Lightning Community Strategic Plan

Sponsored by:
City of Fairburn

Prepared by:
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Lightning Neighborhood Association

Service Donations

Facility Donations

The following organizations made their facilities available for community and advisory committee meetings:

City of Fairburn

Lightning Community Strategic Plan

Part 1: Introduction

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Introduction

The community of Lightning is a small-scale neighborhood node just 1 block off the northwest side of the historic downtown Broad Street in Fairburn, GA. The community is characterized by narrow streets, empty lots, small cottage craftsman style homes and light commercial parcels. It also contains a recently renovated public pocket park for home owners and children. It holds a pavilion and recreational equipment for play.

This strategic plan is a community-based vision for guiding the growth of and change in the neighborhood. It calls for doing so in a way that preserves and builds on neighborhood strengths, addresses challenges and weaknesses, and takes full advantage of Lightning's potential.

The study area includes all stakeholder-identified properties and boundaries. These were discussed and determined by homeowners and small business owners of the Lightning Community.

The Community of Lightning is in the northwest corner of the City of Fairburn near the major cross streets of West Campbellton Street and West Broad Street. The following streets serve as the boundaries for the community: Mullis Street to the south, Orchard Street to the East, Margaret Street to the Northeast and West Campbellton Street to the West. The community of Lightning is made up of approximately 43 acres and contains 137 parcels.

Figure 1: Lightning Community Neighborhood Boundaries

Lightning Community Strategic Plan

Part 2: Historical Perspective

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Historical Perspective

The community of lightning finds its beginnings in the early days of settling the lands south of what would become Atlanta. In 1833, the town of Cartersville was formed and then one year later changed its name to Berryville. The state legislature enacted a town charter and Berryville became the now present-day Fairburn. In 1849 the Atlanta – LaGrange railroad had created a charter and brought with it the creation of a train depot. By 1870, Fairburn's total population was 305. The town now had five groceries, four saloons, six dry goods stores, factories, several cotton gins, and an oil mill.

Part of the demographic characteristics of Fairburn was its mixed population of African-Americans and whites. John Toles was the first recorded African-American merchant of the town in the 1890's. He owned a barber shop and a restaurant that was frequented by both blacks and whites of the town. Among one of the stories pertaining to the name of the community of Lightning is that this neighborhood was where folks both black and white also went to purchase bootleg liquor better known as lightning or moonshine.

Another unique perspective taken on the origins of the community's name was the numerous recorded lightning strikes that occurred on what appeared to be a regular basis throughout the towns recorded history. These weather reports and lightning strikes have been recorded in a published memoire of the City of Fairburn and its history.

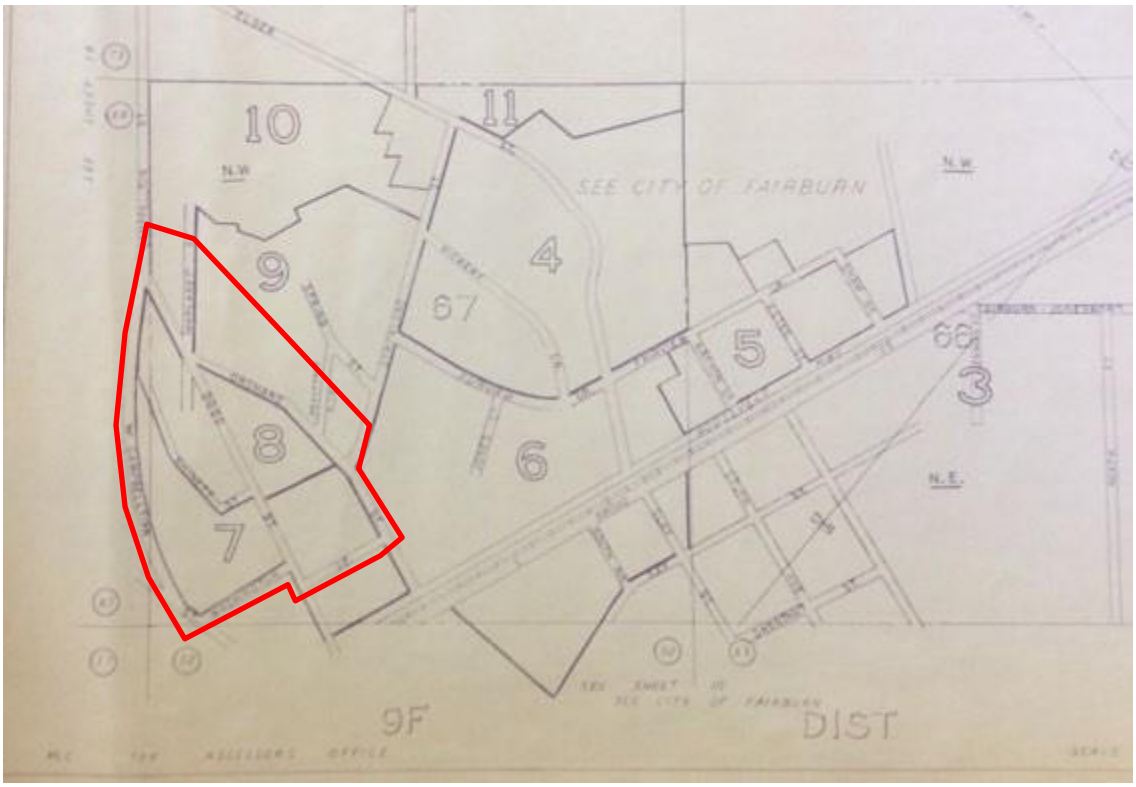

Figure 2: Old plat of city with streets forming the Lightning Community. circa 1950

Lightning Community Strategic Plan

Part 3: Existing Conditions

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Existing Conditions

The initial planning process included a detailed review of existing conditions and site inventory. Transportation, land use, urban design, historic resources, natural environment, demographics, parks, and other existing conditions were carefully reviewed during the planning process to identify opportunities and issues.

Among the key findings are:

- Neighborhood residents are diverse in terms of age, income, and educational level.
- The neighborhood has a wealth of historic resources
- Historically the neighborhood was primarily made up of single-family homes with some churches and places of business and characterized by a multi-generational African-American population (Some recent single-family residential development activities have occurred in the neighborhood along with the loss of some older deteriorated houses).
- The neighborhood's mix of land uses is dominated by single-family houses, duplexes, and small commercial uses.
- Development pressure is changing the face of many parts of the neighborhood, particularly adjacent to downtown Fairburn and the West Campbellton Corridor.
- The neighborhood is well connected to schools, churches, and public facilities.
- The neighborhood benefits from recent downtown development opportunities and has the potential to generate its own development initiative.
- Bus service exist in and near the neighborhood, and new transportation-oriented development initiatives are proposed, but much remains to be done to maximize use.
- Vehicular traffic is not well-served due to an existing cross grid of streets at odd angles and narrowing side streets, but opportunities exist to create new streets and improve roadway operations.
- High speed cut-through traffic is a problem along Dodd St, Golightly, and several other streets.
- Walking is not supported due to poor sidewalk conditions and non-pedestrian friendly streets, particularly along Dodd Street and Orchard Street, which discourages walking.
- A range of pedestrian opportunities exist, including sidewalks, off-street trails and on-street bike routes, but those opportunities exist as an improvement plan for community conditions.
- Green corridors and tree canopy can play a major role in the potential for developing new greenspaces and pocket parks.

Demographics and Employment

Due to the size of the community it was difficult to get accurate demographic data on the Lightning Community. Instead Consultants used census data from the City of Fairburn to establish baseline demographic data. The 2013 -2017 American Community Survey 5-year estimates states that the City of Fairburn had an estimated population of 14,257 in 2017. The American Community Survey also indicates the following about the population:

- The populations are 41.9% male and 58.1% female

- The median age is 32.3
- Out of the population of 14,257 people 77.2% of residence identify as Black or African American, 13.7 % of people identified as Hispanic or Latino, 8.1% of the population identify as White and .5% identified as other.
- The City of Fairburn had a median income of $43,886.00

In a 2015 US Census Work Area Profile Report the Community of Lightning had 53.1% of males in the workforce and 46.9% females in the workplace. 16.8% percent of people had attained a bachelor's degree or advance degree, 27.74% had some college or Associates degree, 30.1% of people had a high school diploma and 14.2% people had less than a high school education.

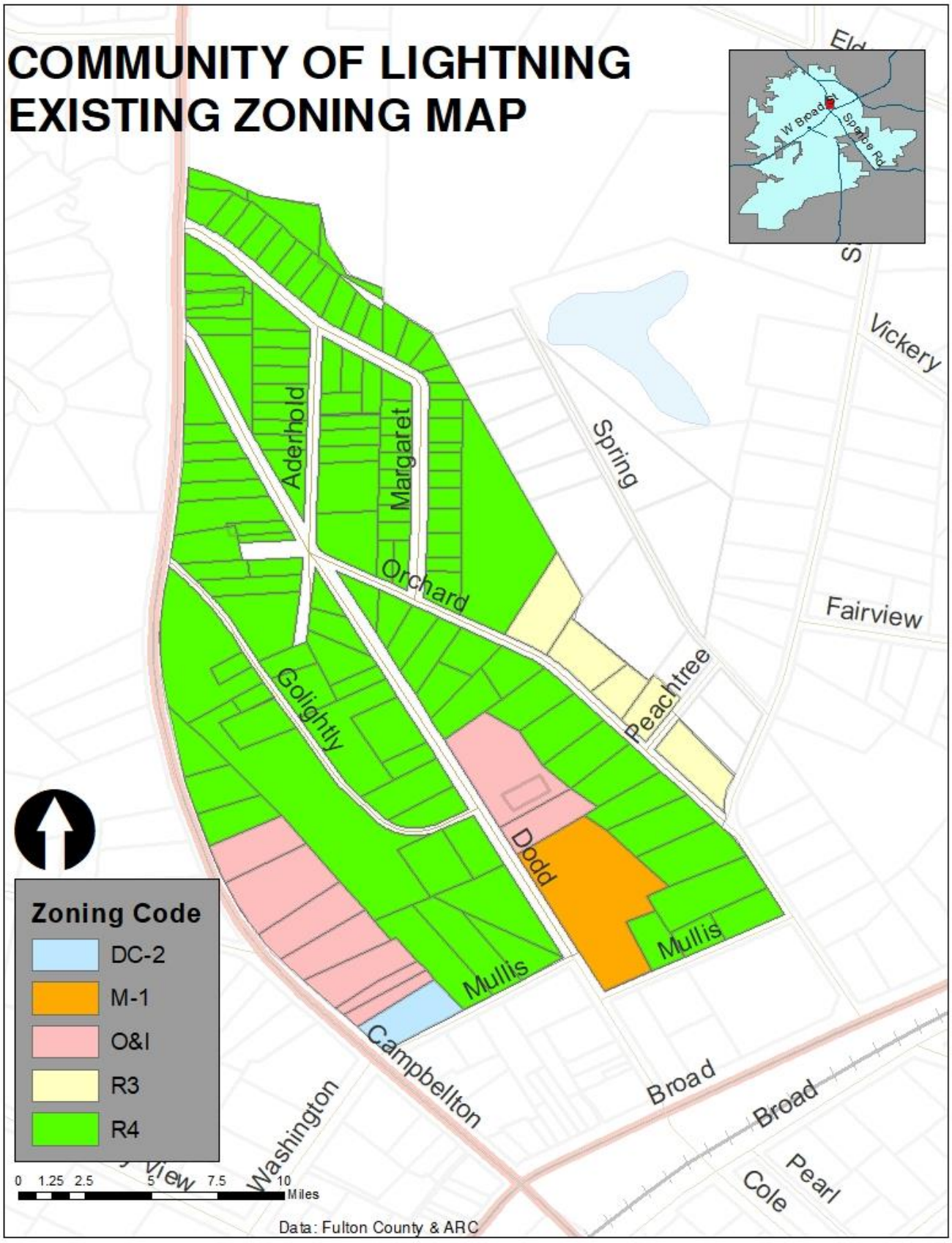
The dominant industry for employees were wholesale trade (64.6%) or transportation and warehousing (26.5%). Most of the workforce in the community were between the ages of 30 to 54 (54.9%). The remainder of workforce were adults aged 55 or older (33.6%) and youth 20 and younger (11.5%). Seventy-five percent of workers in the (larger) census area are classified as white, twenty percent are classified as Black or African American and three percent are classified as other. One hundred percent of the workforce in the Lightning Community commute out of the community for work.

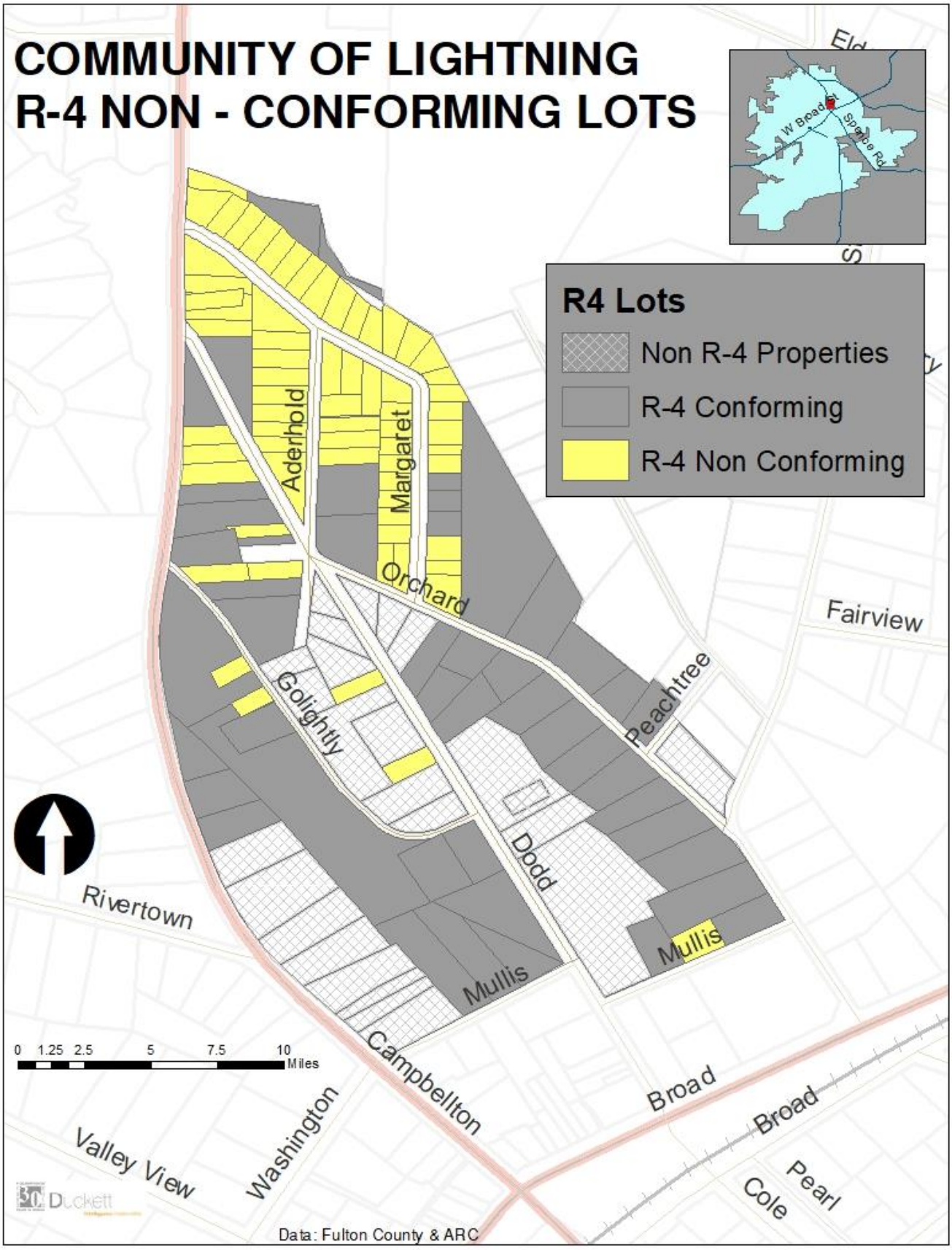
Land Use & Zoning

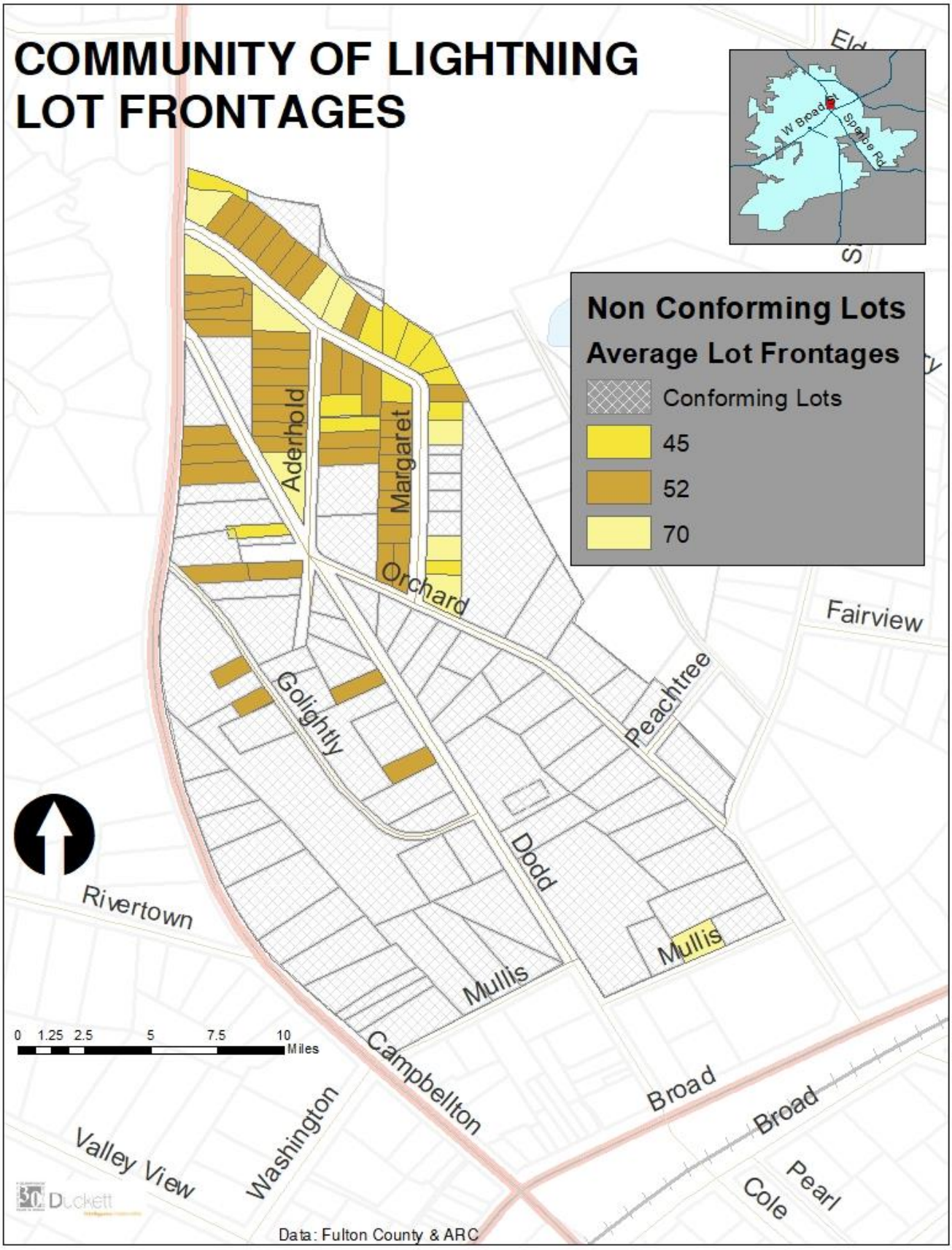
The Lightning Community is comprised of five zoning districts: R-3 (Single-Family), R-4 (Single-Family), O&I (Office Institutional), DC-2 (Downtown Commercial District) and M-1 (Light Industrial District). Approximately 86% of the Lightning District is zoned R-4. The City of Fairburn's Ordinance states that "The R-4 District is intended to provide land areas devoted to high density residential uses on small lots. The district also provides for closely related uses. Land areas zoned R-4 are further intended to provide a transition between low and high-density dwelling areas or between low density dwelling areas and non-residential areas." While the R-4 zoning classification is intended for high density development and land uses on small lots, the minimum required lot size does not support the current lot configuration of the Lightning District. As it stands 61% of the lots in the district are non-conforming to the current zoning code. The average lots in Lighting has an average lot size of approximately 1/8th of an acre and a street frontage of 52 feet. Most of the non- conforming lots are located in the north of the district along Margaret Street and Aderhold Street.

While R-4 is a dominant zoning in Lightning, there is a sprinkling of R-3, O&I, DC-2, and M-I zoning categories along the edges of the district. These combined zoning districts make up a little less than 25% of zoned property in the community.

In the 2017 City of Fairburn Zoning Code Housing Inventory Report, the Atlanta Regional Commission recommended incorporating an overlay district into the Lighting District. This district would help promote and articulate pedestrian accessibility and historic preservation. In creating this overlay, suggestions were made to review the following tools: Form Based Code, clarification of district regulations, illustration of district intent and styles, and more flexibility to allow ownership to combine lots and accommodate residential infill.


