	0.0%	64.7%	0.0%	0.0%	27.9%	0.0%
Hickory Grove Park	0.0%	98.7%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%
Hillside at Northside Drive Park	0.0%	49.7%	0.0%	0.0%	49.3%	0.0%	0.0%	1.0%	0.0%
Historic Fourth Ward Park	0.0%	5.9%	0.1%	0.0%	25.8%	0.4%	0.0%	68.2%	2.7%
Holderness/Lucile Park	0.0%	8.8%	0.0%	0.0%	80.2%	0.0%	0.0%	11.1%	0.0%
Home Park	0.0%	31.1%	0.0%	0.0%	29.9%	0.0%	0.0%	39.2%	0.1%
Homestead Park	0.0%	85.3%	0.0%	0.0%	13.5%	0.0%	0.0%	1.3%	0.0%
Howard Park	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Howell Mill at Beaverbrook Park	0.0%	61.6%	0.0%	0.0%	35.1%	0.0%	0.0%	3.3%	0.0%
Howell Mill at Glenbrook Park	0.0%	94.1%	0.0%	0.0%	4.3%	0.0%	0.0%	1.0%	0.0%
Howell Park	0.0%	36.9%	0.0%	0.0%	47.0%	0.1%	0.0%	16.2%	0.1%
Hurt Park	0.0%	34.3%	0.0%	0.0%	39.9%	0.1%	0.0%	25.8%	0.1%

