

# **Technology-Enabled Smarter Safer Routes to School for the City of Milton, GA**

**Georgia Smart Communities Challenge 2019**

Proposal Government Lead

Milton, GA

In Collaboration With

Fulton County Schools  
Dr. Kari Watkins  
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2006 Heritage Walk  
Milton, GA 30004

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## 1 Project Narrative

The City of Milton seeks to participate in the Georgia Smart Communities Challenge program to study and develop a smart-communication application for smart phones that would build upon and enhance the previously implemented Safe Routes to Schools (SRTS) program in the downtown Milton/ Crabapple area. This smart phone app would be developed to provide a real-time group communication mechanism for parents of kids who want to walk to school in a group with other kids, also known as a walking school bus. The app would encompass features and information that would improve and encourage their children's walking and biking trips to and from school. This program would use a combination of conventional and emerging technologies in addition to the smart phone app to better enable walking and biking to school; resulting in reduced numbers of parent drop-off trips via car. We are calling this program **Smarter Safer Routes to School**.

The app would serve three primary purposes:

1. Connect parents with each other and with tools to schedule supervised groups walking and biking to school together
2. Designate and map primary walking and biking corridors to enhance the safety in numbers aspect of trips to school
3. Provide walking school bus wait time information to parents using GPS locations of the leader parents

This project will be a planning and pilot study in the area of **Smart Mobility**. One of the most prevalent sentiments aiding the resistance to walking and biking to school is the perception that it may be unsafe. This project will hone in on the topic of a **safety and security** to address these perceptions.

The test location for this study will be the area of Downtown Milton in the historic Crabapple community; and will partner with the three Fulton County schools within the neighborhood as the test subjects.

### ***Broader Applicability***

This program can potentially transform the approach to managing walk to school programs throughout the Fulton county school district, the state and beyond. We are confident that the success of this project will be the success of school systems and walkable communities everywhere.

#### 1.1 Vision

*Picture this:* Parents or students open an app and see the number of kids walking to school today. Instead of sitting in traffic for 20 minutes they would decide to walk 20 minutes today. Parents take turns to volunteer in each subdivision, gathering and walking the kids to school every day. There would be less car pool lines and more monitored walk zones. Imagine having multiple eyes on the road and safer environment for students. School staff could have credentials to see more information of students using the app. The school could celebrate students for 100 days of walk or more, promote healthy active lifestyle. Add in to this the motion activated street lights, clear cross walks, street scape and cameras. It is a wholistic approach to make the Safe Routes to School smarter. This is possible when we have community support, and with the help of Georgia Tech

researchers, we would like to create a model that can be easily replicated everywhere in the country.

#### Current Conditions

The Crabapple community in Milton is a historic crossroads village of approximately one and a half square miles in the southern portion of the City of Milton. The City of Milton is in north Fulton County and was incorporated as a city in December 2006. At 13 years old, Milton has shown tremendous initiative and achievement with creating a mixed-use vibrant but quaint downtown village. The mixed-use village design of the Crabapple area emphasizes walkability and accessibility to all people of various ages and abilities.

Within the village of Crabapple, there are three schools adjacent to each other, an elementary school, middle school and a high school. This area has implemented the Georgia program called Safe Routes to Schools, which promotes connecting sidewalks from residential neighborhoods to the schools, to encourage students to walk to school. This collaboration between the City and schools has advanced the walkability of the village. The Form Based Code zoning regulations include provisions for a connected trail system as well as complete street cross-sections that expand alternative transportation options. These elements make this village an ideal lifelong, walkable, and livable community.

Milton's current conditions are we are at the cusp of seeing the original comprehensive plan ideas and aspirations come to fruition. The Downtown Milton buildout and the building of the trails is underway. More than nine (9) major development projects totaling more than 200 residential units, more than 200 square feet of commercial space due for completion in the next 2 years (See Appendix D). The total investment is \$600 million dollars. The city is investing in major infrastructure projects, already underway, including roads, streetscape improvements, and regional stormwater facilities. This area was chosen by the Milton community as the city's future development node and location for municipal headquarters because it is a historic crossroads community, but also in part, because the three Fulton county schools were already located here; and from a planning perspective, would contribute to the livability of the area.

#### Motivating Factors

For downtown Milton in the historic Crabapple area, the land use has been planned for a walkable community. The downtown area is adding many new developments and getting denser. Moreover, multiple public works projects are in process around Crabapple. It just makes sense to have good technology built in, when you are improving the infrastructure. Secondly, walkability, better infrastructure, and suitable land use all relate to Milton's goal of supporting superior quality of life for its residents. However, school related traffic has been a typical issue waiting to be tackled differently. It is a win-win for the community if the traffic could be reduced and walkability could be increased. And finally, starting with the kids, encouraging walking at an early age can result in adults who with greater propensity to walk rather than drive.

#### Citizen Input

Milton has a very engaged citizenry. Members of the public are encouraged to participate in local government planning and decision making. Our meetings are streamed live on the city's website and are available for view any time after. Social media also plays a major role in engaging and informing the community. This project will continue in that format and involve citizen input at town hall meetings, focus group meetings, event/festival exposure and social media. This will be

critical for ascertaining the opinion data we need to determine what features are installed in the app.

### ***Milton's population profile***

The City of Milton has approximately 39,000 people in approximately 39 square miles. Forty-six (46%) percent of the total 13,607 households have children, and twenty (20%) percent of the population is fourteen (14) years or younger. Milton's population demographic is family oriented, and one that is highly educated. Seventy-two (72%) percent of residents aged twenty-five and older, hold a degree (associates, bachelor's or post graduate), and twenty-five (25%) percent hold a post graduate degree. These combined statistics show Milton as an ideal candidate city to test and advance smart city technologies in general, and especially this proposed project as it relates to parents, children, and schools. We hope that this high educational attainment of the population can help bridge the disconnect (discussed at GA Tech's Smart Cities conference) between smart cities technologies and the residents the technologies are meant to serve.

We intend to fully engage the community in this project and continue to promote smart city technology ideas and solutions to our continued planning efforts. At the culmination of this project we see a successfully integrated smart cities program, that will lead to a successfully integrated holistic smart city.

### **Description of prior efforts**

This project will build on the previous accomplishments from Milton's participation in the Safe Routes to Schools program (2009). During the original SRTS efforts, sidewalk sections were completed, signals were installed at intersections, as well as crosswalks and signage. Besides the infrastructure accomplishments, students and teachers also participated in the SRTS program. Walk days were organized and students learned about road safety and the health and environmental benefits of walking to school. Before the SRTS program improvements, six percent of Crabapple Crossing Elementary School students and two percent of Northwestern Middle School students walked to school. The April 2019 numbers show 15% of Middle School students now walk to school.



Pedestrian infrastructure implemented as a result of the original Safe Routes to Schools Program

Additionally, the city has made pedestrian improvements throughout the Milton downtown/Crabapple area (pictured below) to encourage and improve the walkability. In 2017 Milton completed a Placemaking Plan (see Appendix D) that studied logical pedestrian connections between developments and across State Route 372 (Birmingham Hwy and Crabapple Road). Since the elementary, middle and high schools are in the area of these city improvements, the students use them in their walk to walk to school.



Pedestrian improvements at City Hall on Heritage Walk

Wayfinding Signage

There was also a Wayfinding Signage study conducted for the area in 2016 that resulted in a suite of signage that included pedestrian level wayfinding and your-are-here maps. The combination of these elements and the proximity of recent and future residential development in this 1.5 square mile area, makes for the perfect scenario to increase the number of students walking to school to renowned levels.

#### Long-term and/or end-goals and the envisioned future state of the community

This project will contribute to the broader goal of establishing downtown Milton as a highly walkable downtown, where visitors feel comfortable and safe as a pedestrian. Where walking becomes the preferred option to move between buildings.

Further study beyond this project by GA Tech professor Dr. Ellen Dunham-Jones, would be done to evaluate the resulting development pattern from the form-based code zoning and regulating plan to evaluate the quality of life improvements.

Also, part of our long-term vision, is the utilization of **smart lighting** along trail routes that would provide security lighting when necessary as well as save energy. As light poles are installed along sidewalks and trail routes, they should be creatively thought about to be used to enhance the

pedestrian experience in **creative uses of lighting poles** such as public wifi for SRTS users, and/or interactive opportunities.