COMMUNITY OF LIGHTNING
EXISTING ZONING MAP
W Broad St
Sparrow Rd
Vickery
Spring
Fairview
Aderhold
Margaret
Orchard
Golightly
Peachtree
Dodd
Mullis
Mullis
Campbellton
Broad
Broad
Pearl
Cole
Washington
Zoning Code
DC-2
M-1
O&I
R3
R4
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC


COMMUNITY OF LIGHTNING
R-4 NON - CONFORMING LOTS
W Broad
Sparrow Rd
R4 Lots
Non R-4 Properties
R-4 Conforming
R-4 Non Conforming
Aderhold
Margaret
Orchard
Golightly
Peachtree
Fairview
Dodd
Mullis
Mullis
Rivertown
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC


COMMUNITY OF LIGHTNING
LOT FRONTAGES
Non Conforming Lots
Average Lot Frontages
Conforming Lots
45
52
70
Aderhold
Margaret
Orchard
Golightly
Peachtree
Dodd
Fairview
Rivertown
Mullis
Mullis
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC

Housing

The Atlanta Regional Commission conducted a housing analysis in 2016, City of Fairburn Housing Inventory Report 2016. In their analysis the ARC documented 137 parcels of which majority were either single family homes or vacant lots. They assessed the following property types: Single Family Homes which made up 60 % of the Lighting District, Duplexes (4%), Multi-Family (1%), Institutional (4%), Commercial (3%) and Vacant Lots (28%). The goal of their study was to assess the housing and frontage characteristics in the Lightning District and parcels along Highway 29 Overlay District.

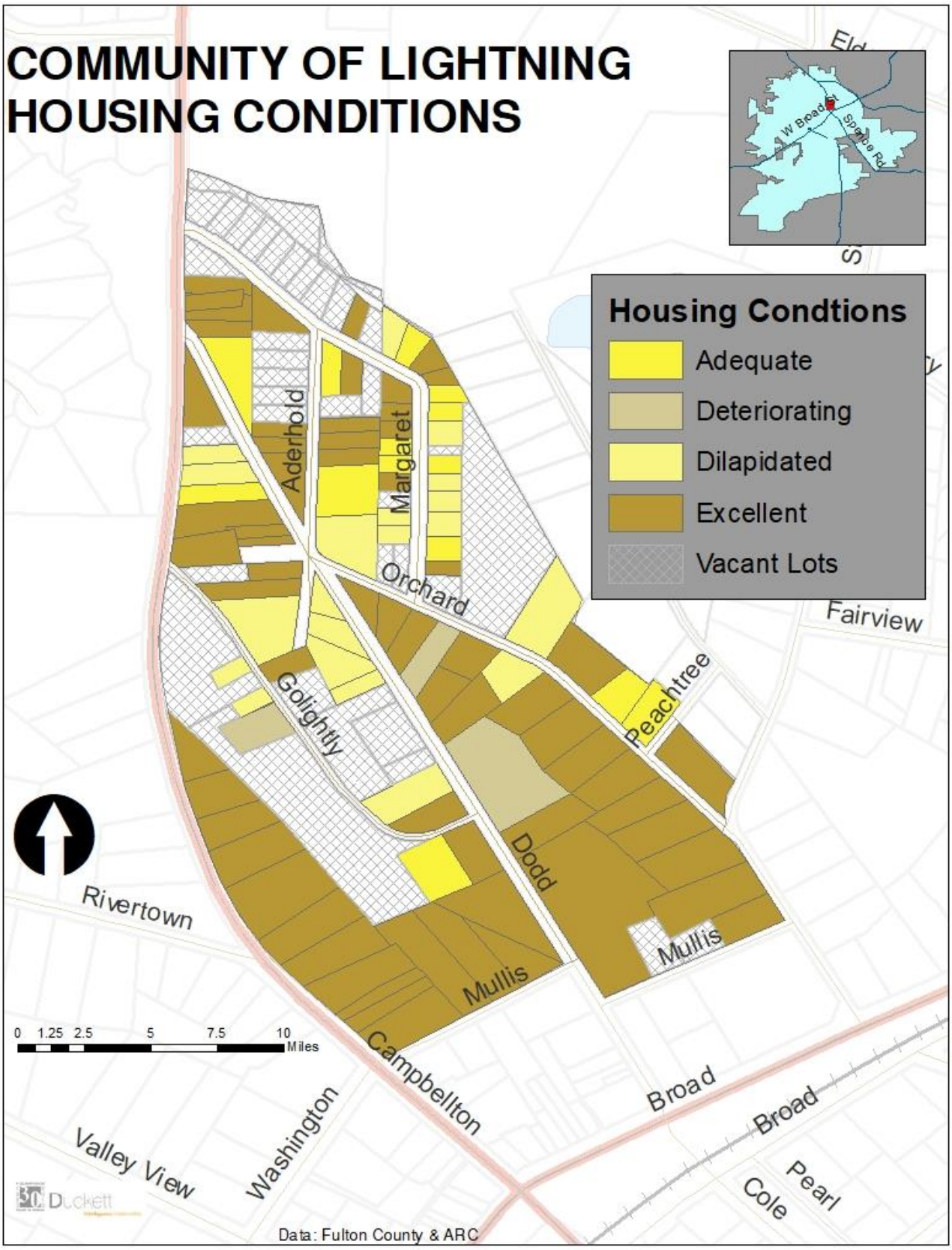
The housing conditions were broken into three different categories: Adequate, Deteriorating and Dilapidated. Adequate structures were structures that were well maintained and had few deficiencies. Deteriorating structures were structures that had substandard critical, major or minor defects. Dilapidated structures were structures which suffered major neglect. The report found that out of 99 parcels with structures 74% of the homes were considered adequate, 3% were deteriorating and 23% of the homes were classified a dilapidated.

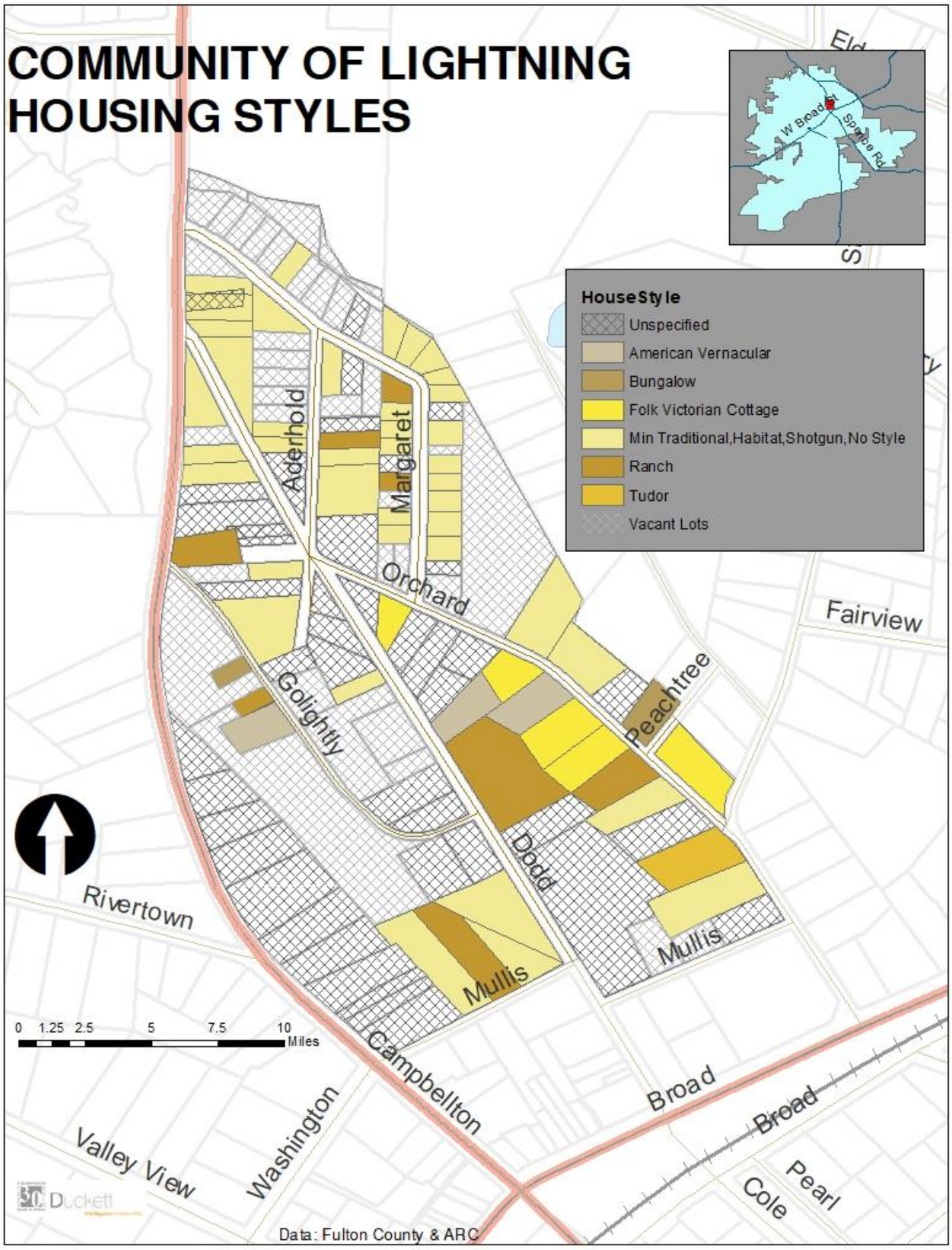
There are 137 parcels in the Community of Lighting. Out of these parcels, 38% of the parcels are owned by 9 different groups/individuals. The two largest property owners are the City of Fairburn and Chinh Nguyen. The City of Fairburn owns 5.9 acres along Golightly and at the intersection of Orchard Street, Dodd Street, and Aderhold Street. These parcels include a 2.52-acre vacant parcel along Golightly Street and the park at the intersection of Aderhold Street, Dodd Street and Orchard Street. Chinh Nguyen owns the 20 single parcels between Aderhold Street, Margaret Street and Golightly. Nguyen's property is primarily made up of vacant single family lots along Margaret Street and Aderhold Street.

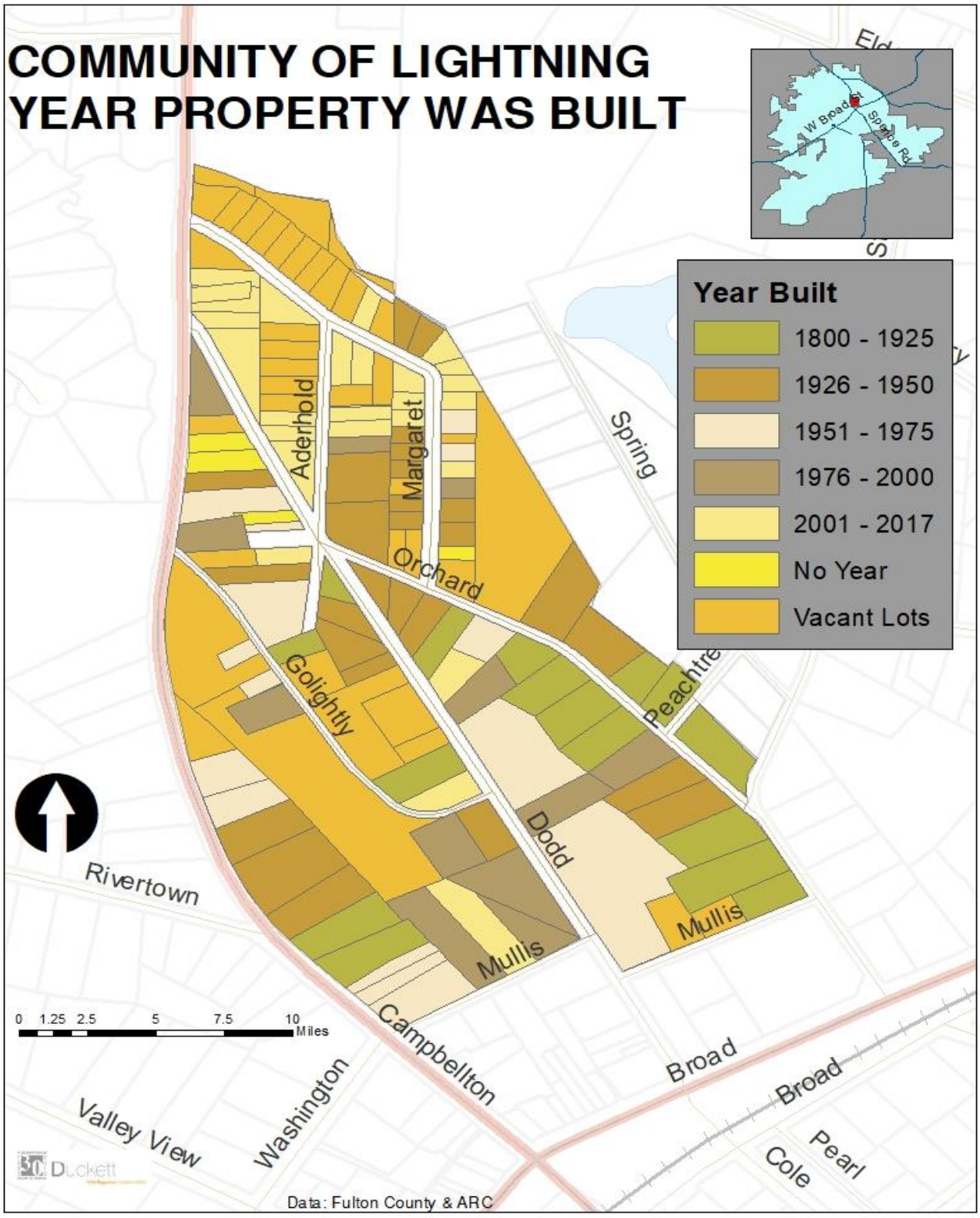
The housing styles range from minimal traditional, shotgun, American vernacular, bungalow, ranch, Tudor and folk Victorian. For this study minimal traditional, shotgun, habitat homes and homes with no academic style were grouped into one group. This grouping made up the largest classification of homes in the Lighting District. These homes are located throughout the district except for at the southern portion of Orchard Street. In this area there is a large cluster of housing diversity. Home styles in this area are the following: folk Victorian cottage, Tudor, ranch, bungalow and American vernacular.

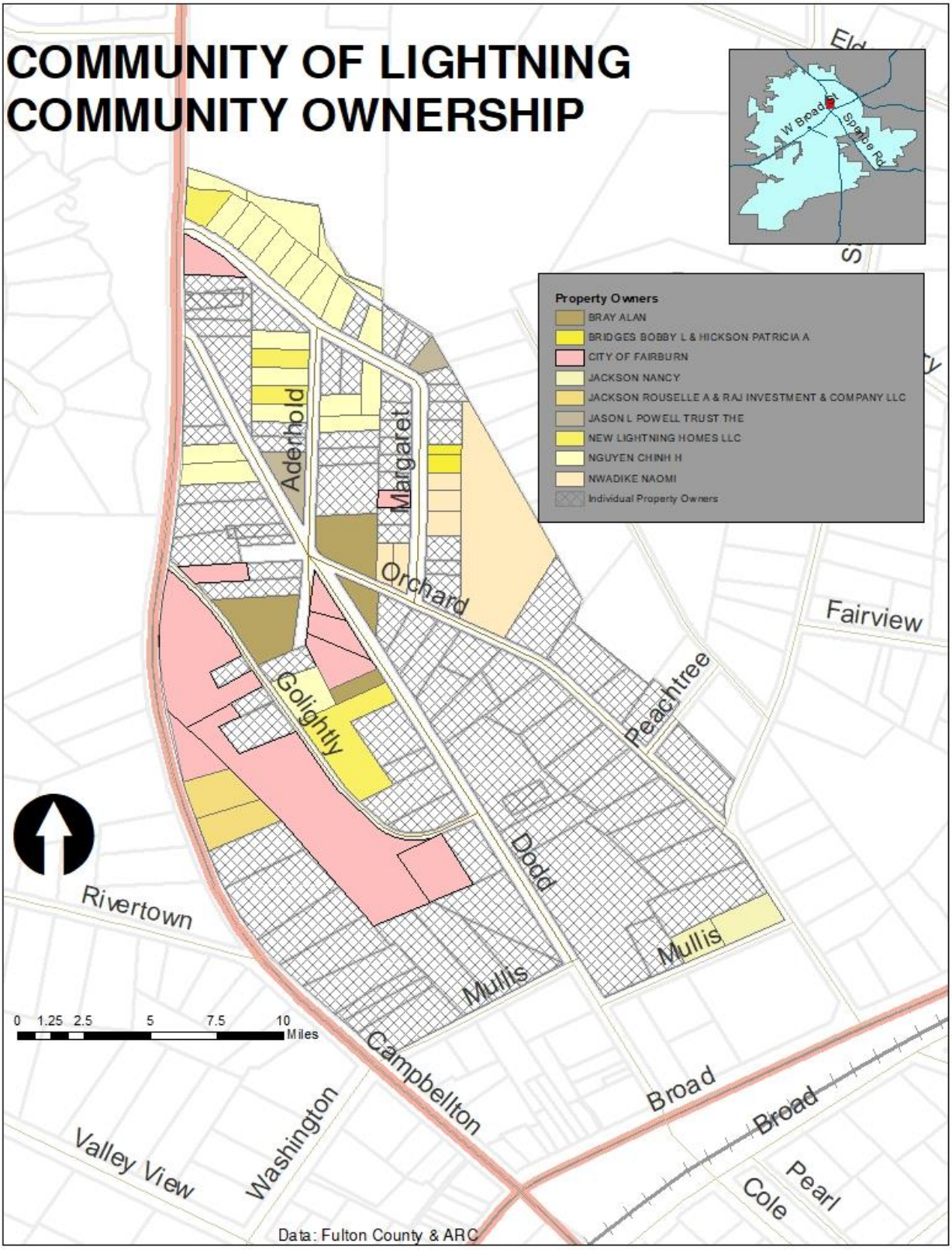
The age of homes in the Lighting District ranges from the 1800s –2017. Most of the homes built between 1800 and 1950 are located along Orchard Street and Aderhold Street. The age of homes coincides with the housing diversity in the district. The older homes vary in style from Tudor, folk Victorian cottage, bungalow and American vernacular. The northern and western portion of the district along Dodd Street has a home stock that was mainly built between 1951-2017. In contrast to the Southeastern portion of the district these homes do not have a distinct architectural style.

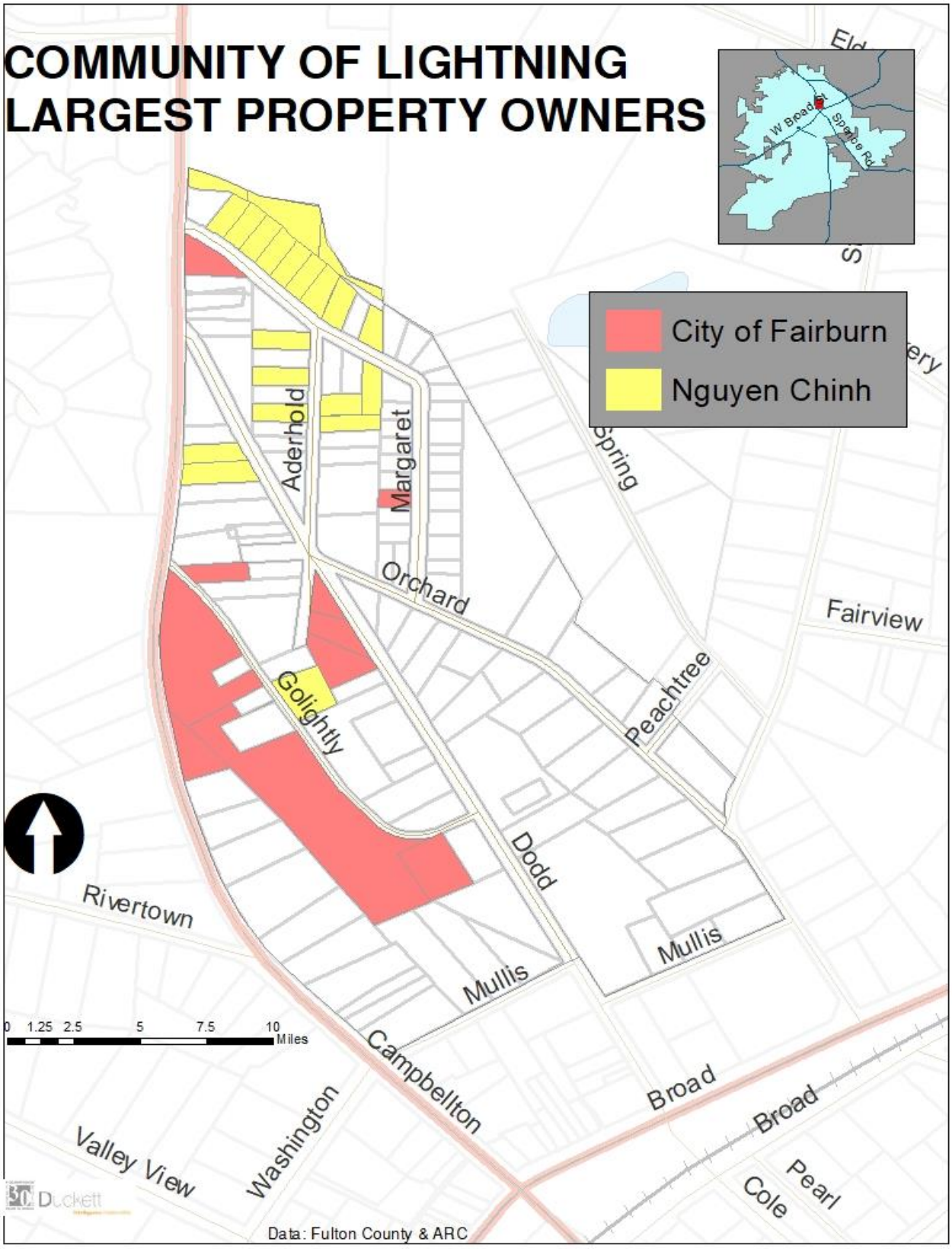
The housing market in the district has been relatively slow. There were 16 real estate transactions between August of 2017 and September of 2018. The average sales price in the district was $36,332.81. Seventy five percent of the purchases were from non-residents of the Lightning District. The majority of the purchases were single family homes classified with the one of the following house styles: Minimal traditional, Habitat, Shotgun or no style.