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Inman Circle at 17th St Park	0.0%	0.0%	0.0%	0.0%	35.1%	0.0%	0.0%	65.5%	0.0%
Inman Park	0.0%	71.2%	0.0%	0.0%	24.8%	0.0%	0.0%	4.2%	0.0%
Inman Park Trolley Barn	0.0%	43.7%	0.0%	0.0%	15.5%	0.0%	0.0%	40.8%	0.1%
Isabel Gates Webster Park	0.0%	74.2%	0.5%	0.0%	20.1%	0.2%	0.0%	5.8%	0.2%
Iverson Park	0.0%	39.3%	0.0%	0.0%	53.2%	0.1%	0.0%	7.6%	0.0%
J. Allen Couch Park	0.0%	23.3%	0.1%	0.0%	55.3%	0.3%	0.0%	21.3%	0.3%
J.D. Sims Recreation Center	0.0%	20.3%	0.0%	0.0%	26.5%	0.0%	0.0%	52.9%	0.1%
J.F. Kennedy Park	0.0%	3.7%	0.0%	0.0%	77.1%	0.1%	0.0%	19.0%	0.1%
Jacci Fuller Woodland Garden Park	0.0%	86.0%	0.0%	0.0%	13.6%	0.0%	0.0%	0.4%	0.0%
John A. White Park	0.1%	44.6%	2.4%	0.1%	46.0%	4.0%	0.0%	9.3%	2.3%
John C. Burdine Center	0.0%	26.6%	0.1%	0.0%	34.9%	0.1%	0.0%	38.5%	0.4%
John Calhoun Park	0.0%	42.2%	0.0%	0.0%	45.7%	0.0%	0.0%	12.1%	0.0%
John Howell Memorial Park	0.0%	63.6%	0.1%	0.0%	23.2%	0.1%	0.0%	13.2%	0.1%
John Wesley Dobbs Park	0.0%	11.6%	0.0%	0.0%	36.5%	0.0%	0.0%	51.8%	0.2%
Jonesboro Triangle	0.0%	41.9%	0.0%	0.0%	51.0%	0.0%	0.0%	7.1%	0.0%
Kimpson Park	0.0%	26.3%	0.0%	0.0%	70.5%	0.0%	0.0%	3.7%	0.0%
Kirkwood Greenway	0.0%	81.0%	0.2%	0.0%	18.8%	0.1%	0.0%	0.2%	0.0%
Knight Park	0.0%	56.5%	0.1%	0.0%	30.9%	0.1%	0.0%	12.7%	0.1%
Lafayette-15th Street Triangle	0.0%	0.0%	0.0%	0.0%	52.9%	0.0%	0.0%	47.5%	0.0%
Lake Claire Park	0.0%	59.7%	0.1%	0.0%	31.8%	0.1%	0.0%	8.5%	0.1%
Lakewood/HiFi	0.0%	18.5%	1.1%	0.0%	30.0%	2.8%	0.1%	51.5%	13.4%
Lang-Carson Park	0.0%	11.2%	0.0%	0.0%	39.7%	0.1%	0.0%	49.2%	0.4%
Lanier Boulevard Parkway	0.0%	48.0%	0.0%	0.0%	36.4%	0.1%	0.0%	15.6%	0.1%
Larchmont Circle	0.0%	11.5%	0.0%	0.0%	70.0%	0.0%	0.0%	18.6%	0.0%
Leathers Circle	0.0%	0.2%	0.0%	0.0%	44.4%	0.0%	0.0%	56.0%	0.0%
Lenox and Johnson Road Park	0.0%	29.4%	0.0%	0.0%	26.0%	0.0%	0.0%	44.2%	0.0%
Lenox Beauty Spot	0.0%	0.0%	0.0%	0.0%	24.1%	0.0%	0.0%	74.7%	0.0%
Lenox-Wildwood Park	0.0%	87.1%	0.4%	0.0%	8.7%	0.1%	0.0%	4.2%	0.1%
Lillian Cooper Shepherd Park	0.0%	38.7%	0.0%	0.0%	38.6%	0.1%	0.0%	23.1%	0.1%
Lionel Hampton	0.1%	94.6%	2.3%	0.0%	5.3%	0.2%	0.0%	0.1%	0.0%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Little Nancy Creek Park	0.0%	96.8%	0.2%	0.0%	2.0%	0.0%	0.0%	1.1%	0.0%
Loring Heights Park	0.0%	79.3%	0.1%	0.0%	13.8%	0.0%	0.0%	6.8%	0.0%
M.L.K. Center	0.0%	7.4%	0.0%	0.0%	28.9%	0.2%	0.0%	63.6%	1.4%
Maddox Park	0.0%	26.0%	0.7%	0.0%	33.9%	1.4%	0.0%	40.1%	4.7%
Maddox-Avery Triangle	0.0%	0.0%	0.0%	0.0%	57.2%	0.0%	0.0%	42.3%	0.0%
Magnum and Lynhurst Park	0.0%	17.5%	0.0%	0.0%	53.4%	0.0%	0.0%	29.3%	0.0%
Manigault Street Playlot	0.0%	90.3%	0.0%	0.0%	6.0%	0.0%	0.0%	3.5%	0.0%
Mantissa Road	0.0%	95.1%	0.1%	0.0%	2.8%	0.0%	0.0%	2.1%	0.0%
Margaret Mitchell Square	0.0%	3.0%	0.0%	0.0%	15.2%	0.0%	0.0%	81.5%	0.0%
Marietta Street Island	0.0%	0.2%	0.0%	0.0%	3.0%	0.0%	0.0%	97.0%	0.0%
Matilda Place Park	0.0%	80.5%	0.0%	0.0%	16.8%	0.0%	0.0%	2.7%	0.0%
Mayflower Beauty Spot	0.0%	46.9%	0.0%	0.0%	28.6%	0.0%	0.0%	24.4%	0.0%
Mayor's #1 Park	0.0%	48.1%	0.0%	0.0%	27.5%	0.0%	0.0%	24.3%	0.0%
Mayson Park	0.0%	97.0%	0.1%	0.0%	2.3%	0.0%	0.0%	0.6%	0.0%
Mayson Ravine	0.0%	99.2%	0.2%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%
McClatchey Park	0.0%	62.2%	0.1%	0.0%	23.0%	0.1%	0.0%	14.8%	0.2%
McKay Circle	0.0%	100.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
McKinley-Wilson Circle	0.0%	88.2%	0.0%	0.0%	3.9%	0.0%	0.0%	9.0%	0.0%
Melvin Drive Park	0.1%	83.6%	2.1%	0.0%	11.2%	0.5%	0.0%	5.2%	0.6%
Memorial Drive Greenway	0.0%	6.6%	0.0%	0.0%	14.3%	0.0%	0.0%	79.0%	0.8%
Mims Park	0.0%	24.6%	0.2%	0.0%	61.0%	0.7%	0.0%	14.3%	0.4%
Mitchell-Haynes Park	0.0%	18.8%	0.0%	0.0%	44.3%	0.0%	0.0%	37.1%	0.0%
Montgomery Ferry/Golf Cir. Triangle	0.0%	0.0%	0.0%	0.0%	11.4%	0.0%	0.0%	90.1%	0.0%
Monument Beauty Spot	0.0%	49.0%	0.0%	0.0%	21.7%	0.0%	0.0%	28.7%	0.0%
Moores Mill-Northside Pkwy Triangle	0.0%	31.3%	0.0%	0.0%	52.9%	0.0%	0.0%	16.0%	0.0%
Moreland Avenue Planters	0.0%	27.6%	0.0%	0.0%	52.5%	0.0%	0.0%	19.1%	0.0%
Morgan-Boulevard Park	0.0%	33.7%	0.0%	0.0%	44.8%	0.0%	0.0%	21.6%	0.0%
Morningside Nature Preserve	0.0%	84.3%	1.4%	0.0%	11.1%	0.3%	0.0%	4.6%	0.3%
Morningside Recreation Center	0.0%	19.7%	0.0%	0.0%	20.5%	0.1%	0.0%	59.8%	0.6%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Mornington Circle	0.0%	41.9%	0.0%	0.0%	37.5%	0.0%	0.0%	20.4%	0.0%