We are already working on implementing our Trails Master Plan. As part of an ongoing planning effort we are looking at ways to introduce public art and other elements that would create interest along the trail network and contribute to encouraging residents and visitors to have a better pedestrian experience. The pictures below show ideas from google images of creative crosswalks in other cities.



## 1.2 Framework

The technology-enabled smarter safer routes to school app will develop knowledge and model that is transferable to multiple locations in Georgia and nationwide. Building on a foundation of SRTS this project will create a multilevel approach to increase walkability. Working with school district and the parent organizations this project would create a plan to that could bring community together to work on a common goal. The plan would also distinguish the roles and responsibilities of community, parents, school staff and city government. Based on the knowledge gained a model would be created to include an app to help connect various parties. This project would also develop best practices to motivate student participation without privacy concerns

## 1.3 Plan

In May 2009, the Georgia Department of Transportation (GDOT) selected the City of Milton to participate in its Safe Routes to School (SRTS) grant program to fund improvements with the goal to increase the safety and number of students walking and biking to school. The \$500,000 funding from this grant supported infrastructure projects at Crabapple Crossing Elementary School, Northwestern Middle School and Summit Hill Elementary School. Through the partnership between the City and the Fulton County schools, the specific infrastructure projects were selected to be funded by the SRTS grant. Some of these projects included physical infrastructure improvements such as filling in sidewalk gaps, installing new sections of sidewalk/trail to provide connections to schools, installing school zone signage, making crosswalk improvements, and ADA improvements to sidewalks at the schools.

This project, **Smarter, Safer Routes to Schools** will look at filling the information gaps to address the safety perceptions. The schools that will be included are Crabapple Crossing Elementary School, Northwestern Middle School, from the initial SRTS, as well as Milton High School directly adjacent to the other schools. The goals for this project to promote biking and walking will need to address high school students and their commute patterns. For high school students, there is the added component of student drivers that have the need to park at the school. These students are not always afforded an on-campus parking permit because of the limited availability of spaces. The walking network can be programmed to allow drivers to park or drop off at a remote location within walking distance for students to join the trail of walkers and bikers.

Milton and Fulton County School have established a proven successful relationship for working together and reaping accomplishments. The city worked with each school during the initial SRTS program to design solutions to address concerns. Safety was the number one concern of the city and the schools. The GA Smart program and research will provide opportunities for technology-enabled smart safety solutions that will improve the clean commuters' experiences, increase numbers of clean commuters, and in turn, reduce the congestion on the State Route 372 due to car riders' drop-offs.

### About the Case Study Schools and Neighborhoods

Students at these schools live in Roswell, Alpharetta, and Milton. There are over 1600 students that could be walking to school from the surrounding neighborhoods. The school campuses are surrounded by several residential subdivisions and mixed-use developments of Milton's city. At present, most of the housing are on the opposite side of Birmingham Hwy (SR 372) from the schools which requires students to cross Birmingham Hwy at either of two signalized intersections or the mid-block crosswalk in front of the elementary school. However, projects are underway that will add two hundred (200) new residential units, most of which will be on the same side of the highway as the school. These neighborhoods are proposed to be completed within the next two years and are designed with walking trails to the schools. We envision that by the time these developments are completed, the app developed from this project will be available for use by the new students.

School	Total Students	Walk	Bike	Bus	Carpool
Crabapple Crossing Elementary School	780	60 (8%)	0	600 (77%)	120 (15%)
Northwestern Middle School	1,340	200 (15%)	3 (0.002%)	700 (53%)	380 (28%)
Milton High School	2,300	NA	NA	NA	NA



Picture showing the combined entrance of Milton HS and Northwestern MS



Picture showing middle schools kids walking home from school along Heritage Walk

The counts from 2019 Walk to School Day on Friday April 26, 2019 show a lot of room for improvement. But as discussed earlier, the potential is there, in the infrastructure and other motivating factors, to accommodate renowned walk to school participation numbers.

Getting to and from School	Crabapple Elementary School	Middle and High School
Morning Carpool	150	NA
Afternoon carpool	58	NA
AM Walkers crossing Birmingham Hwy	559 + 4 bikes	5
PM Walkers crossing Birmingham Hwy	33	77 + 2 bikes

### **The benefits of walking to school**

There are substantial health and environmental benefits to walking to school. According to Healthy Children.org, walking and bike riding are healthy ways to get to and from school. Skipping the school drop-off traffic for more active commutes can contribute to the recommended 60 minutes of physical activity kids need each day. By walking with your children to and from school, you can familiarize them with the neighborhood, teach them about traffic signs, street signs and directions, and model correct behaviors when crossing streets. It's also a great opportunity for some chat time with your kids. Environmentally, trips powered by feet, rather than vehicles that spend time idling in the car pool line, also can help reduce pollution, which can trigger breathing problems in children. (<https://www.healthychildren.org/english/safety-prevention/on-the-go/pages/safety-on-the-way-to-school.aspx>) Studies have even shown that children can concentrate better in school when they have physical activity in the morning before school begins.

For parents that cannot accompany their children to school every day or ever, there are group walking options called the walking school bus. This group activity is good to make neighborhoods friendlier places.

### **Forming a Walking School Bus and Bike Train**

A walking school bus is a group of students and parents that walk to school together. Similarly, a bike train is a group of students that bike with parents to school together. Typically, a “bus” walks or “train” bikes along a predetermined route with adults leading the group to pick up students along the way. By formally organizing such a group, parents can take turns in leading the group to and from school to better enable more families to participate despite busy schedules.

### **The smart phone Smarter Safer Routes to Schools app**

The idea of the app is to facilitate communication among the families whose kids would walk or bike together. Ideally, the app would allow parents to set up and join a walking school bus, see their real-time location and estimated arrival times, see which friends and parents will be on the walking school bus, see the number of students and parent volunteers walking to school today, link to the local weather and temperature, request Milton or Fulton County Schools Police Officer escort for the walk, and send confirmations that the kids arrived at school. Some other features may include data on the historic daily counts of walkers, capabilities for sharing pictures and stories about the walks, point out features of interest along the routes as a fun educational component, and space for reporting hazards along the route.

Many features align with those of the OneBusAway and CycleAtlanta apps co-created by our GA Tech researcher Kari Watkins. OneBusAway gives information about actual bus arrivals, while CycleAtlanta tracks cyclists as they make their trips. The open source code from both projects enables quicker start up with the coding that will be necessary for the Smarter Safer Routes to School app. The initial phase of the project will envision the future app and investigate how existing code can be incorporated.

### **Low-stress Routes to School**

The app is meant to remove some of the perceptive barriers and stresses related to walking to school. As part of this project, a focus group of non-walkers will be asked about additional elements that may encourage them to joint the walk to school movement. The Safe Routes to School movement is increasing the number of children walking and bicycling in neighborhoods while improving personal safety, but many parents are still too worried about the personal safety of their children. One of the primary reasons that families do not walk or bike to school is that they feel unsafe doing so. Milton has already done work to create walkable paths to school by installing sidewalks, eliminating sidewalk gaps and hazards, and providing safe crosswalks. But many families may understandably still be uncomfortable with allowing their children to walk to school alone. The organized walking school bus with adult supervision can provide the safety in numbers that would calm some fears. With more families using the same route, everyone will be and feel safer. Also, the arrival confirmation feature would be helpful.

Local police officers, especially school resource and community police officers, know the realities of the neighborhoods around schools. Building relationships with local law enforcement and community organizations that specialize in personal safety can contribute to policy change and help to supplement SRTS program safety efforts.

### **Route Awareness**

Some parents may not be aware of the shortest safest route to school. Using data about walkable and bikeable streets in the Crabapple area, safe routes will be designated in the app to enable families to understand how to best access the school from their homes.



### **Evaluating the Pedestrian Environment**

Milton city staff will evaluate the pedestrian environment from a pedestrian perspective and through user input and literature reviews, devise a plan for improvements to the pedestrian network. We will increase our understanding of the factors that influence levels of walking and pedestrian route choices and contribute this to the existing research. In a study done by Kelly, Tight, Hodgson and Page, for the City of Leeds in the UK, the results indicated that pavement

cleanliness, safe crossing places, good connectivity and sense of security were important to improving walkability. This approach will complement our project.

In a nutshell, following are the activities community will do in the first year.