COMMUNITY OF LIGHTNING
HOUSING CONDITIONS
W Broad
Spence Rd
Housing Condtions
Adequate
Deteriorating
Dilapidated
Excellent
Vacant Lots
Aderhold
Margaret
Orchard
Golightly
Peachtree
Fairview
Dodd
Mullis
Mullis
Rivertown
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC


COMMUNITY OF LIGHTNING
HOUSING STYLES
W Broad
Sparrow Rd
HouseStyle
Unspecified
American Vernacular
Bungalow
Folk Victorian Cottage
Min Traditional,Habitat,Shotgun,No Style
Ranch
Tudor
Vacant Lots
Aderhold
Margaret
Orchard
Golightly
Peachtree
Dodd
Mullis
Mullis
Fairview
Rivertown
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC


COMMUNITY OF LIGHTNING
YEAR PROPERTY WAS BUILT
Year Built
1800 - 1925
1926 - 1950
1951 - 1975
1976 - 2000
2001 - 2017
No Year
Vacant Lots
Aderhold
Margaret
Orchard
Golightly
Dodd
Mullis
Mullis
Spring
Peachtree
Rivertown
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10 Miles
Data: Fulton County & ARC


COMMUNITY OF LIGHTNING
COMMUNITY OWNERSHIP
W Broad
Property Owners
BRAY ALAN
BRIDGES BOBBY L & HICKSON PATRICIA A
CITY OF FAIRBURN
JACKSON NANCY
JACKSON ROUSELLE A & RAJ INVESTMENT & COMPANY LLC
JASON L POWELL TRUST THE
NEW LIGHTNING HOMES LLC
NGUYEN CHINH H
NWADIKE NAOMI
Individual Property Owners
Aderhold
Margaret
Orchard
Golightly
Dodd
Peachtree
Fairview
Rivertown
Mullis
Mullis
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC


COMMUNITY OF LIGHTNING
LARGEST PROPERTY OWNERS
City of Fairburn
Nguyen Chinh
Aderhold
Margaret
Orchard
Golightly
Spring
Fairview
Peachtree
Dodd
Mullis
Mullis
Rivertown
Campbellton
Broad
Broad
Pearl
Cole
Washington
Valley View
0 1.25 2.5 5 7.5 10
Miles
Data: Fulton County & ARC

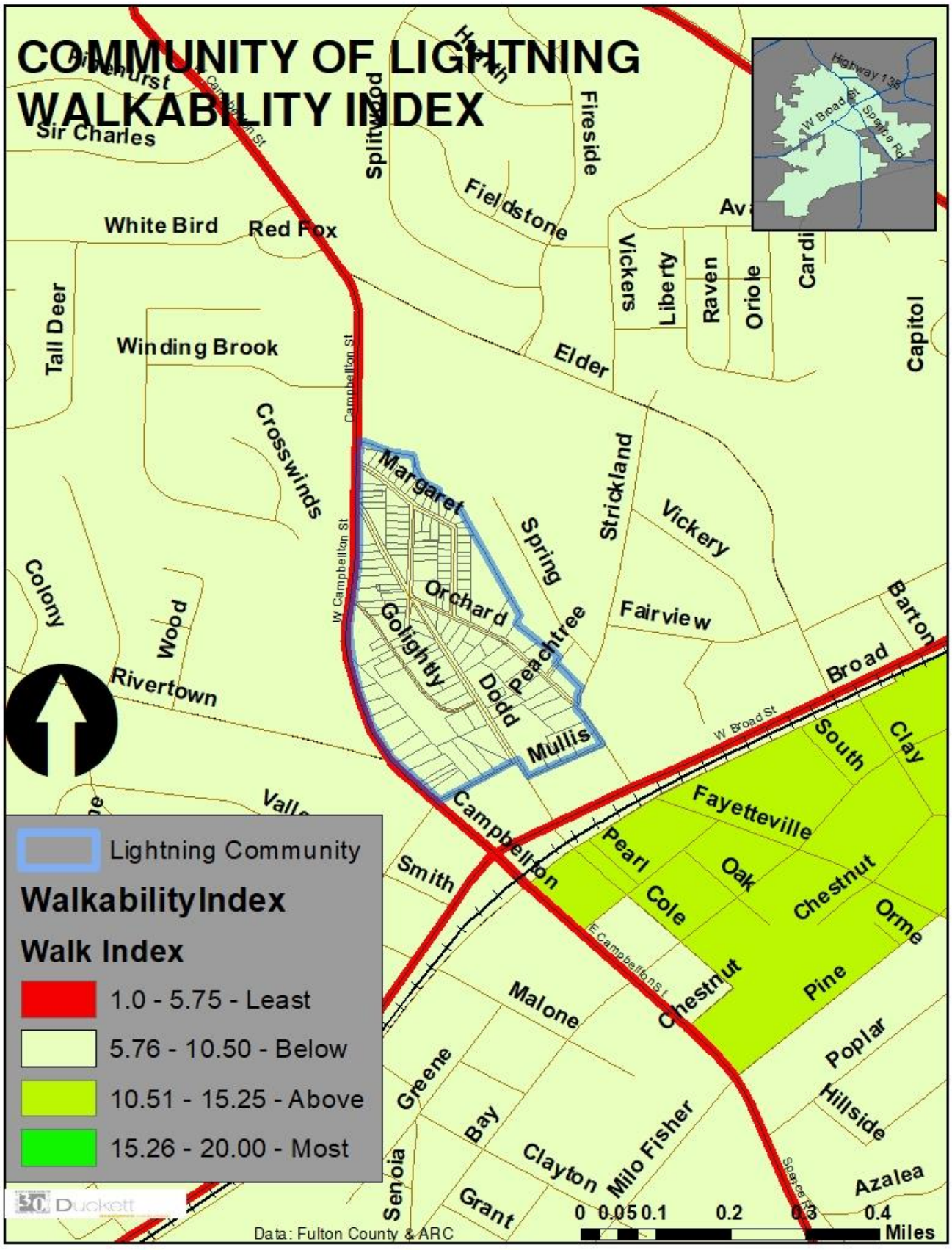
Walkability

The community of Lightning presents a very unfavorable environment when considering walkability and pedestrian conveniences. The community does have one or two main thoroughfares with Dodd Street and Orchard Street. However, the majority of the streetscapes are unwalkable with any measure of safety or protection for the pedestrian. There are no established sidewalk corridors. Some of the streets are barely wide enough to allow two cars to pass each other.

A Walkability Index was recorded for this area by the Environmental Protection Agency. The Walkability Index dataset characterizes every Census 2010 block group in the U.S. based on its relative walkability. Walkability depends upon characteristics of the built environment that influence the likelihood of walking being used as a mode of travel. The Walkability Index is based on the EPA's previous data product, the Smart Location Database (SLD). Block group data from the SLD was the only input into the Walkability Index and consisted of four variables from the SLD weighted in a formula to create the new Walkability Index. This dataset shares the SLD's block group boundary definitions from Census 2010.

The map provided has the walkability factors divided into 4 main categories based on a scoring system. A score of twenty (20) would be considered the MOST walkable environment for pedestrians. A score of one (1) would the LEAST. The Lightning Community scored BELOW across the entire community with a score ranging from 5.75 – 10.5.

The pictures above represent the street conditions and walkability encountered by the residents.


COMMUNITY OF LIGHTNING
WALKABILITY INDEX
Highway 138
W Broad St
Spence Rd
Fairhurst
Sir Charles
Splitwood
Fireside
Fieldstone
White Bird
Red Fox
Vickers
Liberty
Raven
Oriole
Capitol
Tall Deer
Winding Brook
Elder
Crosswinds
W Campbellton St
Margaret
Spring
Strickland
Vickery
Orchard
Goligthly
Dodd
Peachtree
Mullis
Fairview
Barton
Colony
Wood
Rivertown
Broad
W Broad St
South
Clay
Fayetteville
Campbellton
Pearl
Oak
Chestnut
Cole
Orme
Smith
E Campbellton St
Malone
Pine
Poplar
Greene
Bay
Clayton
Milo Fisher
Hillside
Azalea
Senoia
Grant
Spence Rd
Lightning Community
WalkabilityIndex
Walk Index
1.0 - 5.75 - Least
5.76 - 10.50 - Below
10.51 - 15.25 - Above
15.26 - 20.00 - Most
Duckett
Data: Fulton County & ARC
0 0.05 0.1 0.2 0.3 0.4
Miles

Greenspace

Greenway trails provide a unique partnership opportunity to join the people of a community with the natural environment in which that community dwells. There are a variety of possible systems that can be defined as a "greenway" trail system. Some greenway trail systems are defined by their innovative utilization of decommissioned or abandoned rail road beds. These old rail beds are used as foundational surfaces for a potential greenway trails, such as the Silver Comet Trail in Cobb County, Georgia.

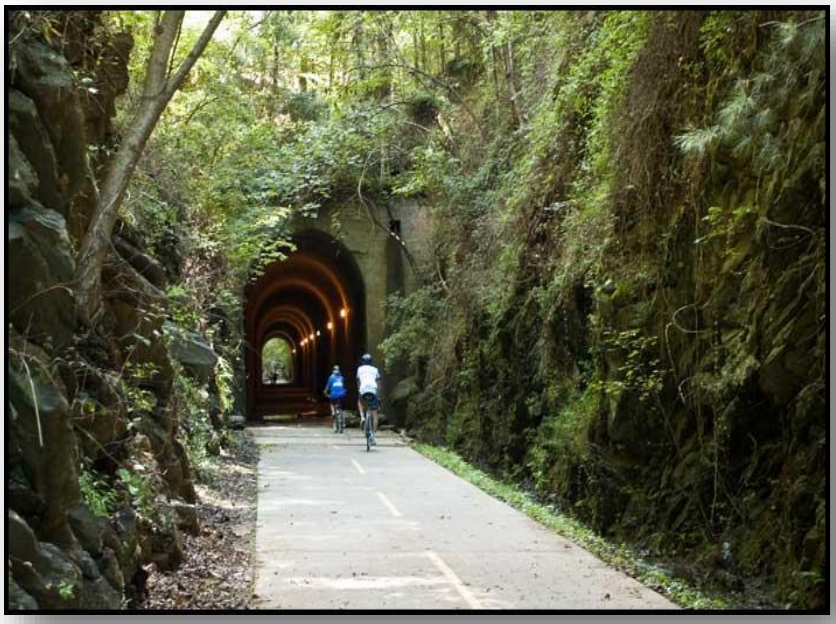


Figure 3: Silver Comet Trail. Image provided by www.garail.com

A variety of greenway systems exist that can utilize any of these available models or a combination of available models in order to achieve a comprehensive greenway trail system that essentially is a custom fit approach for the community in which it resides.

An environmental corridor such as a greenway trail can connect people to a place. It can potentially affect the development and vibrancy of that place. Jack Ahern (1996), author of Greenways in the USA: Theory, Trends, and Prospects states that "the most abstract benefit of greenway connectivity is the psychological one – of linking people with nature, close to where they live and work." He continues by stating "greenways are a network of lands that are planned, designed, and managed for multiple purposes including ecological, recreational, cultural, aesthetic, or other purposes compatible with the concept of sustainable land use."

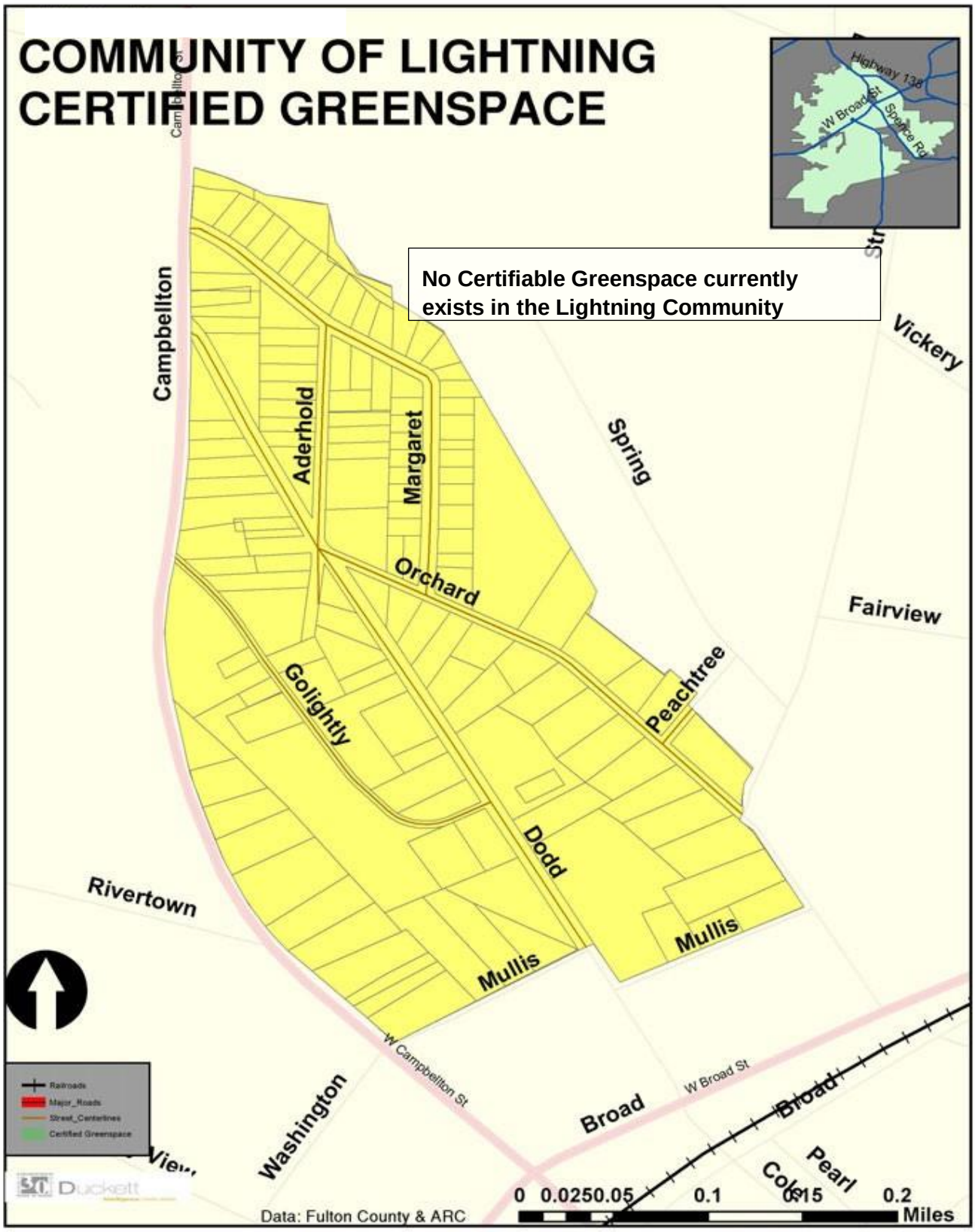
In recent decades, contemporary land development initiatives lead by groups like the US Green Building Council have published guidelines and initiatives designed to aid in the efforts of land use planners and developers to consciously consider the resiliency and sustainability of the natural environments when implementing plans. This effort, in turn, helps develop communities to be more environmentally conscious to the sensitivities of existing natural ecological systems in which they dwell. Since these initiatives ultimately affect land use, the decision to incorporate elements such as green spaces and green corridors must work in conjunction with the green building movement.

Figure 4: Bear Grass Greenway – Louisville, Kentucky. Image provided by www.neighborhoodky.com

Dedicated greenspace is land that is permanently dedicated for greenspace purposes through ownership or deed restriction. It includes lands used for active recreation, lands used for informal or passive recreation, and natural areas that protect environmentally sensitive resources while also providing public access for the enjoyment of these resources. These areas may include dedicated open space reserves or protected areas or land areas that are certified by the US Green Building Council as part of the LEED process or by other organizations and certification programs. The relatively small size of potential areas that may be dedicated as greenspace in the Lightning Community are not likely to require certification, but dedication cane be accomplished informally through property acquisition or easements to protect natural corridors that could potentially be repurposed for dedicated greenspace and pedestrian trails.

There is a small park and playground located at the intersection of South Aderhold Street and Dodd Street, but there are no larger areas currently dedicated as greenspace within the Lightning Community. The nearby dedicated areas of greenspace are located at Duncan Park (about ¾ miles to the northwest) and City Lake Park (about 2 miles south) of the Lightning Community. The Lightning Community does possess several natural corridors that could be repurposed and dedicated for greenspace to enhance the local accessibility to greenspace and recreation.

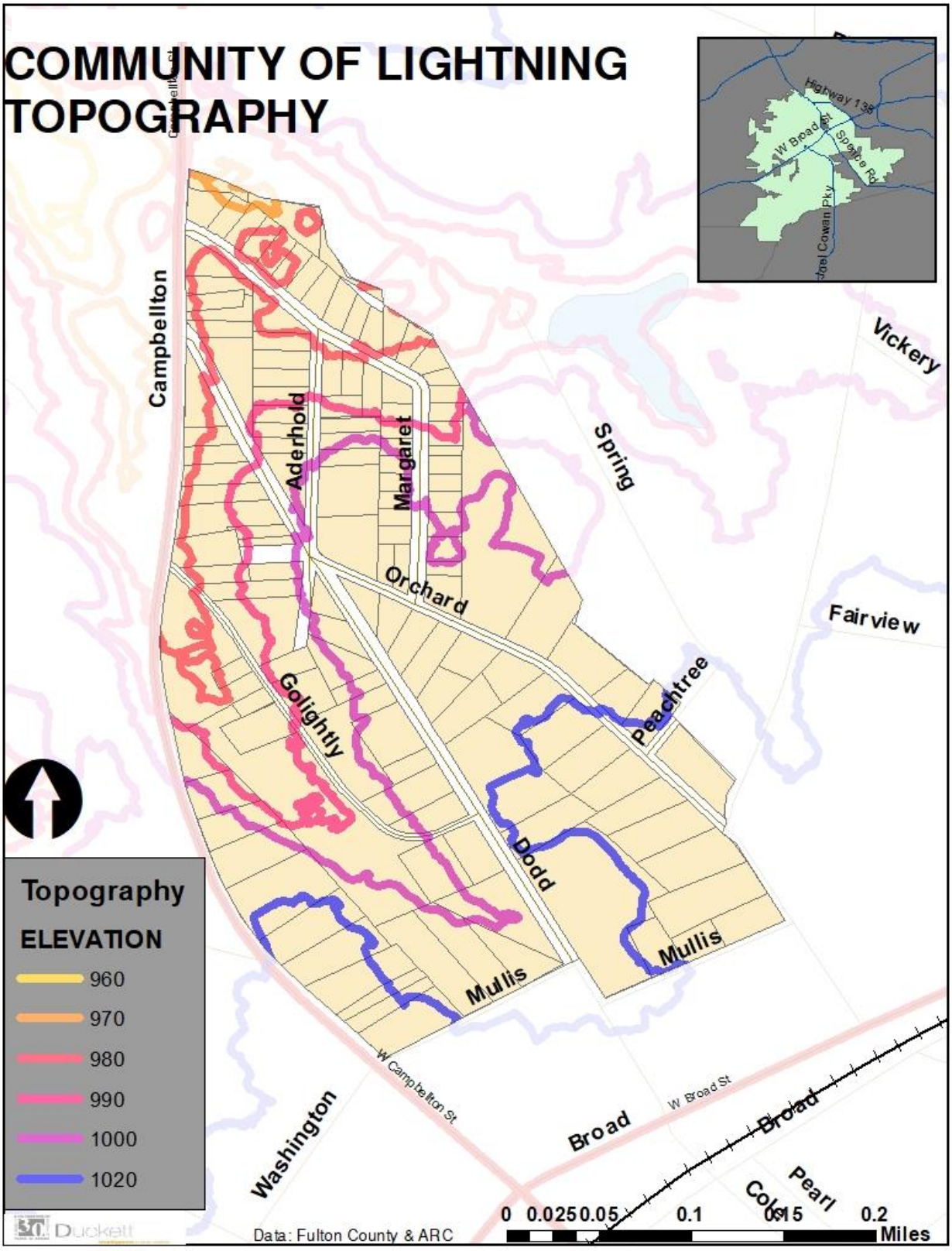
Potential areas in the Lightning Community that could be utilized to establish greenspaces and greenway corridors may be found by identifying the location of current tree canopy coverage for the community. Several existing parcels that are now owned by the city and are no longer suitable for home construction or other residential development represent additional assets that can provide added greenspace.