Mozley Park	0.0%	36.5%	0.6%	0.0%	46.7%	1.1%	0.0%	16.8%	1.1%
Mt. Paran and Northside Park	0.0%	74.2%	0.0%	0.0%	18.5%	0.0%	0.0%	7.2%	0.0%
Mt. Paran Rd. at Cave Rd. Triangle	0.0%	88.3%	0.0%	0.0%	7.6%	0.0%	0.0%	4.0%	0.0%
Noble Park	0.0%	70.8%	0.0%	0.0%	29.2%	0.0%	0.0%	0.0%	0.0%
North Buckhead Park	0.0%	5.3%	0.0%	0.0%	51.1%	0.0%	0.0%	43.3%	0.0%
North Camp Creek Parkway NP	0.1%	90.5%	3.2%	0.0%	9.2%	0.5%	0.0%	0.3%	0.0%
North Evelyn Place Park	0.0%	25.9%	0.0%	0.0%	61.1%	0.0%	0.0%	13.0%	0.0%
North Highland Terrace Park	0.0%	0.0%	0.0%	0.0%	30.6%	0.0%	0.0%	69.1%	0.0%
Northcliffe and Brookview Park	0.0%	80.7%	0.0%	0.0%	18.3%	0.0%	0.0%	1.1%	0.0%
Oak Grove Park	0.0%	55.8%	0.1%	0.0%	35.8%	0.1%	0.0%	8.3%	0.1%
Oak Knoll I Park	0.0%	93.1%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%	0.0%
Oak Knoll II Park	0.0%	75.0%	0.0%	0.0%	22.7%	0.0%	0.0%	2.5%	0.0%
Oakland Cemetery	0.0%	15.5%	0.4%	0.0%	49.6%	1.8%	0.0%	34.9%	3.6%
Oakview I Park	0.0%	25.9%	0.0%	0.0%	60.7%	0.0%	0.0%	13.3%	0.0%
Oakview II Park	0.0%	26.3%	0.0%	0.0%	54.5%	0.0%	0.0%	19.0%	0.0%
Ontario Park	0.0%	0.0%	0.0%	0.0%	59.9%	0.0%	0.0%	39.7%	0.0%
Oriole Park	0.0%	28.8%	0.0%	0.0%	67.6%	0.0%	0.0%	3.6%	0.0%
Orme Park	0.0%	81.1%	0.2%	0.0%	14.2%	0.1%	0.0%	4.7%	0.1%
Orme Triangle	0.0%	38.8%	0.0%	0.0%	22.5%	0.0%	0.0%	39.2%	0.0%
Ormond-Grant Park	0.0%	45.5%	0.0%	0.0%	48.9%	0.0%	0.0%	5.5%	0.0%
Outdoor Activity Center	0.0%	76.6%	0.8%	0.0%	21.5%	0.4%	0.0%	1.9%	0.1%
Parkway-Angier Park	0.0%	29.0%	0.0%	0.0%	66.5%	0.0%	0.0%	4.7%	0.0%
Parkway-Merritts Park	0.0%	67.8%	0.0%	0.0%	23.1%	0.0%	0.0%	9.2%	0.0%
Parkway-Wabash Park	0.0%	36.2%	0.0%	0.0%	34.2%	0.0%	0.0%	29.9%	0.0%
Peachtree at 15th St. Park	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.3%	0.0%
Peachtree Battle Parkway	0.0%	79.5%	0.2%	0.0%	18.7%	0.1%	0.0%	1.8%	0.0%
Peachtree Cir. at 15th St. Triangle	0.0%	38.1%	0.0%	0.0%	34.1%	0.0%	0.0%	27.3%	0.0%
Peachtree Hills Park	0.0%	43.9%	0.2%	0.0%	44.6%	0.3%	0.0%	11.6%	0.2%
Pelham Road Park	0.0%	87.9%	0.0%	0.0%	10.6%	0.0%	0.0%	1.3%	0.0%
Perkerson Park	0.0%	58.7%	1.4%	0.0%	33.4%	1.3%	0.0%	7.8%	0.8%
Pershing Point Park	0.0%	41.8%	0.0%	0.0%	10.7%	0.0%	0.0%	47.7%	0.0%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Pharr Circle Park	0.0%	64.4%	0.0%	0.0%	23.5%	0.0%	0.0%	12.0%	0.0%
Phoenix II Park	0.0%	12.8%	0.0%	0.0%	66.7%	0.4%	0.0%	20.5%	0.3%
Phoenix III Park	0.0%	48.7%	0.1%	0.0%	47.5%	0.1%	0.0%	3.6%	0.0%
Piedmont Heights Park	0.0%	37.3%	0.0%	0.0%	20.7%	0.0%	0.0%	41.9%	0.0%
Piedmont Park	0.1%	32.8%	2.7%	0.1%	45.9%	6.0%	0.0%	21.3%	7.9%
Piedmont Road Triangle	0.0%	100.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Piedmont-Avery Triangle	0.0%	6.6%	0.0%	0.0%	65.4%	0.0%	0.0%	28.1%	0.0%
Pinetree and Brentwood Park	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pittman Park	0.0%	25.9%	0.2%	0.0%	52.7%	0.6%	0.0%	21.4%	0.6%
Pollard and Albany Beauty Spot	0.0%	39.3%	0.0%	0.0%	48.3%	0.0%	0.0%	12.5%	0.0%
Prado at 17th St Triangle	0.0%	61.9%	0.0%	0.0%	16.8%	0.0%	0.0%	21.0%	0.0%
Prado at Inman Circle Park	0.0%	48.7%	0.0%	0.0%	35.9%	0.0%	0.0%	15.4%	0.0%
Prado-Maddox Triangle	0.0%	0.0%	0.0%	0.0%	37.7%	0.0%	0.0%	62.2%	0.0%
Prado-Peachtree Circle Triangle	0.0%	12.9%	0.0%	0.0%	52.1%	0.0%	0.0%	38.7%	0.0%
Prado-Piedmont Beauty Spot	0.0%	27.4%	0.0%	0.0%	51.4%	0.0%	0.0%	21.1%	0.0%
Prado-South Prado Circle	0.0%	0.0%	0.0%	0.0%	12.7%	0.0%	0.0%	87.7%	0.0%
Prado-Westminster Triangle	0.0%	0.0%	0.0%	0.0%	55.6%	0.0%	0.0%	44.9%	0.0%
Prairie View Beauty Spot	0.0%	30.1%	0.0%	0.0%	54.2%	0.0%	0.0%	15.1%	0.0%
Proctor Village Park	0.0%	32.2%	0.0%	0.0%	55.4%	0.1%	0.0%	12.4%	0.1%
Pryor-Tucker Playlot	0.0%	48.1%	0.0%	0.0%	46.8%	0.0%	0.0%	4.9%	0.0%
Queen and White Beauty Spot	0.0%	72.1%	0.0%	0.0%	27.7%	0.0%	0.0%	0.4%	0.0%
Ralph David Abernathy Median	0.0%	10.6%	0.0%	0.0%	8.2%	0.0%	0.0%	81.2%	0.1%
Ralph David Abernathy Plaza	0.0%	0.1%	0.0%	0.0%	32.5%	0.0%	0.0%	67.4%	0.0%
Ranier Circle	0.0%	103.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rawson-Washington Park	0.0%	14.6%	0.0%	0.0%	49.6%	0.2%	0.0%	35.9%	0.3%
Ray Kluka Memorial Park	0.0%	93.9%	0.0%	0.0%	5.3%	0.0%	0.0%	0.2%	0.0%
Rebel Valley Playlot	0.0%	55.3%	0.0%	0.0%	40.5%	0.0%	0.0%	4.2%	0.0%
Renaissance Park	0.0%	60.9%	0.2%	0.0%	37.7%	0.2%	0.0%	1.5%	0.0%