- Get together with the three Fulton County Schools in the neighborhood and parents to survey the potential of this app to promote walking or biking to school
- Given the pre-existing support of the schools and many other community groups, we will work on increasing the usability of the App
- Work with App developers to create features that will work for school, students and parents without risking privacy
- Create a map with the best routes to school and pattern to group students and volunteers
- Work with the parents and community to create streetscape that works best for the students and other pedestrians and bikers
- Work with the public works department to identify locations for sensor-activated street lighting for installation along the walking and biking routes.
- Work with researchers to develop Metrix to measure long term impact of the project on the students.
- Use student surveys, parent surveys and staff surveys to measure the success of the project

See the schedule in section 2.3.

#### 1.4 Research

The work of the Smarter Safer Routes to School program will be done in coordination with Dr. Angshuman Guin and Dr. Kari Watkins, both in the Civil and Environmental Engineering (CEE) Department at Georgia Tech. Dr. Guin is a Senior Research Engineer in CEE who has done significant work in transportation safety and intelligent transportation systems for multiple federal, state, and local agencies. He is currently leading a Connected Vehicle Master Plan for Gwinnett County for the Smart Communities Challenge. Dr. Watkins is an Associate Professor in CEE who has previously worked on creating walkable and bikeable communities based on perceptions of safety and travel demand behavior. She co-created two apps, OneBusAway and CycleAtlanta, that can be used as a basis for the Smarter Safer Routes to School program. Dr. Guin and Dr. Watkins will assist and advise in the development and evaluation of the app.

Dr. Watkins and Dr. Guin will first advise and assist capturing the functional requirements for the app and overseeing the design based on previous open source code. There may be opportunities to partner with courses at Georgia Tech such as the App Design course or Capstone Senior Design that Dr. Watkins and Dr. Guin will explore. Otherwise, funding from the grant will be used to hire a developer to do the coding. In addition, design of the app will utilize existing research from Dr. Watkins group on perceived safety in biking and walking to establish good walking and biking routes to school based on the initial SRTS plan. Metrics such as the Level of Traffic Stress will be used to assess which streets are the most walkable and bikeable based on traffic volumes and speeds. These aspects will be incorporated into the app to provide information to the parents about the best routes.

In the last phase of the project, Dr. Guin and Dr. Watkins will participate in the evaluation of the impact of the Smarter Safer Routes to School app using technology to collect data about the acceptance of the app and the resulting changes in walking and biking behavior. Through an

ongoing project between Dr. Watkins and GTRI, video equipment is being used to count pedestrians and cyclists automatically. Milton will make a nice test case for this ongoing project. This is will paired with other surveys, counts, and feedback gathered through the app itself to judge the success of the Smarter Safer Routes to School program.

## 2 Execution Plan

Upon selection, the City of Milton will work closely with its Georgia Tech research team to prioritize the project elements. A scope of work for professional services will be drafted that incorporates the work for creating the app that would include the features that the stakeholders thought to be pertinent.

### 2.1 Cost Plan

The total project grant is \$100,000.

\$50,000 cash from GA Tech plus \$10,000 from the City of Milton for a total of \$60,000 to spend on a vendor contract.

\$40,000 in-kind from the City of Milton for project management, community engagement and other resources.

Activity	Responsible Party	Cost
Project Management	City of Milton	\$12,000 (in-kind)
Community Engagement & Public Outreach	City of Milton	\$10,000 (in-kind)
Surveys and Data Collection	City of Milton	\$ 8,000 (in-kind)
Printed Materials and Signage	City of Milton	\$10,000 (in-kind)
Conferences, Training & other related items	City of Milton	\$10,000 (cash)
Professional Services/App development	App Development Firm	\$50,000 (cash)
Total Grant Amount		<u><b>\$100,000</b></u>
GA Tech Research component		\$25,000

### 2.2 Personnel Plan

The City of Milton staff will lead the task management and public engagement of this project. The team will consist of Parag Agrawal, City of Milton as the project point-of-contact. Parag Agrawal is an architect and a seasoned planning manager with over 18 years of experience in development and implementation of planning projects that promote sustainable growth practices, foster economic development, and encourage smart transportation choices. Prior to working for the City of Milton, Parag held leadership positions at the state and local levels in the northeast and midwestern regions of the United States. Parag has applied for and received for than \$120 million

dollars of federal and state grants including, TIGER grants, Rebuild by Design grant and other state grants.

The duration of the project is 50 weeks or 2,000 hours accounting for holidays.

Name	Organization	Relevant Qualifications	Primary Project Role	Time
Parag Agrawal (678) 242-2555 <a href="mailto:parag.agrawal@cityofmiltonga.us">parag.agrawal@cityofmiltonga.us</a>	City of Milton	Director of Community Development with over 18 years of experience in development and implementation of planning projects that promote sustainable growth practices and encourage smart transportation choices.	Point-of-contact	5%
Michele McIntosh-Ross (678) 242-2538 <a href="mailto:michele.mcintosh-ross@cityofmiltonga.us">michele.mcintosh-ross@cityofmiltonga.us</a>	City of Milton	Principal Long-Range Planner with 14 years of experience in urban planning, project management and grants administration.	Lead Project Manager	20%
Shubhangi Jangam	City of Milton	Senior Planner with over five years of experience in planning and architecture and five years of experience working for the Atlanta Public School District	Assistant Project Manager	20%
Sara Leaders, P.E.	City of Milton	Public Works Director Transportation engineer with 15 years of experience. Sara was the project manager for the original 2008 SRTS program	Resource Associate	5%
Dr. Anshuman Guin	Georgia Institute of Technology	Transportation systems engineer with 13 years of experience in freeway operations, intelligent systems, transportation safety, and traffic simulation and data management.	GA Tech Research Partner	
Dr. Kari Watkins	Georgia Institute of Technology	Civil and Environmental engineer with teaching and research interests in multi-modal transportation related to transit planning and operations and improved traveler information. Co-creator of the Cycle Atlanta smartphone app and the OneBusAway program.	GA Tech Research Partner	

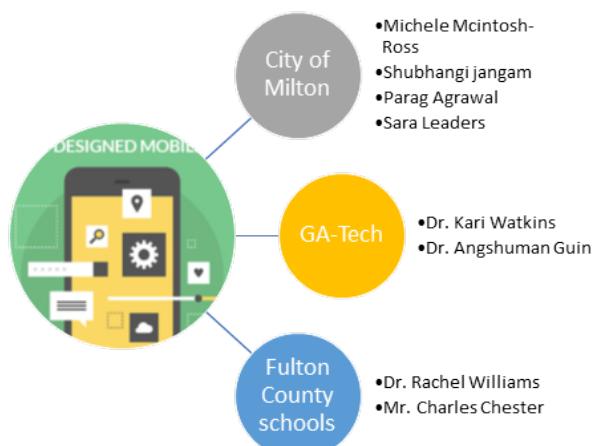
### 2.3 Schedule

We will be attending the Strategic Infrastructure Dialogue: GA Tech Smart Cities Conference on May 07 - 08, 2019. This is not part of this GA Smart Communities program in that it will not be counted towards our time and efforts but, the project team is eager to be prepared and able hit the ground running.

Task Description	Jul-19	Aug-19	Sept-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-19	May-19	Jun-19	Jul-20	Aug-20	Sept-20
GA Smart Award Announcement	X														
Project kick off is September 5, 2019 in Atlanta			X												
Meet with the School officials and parent-groups to kick off meeting and discuss potential of the app. Also discuss that physical needs of the safe routes to include in side-walk improvement plan.			X												
Booth at Crabapple Fest. This is hugely attended annual fall festival in the Crabapple area. We will reach a lot of residents by hosting an information booth				X											
Monthly status reports due to GA Smart				X	X	X	X	X	X	X	X	X	X	X	X
Workshops hosted by GA Smart (To be determined)															
Community workshop hosted by Milton					X										
Focus group meetings: Survey the students and parents to benchmark the motivation to walk or bike. Survey the factors that can encourage the walk from various perspective. Survey the likelihood of volunteers and their frequency.			X		X										
Post RFP for the App developer solicitations				X											
Research and determine the map of the best routes to schools					X	X									
Execute a contract with the app developer						X									
Mid-year report is due to GA Smart								X							
Focus group meetings with the app developers							X								
Present the framework and functions of the app to the community. Get the feedback									X						
Present the routing plan and maps to community. Get the feedback										X					
Present the adjusted app											X				
Test the App with volunteers												X	X		
Launch the app for August start of school														X	
Final year-end report is due to GA Smart															X

### 2.4 Collaboration

This pilot study will focus on technology that would address the needs of students at the Fulton County schools and the parents who live in the attendance zones. We will have a committed partnership and symbiotic relationship between the City of Milton and the Fulton County Schools similar to the successful relations during the 2008-2009 SRST program.