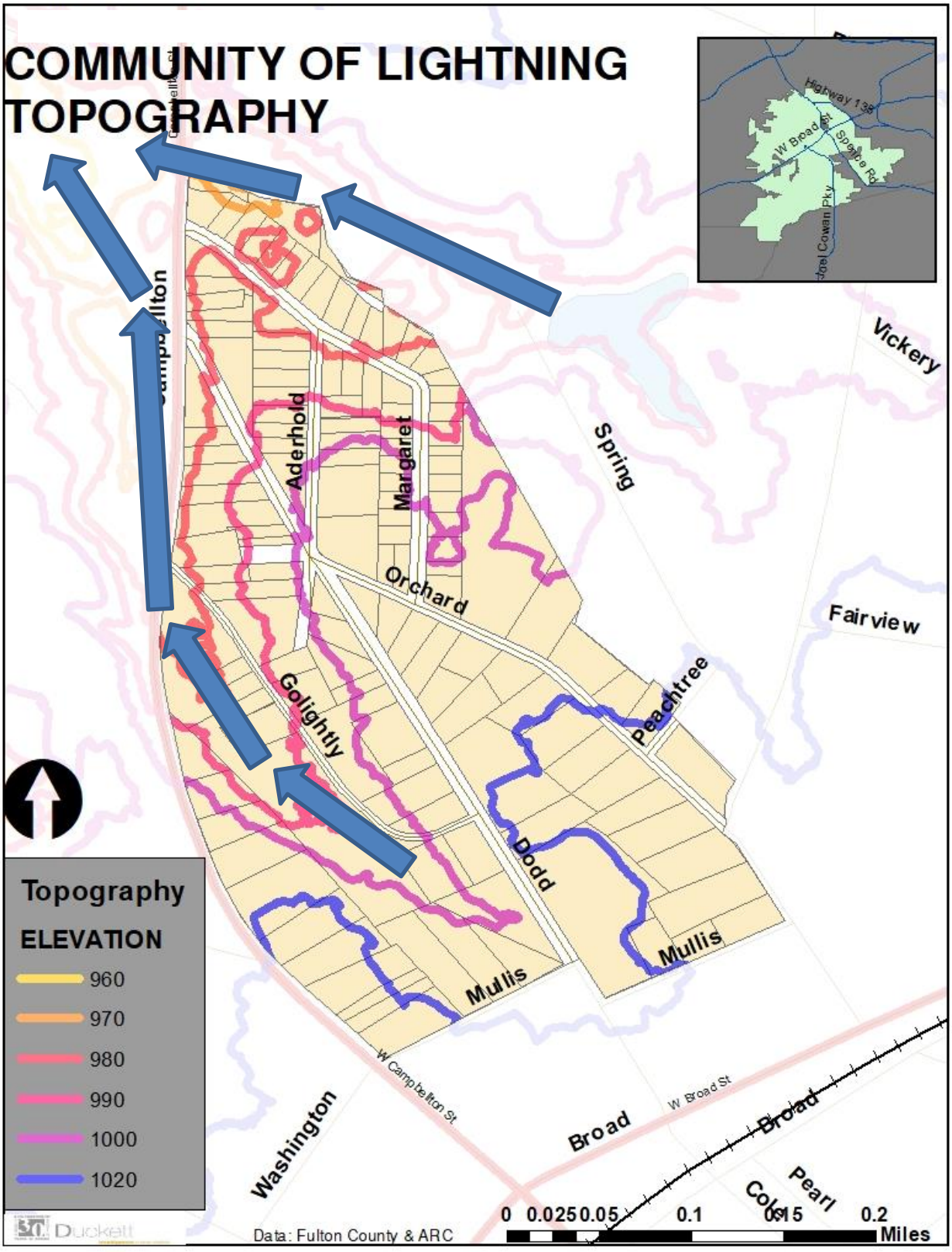

COMMUNITY OF LIGHTNING
CERTIFIED GREENSPACE
Highway 138
W Broad St
Sparrow Rd
No Certifiable Greenspace currently exists in the Lightning Community
Campbellton
Aderhold
Margaret
Orchard
Golightly
Dodd
Peachtree
Spring
Vickery
Fairview
Rivertown
Mullis
Mullis
W Campbellton St
Washington
Broad
W Broad St
Broad
Pearl
Railroads
Major_Roads
Street_Centerlines
Certified Greenspace
Buckett
Data: Fulton County & ARC
0 0.0250.05 0.1 0.15 0.2
Miles

Topography

The topography of the Lightning Community is defined by two or three key characteristics. First, along the west boundary of the study area there is a quick drop in elevation due to a pronounced swale that has its beginning at Mullis Street. It is also noted that at this location exists a known spring that produces ground water saturation year-round and it is visible through the heavy rain months. It was also noted and recorded that several structures along this location at Mullis Street where this natural swale begins have historically had to deal with the mitigation of ground water affecting their foundations

Secondly, Lightning is predominantly a raised plateau along the route of Dodd Street from the downtown corridor traveling north until you reach the six-street intersection at the apex of Lightning where there currently is a park and pavilion at the intersections of Dodd, Orchard, and Aderhold Streets. From here moving north and northeast the plateau's elevation begins to drop at a steady rate to the creek along the north boundary of the community. If one follows this creek as it drops, it eventually reaches a confluence where it joins the previously mention swale that carries water from time to time.


COMMUNITY OF LIGHTNING
TOPOGRAPHY
Highway 138
W Broad St
Sparrow Rd
Joel Cowan Pky
Campbellton
Vickery
Aderhold
Margaret
Spring
Orchard
Fairview
Golightly
Peachtree
Dodd
Mullis
Mullis
W Campbellton St
Washington
Broad
W Broad St
Broad
Pearl
Topography
ELEVATION
960
970
980
990
1000
1020
Data: Fulton County & ARC
0 0.025 0.05 0.1 0.15 0.2
Miles


COMMUNITY OF LIGHTNING
TOPOGRAPHY
Campbellton
Aderhold
Margaret
Orchard
Golightly
Spring
Vickery
Fairview
Peachtree
Dodd
Mullis
Mullis
W Campbellton St
Washington
Broad
W Broad St
Broad
Pearl
Cole
Highway 139
W Broad St
Sprayberry Rd
Joel Cowan Pky
Topography
ELEVATION
960
970
980
990
1000
1020
Data: Fulton County & ARC
0 0.025 0.05 0.1 0.15 0.2
Miles

Lightning Community Strategic Plan

Part 4: Transportation

Community of Lightning Development Study
Transportation Impact Analysis

PREPARED BY

VISION ENGINEERING & PLANNING

TRAFFIC IMPACT STUDY GLOSSARY

Access Point - An intersection, driveway, or opening on a public street providing entry to a private development or property.

ADA - Americans with Disabilities Act

Adjacent Street Traffic - All traffic with direct access to a development site

Arterial - A signalized street that primarily serves through traffic and that secondarily provides access to abutting properties, with signal spacing of 2.0 miles or less.

At-Grade Intersection - The location at which two roadways cross and join at the same vertical elevation; access through the intersection may be controlled by traffic signals or stop/yield signs

Background Conditions - Conditions affecting the performance of the transportation network not directly related to the subject development over a designated time period, such as growth in existing traffic volumes, other planned, approved or current developments in the study area, and planned improvements to the transportation network

Capacity - The maximum sustainable flow rate at which vehicles or persons reasonably can be expected to traverse a point or uniform segment of roadway during a specified time period under given roadway, geometric, traffic, environmental, and control conditions, usually expressed as vehicles per hour.

Collector- A roadway with no control of access linking residential communities with the arterial system

Cycle - The time period required for one complete sequence of traffic signal indications

Delay- The additional time experienced by a roadway user, typically motorists as a result of constrained movements and deviation from ideal or free flow speeds

Generator - a land use that attracts vehicle, pedestrian, or other modes of traffic

Highway Capacity Manual - A publication of the National Academy of Sciences Transportation Research Board that provides a collection of the state-of-the-art techniques for estimating the capacity and determining the level of service for transportation facilities; first published in the 1950s and most recently published in 2000.

Internally Captured Trip - A trip originating and destined for different land uses within the same development but not traveling on a public street

Level of Service - A qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed, travel time, freedom to maneuver, traffic interruption, comfort and convenience.

Modal Split - The percentage of people using a particular means of transport, such as auto, transit, or walking, to make a trip

Multi-modal - A transportation facility for different types of users, modes, or vehicles.

Pass-by Trip - An intermediate stop on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the development.

Peak Hour - The one-hour period of greatest utilization of a transportation facility; weekdays normally have two peaks, one in the morning and one in the afternoon

Phase - A portion of a traffic signal cycle allocated to any traffic movement or combination of traffic movements

Split-Phased Mode - A type of signal control where all movements from one side street at a time move concurrently

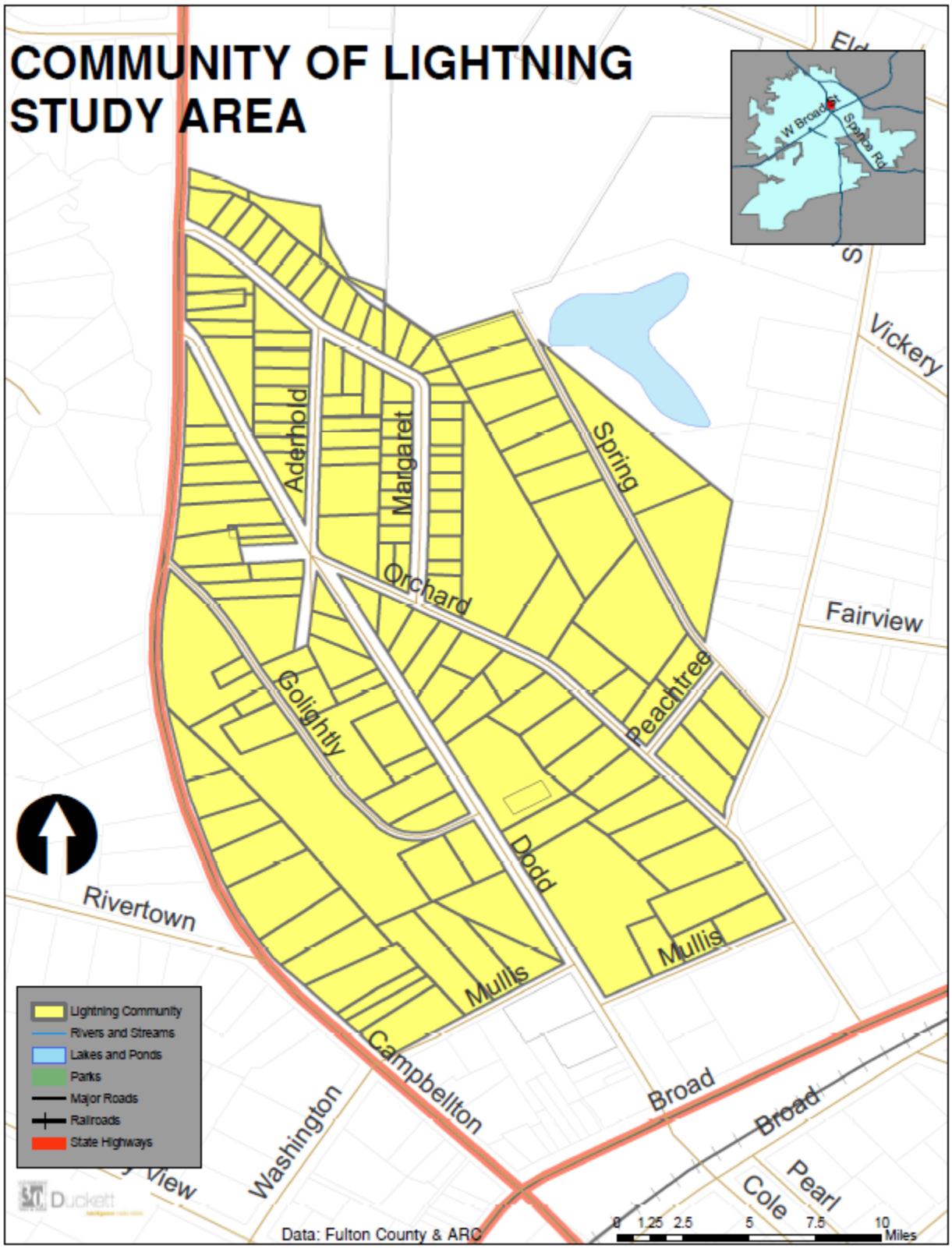
Trip/Trip End - A single or one-direction movement by any mode of travel with the origin or destination (exiting or entering) inside the study development.

INTRODUCTION

The Community of Lightning is located in Fairburn, Georgia, approximately 20 miles southwest of Downtown Atlanta and 5 miles south of Hartsfield-Jackson International Airport. The study area is located northeast of the intersection of West Campbellton Street and Broad Street. The focal point of the development plan will be around the proposed roundabout at Dodd Street and Orchard Street. The land use in the study area is primarily single family residential with some commercial and light industrial land uses on Dodd Street north of Mullis Street. The roadways in the study area are two lane residential roads with stop signs as the predominant traffic control.

The report is divided in two sections; first the existing conditions are evaluated and documented including the existing roadway network, existing traffic volumes, and existing intersection capacity and level of service. Secondly, the Year 2025 conditions were analyzed to include the regional growth in existing traffic volumes, traffic from nearby planned, approved, or current development activity, and planned improvements to the transportation network.

Figure 4.1 – Study Area (Not to Scale)



Sources of data for this study include traffic counts collected by Vision Engineering and Planning, LLC and roadway and intersection conditions as inventoried in the field by Vision Engineering and Planning, LLC.

Analysis was conducted for the existing conditions. The Highway Capacity Manual 2010 (HCM) methodology was employed through Synchro version 9.0 for all capacity analysis.

EXISTING CONDITIONS

Existing Road Network

The focal point of the development plan will be at the proposed roundabout at Dodd Street and Orchard Street which is near the center of the community. The roadways in the study area are two lane residential streets with posted speed limits of 25 miles-per-hour (mph).

The following is a description of some of the roads in the vicinity of the site:

- *Orchard Street*
  Orchard Street is a residential two-lane street with a posted speed limit of 25 mph.

- *Dodd Street*
  Dodd Street is a residential two-lane street with a posted speed limit of 25 mph.

Vision Engineering and Planning, LLC conducted field reconnaissance to obtain the existing lane usage and traffic controls at the intersections within the study area. Figure 2 presents the local roadway network of the study area and existing lane use and configurations.

Existing Traffic Volumes

Turning movement traffic counts were conducted at the intersections of Dodd Street at Aderhold Street and Orchard Street at Margaret Street during the month of November between 7:00 a.m. and 9:00 a.m., and 4 p.m. and 6 p.m. The results of the traffic counts are summarized on Figure 3.

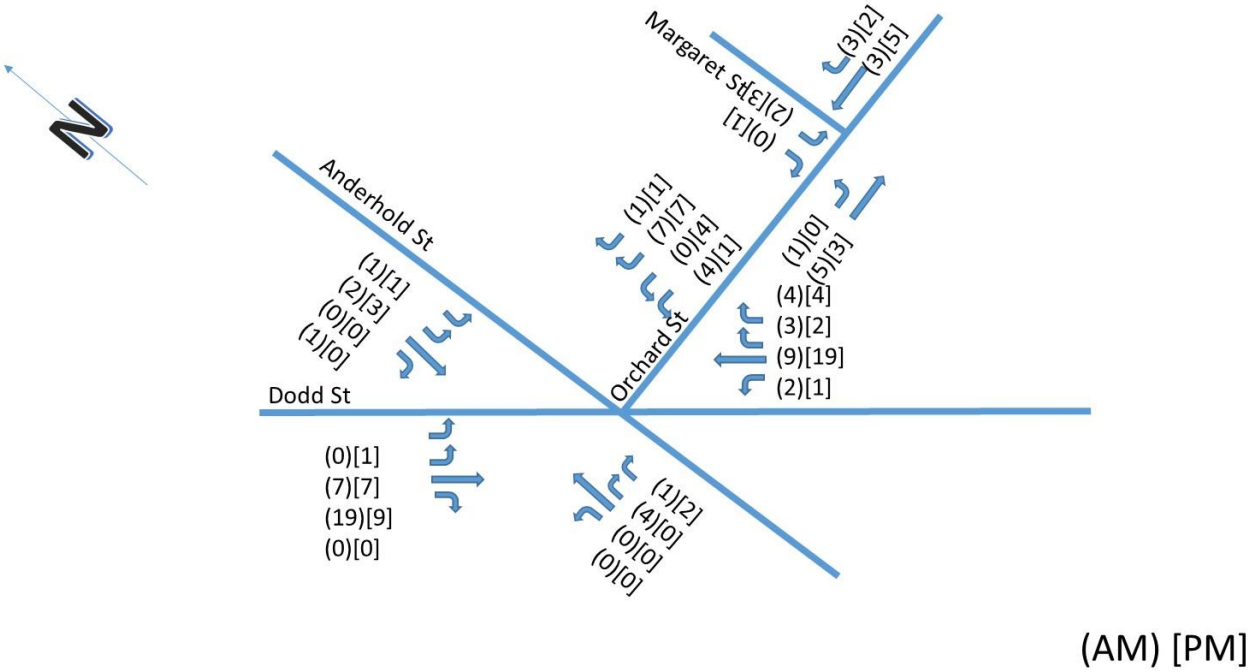
Existing Capacity Analysis

Capacity analyses were performed to determine the existing Level of Service (LOS) and volume-to-capacity (v/c) ratios for the a.m. and p.m. peak hours for the study intersections. A LOS grade is essentially a measure of the quality of service to the user through a letter grade based on the average delay experienced by motorists traveling through a particular intersection. Levels of service results range from LOS A being the best to LOS F being the worst. LOS D is typically used as the acceptable LOS threshold for many cities and counties. Sometimes LOS E and F are accepted in certain highly urbanized and constrained areas.

Figure 4.2 – Existing Lane Use and Traffic Controls

The volume-to-capacity ratio is an indicator and measure of the adequacy of the capacity of the intersection. This included the physical geometry design features and the signal operations. If the value of the v/c ratio is closer to zero, then this represent “under capacity” operations; if the value of the v/c ratio approaches 1 or the value is 1, then this implies that the intersection operates “near” or “at” capacity, respectively. If the v/c ratio is above 1, then the intersection is over its capacity or congested. The *Highway Capacity Manual 2010* (HCM) methodology, through Synchro, was used for all analyses. For unsignalized intersections, the LOS is reported for the minor street or left turn movement that experiences the highest delay at the intersection.

Figure 4.3 – Existing Traffic Counts



The existing LOS capacity analyses were based on: (1) the existing lane use, and traffic controls shown on Figure 2; (2) the peak hour traffic volumes at each study intersection on Figure 3; and (3) the *Highway Capacity Manual 2010* (HCM) methodologies (using Synchro 9 software).

Table 4.1 summarizes the results of the capacity analyses.

Table 4.1 – Existing Levels of Service Results

Study Intersections	Summary of Results							
	Existing							
	AM	PM						
Dodd Street at Aderhold Street	A	A						
Orchard Street at Margaret Street	A	A						

The analysis shows that the study intersections currently operate at LOS A during the AM and PM peak hours.

FUTURE CONDITIONS

The Year 2025 Future Conditions includes the following assumptions:

- ✓ Growth in existing traffic volumes over the study period due to regional growth,
- ✓ Other planned, approved or current developments in the study area,
- ✓ Planned improvements to the transportation network by the City/County and/or State in the study area

A. Growth in Existing Traffic Volumes

The existing traffic counts were collected in November 2018. Given historical traffic counts in the area have illustrated stable or declining trends, and the study area roadways are local in nature, no growth factor was applied to the existing traffic volumes to account for regional growth.

B. Future Developments

Based on information obtained from the City of Fairburn and the Public Involvement process, more residential infill development is expected in the Lightning study area. Most of this development is expected to remain single family homes with smaller lots. The small commercial node located along Dodd Street at the southern edge of the Lighting Community area has some potential to redevelop to provide more current commercial resources if the small tank repair facility and the area adjacent to Mullis Street can address a problem with stormwater flow coming from the ridge line along downtown's Broad Street and flowing northwest across Mullis Street and through the Lightning Community towards Line Creek.

C. Trip Generation and Distribution

Projecting the number of new vehicular trips generated by proposed development is the most critical aspect of assessing traffic impact. The objective of a trip generation analysis is to forecast the number of new trips that will begin or end at a proposed land use. A primary source for data on vehicular trip generation is the Institute of Transportation Engineers Trip Generation 10th Edition handbook. The handbook compiles data from numerous studies of vehicular trip rates at hundreds of specific types of land uses such as recreational, residential, commercial, office, institutional, and industrial throughout the country. The data is sorted by various time periods such as morning and evening peak hour, and plotted against independent variables for specific land uses such as square feet of commercial space, number or hotel rooms, number of dwelling units, etc. The data is presented in chart format with mean trip rates, standard deviations, and fitted curve linear regression equations, where enough data is available.

Several site-specific factors can reduce the number of new personal vehicular trips generated by a new development or land use. These include 1) the availability of alternative modes of transportation such as sidewalks, bicycle facilities, and public transportation, 2) the effect of pass-by traffic which includes personal vehicles already on the roadway network making an intermediate stop on the way from an origin to a primary trip destination without a route diversion, and 3) the effect of internally captured trips composed of traffic originating and destined for different land uses within the same development that do not travel on the public roadway network. An example of an internal trip would be a trip from an office building to a restaurant or from a hotel to an office building within the same development.

For this study, the ITE Trip Generation Manual, 10th Edition peak hour trip generation rates were determined based on current land use categories. The average number of vehicular trip ends and percentage of entering and exiting volumes were calculated using the land uses for General Retail Center and Single Family Residential to estimate the future trips in the study area.