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	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Rev. James Orange Park at Oakland City	0.0%	42.0%	0.3%	0.0%	44.8%	0.5%	0.0%	13.2%	0.4%
Riverside	0.0%	91.2%	0.3%	0.0%	8.8%	0.0%	0.0%	0.0%	0.0%
Robert W. Woodruff Park	0.0%	28.7%	0.0%	0.0%	36.7%	0.1%	0.0%	34.8%	0.2%
Robin Lane Park	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	101.0%	0.0%
Rockdale Park	0.1%	73.6%	2.2%	0.0%	24.7%	1.2%	0.0%	1.7%	0.2%
Rosa L. Burney Park	0.0%	19.4%	0.1%	0.0%	55.5%	0.6%	0.0%	25.1%	0.7%
Rose Circle Park	0.0%	36.8%	0.0%	0.0%	49.3%	0.1%	0.0%	14.0%	0.1%
Rose Circle Triangle	0.0%	37.5%	0.0%	0.0%	36.6%	0.0%	0.0%	26.0%	0.0%
Rosel Fann Park	0.0%	57.3%	0.5%	0.0%	22.3%	0.3%	0.0%	20.4%	0.8%
Roseland Cemetery	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rumson and Pinetree Park	0.0%	5.1%	0.0%	0.0%	23.4%	0.0%	0.0%	72.2%	0.0%
Rumson Road Circle	0.0%	24.6%	0.0%	0.0%	8.3%	0.0%	0.0%	66.5%	0.0%
Sandpiper Circle	0.0%	2.9%	0.0%	0.0%	59.1%	0.0%	0.0%	38.1%	0.0%
Sandtown Triangle	0.0%	23.6%	0.0%	0.0%	67.7%	0.0%	0.0%	8.7%	0.0%
Sara J. Gonzalez Park	0.0%	78.4%	0.1%	0.0%	16.0%	0.0%	0.0%	5.6%	0.0%
Selena S. Butler Park	0.0%	19.3%	0.0%	0.0%	56.1%	0.2%	0.0%	24.6%	0.2%
Shady Valley Park	0.0%	70.0%	0.4%	0.0%	27.1%	0.2%	0.0%	2.8%	0.1%
Shadyside Park	0.0%	57.8%	0.1%	0.0%	29.7%	0.1%	0.0%	12.5%	0.1%
Shirley Place Park	0.0%	74.1%	0.2%	0.0%	22.0%	0.1%	0.0%	4.0%	0.0%
Sibley Park	0.0%	93.5%	0.4%	0.0%	6.5%	0.0%	0.0%	0.0%	0.0%
Sidney Marcus Park	0.0%	70.6%	0.1%	0.0%	27.4%	0.1%	0.0%	2.0%	0.0%
Smith Park	0.0%	25.2%	0.0%	0.0%	70.6%	0.0%	0.0%	4.2%	0.0%
South Atlanta Park	0.0%	32.8%	0.2%	0.0%	52.6%	0.4%	0.0%	14.6%	0.3%
South Bend Park	0.1%	66.8%	2.4%	0.0%	27.3%	1.6%	0.0%	5.9%	1.0%
South Evelyn Place Park	0.0%	34.2%	0.0%	0.0%	61.4%	0.0%	0.0%	4.4%	0.0%
South Gordon Triangle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	99.4%	0.0%
Southside Park	0.2%	84.9%	8.6%	0.0%	12.3%	2.0%	0.0%	2.8%	1.3%
Spellman-Morehouse Beauty Spot	0.0%	0.0%	0.0%	0.0%	12.8%	0.0%	0.0%	87.4%	0.0%
Spink-Collins Park	0.0%	95.6%	1.2%	0.0%	2.3%	0.0%	0.0%	2.1%	0.1%
Spring Valley Jewish Corner	0.0%	41.0%	0.0%	0.0%	26.9%	0.0%	0.0%	32.1%	0.0%
Spring Valley Park	0.0%	93.6%	0.2%	0.0%	6.0%	0.0%	0.0%	0.4%	0.0%
Springdale Park	0.0%	21.5%	0.1%	0.0%	65.5%	0.3%	0.0%	13.1%	0.1%
Springlake Park	0.0%	94.2%	0.2%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
Springvale Park	0.0%	54.3%	0.1%	0.0%	33.7%	0.1%	0.0%	12.0%	0.1%
Stafford Circle Park	0.0%	21.7%	0.0%	0.0%	57.0%	0.0%	0.0%	20.3%	0.0%
Stafford Street Park	0.0%	25.4%	0.0%	0.0%	53.4%	0.0%	0.0%	21.0%	0.0%
Stephanie Drive Park	0.0%	49.2%	0.0%	0.0%	46.6%	0.0%	0.0%	4.2%	0.0%
Stone Hogan Park	0.0%	90.1%	0.5%	0.0%	6.0%	0.0%	0.0%	4.0%	0.1%
Stoney Point Park	0.0%	3.3%	0.0%	0.0%	22.0%	0.0%	0.0%	74.9%	0.0%
Summerhill Triangle	0.0%	46.4%	0.0%	0.0%	35.3%	0.0%	0.0%	18.3%	0.0%
Sunken Garden Park	0.0%	64.0%	0.0%	0.0%	30.7%	0.0%	0.0%	5.3%	0.0%
Sunnybrook Park	0.0%	98.5%	0.1%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%
Swann Preserve	0.1%	95.2%	2.3%	0.0%	4.3%	0.2%	0.0%	0.5%	0.1%
Sylvan Circle Playlot	0.0%	44.9%	0.0%	0.0%	45.5%	0.0%	0.0%	9.7%	0.0%
Tanyard Creek Park	0.0%	68.7%	0.5%	0.0%	28.5%	0.3%	0.0%	2.7%	0.1%
Tanyard Creek Urban Forest	0.0%	86.3%	0.3%	0.0%	8.2%	0.0%	0.0%	5.4%	0.1%
Tennyson Circle	0.0%	79.3%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%	0.0%
Thomasville Park	0.0%	46.6%	0.4%	0.0%	38.0%	0.5%	0.0%	15.5%	0.6%
Todd Street Triangle	0.0%	53.0%	0.0%	0.0%	16.3%	0.0%	0.0%	28.1%	0.0%
Torrence Circle	0.0%	0.0%	0.0%	0.0%	19.9%	0.0%	0.0%	80.5%	0.0%
Tremont Playlot	0.0%	44.1%	0.0%	0.0%	52.9%	0.0%	0.0%	3.1%	0.0%
Tucson Trail Park	0.0%	67.0%	0.1%	0.0%	19.1%	0.0%	0.0%	13.9%	0.1%
Tullwater Park	0.0%	78.9%	0.2%	0.0%	16.7%	0.1%	0.0%	4.5%	0.1%
Underwood Hills Park	0.0%	73.9%	0.3%	0.0%	18.7%	0.1%	0.0%	7.4%	0.2%
Valley Road and Habersham Park	0.0%	77.4%	0.0%	0.0%	19.0%	0.0%	0.0%	3.6%	0.0%
Vedado-Greenwood Triangle	0.0%	59.9%	0.0%	0.0%	37.0%	0.0%	0.0%	0.0%	0.0%
Veltre Circle	0.0%	45.0%	0.0%	0.0%	55.1%	0.0%	0.0%	0.0%	0.0%
Verbena Street Playlot	0.0%	7.4%	0.0%	0.0%	62.4%	0.0%	0.0%	30.1%	0.0%
Vermont Road Park	0.0%	87.4%	0.1%	0.0%	7.5%	0.0%	0.0%	5.2%	0.0%
Vine City Park	0.0%	9.3%	0.0%	0.0%	37.7%	0.0%	0.0%	52.9%	0.2%
Virgilee Park	0.0%	45.0%	0.1%	0.0%	50.5%	0.1%	0.0%	4.6%	0.0%
Virginia Highland Triangle	0.0%	23.4%	0.0%	0.0%	20.2%	0.0%	0.0%	56.4%	0.0%
Walker Park	0.0%	18.7%	0.1%	0.0%	72.2%	0.4%	0.0%	9.1%	0.1%
Walton Spring Park	0.0%	1.9%	0.0%	0.0%	11.7%	0.0%	0.0%	86.6%	0.0%
Washington Park	0.0%	31.0%	0.3%	0.0%	46.5%	0.7%	0.0%	22.5%	1.0%
Welch Street Park	0.0%	58.7%	0.0%	0.0%	40.4%	0.0%	0.0%	1.4%	0.0%
West End Park	0.0%	33.7%	0.1%	0.0%	54.7%	0.3%	0.0%	11.6%	0.2%