## Appendix A Letters of Support

STATE OF GEORGIA

COUNTY OF FULTON

RESOLUTION NO. 19-04-507

**A RESOLUTION OF THE CITY OF MILTON AUTHORIZING THE SUBMISSION OF AN APPLICATION  
TO GEORGIA INSTITUTE OF TECHNOLOGY (GATECH) FOR THE 2019 GEORGIA SMART  
COMMUNITIES CHALLENGE (GEORGIA SMART) GRANT PROGRAM FOR FUNDING IN THE  
AMOUNT OF ONE HUNDRED THOUSAND DOLLARS (\$100,000)**

**BE IT RESOLVED** by the City Council of the City of Milton, GA while in a Regular Meeting on April 22, 2019 at 6:00 p.m. as follows:

**WHEREAS**, the Georgia Smart Communities Challenge also known as Georgia Smart, is a grant funding and research assistance program developed by Georgia Institute of Technology (GaTech) with funds provided by Georgia Power, and

**WHEREAS**, Georgia Smart makes \$50,000 available per community with a 100% match requirement, and

**WHEREAS**, provided that the City receives the grant, Georgia Smart allows the City's matching funds to be comprised of Ten Thousand Dollars (\$10,000) in cash, and Forty Thousand Dollars (\$40,000) in like-kind materials, services, or donations, and

**WHEREAS**, the Community Development Department of the City of Milton has identified Ten Thousand Dollars (\$10,000) within the Community Development budget for use in the cost of the required matching funds, and can attest to Forty Thousand Dollars (\$40,000) of like-kind resources (including, but not limited to supplies, materials, equipment, meeting space, volunteer hours and staff time) that can be attributed to the Georgia Smart grant, and

**WHEREAS**, the Community Development Department of the City of Milton is prepared to submit a Georgia Smart application.

**NOW THEREFORE BE IT RESOLVED**, that the City Council of the City of Milton does hereby authorize the Community Development Department to submit an application to Georgia Institute of Technology for the 2019 Georgia Smart grant program in the amount of One Hundred Dollars (\$100,000).

**RESOLVED** this 22<sup>nd</sup>, day of April 2019

Approved:



Joe Lockwood, Mayor

Attest:

  
Sudie Gordon, City Clerk



## Appendix B Documentation of Financial Support



**MAYOR**  
Joe Lockwood

**CITY COUNCIL**  
Peyton Jamison Matt Kunz  
Laura Bentley Carol Cookerly  
Joe Longoria Rick Mohrig

May 3, 2019

This letter is to confirm the City of Milton Community Development department will be investing a 40% in kind match of \$40,000 towards the Smart Cities Communities Challenge program. If the City of Milton is awarded this grant, the following staff members will be committed to working on the project.

Name	Title	Project Role	Hourly Rate	Time	Cost
Parag Agrawal	Director of Community Development	Point of Contact	\$90	100 hours	\$9,000
Sara Leaders	Interim Public Works Director	Resource Associate	\$70	100 hours	\$7,000
Michele McIntosh-Ross	Principal Planner	Project Manager	\$40	300 hours	\$12,000
Shubhangi Jangam	Senior Planner	Assistant Project Manager	\$40	300 hours	\$12,000
				Grand Total	\$40,000

Sincerely,

Steven Krokoff  
City Manager

## Appendix C Letters of Understanding from NGOs



### CRABAPPLE CROSSING ELEMENTARY

12775 Birmingham Hwy, Milton, GA 30004-3760  
School (470)254-7055, Fax (470) 254-2841  
[crabapplecrossing.org](http://crabapplecrossing.org)

**Dr. Rachel A. Williams, Principal**  
Denise Haltrecht, Assistant Principal

April 26, 2019

To Whom It May Concern:

I am writing on behalf of the Milton community, specifically as a public school leader in the local area, to support the grant in which the City of Milton is seeking from Georgia Tech. I realize the city is composing a grant application packet with the idea of creating safe walking and biking routes in the area.

As an elementary school leader, this is music to my ears. With numerous construction projects going up around our school, this is needed now more than ever before. Students and families enjoy walking to school and we actually hold a formal event day each month. We also enjoy seeing our students and families walking to visit local business and restaurants by our school. With safer routes that are pedestrian friendly, we know this number would increase.

Milton has the ability to maintain its reputation of being one of the best cities to live in Georgia and this grant opportunity would only benefit an area which is already doing positive things for its citizens. Thanks for the opportunity to share my full support of this project.

Best,

Dr. Rachel A. Williams, Principal

## **Appendix D References and Citations**

Crabapple Presentation

Placemaking Plan

Reference Map

## **Appendix A Letters of Support**

STATE OF GEORGIA

COUNTY OF FULTON

RESOLUTION NO. 19-04-507

**A RESOLUTION OF THE CITY OF MILTON AUTHORIZING THE SUBMISSION OF AN APPLICATION  
TO GEORGIA INSTITUTE OF TECHNOLOGY (GATECH) FOR THE 2019 GEORGIA SMART  
COMMUNITIES CHALLENGE (GEORGIA SMART) GRANT PROGRAM FOR FUNDING IN THE  
AMOUNT OF ONE HUNDRED THOUSAND DOLLARS (\$100,000)**

**BE IT RESOLVED** by the City Council of the City of Milton, GA while in a Regular Meeting on April 22, 2019 at 6:00 p.m. as follows:

**WHEREAS**, the Georgia Smart Communities Challenge also known as Georgia Smart, is a grant funding and research assistance program developed by Georgia Institute of Technology (GaTech) with funds provided by Georgia Power, and

**WHEREAS**, Georgia Smart makes \$50,000 available per community with a 100% match requirement, and

**WHEREAS**, provided that the City receives the grant, Georgia Smart allows the City's matching funds to be comprised of Ten Thousand Dollars (\$10,000) in cash, and Forty Thousand Dollars (\$40,000) in like-kind materials, services, or donations, and

**WHEREAS**, the Community Development Department of the City of Milton has identified Ten Thousand Dollars (\$10,000) within the Community Development budget for use in the cost of the required matching funds, and can attest to Forty Thousand Dollars (\$40,000) of like-kind resources (including, but not limited to supplies, materials, equipment, meeting space, volunteer hours and staff time) that can be attributed to the Georgia Smart grant, and

**WHEREAS**, the Community Development Department of the City of Milton is prepared to submit a Georgia Smart application,

**NOW THEREFORE BE IT RESOLVED**, that the City Council of the City of Milton does hereby authorize the Community Development Department to submit an application to Georgia Institute of Technology for the 2019 Georgia Smart grant program in the amount of One Hundred Dollars (\$100,000).

**RESOLVED** this 22<sup>nd</sup>, day of April 2019

Approved:



Joe Lockwood, Mayor

Attest:



Sudie Gordon, City Clerk



## **Appendix B Documentation of Financial Support**

**MAYOR**

Joe Lockwood

**CITY COUNCIL**

Peyton Jamison	Matt Kunz
Laura Bentley	Carol Cookerly
Joe Longoria	Rick Mohrig

May 3, 2019

This letter is to confirm the City of Milton Community Development department will be investing a 40% in kind match of \$40,000 towards the Smart Cities Communities Challenge program. If the City of Milton is awarded this grant, the following staff members will be committed to working on the project.