Information for pass-by and internal capture trip rates for mixed-use developments can also be found in the Trip Generation Handbook. In addition, if there are multiple land uses and specialty retail within the development which would also effectively reduce vehicular trips, pass-by and/or internal capture reductions were calculated for the subject developments. To be conservative from a traffic analysis perspective, it was assumed that the commercial node could redevelop into 28,875 square feet of additional retail space and that approximately fifty (50) additional residential units could be added to the study area to reflect the expected residential infill development. This assumes 35 new residential units would be developed based on existing available lots, and that approximately 15 abandoned homes in the study area would be redeveloped to establish an understanding of the potential trips that could be generated.

After applicable trip reduction factors, these proposed (hypothetical) developments may be projected to generate a total of 1719 new daily vehicular trips, of which 79 will occur during the AM peak hour and 148 will occur during the PM peak hour.

D. Distribution of Site Trips

The distribution of site trips is based on existing traffic patterns, land uses and access points to the Lightning Study Area.

E. Transportation Network Improvements

The focal point of the development plan will be at the proposed roundabout at Dodd Street and Orchard Street which is near the center of the community. This roundabout is the only planned transportation improvement in the study area.

F. Future Intersection Capacity and Level of Service

A capacity analysis was performed for the future conditions with the results summarized in Table 2.

Table 4.2 – Future Levels of Service Results

Study Intersections	Summary of Results							
	Existing			Future				
	AM	PM		AM	PM			
Dodd Street at Aderhold Street	A	A		A	A			
Orchard Street at Margaret Street	A	A		A	A			

The results of the future year 2025 conditions capacity analysis indicate that the roundabout will operate at a LOS A during the AM and PM peak hours with the development plan implemented.

Figure 4.4 – Future Traffic Volumes - AM Peak Hour

Figure 4.5 – Future Traffic Volumes - PM Peak Hour

CONCLUSION AND RECOMMENDATIONS

Conclusions

The capacity analyses contained in this report provided the following results:

- *Existing Conditions*

  Under existing conditions the study intersections operate at a LOS A during the AM and PM peak hours.

- *Future Conditions*

  The results of the future capacity analyses show that the study intersections would operate at a LOS A during the AM and PM peak hours with the additional infill development.

Based on these results, vehicular traffic generated by the proposed infill residential development and commercial redevelopment will not require mitigation measures as the proposed roadway network including the proposed roundabout will operate at an acceptable LOS.

Recommendations

- Add and improve sidewalks in the study area to provide safer pedestrian access throughout the study area. Fill in remaining sidewalk gaps to encourage safe pedestrian travel. Improve pedestrian connections between study area and existing MARTA bus stops.
- Add bicycle lanes and Wayfinding to encourage and accommodate safe bicycle travel in the study area. Bike lanes could be striped on a number of existing study area streets at a relatively low investment by the city.
- Add pedestrian scale streetlighting to the study area to increase visibility and improve safety for pedestrians.

Lightning Community Strategic Plan

Part 5: Public Involvement

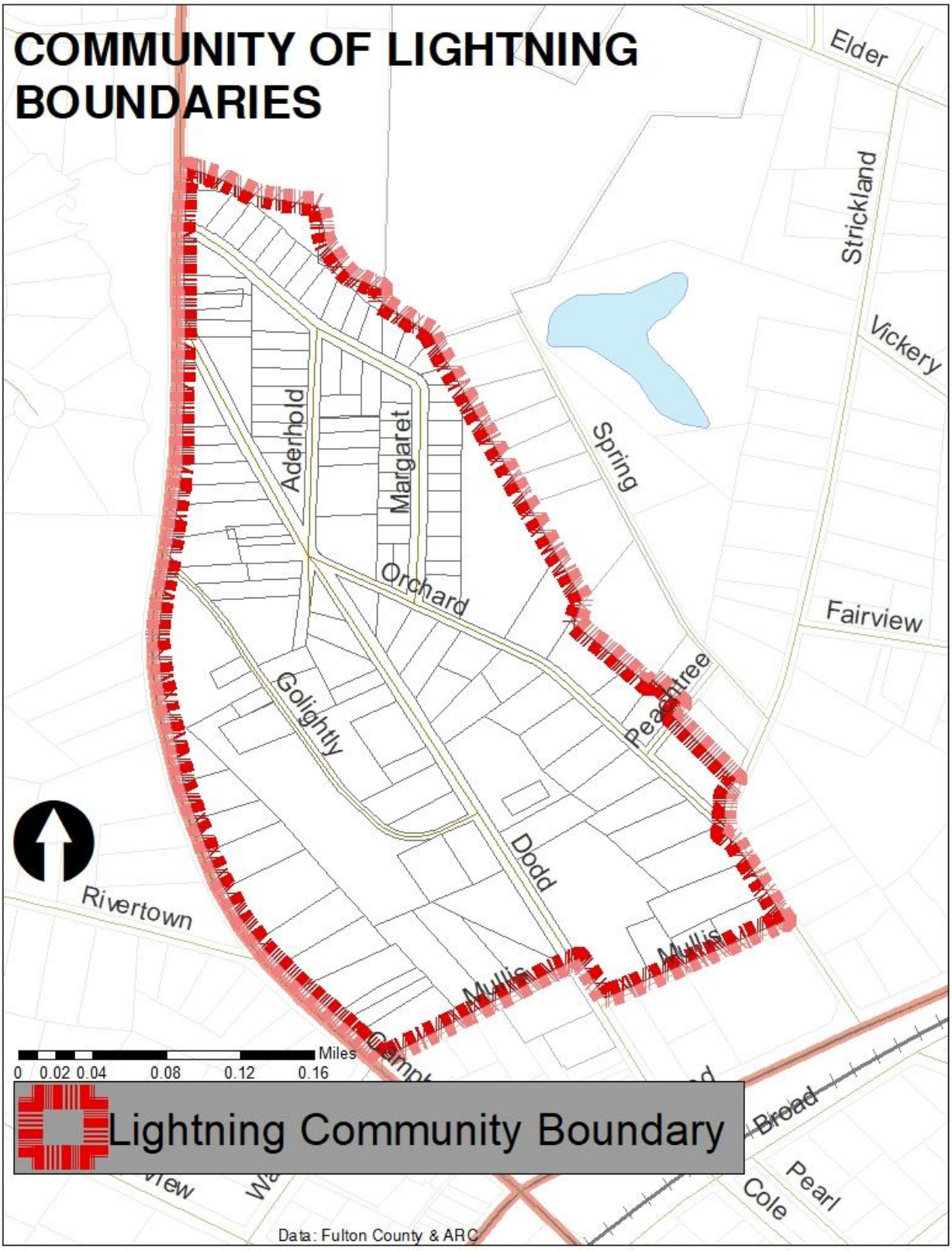
Sponsored by:
City of Fairburn

Meeting #1

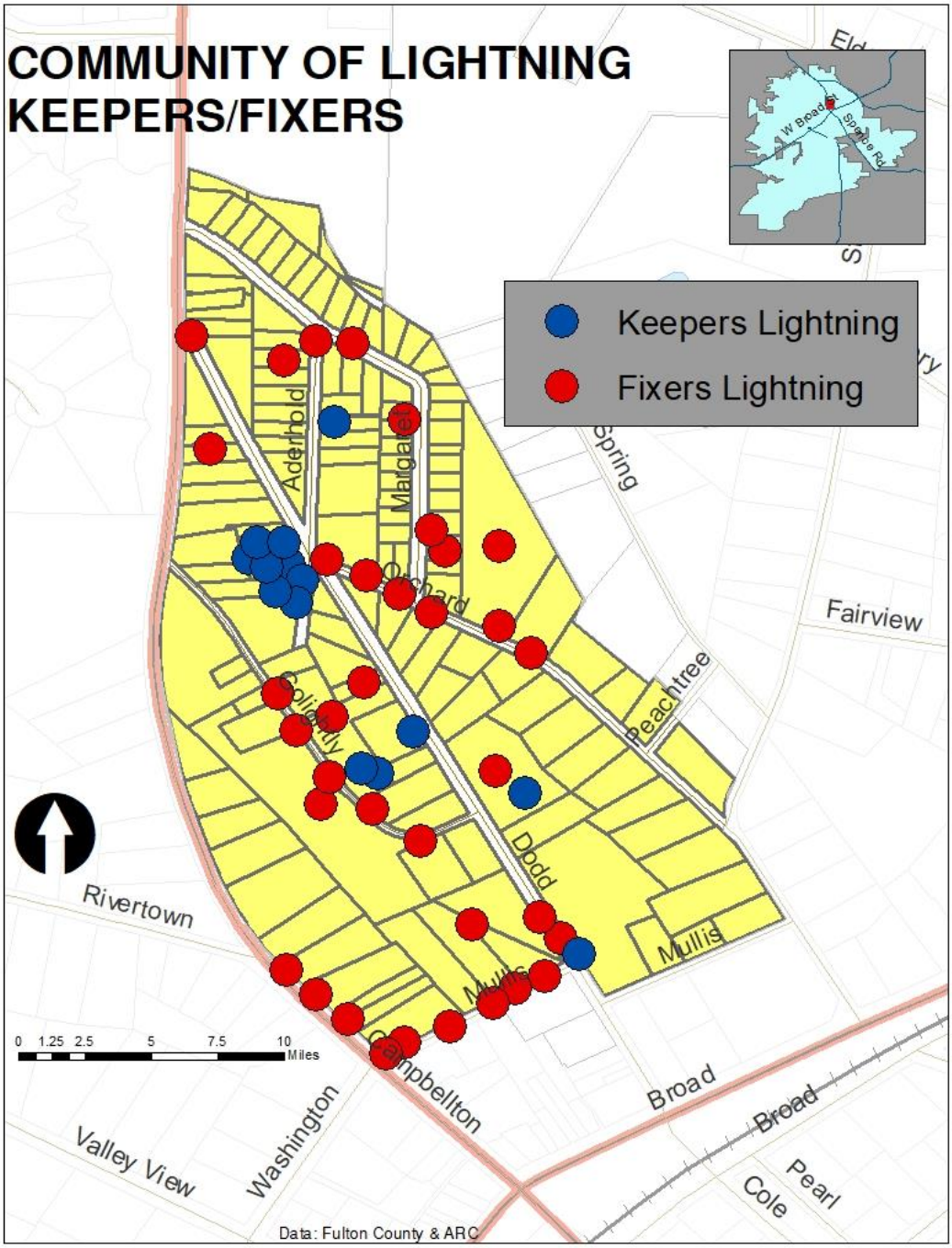
The first public participation meeting was held on the evening of November 15, 2018. The City of Fairburn hosted the event at the Fairburn City Hall and provided the Council Chambers as the meeting space. The community of Lightning was represented by 25 members. The members were a mix of home owners, renters, business owners, and local worship leaders. All were greeted and welcomed as valid stakeholders of the Lightning Community.

In addition to these community residents, there were also members and representatives of the Fairburn City Council, Atlanta Habitat, and Georgia's Initiative on Community Housing. They too were present to offer guidance and additional community-based advocacy for the Lightning community.

The main objectives of this first meeting were to introduce the planning team to the community and ask the community to help us define an agreeable boundary for the Lightning Community. With the aid of crayons, markers, and several maps, the stakeholders were randomly broken into two independent groups to work on defining the community boundary. Once each team was complete, we then compared the two to find that both agreed very closely as to the understood boundary of Lightning. We then had our true area of study defined by the very people that live there.

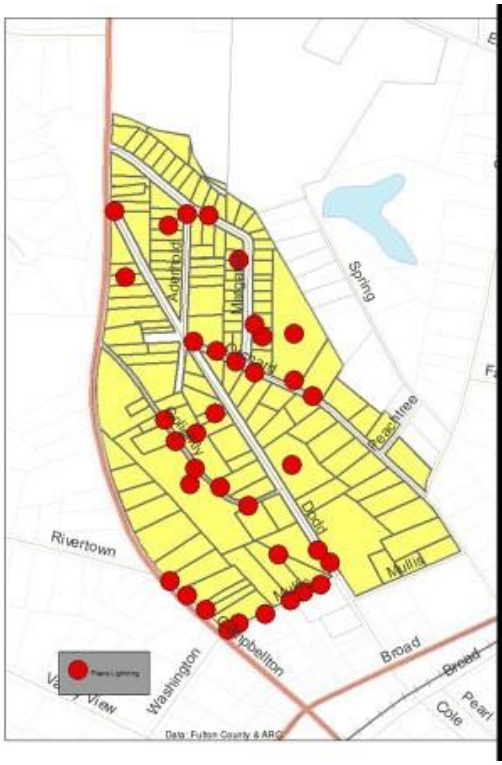

COMMUNITY OF LIGHTNING BOUNDARIES
Elder
Strickland
Vickery
Spring
Aderhold
Margaret
Orchard
Fairview
Goighntly
Peachtree
Dodd
Rivertown
Mullis
Mullis
Broad
Pearl
Cole
Miles
0 0.02 0.04 0.08 0.12 0.16
Lightning Community Boundary
Data: Fulton County & ARC

Next, we worked with the community stakeholders to help us identify and define the various "Keepers" and "Fixers" within the neighborhood. "Keepers" are things that the community wishes to protect and keep and "Fixers" are items that need repair, rehabilitation, or replacement. The members went back to their tables and began assessing several items in their community that addressed the following items:



Keepers Summary

- Park
- Housing Diversity
- Existing Commercial Parcels on Dodd Street (Potential Mix Use)
- Housing Diversity
- Street Plan for Dodd Street
- Affordability
- Existing Single Family Homes



Fixers Summary

- Remove vacant and depilated homes
- Fix street flooding on Mullis
- Remove church on Margret
- Slow Traffic on Dodd, Orchard, Mullis and Golightly
- Access to community center/community place

Meeting #2

The second public participation meeting was once again hosted by the City of Fairburn and the turnout was just as good as the first. Every stakeholder came to the meeting ready to be engaged and involved in the process of collaboratively planning for their neighborhood.

In the second meeting we put together a Polling Package for the residents to review and vote on various characteristics that would directly affect the recommendations developed as part of the final strategic plan. The polling questions were presented on a large projection display as well as each person was handed a print out to have something tangible in their hand to circle and vote. Each stakeholder was instructed to review the pictures and circle the ones that they thought would "fit" in their vision of a future Lightning Community. They could vote for more than one choice. If two or more scenarios were plausible in their personal vision, they could circle them.

The following images are each of the polling questions. At the end is the feedback and data from the polling.

SETBACKS & SIDE SETBACKS FOR HOUSING

HOUSING SCALE

HOUSING STYLE

HOUSING TYPE

SIDEWALK & STREETS

GREENSPACE

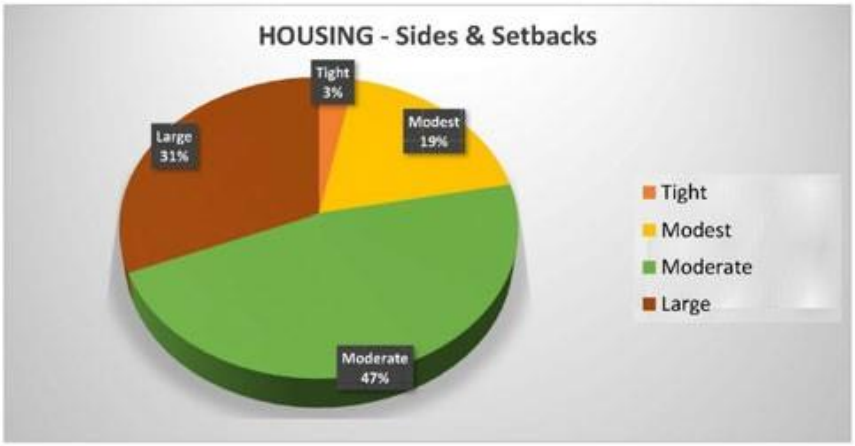
COMMERCIAL SPACE

Polling Results

The results of the polling were interesting. Although the planning team physically witnessed the opinions of the stakeholders emphasizing only one or two options openly when discussing the choices, the outcomes of the voting were much more open to choices beyond those verbally expressed in the meeting.

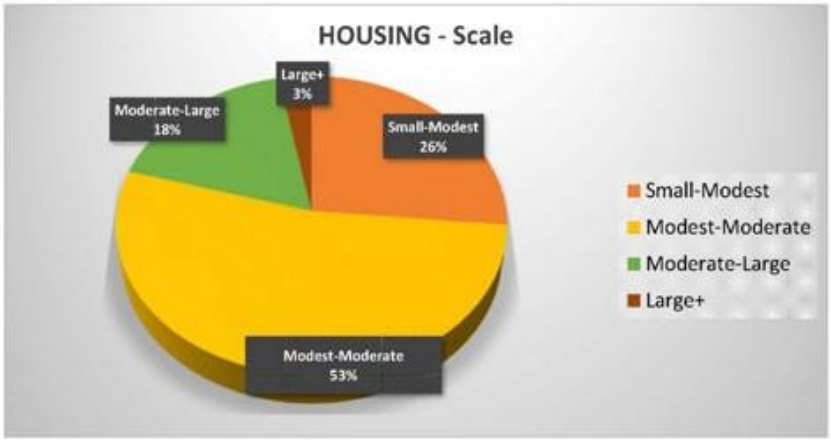
Lightning Community - Meeting 2 Polling

Housing - Sides and Setbacks	Count
Tight	1
Modest	6
Moderate	15
Large	10



Lightning Community - Meeting 2 Polling

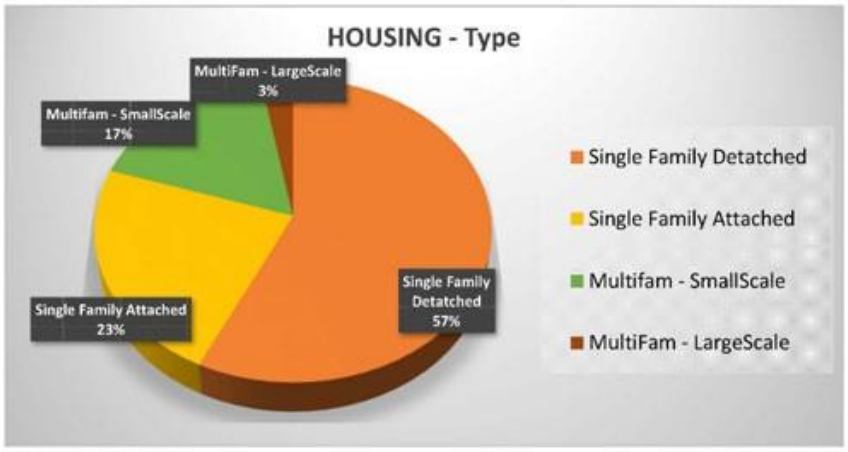
Housing - Scale	
Small-Modest	9
Modest-Moderate	18
Moderate-Large	6
Large+	1



Lightning Community - Meeting 2 Polling

Housing - Types

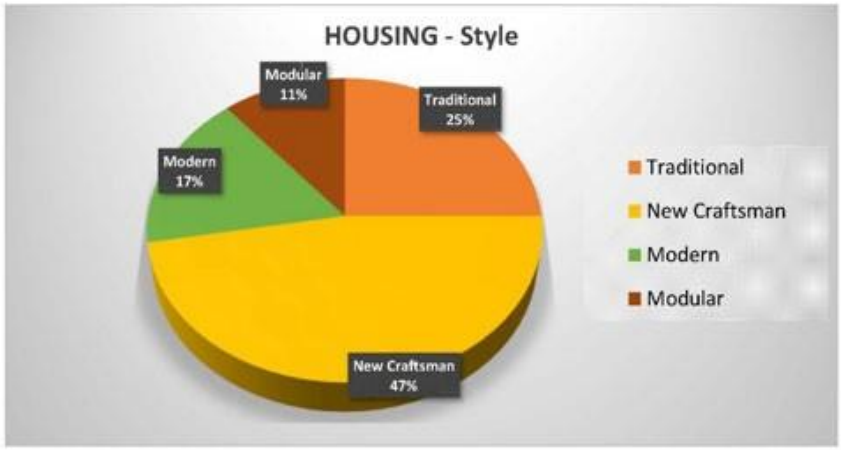
Single Family Detatched	20
Single Family Attached	8
Multifam - SmallScale	6
MultiFam - LargeScale	1



Lightning Community - Meeting 2 Polling

Housing - Style

Traditional		9
New Craftsman		17
Modern		6
Modular		4



Lightning Community Meeting 2 Polling

Sidewalks and Street5

No Sidewalks	
Sidewalks	6
Sidewalks & LS	14
Sidewalks, LS, furnishings	6

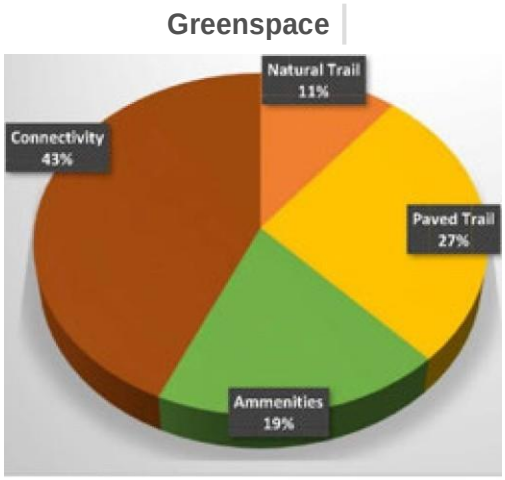
No Sidewalks & LS

SW, LS, & Furnishings

Lightning Community - Meeting 2 Polling

Greenspace

Nature Trail		4
Paved Trail		10
Amenities		7
Connectivity		16



Natural Trail

Paved Trail

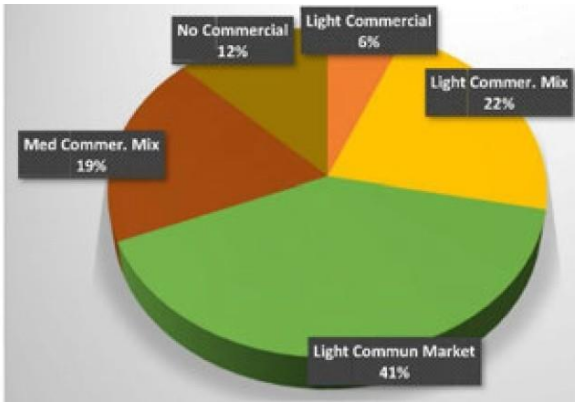
Amenities

Connectivity

Lightning Community Meeting 2 Polling

Commercial Space

Commercial Space	
Light Commercial	2
Lieht Comm. Mix	7
Light Comm.	13
Med Comm. Mix	6
No Commercial	4