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Park	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Park	% UTC	% City Land	% Park	% NTV	% City Land	% Park	% NV
West Manor Park	0.0%	54.7%	0.3%	0.0%	33.0%	0.3%	0.0%	12.3%	0.3%
West Wesley Park	0.0%	94.4%	0.1%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%
Westminster Park	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	99.7%	0.0%
Westside Park	0.0%	28.6%	0.1%	0.0%	23.9%	0.2%	0.0%	47.5%	1.1%
Whetstone Creek Park	0.0%	80.0%	0.1%	0.0%	18.4%	0.0%	0.0%	1.6%	0.0%
Whittier Mills Park	0.0%	59.6%	0.6%	0.0%	38.0%	0.6%	0.0%	2.4%	0.1%
Wildwood Gardens Park	0.0%	80.3%	0.1%	0.0%	13.3%	0.0%	0.0%	6.3%	0.0%
Wildwood Place	0.0%	77.9%	0.0%	0.0%	22.0%	0.0%	0.0%	0.0%	0.0%
Willard and Gordon Park	0.0%	75.9%	0.0%	0.0%	13.7%	0.0%	0.0%	10.5%	0.0%
Wilson Mill Park	0.0%	62.6%	1.1%	0.0%	31.9%	0.9%	0.0%	5.5%	0.4%
Wilson Park Triangle	0.0%	65.2%	0.0%	0.0%	35.1%	0.0%	0.0%	0.0%	0.0%
Windsor Street Park	0.0%	21.9%	0.0%	0.0%	68.0%	0.1%	0.0%	10.1%	0.0%
Winn Park	0.0%	62.6%	0.3%	0.0%	30.8%	0.2%	0.0%	6.6%	0.1%
Yonah Park	0.0%	75.5%	0.1%	0.0%	23.3%	0.0%	0.0%	1.2%	0.0%
Zimmer Drive Circle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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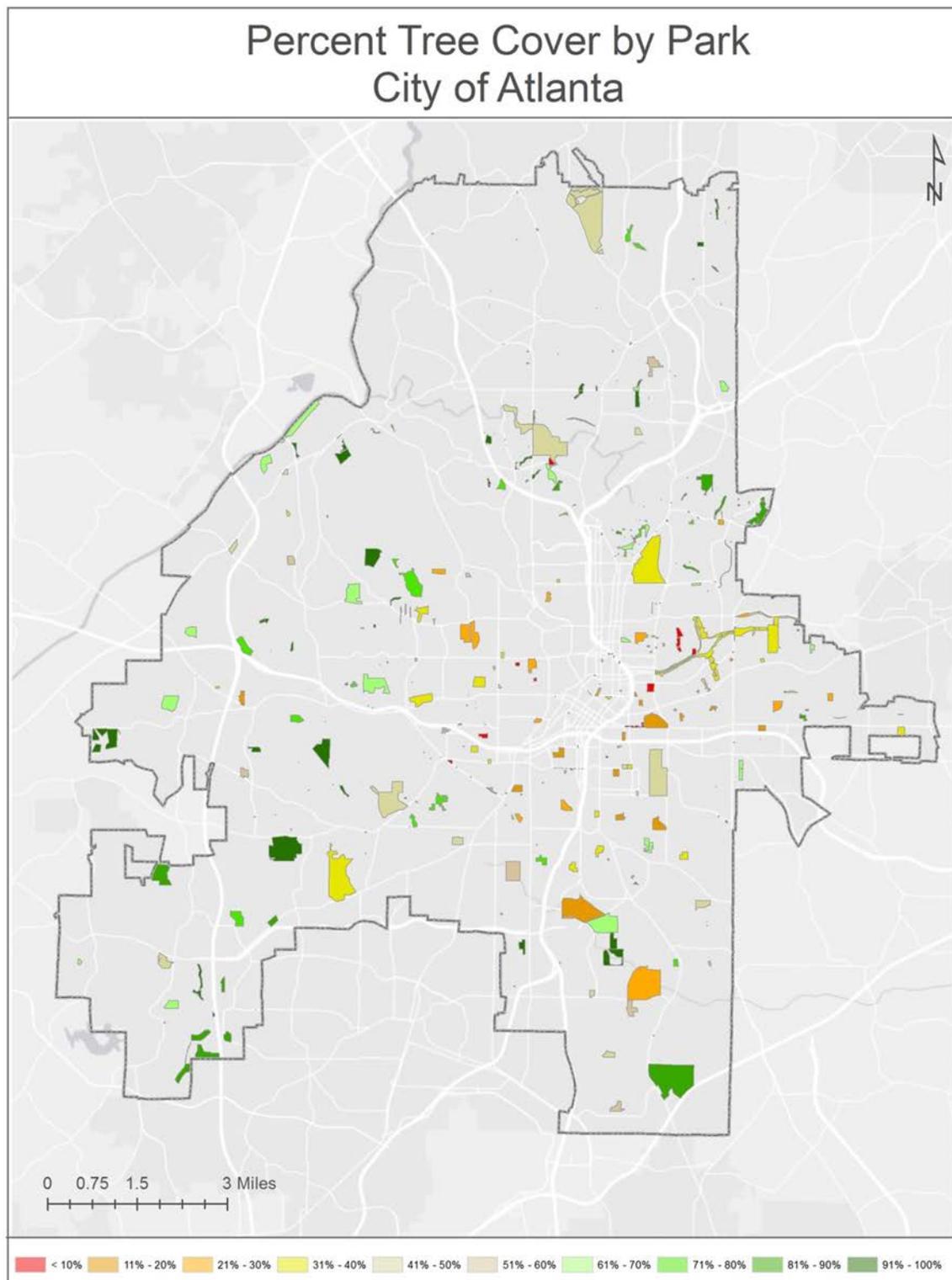
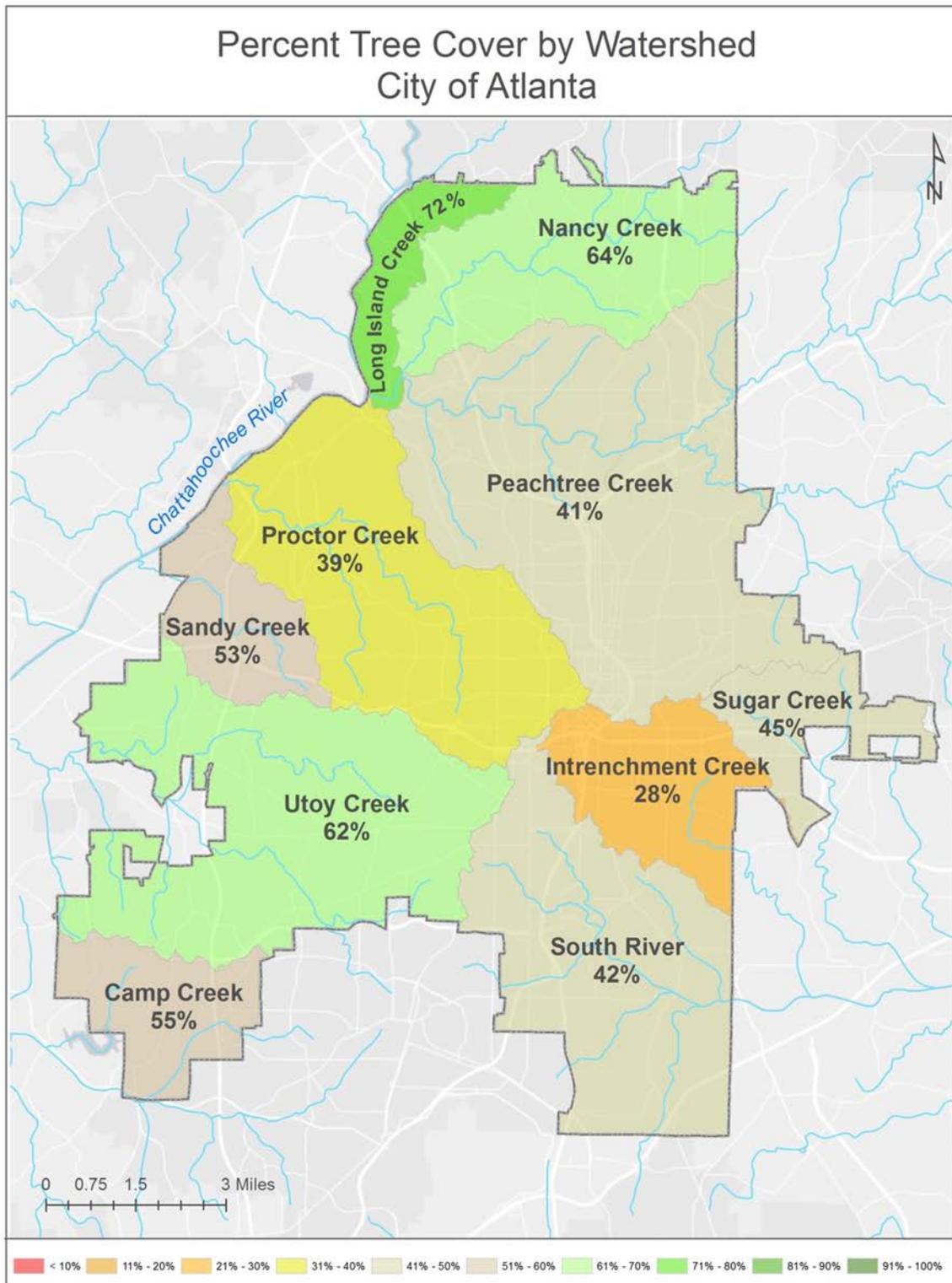**Figure 49: City of Atlanta 2008 Percent Tree Cover by Park Map**