Name	Title	Project Role	Hourly Rate	Time	Cost
Parag Agrawal	Director of Community Development	Point of Contact	\$90	100 hours	\$9,000
Sara Leaders	Interim Public Works Director	Resource Associate	\$70	100 hours	\$7,000
Michele McIntosh-Ross	Principal Planner	Project Manager	\$40	300 hours	\$12,000
Shubhangi Jangam	Senior Planner	Assistant Project Manager	\$40	300 hours	\$12,000

## **Appendix C Letters of Understanding from NGOs**



## CRABAPPLE CROSSING ELEMENTARY

12775 Birmingham Hwy, Milton, GA 30004-3760  
School (470)254-7055, Fax (470) 254-2841  
[crabapplecrossing.org](http://crabapplecrossing.org)

**Dr. Rachel A. Williams, Principal**  
Denise Haltrecht, Assistant Principal

April 26, 2019

To Whom It May Concern:

I am writing on behalf of the Milton community, specifically as a public school leader in the local area, to support the grant in which the City of Milton is seeking from Georgia Tech. I realize the city is composing a grant application packet with the idea of creating safe walking and biking routes in the area.

As an elementary school leader, this is music to my ears. With numerous construction projects going up around our school, this is needed now more than ever before. Students and families enjoy walking to school and we actually hold a formal event day each month. We also enjoy seeing our students and families walking to visit local business and restaurants by our school. With safer routes that are pedestrian friendly, we know this number would increase.

Milton has the ability to maintain its reputation of being one of the best cities to live in Georgia and this grant opportunity would only benefit an area which is already doing positive things for its citizens. Thanks for the opportunity to share my full support of this project.

Best,

A handwritten signature in black ink that reads "Rachel Williams".

Dr. Rachel A. Williams, Principal



**NORTHWESTERN MIDDLE SCHOOL**  
12805 BIRMINGHAM HIGHWAY • MILTON, GEORGIA 30009  
470-254-2870                                  Fax 470-254-2878

---

Charles Chester  
Principal

May 3, 2019

Greetings,

I am writing you to show support of the City of Milton in seeking a grant from Georgia Tech to enhance the safe walking and biking routes in this community. As a school leader in the Milton community, I am excited about the possibility of to enhance these areas of our community for our families.

Healthy habits are something that we encourage as a school community. Providing these avenues for our families to increase walking and riding would benefit our school community. This proposal would provide safer routes for families to commute to school events, local restaurants, and businesses.

Our families truly enjoy the city and our community is a very social and vibrant one. In addition to promoting health and safety, the grant would promote togetherness in our community. Milton is one of the best places to live and work in the country. We are excited about this grant making it even better!

Kind Regards,

Charles Chester  
Principal  
Northwestern Middle School



George R. Austin, Jr.  
Chief of Police

**MILTON, GEORGIA  
POLICE DEPARTMENT**  
13000 DEERFIELD PKWY, STE 107F  
MILTON, GA 30004



2006

**DEPARTMENTAL CORRESPONDENCE**

**DATE: May 3, 2019**

**TO: Georgia Smart Community Challenge Committee 2019**  
**FROM: Captain Charles Barstow, Acting Chief of Police**  
**SUBJECT: Letter of Support from the Milton Police Department**

I am writing to you on behalf of Chief Rich Austin and the Milton Police Department to support the City of Milton's application to the Georgia Smart Community Grant. I believe that this grant will enhance the safety of the students and families, many of whom walk or utilize alternate forms of transportation, such as bicycles, to move throughout the area. With your help, this initiative will allow the City of Milton to plan for and utilize innovative technology which will make walking or biking to schools safer. We are a close-knit community, specifically in Crabapple, where the city has worked to create an environment that supports less vehicular traffic and greater access to the area via pedestrian and bicycle utilization. We support regular educational meetings that raise the awareness of the community about bicycle traffic and how bicycles and motorists can respectfully share the cities roadways. We also support reducing vehicular traffic in and out of our local schools by supporting local school initiatives, such as "Walk to School". At least once a month, one of our local schools, Crabapple Crossing Elementary, sponsors a walk to school day which greatly reduces the number of vehicles on our roadways and promotes a healthy lifestyle for our young people who will hopefully continue the practice as they mature. With an elementary school, middle school and high school all within one half mile of each other, the area can become quite congested and programs such as "Walk to School" help alleviate that congestion.

By being awarded this grant, we can continue to create and implement new and innovative ways to continue the reduction of vehicular traffic. This in turn would create a safer environment for bicyclists and pedestrians and promote healthy practices with both students and their parents.

As a police department, one of our missions is to promote a high quality of life for all our citizens. We strongly believe that this grant will be beneficial in that endeavor. By creating less traffic congestion and promoting alternate and healthy means of reaching nearby destinations, specifically our schools, we can continue to meet and exceed the needs of our students and the community at large.

Yours sincerely,

Captain Charles S. Barstow

*C. S. Barstow*

# M C W H O R T E R

---

May 2, 2019

Re: Safe Routes to School

To whom it may concern:

I am writing in support of the grant the City of Milton is seeking from Georgia Tech to create safer walking and biking routes to school in the Crabapple area.

My family and I live in the Braeburn neighborhood, which is less than a half mile from Crabapple Crossing Elementary, Northwestern Middle and Milton High Schools. There are two other neighborhoods that are connected to our neighborhood area, Crabapple Crossroads and Heritage at Crabapple. Among our three neighborhoods, over 200 students regularly walk or bike to school, weather and time permitting. When the elementary school hosts its incentivized walk to school days that number increases exponentially, which reduces the commuter traffic significantly.

I believe that those numbers would increase greatly with the right encouragement. The residents in Crabapple are here because of the potential walkability of the area. We support any project that improves the safety and accessibility of these routes. I am in favor of any program that encourages more people to walk or ride bicycles to the schools. Thank you for the opportunity to share my full support of this project.

Sincerely,

Christy McWhorter

May 2, 2019

Re: Safe Routes to School

To Whom It May Concern:

I am writing this letter in enthusiastic support of the grant that the City of Milton is seeking from Georgia Tech to create safer walking and biking routes to school in the Crabapple area.

My passion for the walkability of this community runs deep as the Walk to School chairperson for the Crabapple Crossing Elementary PTO and as a parent of a fourth grader who has walked to school almost every day since kindergarten. One of the greatest pleasures I have every day is the time I spend walking with my daughter and our neighbors the half mile to the door of Crabapple Crossing. The ability to stop and chat along the way with other members of the community are benefits that you cannot get through a car window. This ability to connect is one of the reasons that I believe that the Walk to School days that we host every month are so successful. I am truly amazed every month at the turnout we get even when the weather is just above 40 degrees or there is rain coming down. Long after the last bell has rung, there are still parents outside lingering to chat as they sip their coffee.

I do know, however, that I am privileged to live in a home that has sidewalks and secure crossing points on the entire route to all three of the schools my daughter will attend (CCES, Northwestern and Milton). When I took on my role with the PTO, I sat with City employees and noted many neighborhoods that did not have continuous access. I have no doubt that as we increase the accessibility by both walking and biking, we will encourage more people to make alternatives to the car a more regular habit. This will be imperative as our community is growing by leaps and bounds. Walkability is one of the things that makes our community rare among the suburbs of Atlanta. We need to make sure that we can preserve this feature as the community grows.

Thank you for the opportunity to share my support.

Best Regards,



Candace Tenhundfeld

## Appendix D References and Citations

# Downtown Milton Update- Building of a Community



**Parag Agrawal, AICP**  
**Community Development Director**  
**City of Milton**  
**City Council Presentation 04/15/2019**



# Downtown Milton Update - Building of a Community

- **Planning History**
- **Development Review Process**
- **Overview of the Proposed Development**
- **Sustainability and Architecture**
- **Road Infrastructure**
- **Challenges and Strengths**
- **Stakeholders**