Light Commercial

Light Comm. Mix

Light Comm. Market

Med. Comm. Mix

No Commercial

Lightning Community Meeting 2 Polling

Housing - Sides and Setbacks		
A. Tiny		1
B. Small-Modest		6
C. Average		19
D. Large		T10

Housing Scale	
A. Small- Modest	9
B. Modest-Modern	18
C. Moc!Prate-l.ar te	6
D. Large	1

Housing	
A, Traditional	9
B. New Craftsman	12
C. Modern	6
D. Modular	4

Housing Types	
A. Single Family Detached	20
B Single Family Attached	8
C. Multi-Family -Small Scale	6
D. Multi-Family -Large Scale	1

Sidewalks and Streets	
A. No Sidewalks	1
S. Sidewalks	8
C. Sidewalks & LS	14
D. SW, LS, Furnishings	8

Greenspace	
A. Natural Trail I	4
B. Paved Trail	10
C. Amenities	7
D. Connectivity	16

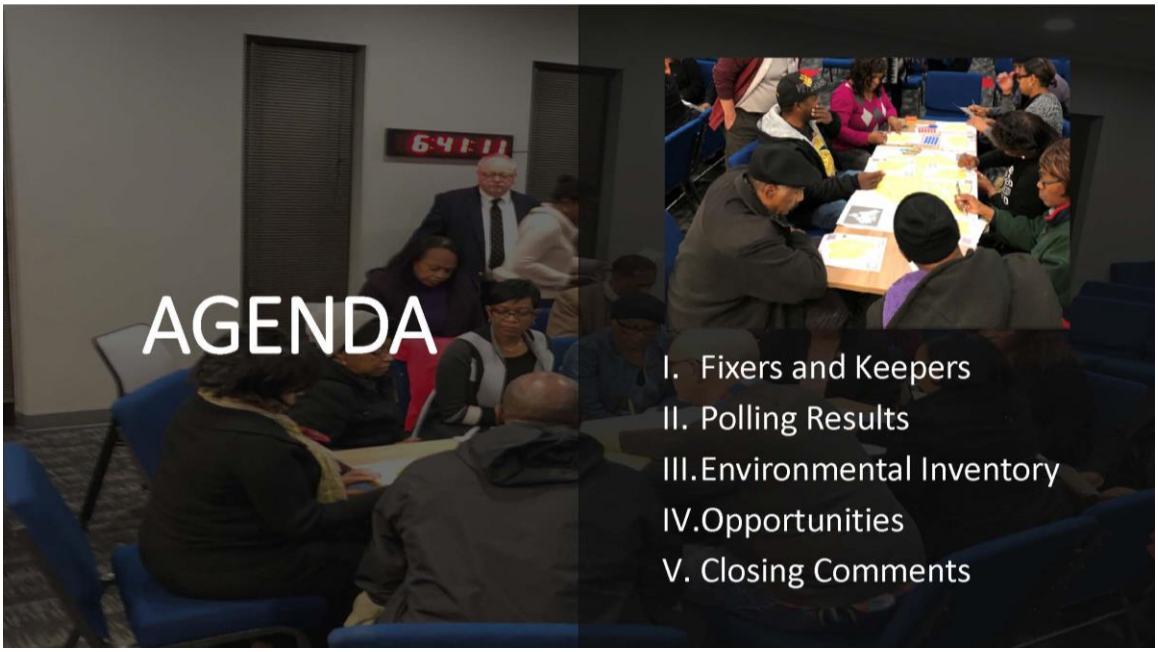
Commercial Scale	
A. Light Commercial	2
B. Light Comm. Mix	7
C. Lt. Community Market	13
D. Med Comm. Mix	6
E. No Commercial	4

Maintain Existing Scale
Mix of Incomes in Multi-Family
Dodd Street Connectivity
Connectivity will not work on Mullins Street.
No Commercial that would encourage truck traffic
Ownership / No rental
Connectivity close to City

Meeting #3

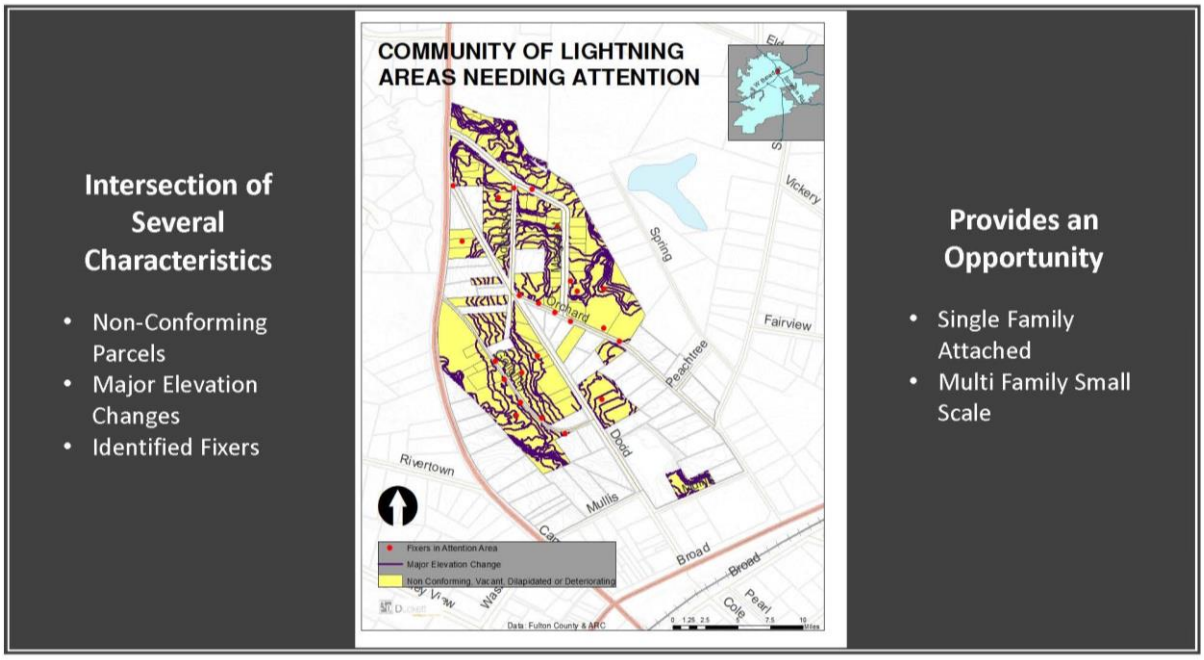
The third public participation meeting was held on the evening of January 31, 2019. The event was held at the City Hall. The community of Lightning was represented by 20 persons, including a mix of homeowners, renters, business owners, and local worship leaders and members and representatives of the Fairburn City Council.

The objectives of the third meeting were to confirm the opportunities available to the community and prioritize major issues to be accomplished through implementation of community plans. The polling analysis was presented to the community and included a strong consensus regarding the preservation of single-family housing in the community and repair or removal and replacement of dilapidated housing. Better management of traffic is needed on Dodd Street, Orchard Street, Mullis Street, and Golightly Street, and improvements to drainage are needed to avoid stormwater affecting the existing houses and streets.



A street plan for Dodd Street to provide safety and speed management and improvements to the small park area in the community were important elements in planning. Also, the community supported affordable housing and some housing diversity in the Lightning community. The continued use of the existing commercial properties located in the neighborhood are acceptable if they could maintain the properties and limit negative impacts affecting their surroundings.

The community values the connectivity to downtown Fairburn and desires sidewalks and landscaping to enhance area appearance and reinvestment in housing. Moderate setbacks from the street and between houses were also identified as acceptable. Desired single-family housing types included traditional and new craftsman styles. Some community members stated that they were interested in goals for a positive, livable, and walkable neighborhood.



The major issues affecting the community are important to establishing the opportunities for redevelopment.

Meeting #4

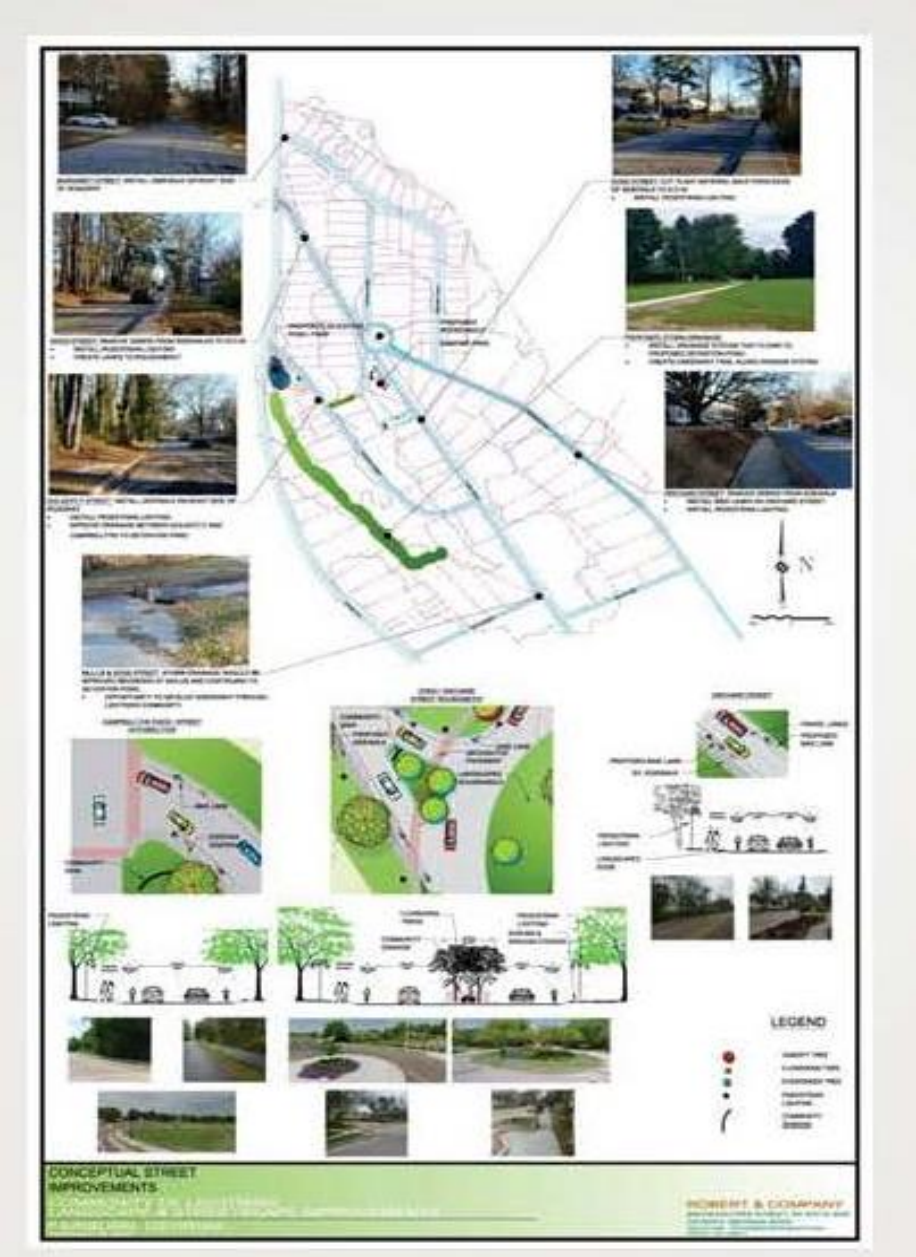
The fourth public participation meeting was held on the evening of February 28, 2019 at the Fairburn City Hall chambers. The meeting was a presentation of the draft recommendations for the community of Lightning. The meeting gave participants an opportunity to comment on the proposed plan recommendations. Approximately 25 persons attended the meeting and listened to the planners' presentation and made comments in response to the suggested projects and recommendations.

The objective of this meeting was to introduce several planning recommendations to the community to determine if projects were viable and to determine priorities.

Proposed projects include:

- Sidewalk Improvements
- New Sidewalks
- Improved Drainage
- Improved Intersection of Dodd at Campbellton Road
- Dodd/Orchard Intersection Improvements of Roundabout
- Opportunity for a Neighborhood Garden

Most improvements were welcomed by the attending representatives of the community. However, the proposed roundabout was strongly opposed by some of the community residents. The discussions were expanded to identify an alternative to the roundabout.



The adjacent map is illustrated at larger size on Page 73

Lightning Community Strategic Plan

Part 6: Recommendations

Sponsored by:
City of Fairburn

Strategic Plan Recommendations

The recommendations for the Lightning Community Strategic Plan were created on the basis of the opportunities and priorities identified in the public participation element of the study. The priorities were to maintain and enhance the quality of life of the community residents and visitors, and to preserve the character of the neighborhood. Key components of desired improvements were identified:

- Resolve drainage issues coming from stormwater flow from Broad Street and Mullis draining through the community.
- Manage the design of the roadways for the neighborhood and provide better lighting and safety improvements for pedestrians.
- Expand the Park to enhance safety and social activities, including interactive spaces, artwork, and community gardening.
- Resolve zoning issues for non-conforming lot sizes and uses.

Drainage Improvements

The primary drainage issues are generated off site to the south along the ridge line including Broad Street and the railroad. Natural storm water flow is to the northwest along drainage swales through the Lightning Community towards a stormwater culvert near Dodd Street, and then to a tributary of Line Creek that crosses West Campbellton Street (Highway 92) about 200 feet north of the Margaret Street intersection with West Campbellton Street. The capacity of existing drainage in the community is surpassed during heavy rains with significant flow occurring along Dodd and Orchard Streets and some flooding into yards along Mullis Street and other streets.

Storm drainage should be improved beginning at Mullis Street and continuing to a new detention pond located in the apex angle between West Campbellton Street and Golightly Street. This presents an opportunity to develop a greenway through the Lightning Community. These storm drainage improvements should be installed along the greenway corridor along the rear of the lots between West Campbellton Street and Golightly Street from the corner of Mullis and Dodd Streets to the detention pond. See the attached drawing 1: Conceptual Street Improvements for the location of the drainage improvements.

The detention pond is proposed to be constructed on the south side of the intersection of West Campbellton and Golightly Streets. The pond is proposed to provide flood control and may be stocked with fish to provide recreational fishing for residents and visitors. The pond will require access control and fencing to provide protection from accidental falls into the water by children or adults. The attached Drawing 2: Conceptual Drainage Improvements illustrates the conceptual planning regarding this proposed water feature.

Roadway Improvements

Attached drawing 1: Conceptual Street Improvements also illustrates the proposed roadway improvements for the Lightning Community. The drawing identifies typical sections for streets, sidewalks, pedestrian lighting, and bicycle lanes. The drawings also identify locations for canopy trees, flowering trees, evergreens, lighting, and signage. These improvements include the following projects:

- Install sidewalk on the south side of Margaret Street to Aderhold Street
- Remove debris from the sidewalks to edge of right-of-way on Dodd Street between West Campbellton and Aderhold (Five Points) and install pedestrian lighting. Mark Dodd Street as a bicycle route.
- Cut plant material back from edge of sidewalks to edge of right-of-way on Dodd Street between Aderhold (Five Points) and Mullis Street and install pedestrian lighting.
- Install sidewalk on the east side of Golightly Street from Dodd Street to West Campbellton Street and install pedestrian lighting.
- Remove debris from sidewalk and install pedestrian lighting on Orchard Street. Stripe Orchard Street for a bicycle lane from Dodd Street to Mullis Street.
- Improve intersection of West Campbellton Street at Dodd Street including crosswalk Improvements

The Five Points intersection

The planning team was initially provided with a plan to place a roundabout at the Five Points intersection of Dodd, Orchard, and Aderhold Streets. The roundabout plan was presented at the 4th public meeting, but there were several comments in opposition to the roundabout that were raised at the meeting. Therefore, several alternative ideas were identified at the meeting to address a different concept for the Five Points intersection.

After the meeting, the planning team identified two additional alternatives for improving the intersection. The roundabout alternative was one, and basic street crosswalks, signage, and marking improvements provided a “fallback” alternative. A revised concept was to link Orchard Street and the north leg of Aderhold Street using some of the properties on the east side of the proposed roundabout and then providing a short linking road to the intersection with Dodd Street and the south leg of Aderhold Street at the current Five Points location. Although the connecting street would be very short, it would divide the current intersection into two right-angle intersections. It also would create a small square on the east side of Dodd Street that could provide a small open space for gatherings or the placement of an arts feature.

The three alternatives are provided below illustrating the roundabout, the short connector street between Dodd Street and the combined Orchard and Aderhold Streets, and the “no-build” alternative that provides minimal improvements to Five Points .

The recommendation of the planning team is for the City of Fairburn to consider Alternative Two as a means to enhance the Lightning Community and to improve controls over through traffic flow along Orchard and Dodd Streets.

Park Expansion

It is recommended that the City expand the existing park located at the “Five-Points” intersection. There appears to be an opportunity to obtain land south of the existing park and adjacent to Dodd Street. Once the land is acquired, it is recommended that a large community pavilion be constructed with parking for eighteen (18) vehicles. The pavilion is recommended to be placed near the back of the proposed park site so that a large open green space could be constructed between the parking lot and the pavilion.

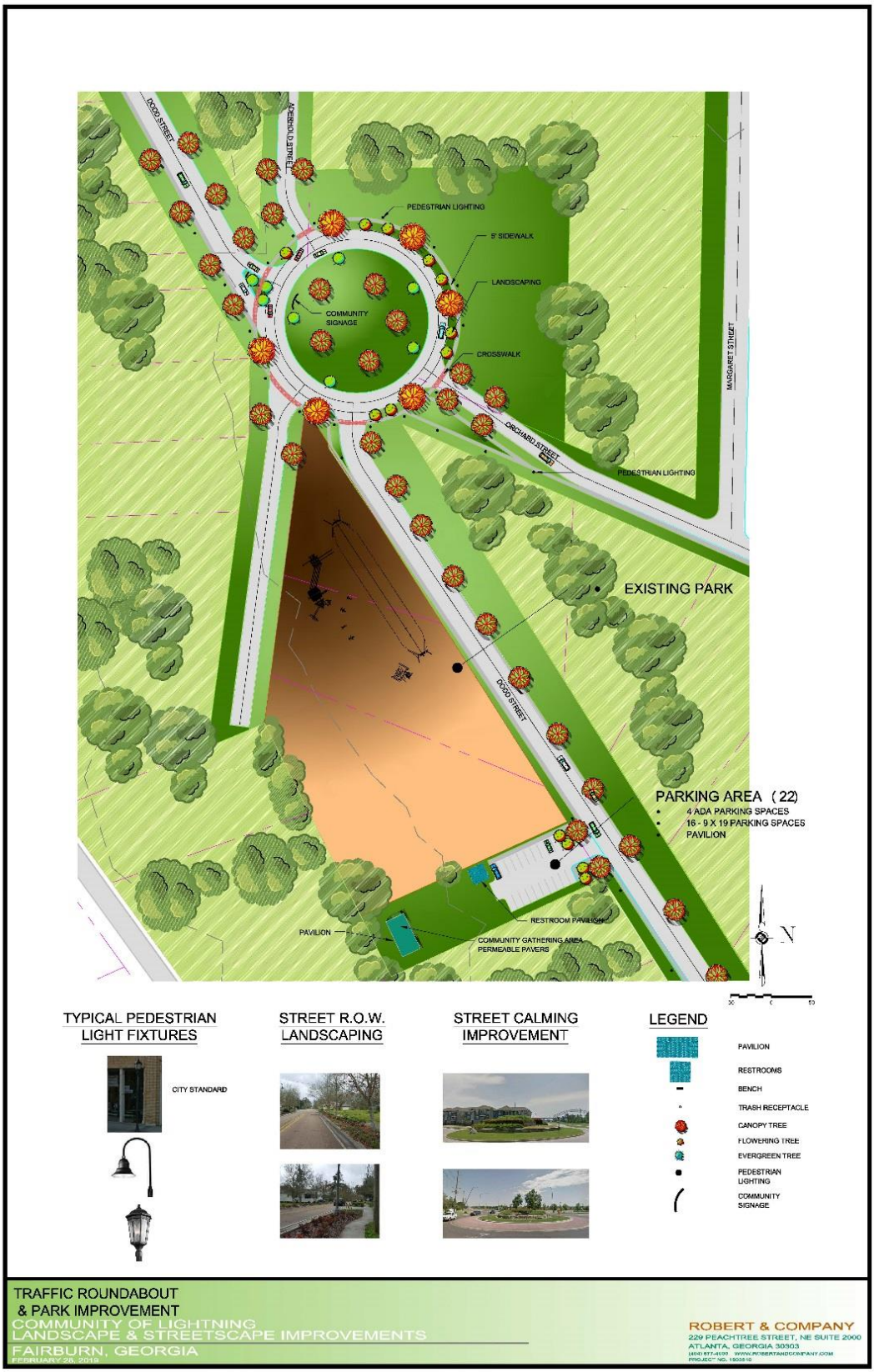
As part of the expansion it is recommended that a trail to connect the park to Golightly Street be developed. This connection would be allow pedestrians to walk from Dodd Street to Golightly and to the proposed park.