Appendix H: Watersheds and Sub-Watersheds

Table 33: Land Cover Area and Percent Cover by Watershed

Watershed	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
Intrenchment Creek	4862	1,370	28%	1,338	28%	2,155	44%
Proctor Creek	12056	4,716	39%	2,973	25%	4,368	36%
Peachtree Creek	19554	8,108	41%	3,600	18%	7,846	40%
Sugar Creek	11925	4,996	42%	3,011	25%	3,920	33%
South River	3001	1,346	45%	968	32%	910	30%
Sandy Creek	3575	1,891	53%	844	24%	840	24%
Camp Creek	3805	2,109	55%	843	22%	852	22%
Utoy Creek	14981	9,290	62%	3,656	24%	2,643	18%
Nancy Creek	8002	5,152	64%	1,326	17%	1,531	19%
Long Island Creek	2318	1,673	72%	318	14%	328	14%

Table 34: Land Cover Summary Statistics by Watershed

Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Watershed	% UTC	% City Land	% Watershed	% NTV	% City Land	% Watershed	% NV
Intrenchment Creek	2%	28%	3%	2%	28%	7%	3%	44%	8%
Proctor Creek	6%	39%	12%	4%	24%	16%	6%	37%	18%
South River	6%	42%	12%	4%	25%	16%	5%	33%	16%
Peachtree Creek	10%	42%	20%	4%	18%	19%	9%	40%	31%
Sugar Creek	2%	43%	3%	1%	28%	5%	1%	29%	3%
Sandy Creek	2%	54%	5%	1%	25%	5%	1%	21%	3%
Camp Creek	3%	55%	5%	1%	22%	5%	1%	23%	3%
Utoy Creek	10%	60%	22%	4%	23%	18%	3%	17%	10%
Nancy Creek	6%	64%	13%	2%	17%	7%	2%	19%	6%
Long Island Creek	2%	72%	4%	0%	14%	2%	0%	14%	1%

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Figure 50: City of Atlanta 2008 Percent Tree Cover by Watershed Map

Table 35: Land Cover Area and Percent Tree Cover by Sub-Watershed

Sub-Watershed	Watershed	Area (acres)	Tree Canopy (acres)	Tree Canopy (percent)	Non-Tree Vegetation (acres)	Non-Tree Vegetation (percent)	Non-Vegetation (acres)	Non-Vegetation (percent)
CC-2	Camp Creek	1,798	1,219	68%	357	20%	221	12%
CC-1	Camp Creek	2,014	893	44%	483	24%	637	32%
IN-1	Intrenchment Creek	2,270	770	34%	649	29%	851	38%
IN-2	Intrenchment Creek	2,542	599	24%	681	27%	1,262	50%
LI-1	Long Island Creek	2,178	1,569	72%	299	14%	309	14%
NA-2	Nancy Creek	2,736	1,907	70%	486	18%	343	13%
NA-1	Nancy Creek	2,617	1,655	63%	405	15%	557	21%
NA-3	Nancy Creek	2,646	1,588	60%	429	16%	628	24%
PE-2	Peachtree Creek	3,026	1,849	61%	449	15%	728	24%
PE-1	Peachtree Creek	3,818	1,931	51%	619	16%	1,268	33%
PE-6	Peachtree Creek	2,620	1,304	50%	620	24%	696	27%
PE-5	Peachtree Creek	1,675	729	44%	239	14%	706	42%
PE-4	Peachtree Creek	4,911	1,479	30%	1,056	22%	2,376	48%
PE-3	Peachtree Creek	3,514	909	26%	626	18%	1,978	56%
PR-3	Proctor Creek	1,950	1,067	55%	536	27%	346	18%
PR-2	Proctor Creek	2,515	1,247	50%	654	26%	613	24%
PR-1	Proctor Creek	2,723	1,203	44%	637	23%	884	32%
PR-5	Proctor Creek	1,458	463	32%	251	17%	745	51%
PR-4	Proctor Creek	3,947	926	23%	973	25%	2,048	52%
SA-1	Sandy Creek	3,582	1,940	54%	885	25%	757	21%
SO-2	South River	2,704	1,505	56%	467	17%	731	27%
SO-3	South River	1,691	835	49%	465	28%	390	23%
SO-4	South River	1,419	636	45%	330	23%	453	32%
SO-1	South River	2,287	868	38%	675	30%	743	32%
SO-5	South River	3,887	1,156	30%	1,084	28%	1,647	42%
SU-1	Sugar Creek	3,014	1,308	43%	846	28%	859	29%
UT-5	Utoy Creek	1,489	1,017	68%	280	19%	192	13%
UT-1	Utoy Creek	2,994	1,922	64%	589	20%	483	16%
UT-4	Utoy Creek	2,562	1,539	60%	556	22%	467	18%
UT-2	Utoy Creek	3,980	2,325	58%	968	24%	686	17%
UT-3	Utoy Creek	3,565	1,888	53%	1,025	29%	651	18%

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Table 36: Land Cover Summary Statistics by Sub-Watershed