# Crabapple Planning History



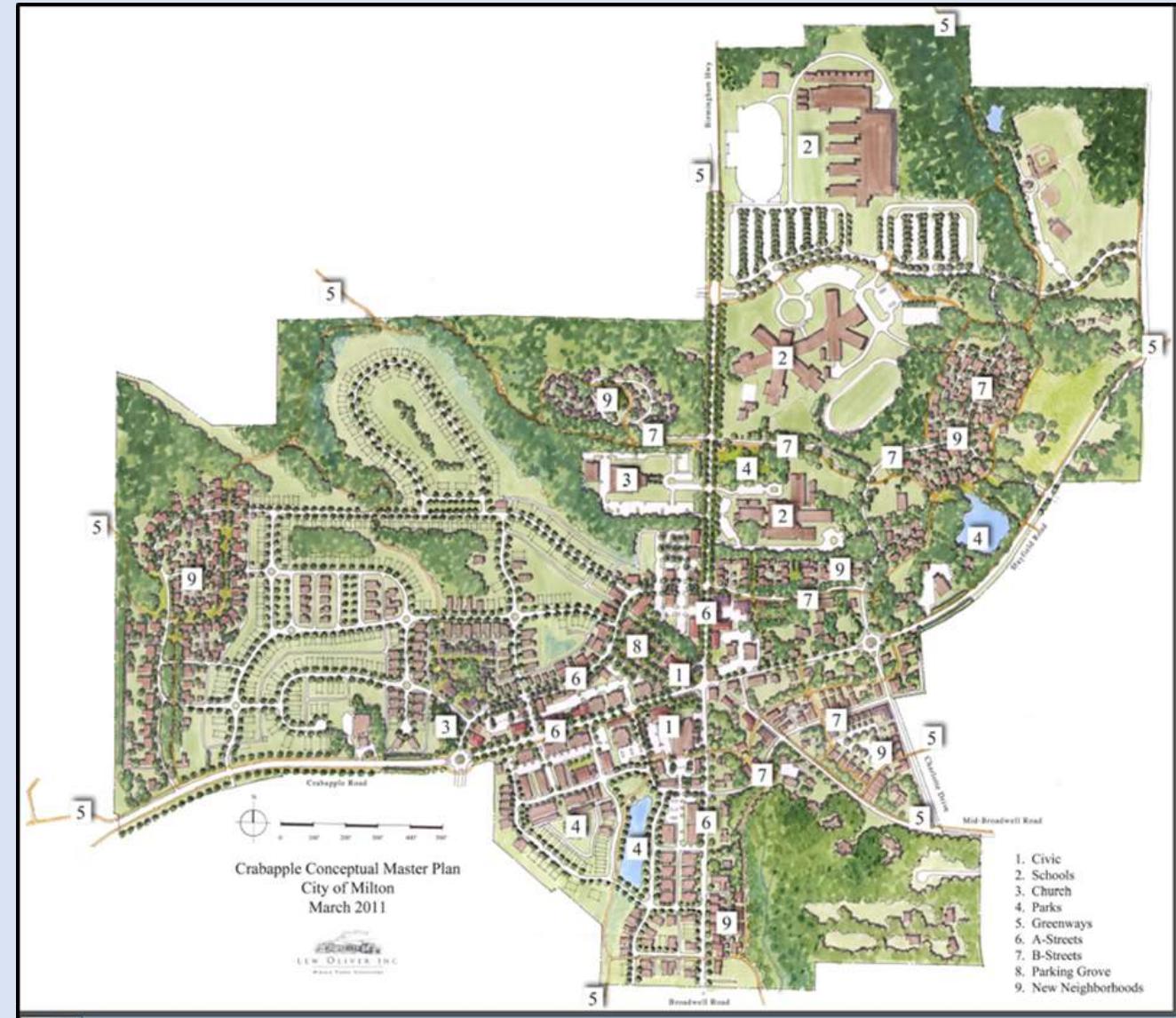
## Crabapple Visioning Study - 2011

### Big Ideas were -

- Do not build for additional commuter traffic – Traffic Calming, no street widening
- Provide multi-modal transportation options - potential trails and greenways, pedestrian and bicycle facilities.
- Complete the Community - More housing options, more small scaled retail, live/work units

### 'Modestly' scaled commercial – No large scale retail

### Architecture – Simple, local and vernacular



## Crabapple Visioning Study - 2011



**Introduced the concept of Main Street -**

A walkable street that will be lined with trees, retail stores and wide sidewalks. Future buildings will be non-monolithic in nature

## Form-Based Code

### Intent –

To promote high-quality, mixed-use development

Create a walkable and bicycling friendly environment

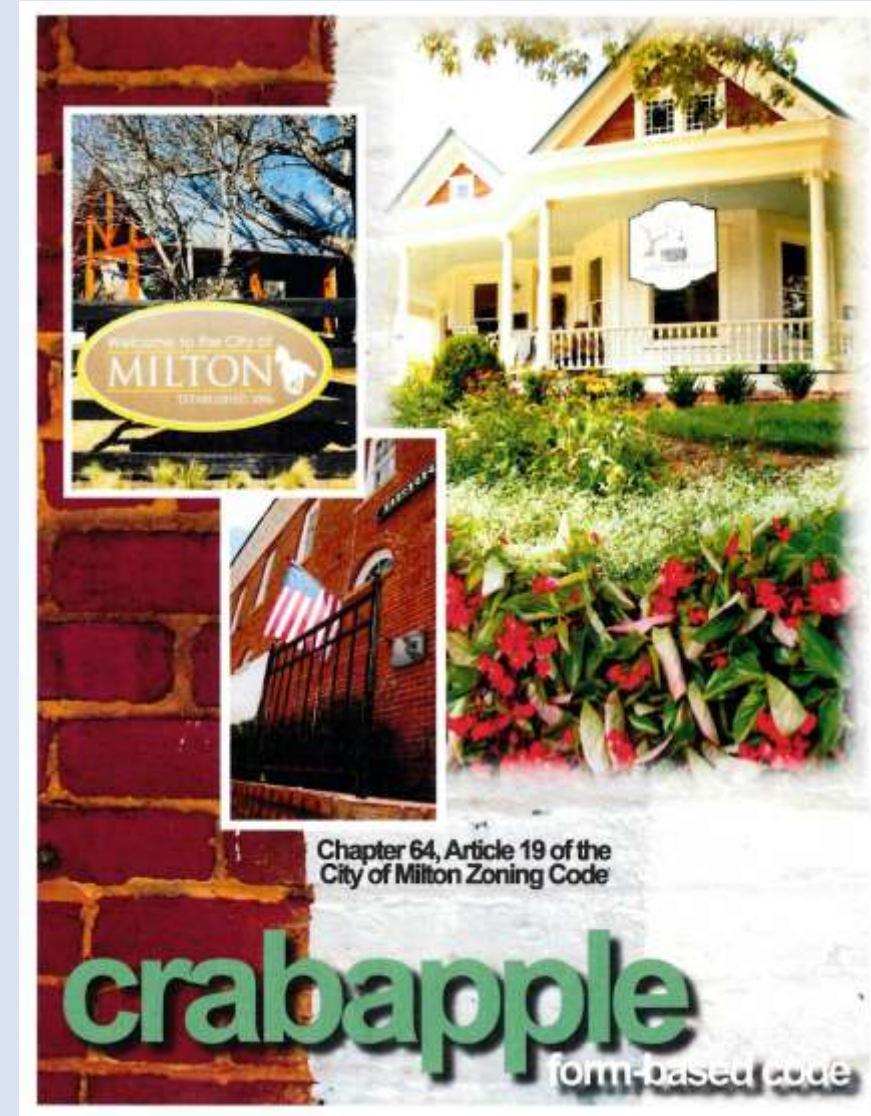
### Transect Zones, Civic Zones, Special Districts