Another park recommendation is to develop a small park at the intersection of Golightly and West Campbellton Streets. The park site is an ideal location for the development of community garden plots. Each plot should be approximately 10 feet wide and 20 feet long with a 4-5’ space on either side to allow for walking and maintaining the individual plots. The park should also provide a hose bib connection for gardeners to water their plots. It is recommended that a 20’ x 20’ pavilion be placed on site to provide shade. Another recommendation is to allow parking for approximately five (5) vehicles.

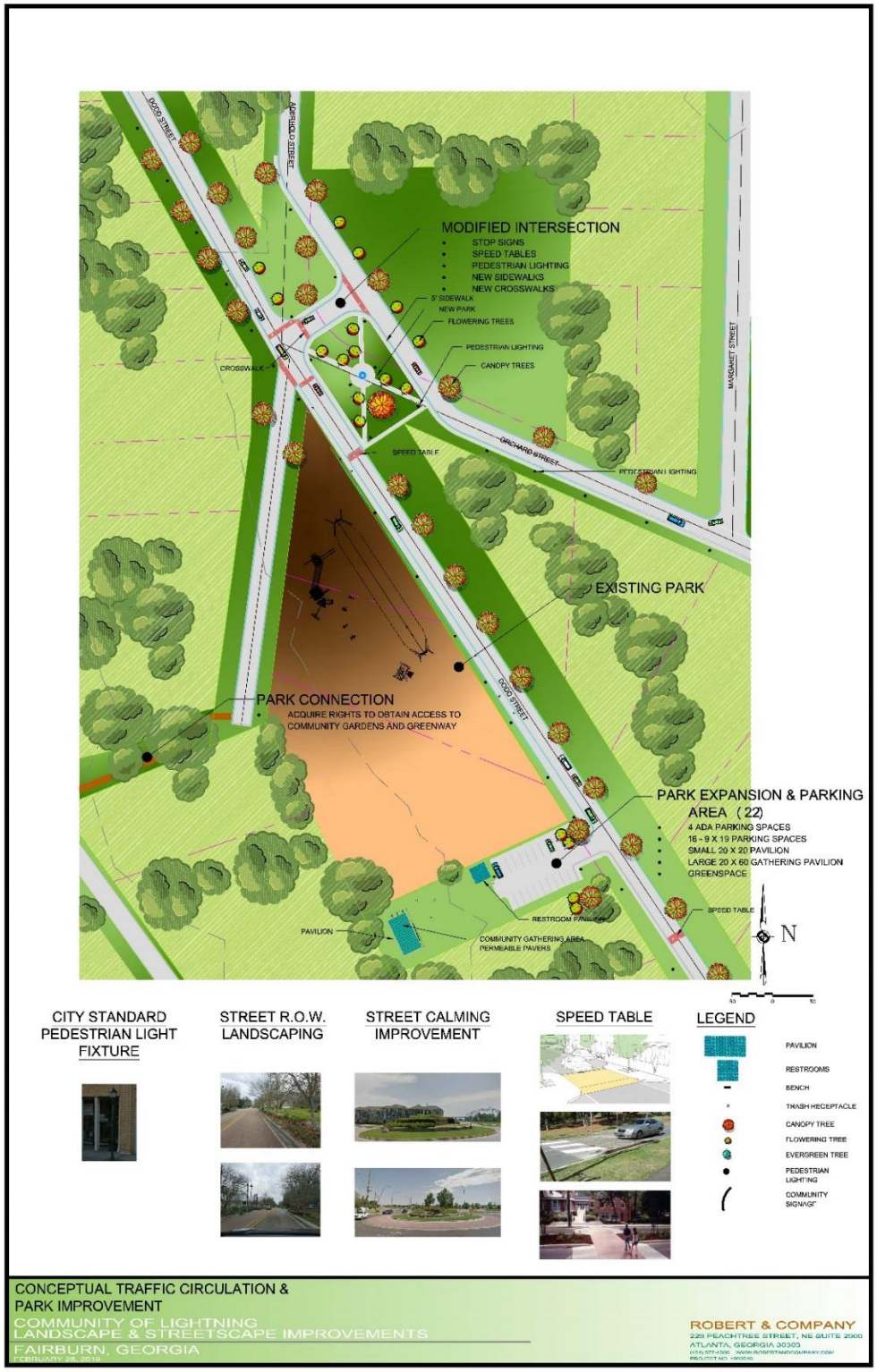
The terminus of the drainage greenway that extends from Dodd and Mullis to Golightly and Campbellton Streets would be located at this park and the greenway would be developed at the same time as the redevelopment of the drainage way occurs. The park and the proposed greenway are in the flood prone areas mentioned in community discussions, and the greenway would be well suited to address the drainage and flooding issues in the Lightning Community area.

The attached drawings illustrate the location and potential development of the park space in the community.

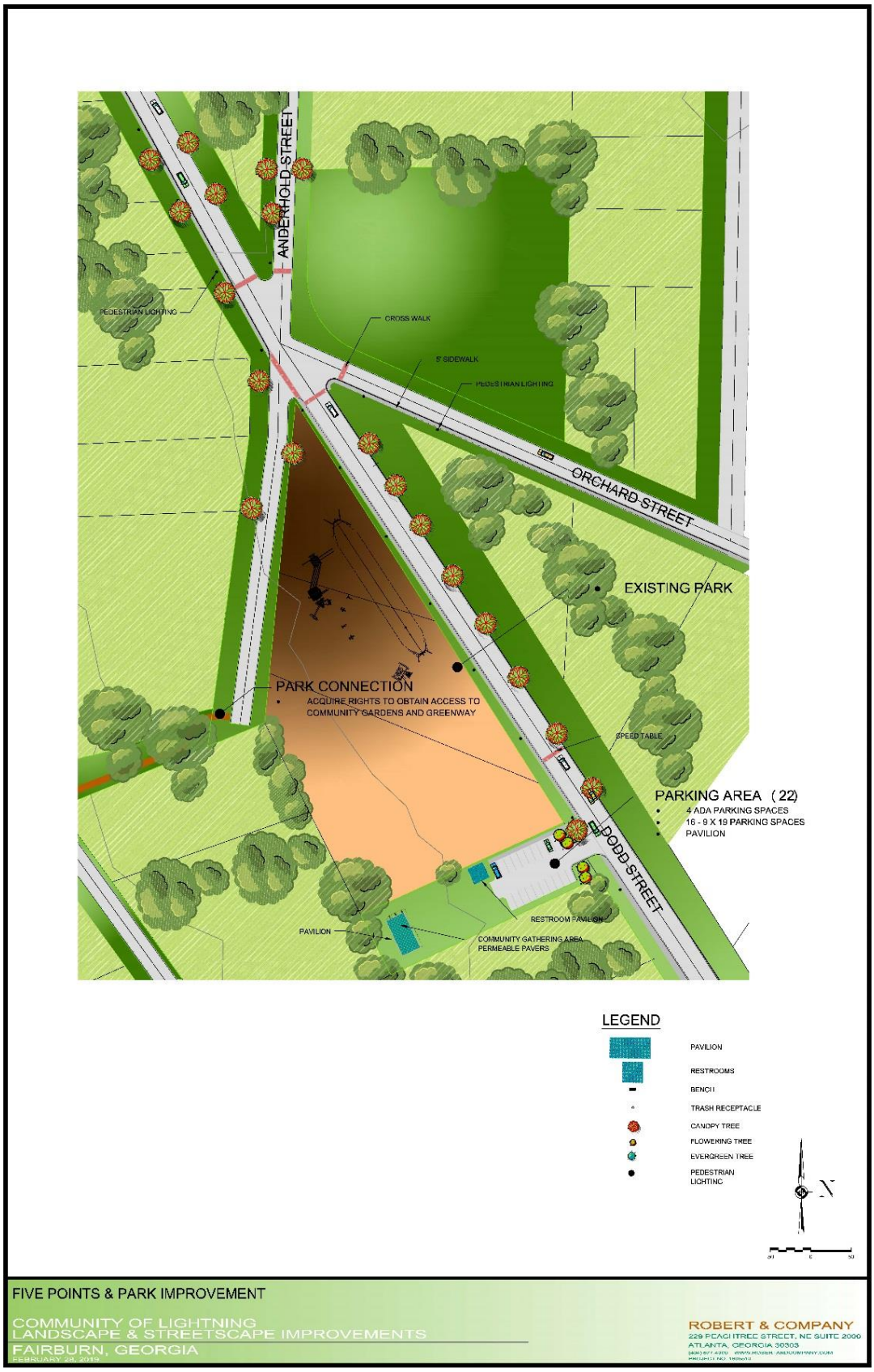
Alternate One- Roundabout



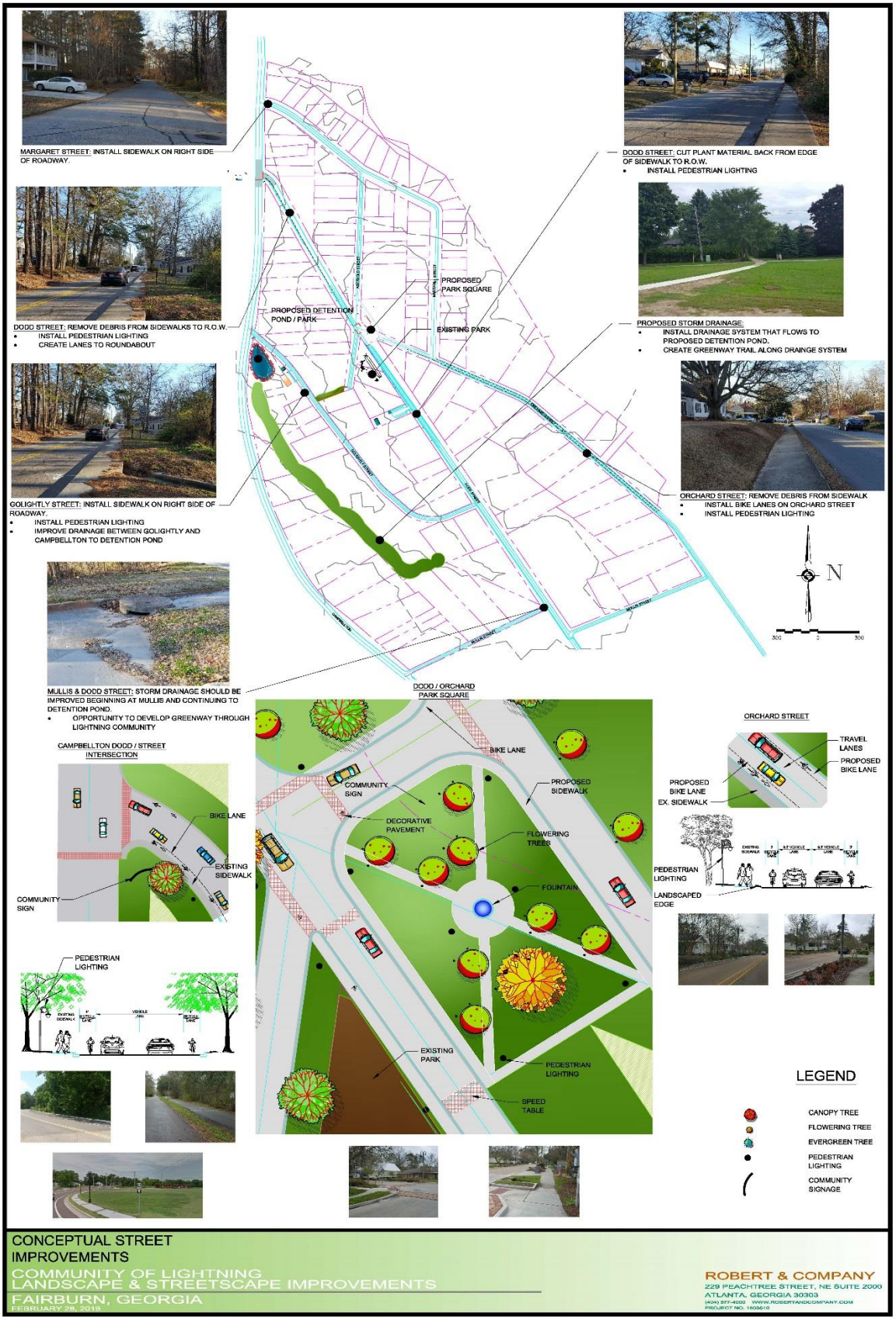
Alternate Two- Square Intersection based on discussions with residents



Alternate Three- Five Points with Traffic Enhancements

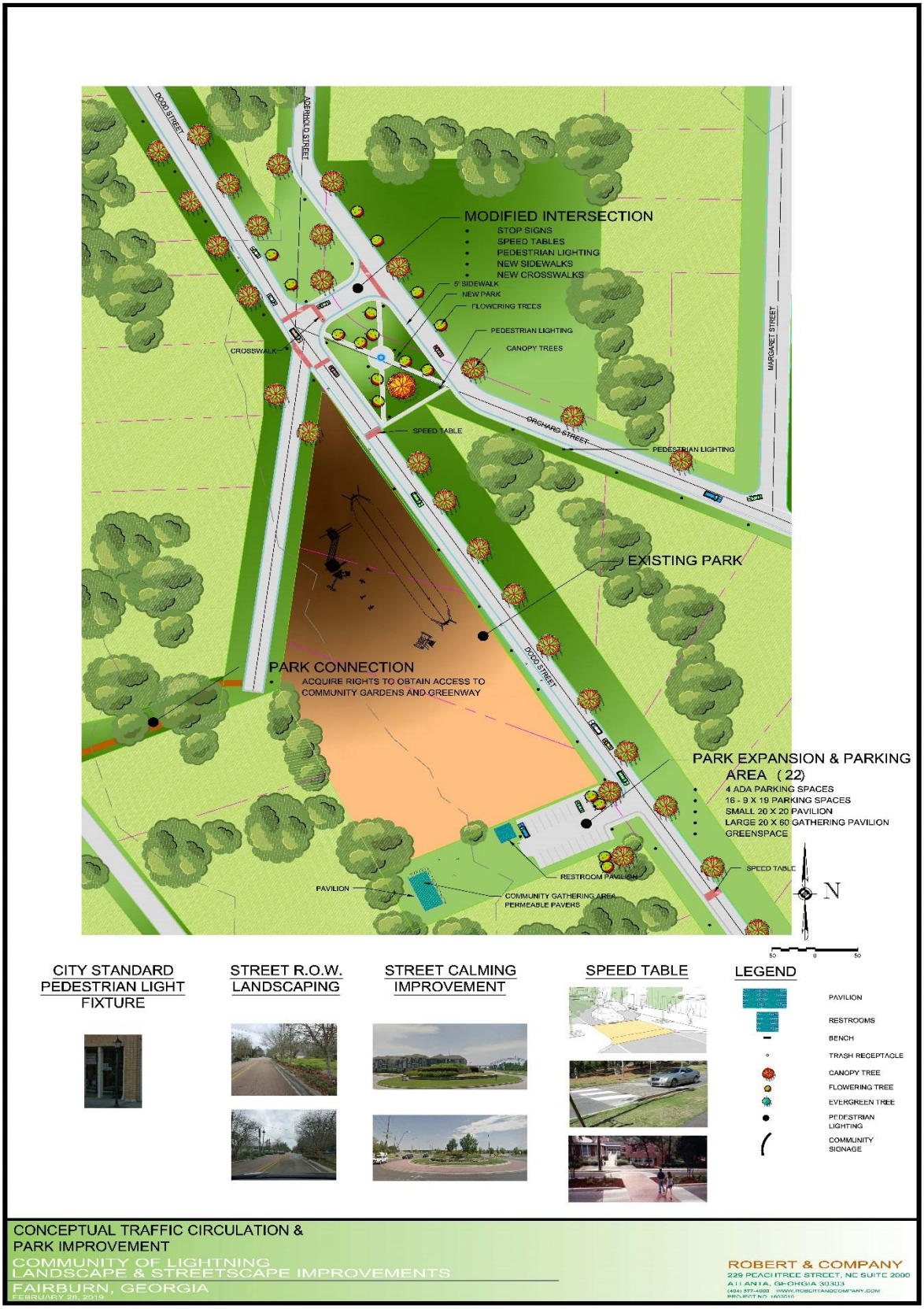


Street Improvements



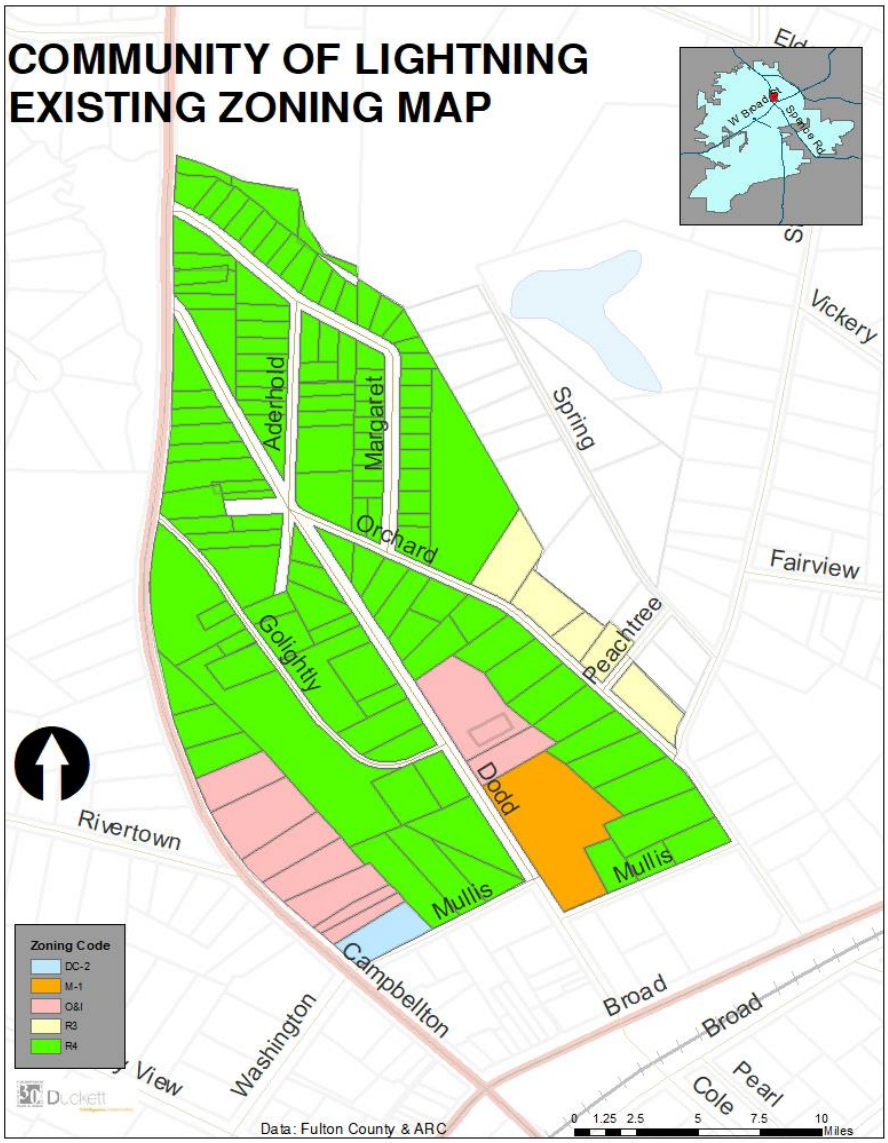
Drainage Improvements and Neighborhood Gardens

Traffic Circulation and Park Improvements



Zoning and Non-Conforming Lots and Uses

The zoning in the Lightning Community includes one parcel zoned DC-2 (Downtown Commercial District), one parcel zoned M-1 (Light Industrial), and 10 parcels zoned O&I (Office and Institutional). Five parcels along Orchard Street are zoned R-3 (Single-Family Residential) and 120 lots (the majority of the study area) are zoned R-4 (Single-Family Residential). The zoning in the study area is illustrated by the adjacent map (a larger version is located on page 13 above).



The DC-2 (Downtown Commercial District) zoning category shown in blue represents land and structures that are to provide retail and office use that complement the historic downtown core of Fairburn. The city's zoning ordinance specifically permits 126 different uses for properties with this zoning designation. There are no minimum setbacks al-though the structure may not exceed 50% of the lot area. The single property within the Lightning Community area is at the northeast corner of West Campbellton Street and Mullis Street and is a conforming use.