Watershed	Tree Cover			Non-Tree Vegetation			Non-Vegetation		
	% City Land	% Sub-Watershed	% UTC	% City Land	% Sub-Watershed	% NTV	% City Land	% Sub-Watershed	% NV
CC-1	1.06%	44.34%	2.22%	0.57%	23.99%	2.59%	0.76%	31.65%	2.52%
CC-2	1.45%	67.79%	3.03%	0.42%	19.88%	1.92%	0.26%	12.32%	0.88%
IN-1	0.92%	33.92%	1.91%	0.77%	28.57%	3.48%	1.01%	37.51%	3.37%
IN-2	0.71%	23.55%	1.49%	0.81%	26.81%	3.66%	1.50%	49.64%	5.00%
LI-1	1.87%	72.06%	3.90%	0.36%	13.73%	1.61%	0.37%	14.20%	1.22%
NA-1	1.97%	63.23%	4.11%	0.48%	15.49%	2.18%	0.66%	21.27%	2.20%
NA-2	2.27%	69.69%	4.74%	0.58%	17.78%	2.61%	0.41%	12.53%	1.36%
NA-3	1.89%	60.03%	3.95%	0.51%	16.23%	2.31%	0.75%	23.73%	2.49%
PE-1	2.29%	50.57%	4.80%	0.74%	16.22%	3.33%	1.51%	33.21%	5.02%
PE-2	2.20%	61.11%	4.59%	0.53%	14.83%	2.41%	0.87%	24.06%	2.88%
PE-3	1.08%	25.87%	2.26%	0.74%	17.82%	3.36%	2.35%	56.31%	7.83%
PE-4	1.76%	30.12%	3.68%	1.26%	21.50%	5.67%	2.82%	48.38%	9.41%
PE-5	0.87%	43.52%	1.81%	0.28%	14.28%	1.28%	0.84%	42.18%	2.80%
PE-6	1.55%	49.75%	3.24%	0.74%	23.67%	3.33%	0.83%	26.56%	2.76%
PR-1	1.43%	44.16%	2.99%	0.76%	23.38%	3.42%	1.05%	32.45%	3.50%
PR-2	1.48%	49.61%	3.10%	0.78%	26.02%	3.51%	0.73%	24.38%	2.43%
PR-3	1.27%	54.74%	2.65%	0.64%	27.49%	2.88%	0.41%	17.77%	1.37%
PR-4	1.10%	23.46%	2.30%	1.16%	24.66%	5.23%	2.43%	51.88%	8.11%
PR-5	0.55%	31.75%	1.15%	0.30%	17.18%	1.35%	0.89%	51.06%	2.95%
SA-1	2.31%	54.16%	4.82%	1.05%	24.71%	4.75%	0.90%	21.12%	3.00%
SO-1	1.03%	37.97%	2.16%	0.80%	29.53%	3.63%	0.88%	32.50%	2.94%
SO-2	1.79%	55.66%	3.74%	0.56%	17.29%	2.51%	0.87%	27.04%	2.90%
SO-3	0.99%	49.39%	2.08%	0.55%	27.52%	2.50%	0.46%	23.08%	1.55%
SO-4	0.76%	44.83%	1.58%	0.39%	23.23%	1.77%	0.54%	31.93%	1.79%
SO-5	1.37%	29.74%	2.87%	1.29%	27.89%	5.82%	1.96%	42.36%	6.52%
SU-1	1.56%	43.42%	3.25%	1.01%	28.07%	4.54%	1.02%	28.50%	3.40%
UT-1	2.28%	64.20%	4.78%	0.70%	19.66%	3.16%	0.57%	16.13%	1.91%
UT-2	2.76%	58.42%	5.78%	1.15%	24.32%	5.20%	0.82%	17.25%	2.72%
UT-3	2.24%	52.97%	4.69%	1.22%	28.76%	5.51%	0.77%	18.27%	2.58%
UT-4	1.83%	60.08%	3.82%	0.66%	21.70%	2.99%	0.55%	18.22%	1.85%
UT-5	1.21%	68.31%	2.53%	0.33%	18.82%	1.50%	0.23%	12.87%	0.76%