To reflect a variety of development patterns

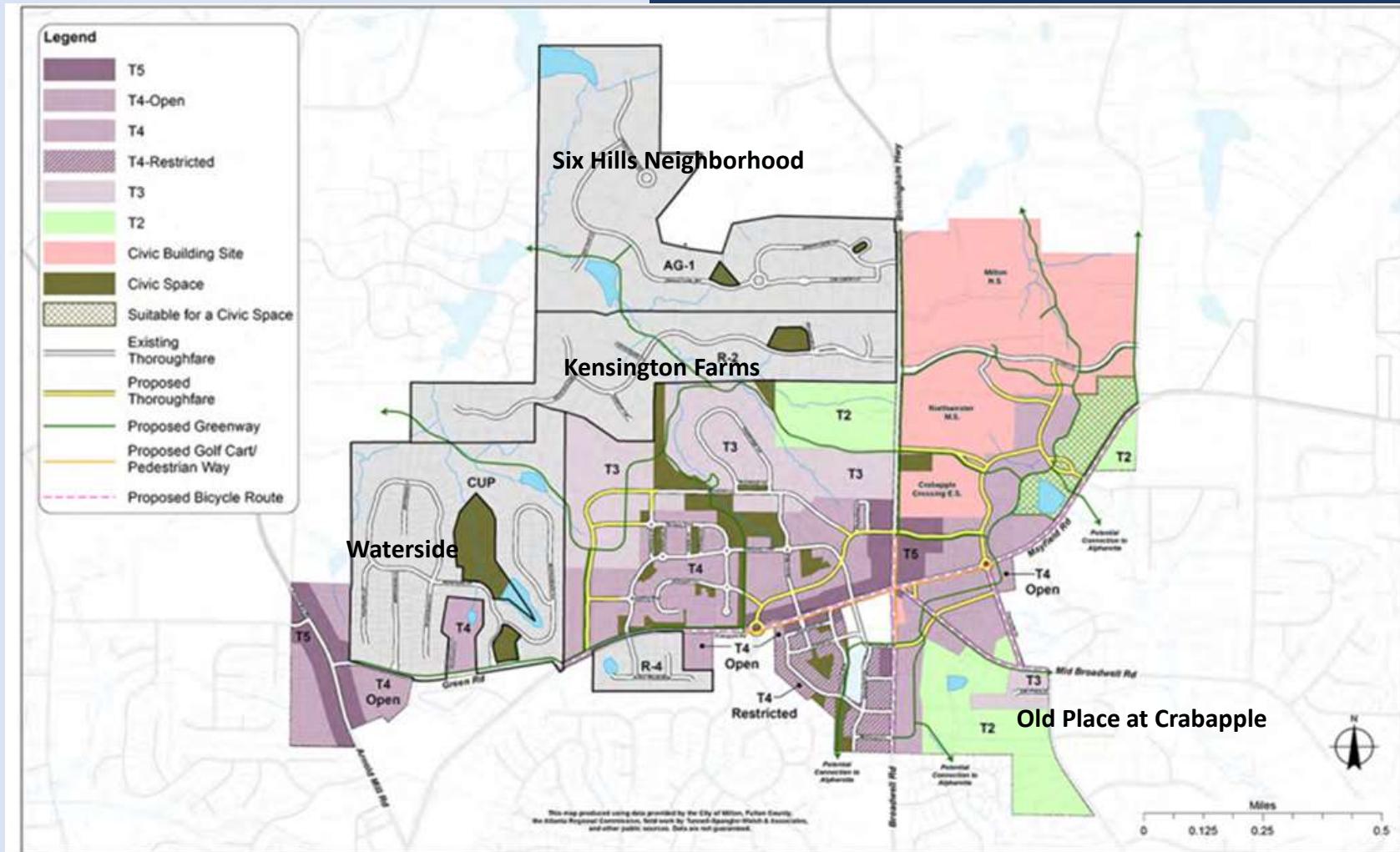
- T-2 Rural – sparsely settled lands in open estates (agriculture land)
- T-3 Sub-Urban – low density residential areas
- T-4 General Urban – mixed-use, but residential in nature
- T-5 Urban Center – higher density, mixed-use

### Public Standards and Building Standards

Uses Table – Table 9 – R (Right), W (Warrant), U (Permit)