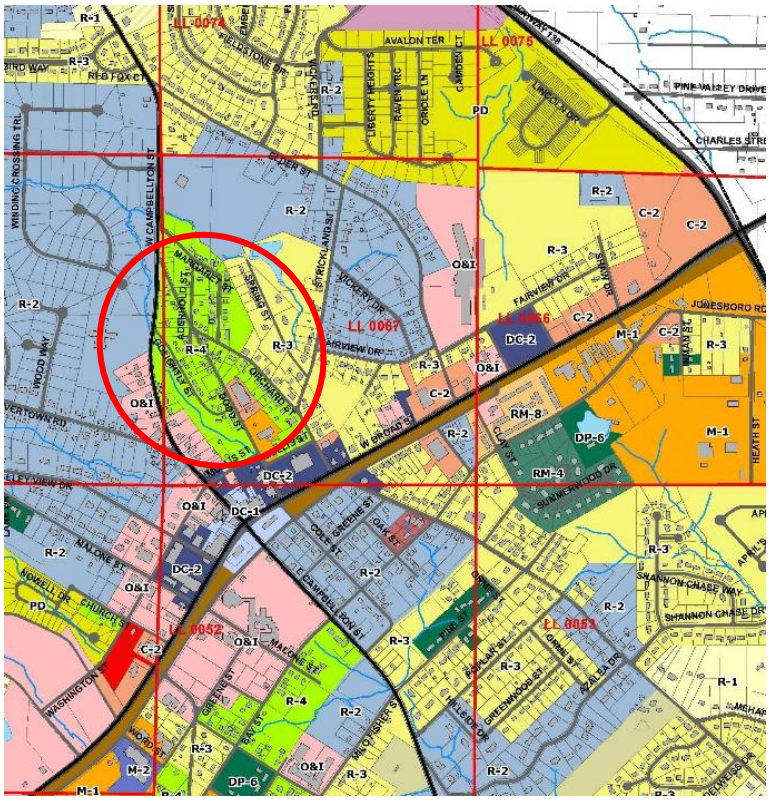
M-1 (Light Industrial District) zoning shown in orange is intended to provide sites for manufacture, storage, sale, and distribution of goods and conducting related commercial and industrial activities. Permitted uses include agriculture, animal hospitals and grooming, auto-oriented sales and services, commercial and cultural facilities, electric supply, fuel facilities, food processing, laundries, lumber, manufacturing, offices, paint stores, plumbing, printing, restaurants, retail, warehousing, wholesale, and accessory uses. All M-1 uses require a minimum front yard setback of 35 feet, a rear yard setback of 30 feet, and a side yard of 20 feet. M-1 structures abutting a residential district must maintain a 50 foot rear and/or side yard. Additional conditions apply for some of the specific uses. The minimum lot size is one acre. The single parcel zoned M-1 is located at the northeast corner of Dodd Street and Mullis Street and is a conforming use.

O&I (Office and Institutional) zoning illustrated in pink includes seven parcels located on the eastern side of West Campbellton Street and two parcels that front on the eastern side of Dodd Street. One additional parcel is located within one of the Dodd Street parcels. The O&I category provides for the compatible transition from commercial and residential development to limited office and institutional development at selected locations within the city. Permitted uses allow banks, child day-care centers, churches, funeral homes, group residences, office parks, medical care services, educational services, government buildings and accessory uses. Minimum front yard set-backs are 35 feet (40 feet along a thoroughfare such as West Campbellton Street). The minimum rear yard setbacks are 25 feet, and minimum side yards are 15 feet. Lot frontage at the building line is 50 feet, and the minimum lot size is 20,000 square feet. The properties zoned O&I are conforming uses.

Five parcels identified in yellow in the map above along Orchard Street are zoned R-3.(Single-Family Residential) to provide for development of medium density single-family residential uses on relatively small lots. Permitted uses are for single-family dwellings, small day-care centers and accessory uses and structures. Minimum front yard set-backs are 45 feet, minimum rear yards are 30 feet, and minimum side yards are 10 feet. Lot frontage at the building line is 85 feet, and the minimum lot size is 14,520 square feet (1/3 acre). These five properties are conforming uses.

The R-4 (Single Family Residential) district shown in green comprises the majority of the Lightning Community as defined by this study covering 120 parcel lots. The R-4 category permits single-family dwellings, non-profit recreational uses, institutional uses, child daycare centers, and accessory uses. Structure heights are limited to 48 feet. Minimum front yard set-backs are 35 feet, minimum rear yards are 25 feet, and minimum side yards are 10 feet. Lot frontage at the building line is 75 feet, and the minimum lot size is 10,890 square feet (¼ acre).

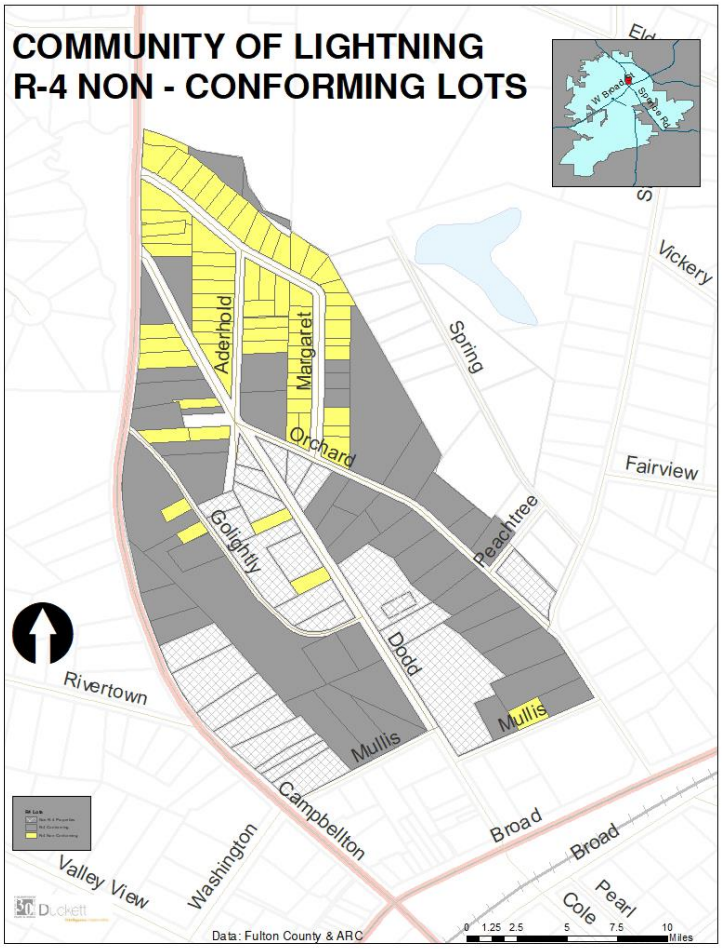
The five zoning categories identified above are specified in the City of Fairburn Zoning Ordinance which includes 30 different zoning districts, each with specific allowances and requirements. Therefore, some additional context is provided in the adjacent map that includes the community (see the red circle for location of the Lightning Community) and its surroundings with downtown Fairburn to the south and West Campbellton Street running north-south through the area. Areas to the west and north of the Lightning study area are predominately R-2 (Single Family Residential) as shown in light blue. The area to the east is mostly R-3 (Single Family Residential).



As may be noted, the R-4 zoning in the Lightning Community forms a unique pocket surrounded by other types of residential zoning (although other areas of R-4 zoning are found in other parts of the city). The R-3 zoning district to the east requires larger (1/3 acre) lots with larger setbacks and the R-2 zoning to the north and west (across West

Campbellton Street) requires a minimum lot size of ½ acre and even larger setbacks although the allowed uses are relatively the same for all three districts.

Unfortunately, many of the past divisions of properties in the Lightning Community are not consistent with the R-4 zoning district requirements as it currently exists. A review showed that 69 of 120 parcels zoned R-4 in the Lightning Community are non-conforming due to insufficient lot size, setbacks, or yard depth and width requirements. Many of the parcels located along Margaret and Aderhold Streets and a few parcels on Orchard, Dodd and Golightly Streets do not meet the frontage width requirements and average about 52' in width versus the 75' wide requirements. One parcel on Mullis Street does not provide the appropriate depth for front and rear lots.



Article V – Nonconforming Lots, Uses and Structures (Section 80-243) of the City of Fairburn Zoning Ordinance states that pre-existing lots, structures, and uses of both land and structures that were lawful prior to adoption of the ordinance but which would be prohibited, regulated, or restricted by the current zoning code may be permitted to continue until they are removed. Article V further states: *"It is the intent of this article to permit these nonconformities to continue until they are removed, but not to encourage their survival. It is further the intent of this article that nonconformities shall not be enlarged upon, extended, or expanded, nor be used as grounds for adding other structures or uses prohibited in the same district."*

Thus, nonconforming lots, structures, and/or uses may continue in their nonconforming status with limitations and requirements specifically defining the conditions for (1) nonconforming lots, (2) nonconforming uses of land, (3) nonconforming uses of structures, and (4) nonconforming structures (see the City of Fairburn Zoning Ordinance for details).

Based on the above intent and the language of the zoning ordinance, existing single-family structures are allowed to be built on a nonconforming lot if the lot is in separate ownership and not adjacent to another property owned by the same owner even though the property may fail to meet the requirements for area or width (or both) that are applicable to the district. The provisions of the ordinance also state that the requirements for nonconforming lots where single family dwellings are permitted states that any variance of yard requirements must be approved by the Planning and Zoning Commission.

The section regarding nonconforming use of structures states that a nonconforming use of a structure may be continued as long as it is not changed to another nonconforming use and is not

reestablished after discontinuing occupation in that use for one year or more. The owner is also not allowed to expand the nonconforming use or occupy a greater area of land than at the time the ordinance took effect.

The planning team interprets the requirements of the City of Fairburn Zoning Ordinance as allowing existing dwellings to continue use as provided by the ordinance. However, where several properties have been assembled by a single owner, the ordinance would trigger the provisions to consolidate or redevelop lots into appropriate yard widths if there are no existing dwellings or if the existing dwellings are removed prior to allowing new construction permits to build new structures. Therefore, eight of the current property lots along the north side of Margaret Street between 251 Margaret Street and West Campbellton Street would be subject to revising the lot dimensions since they share common ownership. This option is considered important for the development of these properties to ensure that they have appropriate yard dimensions and to address possible issues that may arise from their proximity to the floodplain on their northern side.

Other lots on the north side of Margaret Street are nonconforming, including 251, 225, 219, and 211 Margaret Street on the north side; 260, 248, 240, and 216 on the south side of Margaret Street; and the lots on the east and west sides of Margaret Street to Orchard Street. The church at 175 Margaret Street actually occupies three of these lots. In addition, the properties on both sides of Aderhold Street, including 201, 207, and 217 Aderhold are nonconforming, as well as 200 and 196 Dodd Street, and 120 Aderhold Street (on the southwest corner of Five Points). Some of these houses are aging and several are boarded up. Some of the adjacent properties between Dodd and West Campbellton Streets meet setback criteria but are also deteriorating. Other dwellings within this area are being well-maintained albeit expansions or additions are not allowed under the R-4 zoning.

The R-4 zoning category allows the smallest lot size single family residential category in the City of Fairburn's ordinance. R-CT allows single family dwellings with a minimum lot size of 3,000 square feet, but also allows multi-family condominiums and the density is significantly greater than the ¼ acre (10,890 square feet) allowed in R-4.

In order to maintain the character of the existing development, a new zoning overlay is proposed for the portions of the Lightning Community described as including the east side of West Campbellton Street, all lots south of Margaret Street and including the north and east sides of Margaret Street from 251 Margaret Street to Orchard Street, and north of Orchard Street and an extended line to the west from Dodd Street including 120 Aderhold Street to West Campbellton Street. This overlay is recommended to be identified as **Category R-4.5: Lightning Community Single Family Residential** of the Fairburn Zoning ordinance. The new R-4.5 zoning category would allow single-family dwellings, non-profit recreational uses, institutional uses, child daycare centers, and accessory uses as allowed for the R-4 category Structure heights are limited to 48 feet, minimum front yard set-backs are 25 feet, minimum rear yards are 25 feet, and minimum side yards are 10 feet with a lot frontage at the building line required to be 50 feet. The minimum lot size is proposed as 5,500 square feet (1/8 acre).

This change to the zoning ordinance will require an amendment to the current zoning ordinance to be approved by city staff, the City's Planning and Zoning Commission, and Fairburn City Council. The planning team recommends that the amendment ordinance be prepared by city staff and reviewed by the city's legal counsel.

Lightning Community Strategic Plan

Part 7: Implementation Cost Estimates

Sponsored by:
City of Fairburn

Costs for Implementation

Estimated construction costs for the projects identified above were prepared by the planning team to assist the City of Fairburn in developing a capital program to implement the planning program recommendations. The cost estimates provide relative order of magnitude for construction and assumes a 10% contingency. The total construction is estimated to be just under $2,000,000 dollars assuming current 2019 dollar values.

Design costs may be assumed to require an additional increase over these costs by 5% to 10%. Therefore, the total costs are estimated to be about $2.2 Million.

The zoning update can primarily be completed in-house by the City of Fairburn Planning and Zoning staff and legal counsel. The effort should be in the form of an amendment to the zoning ordinance introduced by Fairburn City Council. This effort can be reviewed, edited, and adopted as part of the City's normal zoning review process. The planning team estimates that approximately 80 hours of professional staff time will be required as part of the zoning update effort.

Lightning Community Strategic Plan Construction Cost Estimates:

Five Point Intersection Improvements

Description	Unit	Quantity	$/unit	Total
Mobilization				
Traffic control Bonds	LS	1	$15,000.00	$15,000.00
Mobilization	LS	1	$10,000.00	$10,000.00
Sub-Total				**$25,000.00**
Landscape & Erosion Control				
Temporary Grassing	Ac	0.52	$400.00	$208.00
Mulch - Straw	TN	10	$500.00	$5,000.00
Maint. of Temp Silt Fence Type C	LF	1500	$1.00	$1,500.00
Temp. Silt Fence Typ. C	LF	2600	$3.33	$8,658.00
Landscaping	LS	1	$3,000.00	$3,000.00
Sub-Total				**$18,366.00**
Grading Complete	LS	1	$50,000.00	**$50,000.00**
Sidewalk and Roadway Pavement				
Gra. Agg Base Course 6"	SY	1275	$16.50	$21,037.50
Recycled asphl. Conc. Patch	SY	1275	$110.00	$140,250.00
Conc. Sidewalk 4"	SY	355	$45.00	$15,975.00
Concrete Curb and Gutter 24"	LF	1040	$50.00	$52,000.00
ADA Ramps	EA	7	$900.00	$6,300.00
Road	TN	258	$110.00	$28,380.00
Drop Inlet GP 1	EA	7	$1,900.00	$13,300.00
18" RCP	LF	1330	$55.50	$73,815.00
Crosswalk Pavers	SF	1050	$15.00	$15,750.00
Pedestrian Lighting	LS	15	$2,000.00	$30,000.00
Utility Work	LS	1	$15,000.00	$15,000.00
Sub-Total				**$411,807.50**
Traffic Striping / Signage				
Community Signage	LS	1	$5,000.00	$5,000.00
Galv Steel Post typ 7	LF	10	$12.50	$125.00
Stop Bar	LF	180	$38.00	$6,840.00

Thermo solid traffic strip 5" wht	LF	350	$1.13	$395.50
Thermo solid traffic strip 8" wht	LF	1500	$13.30	$19,950.00
Sub-Total				**$32,310.50**
Extended Total Intersection Improvements				**$537,484.00**
10% Contingency and Consultant fee			*$134,371.00*	
Grand Total Five Points Intersection				**$671,855.00**

Five Points Square Park

Description	**Quantity**	**$/unit**	**Total**
Grading Complete			
Grading Complete	1	$15,000.00	**$15,000.00**
Sidewalk and Roadway Pavement			
Community Signage	LS	1	$5,000
Conc. Sidewalk 4"	325	$45.00	$14,625.00
Fountain	1	$10,000.00	$10,000.00
Benches	3	$1,200.00	$3,600.00
Landscaping	1	$12,000.00	$12,000.00
Pedestrian Lighting	4	$2,000.00	$8,000.00
Utility Work	1	$5,000.00	$5,000.00
Sub-Total			**$58,225.00**
Extended Total Five Points Square Park			**$73,225.00**
10% Contingency and Consultant fee		$18,306.25	
Grand Total Five Points Square Park			**$91,531.25**

Park Expansion

Description	**Unit**	**Quantity**	**S/unit**	**Total**
Traffic Control	LS	1	$0.00	$0.00
Mobilization	LS	1	$2,500.00	$2,500.00
Sub-Total				**$2,500.00**
Landscaping & Erosion Control				
Temporary Grassing	Ac	0.06	$400.00	$24.00
Landscaping	LS	1	$10,000.00	$10,000.00

Sod	SY	150	$4.50	$675.00
Sub-Total				**$10,699.00**
Grading Complete	LS	1	$20,000.00	**$20,000.00**
Sidewalk and Roadway Pavement				
Conc. Sidewalk 4"	SY	100	$45.00	$4,500.00
Concrete Curb and Gutter 24"	LF	100	$50.00	$5,000.00
Asphalt Parking	TN	158	$110.00	$17,380.00
ADA Ramp	EA	2	$900.00	$1,800.00
Pavilion with picnic tables and conc.	LS	1	$25,000.00	$25,000.00
Large Pavilion with Restrooms	LS	1	$55,000.00	$55,000.00
Pedestrian Lighting	LS	3	$2,000.00	$6,000.00
Utility Work -Electrical, Plumbing	LS	1	$12,000.00	$12,000.00
Sub-Total				**$126,680.00**
Extended Total Park Expansion				**$159,879.00**
10% Contingency and Consultant fee			*$39,969.75*	
Grand Total Park Expansion				**$199,848.75**

Park Detention Pond & Gardens

Description	**Unit**	**Quantity**	**$/unit**	**Total**
Traffic Control	LS	1	$3,000.00	$3,000.00
Mobilization	LS	1	$10,000.00	$10,000.00
Sub-Total				**$13,000.00**
Erosion Control				
Temporary Grassing	Ac	2	$400.00	$800.00
Erosion Control	LS	1	$10,000.00	$10,000.00
Landscaping-Sod, Trees, Garden Preparation	LS	1	$20,000.00	$20,000.00
Sub-Total				**$30,800.00**
Grading Complete	LS	1	$50,000.00	**$50,000.00**
Sidewalk and Roadway Pavement				
Gra. Agg Base Course 6"	SY	252	$16.50	$4,158.00

C C & G 24"	LF	140	$50.00	$7,000.00
Parking lot	TN	51	$110.00	$5,610.00
4" Concrete Sidewalk	SY	1395	$45.00	$62,775.00
ADA Ramps	EA	2	$900.00	$1,800.00
Fencing	LF	750	$15.00	$11,250.00
Utility Work - plumbing, electrical	LS	1	$5,000.00	$5,000.00
Drop Inlet GP 1	EA	2	$1,900.00	$3,800.00
Storm Drainage	LF	215	$55.50	$11,932.50
Small Pavilion w/picnic tables	EA	1	$27,500.00	$27,500.00
Pedestrian Lighting	EA	2	$2,000.00	$4,000.00
Sub-Total				**$144,825.50**
Traffic Stripping / Signage				
Hwy Signs, Tp 1 Material Refl sht tp 11	SF	12	$35.00	$420.00
Galv Steel Post typ 7	LF	30	$12.50	$375.00
Parking Lot striping	LF	40	$38.00	$1,520.00
Community Signage	LS	1	$5,000.00	$5,000.00
Sub-Total				**$7,315.00**
Extended Total Detention Pond & Garden				**$245,940.50**
10% Contingency and Consultant fee			*$61,485.13*	
Grand Total Detention Pond & Gardens				**$307,425.63**

Pedestrian Trail System Golightly Trail

Description	**Unit**	**Quantity**	**S/unit**	**Total**
Traffic Control	LS	1	$3,000.00	$3,000.00
Mobilization	LS	1	$10,000.00	$10,000.00
Sub-Total				**$13,000.00**
Erosion Control				
Temporary Grassing	Ac	3	$400.00	$1,200.00
Erosion Control	LS	1	$20,000.00	$20,000.00
Landscaping-Sod	LS	1	$10,000.00	$10,000.00
Sub-Total				**$31,200.00**
Grading Complete				
Grubbing & Grading Complete	LS	1	$100,000.00	**$100,000.00**

Trail				
10' asphalt trail	TN	1875	$110.00	$206,250.00
Utility Work - plumbing, electrical	LS	1	$10,000.00	$10,000.00
Storm Drainage Improvements	LF	2500	$45.00	$112,500.00
Pedestrian Lighting	EA	25	$2,000.00	$50,000.00
Sub-Total				**$378,750.00**
Traffic Striping / Signage				
Hwy Signs, Tp 1 Matl Refl sht tp 11	SF	20	$35.00	$700.00
Galv Steel Post typ 7	LF	50	$12.50	$625.00
Sub-Total				**$1,325.00**
Extended Total Pedestrian Trail				**$524,275.00**
20% Contingency and Consultant fee			*$183,496.25*	
Grand Total Pedestrian Trail				**$707,771.25**

Golightly Connector Trail

Description	Unit	Quantity	S/unit	Total
Traffic Control	LS	1	$1,000.00	$1,000.00
Mobilization	LS	1	$5,000.00	$5,000.00
Sub-Total				**$6,000.00**
Erosion Control				
Temporary Grassing	Ac	1	$400.00	$400.00
Erosion Control	LS	1	$5,000.00	$5,000.00
Landscaping-Sod	LS	1	$5,000.00	$5,000.00
Sub-Total				**$10,400.00**
Grading Complete				
Grubbing & Grading Complete	LS	1	$20,000.00	**$20,000.00**
Trail				
10' asphalt trail	TN	58	$110.00	$6,380.00
Utility Work - plumbing, electrical	LS	1	$10,000.00	$10,000.00
Pedestrian Lighting	EA	3	$2,000.00	$6,000.00
Sub-Total				**$22,380.00**
Traffic Striping / Signage				
Hwy Signs, Tp 1 Matl Refl sht tp 11	SF	10	$35.00	$350.00
Galv Steel Post typ 7	LF	20	$12.50	$250.00
Sub-Total				**$600.00**

Extended Total Golightly Trail Connector		**$59,380.00**
20% Contingency and Consultant fee	*$20,783.00*	
Grand Total Golightly Trail Connector		**$80,163.00**
Strategic Plan Grand Total		**$2,058,595**

Lightning Community Strategic Plan

Appendices

Sponsored by:
City of Fairburn