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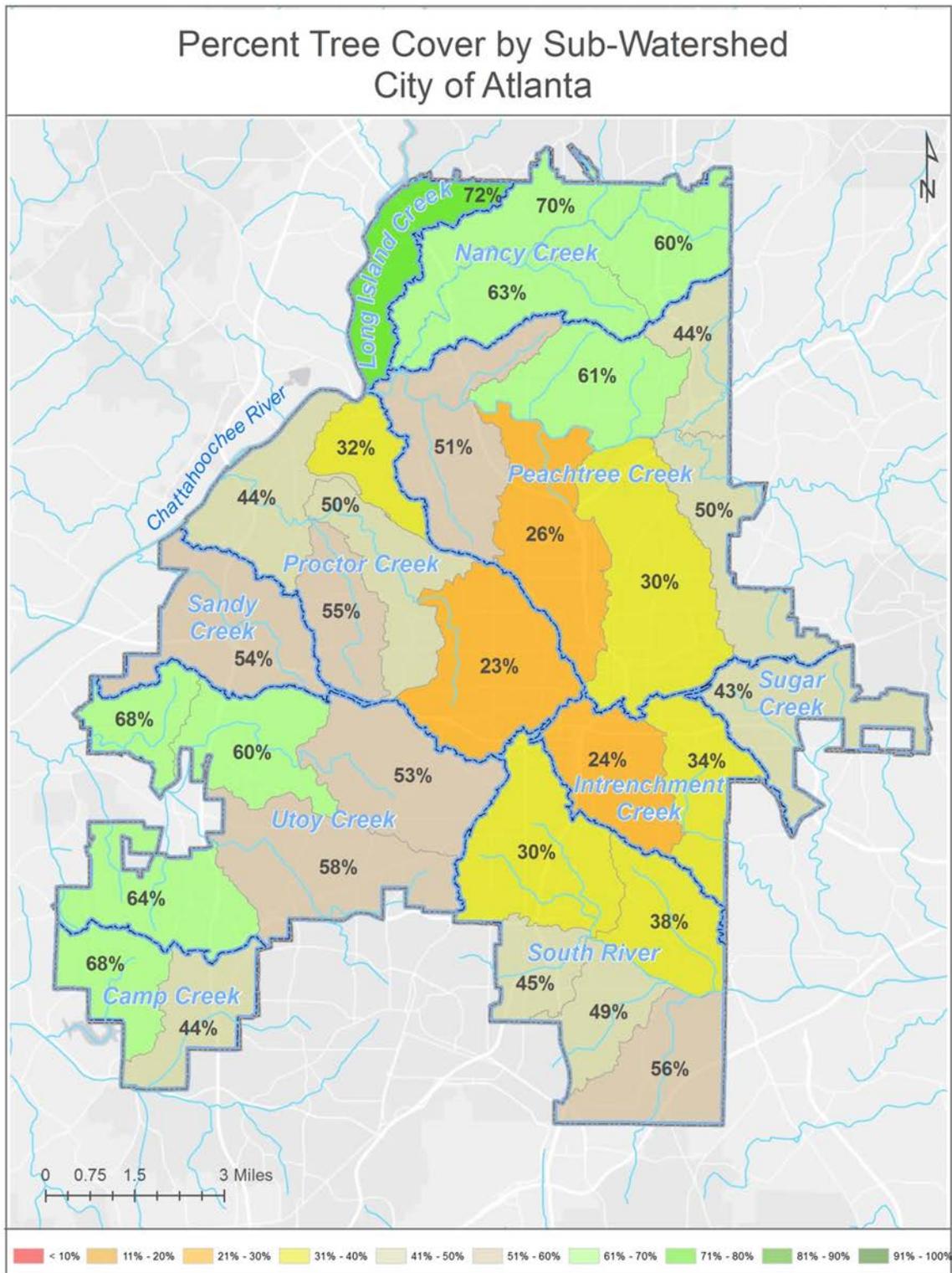
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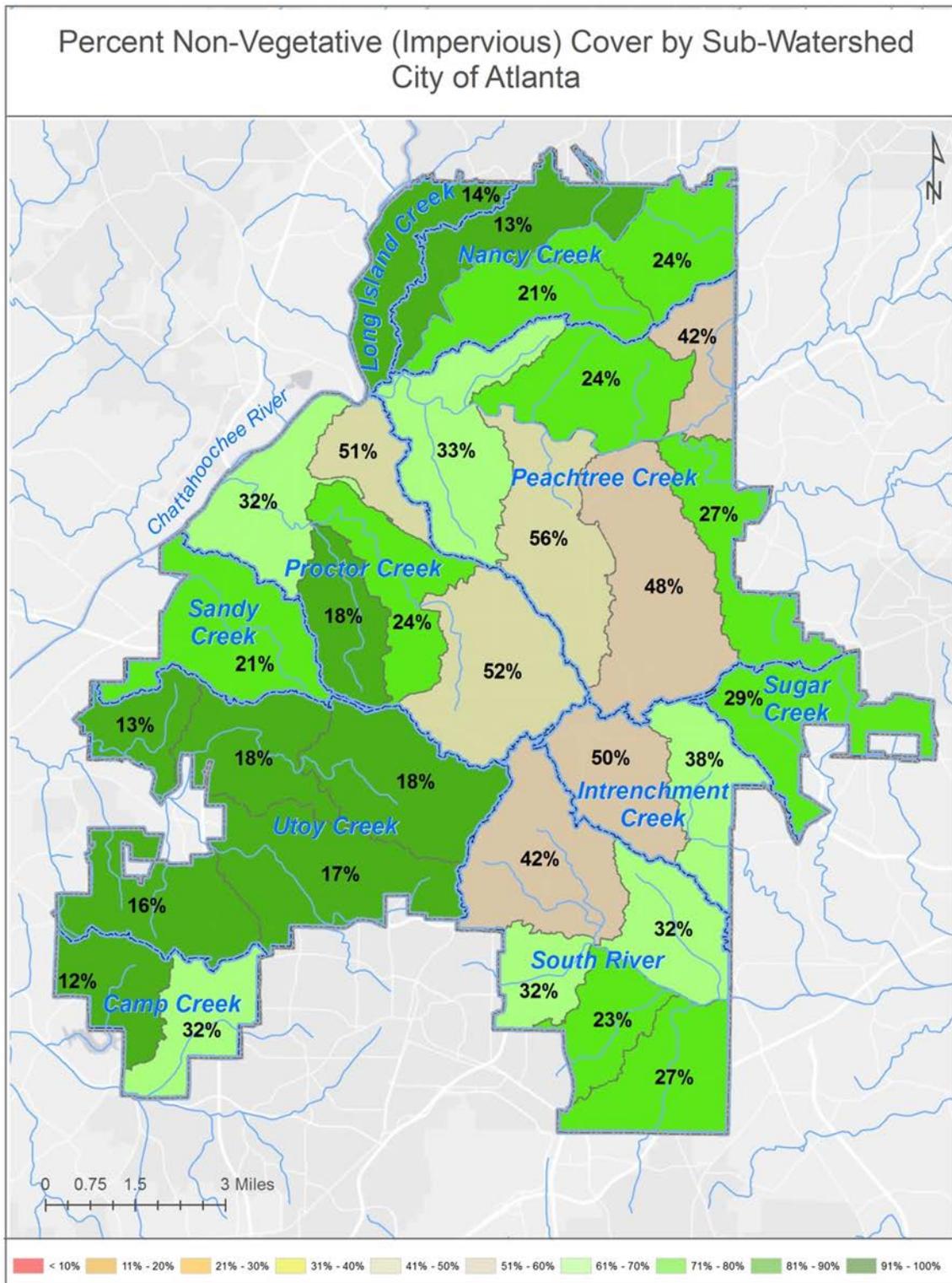**Figure 51: City of Atlanta 2008 Percent Tree Cover by Sub-Watershed Map**

Figure 52: City of Atlanta 2008 Percent Non Vegetative (Impervious) Cover by Sub-Watershed Map

Appendix I: Comparison Cities for UTC Studies

City	UTC %	Method	Year	Source Institution
Ann Arbor	32.9	Multispectral Remote Sensing	2010	AMEC Earth & Environmental
Austin	32.0	Aerial Photography Pixel Analysis		Austin Parks and Recreation Department
Baltimore	27.3	Aerial Imagery	2009	Rubenstein School of the Environmental & Natural Resources, University of Vermont
Charlotte	47.0	NAIP Imagery	2013	University of Vermont
Chicago	17.2			USDA Forest Service, Northeastern Research Station
Dallas	29.5	Multispectral Remote Sensing	2010	AMEC Texas Trees Foundation
Des Moines	26.8	Satellite Imagery and LiDAR	2009	Rubenstein School of the Environmental & Natural Resources, University of Vermont
Los Angeles	17.5	QuickBird Remote Sensing	2007	Center for Urban Forest Research, Pacific Southwest Research Station, USDA Forest Service; & Department of Land, Air, and Water Resources, University of California Davis
Miami	21.0		2008	The United States Conference of Mayors
New York City	23.0	Satellite Imagery and LiDAR	2006	USDA Forest Service, Northeastern Research Station
Pittsburgh	42.0	Satellite Imagery and LiDAR	2011	USDA Forest Service: Tree Canopy Assessment Protocols
Portland	28.2		2007	Portland Parks & Recreation, City Nature Urban Forestry
Salem, OR^	23.2	Satellite Imagery	2011	AMEC Environment & Infrastructure
San Diego^	13.0	Landsat Satellite 30 m	2003	USDA Forest Service
San Fancisco	29.0	Satellite Imagery	2007	USDA Forest Service, Pacific Southwest Research Station
Washington DC	35.0	Satellite Imagery and LiDAR	2009	Rubenstein School of the Environmental & Natural Resources, University of Vermont

Figure 53: Comparison Cities Summary

Assessing Urban Tree Cover in the City of Atlanta
A Baseline Canopy Study

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