# Form-Based Code



## Crabapple Regulating Plan

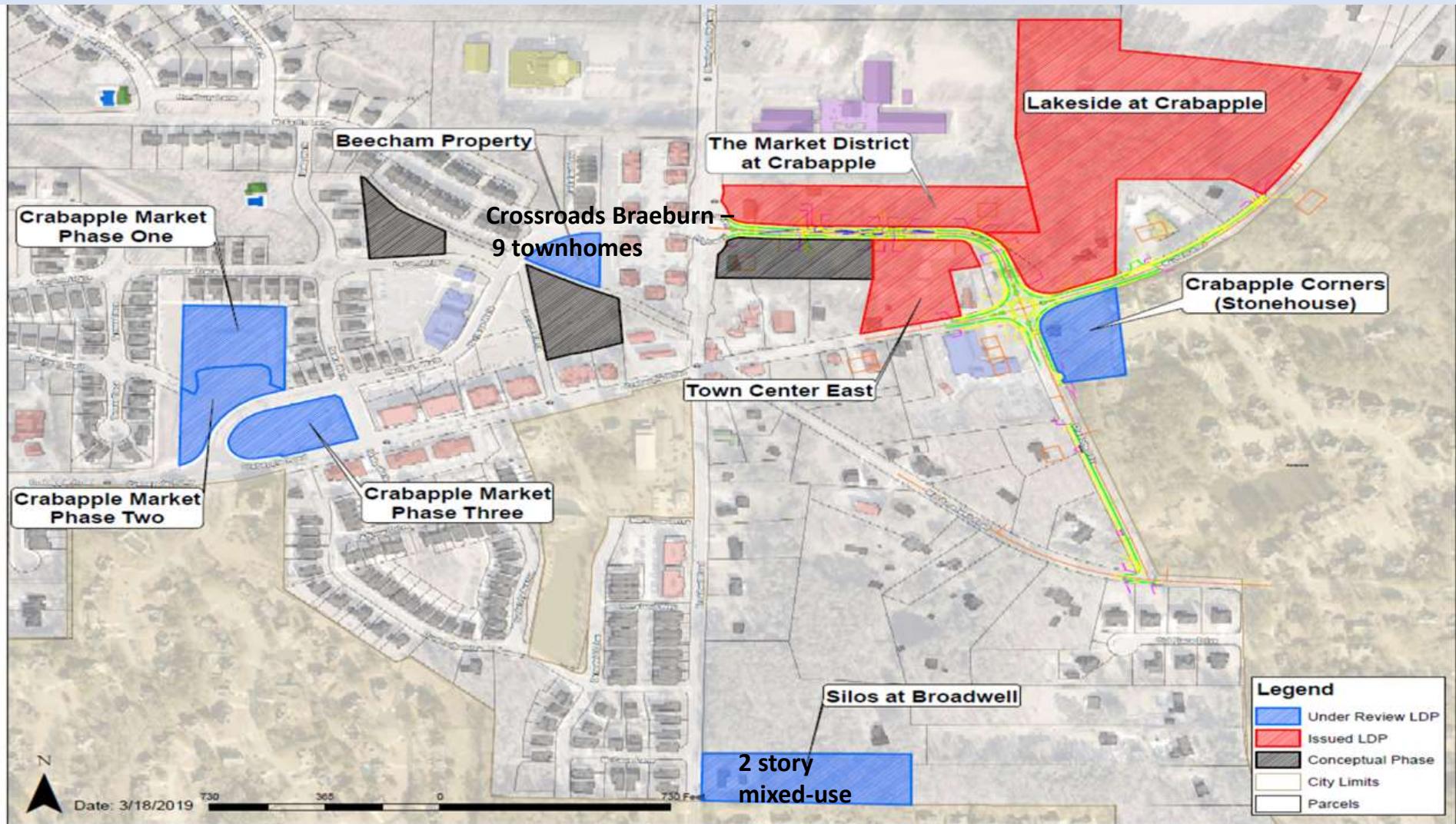
CRABAPPLE FORM-BASED CODE

April 27, 2015

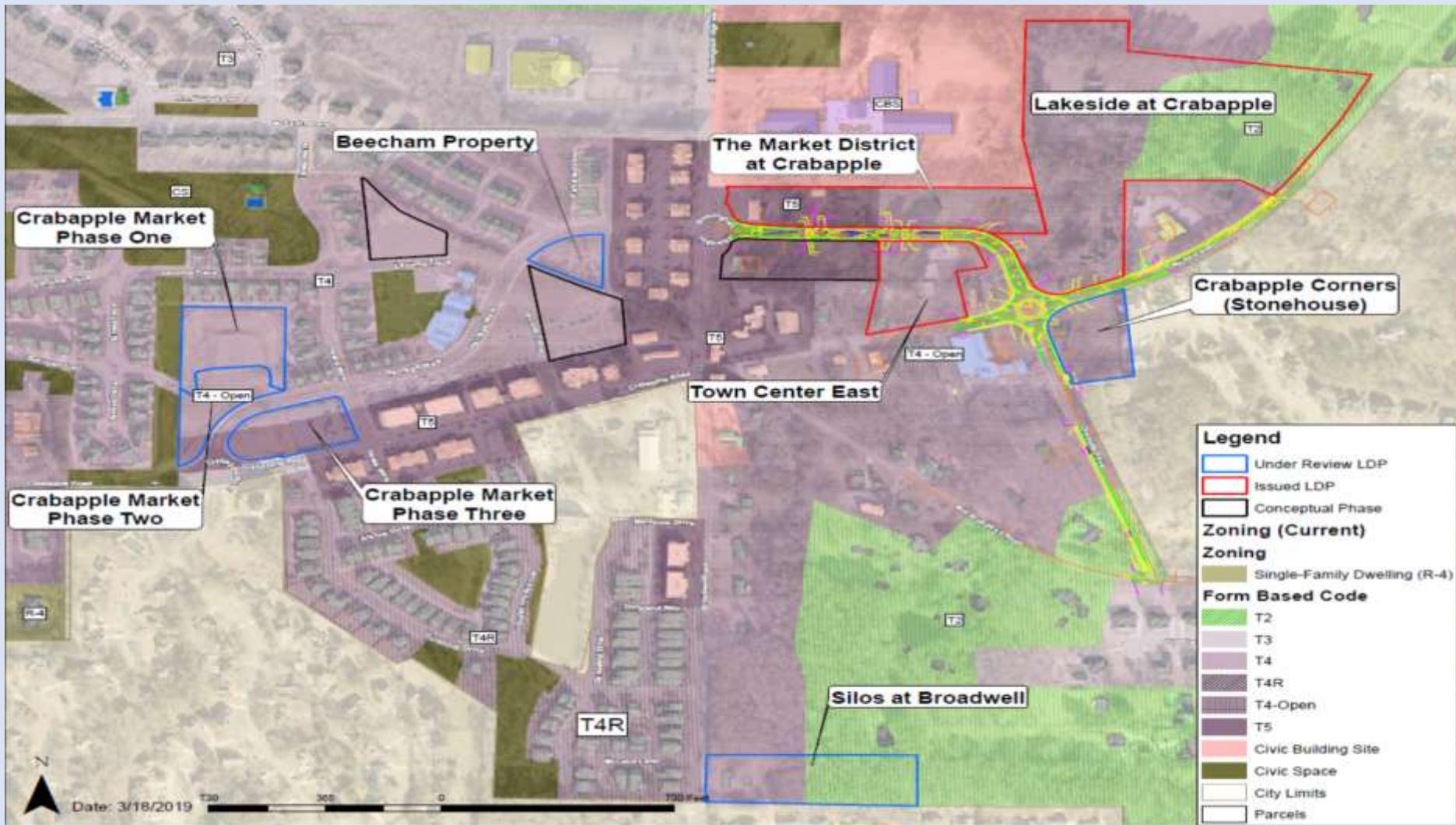
Prepared by Tunell-Spangler-Walsh & Associates



# Proposed Development – Project Update



# Proposed Development - Project Status



## Proposed Development Model



## Proposed Development Model



## Proposed Development

### Lakeside at Crabapple

- Single-family units – 28
- Townhomes – 41
- No commercial at this stage



## Proposed Development

### Proposed Park and the Lake on Mayfield Road



# **Market District at Crabapple**

## Total of Eight Buildings

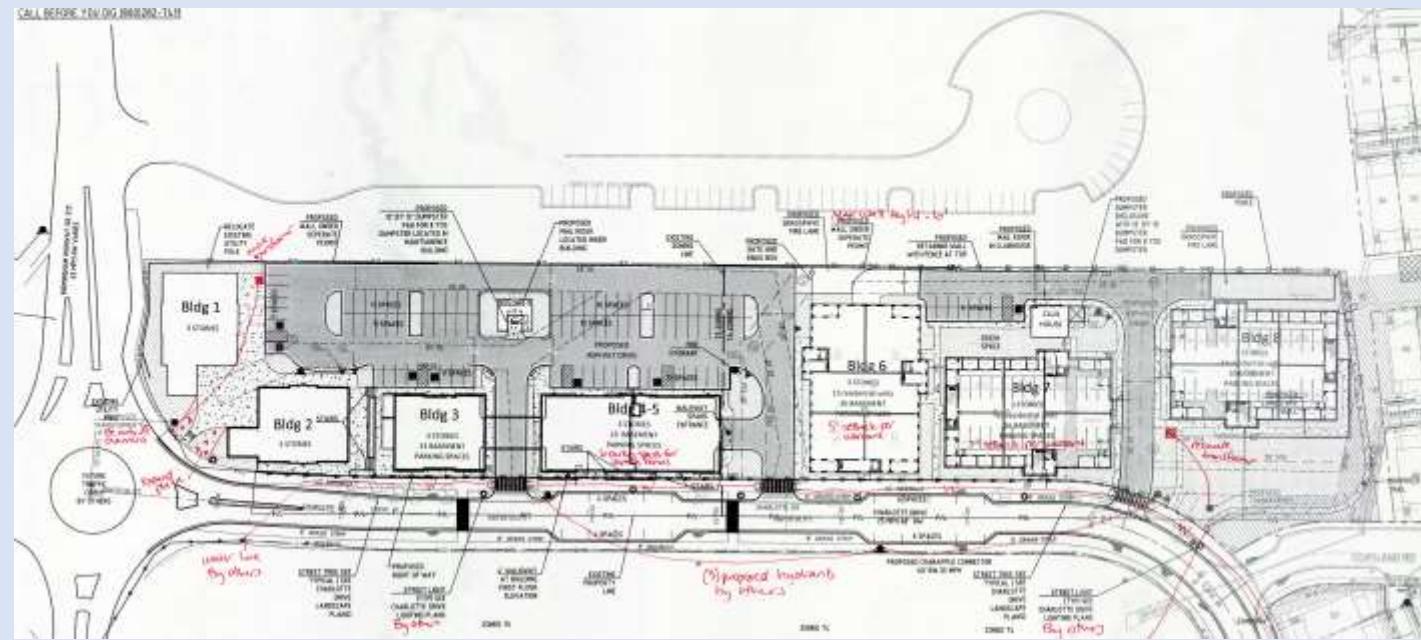
- Total Square Foot of Retail – 22,752 sq ft.
  - Total Square Foot of Office – 25,420 sq ft.
  - Senior Housing Units – 39

# **Buildings 1,2,3,4 and 5- Retail and Office**

## **Buildings 6,7 and 8 – Residential buildings**

(13 units each and 26 parking spaces in basement)

## **Proposed Development**



## Proposed Development

### Town Center East

Three Story building on 2.75 acre site

Total Square Foot of Retail –  
10,324 sq. ft.

Total Square Foot of Office –  
20,058 sq. ft.



# Proposed Development



**CRABAPPLE MARKET**

PHASE III

ORKIN & ASSOCIATES  
INVESTMENTS

## Crabapple Market

### Two Phases –

- Phase 1 - Buildings L through P
- Phase 2 – Buildings F through K

### Phase 1

- Buildings L through P – Commercial
  - Building L – Retail – 1500 SF
  - Building M – 2000 SF Retail
  - Building N – 3100 SF Retail + 2 condos
  - Building O – Retail + Condos
  - Building P – 3150 SF Retail + Condos

## Proposed Development



### **Crabapple Market**

#### **Phase 2**

Buildings F through K – Mixed-Use

Building F – Mixed-Use Building – Office over Restaurant (16,774 SF)

Building G – Mixed-Use Building – Office over Restaurant (11,657 SF)

Building H – Commercial – Restaurant (4000 SF)

Building J – Commercial – Retail (2,910 SF)

Building K – Commercial – Restaurant

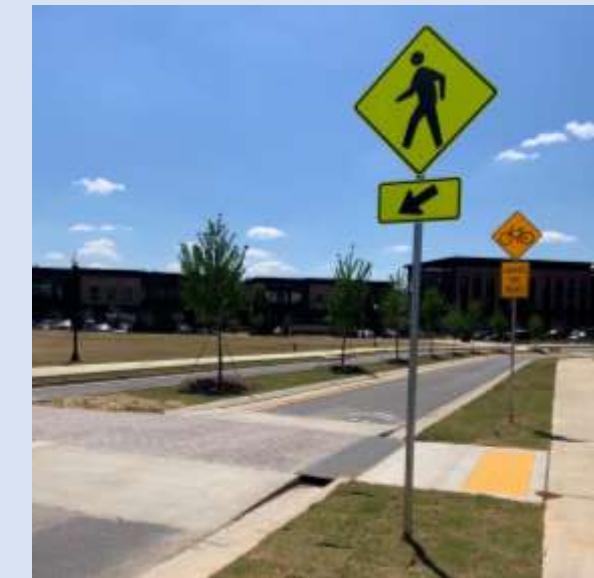
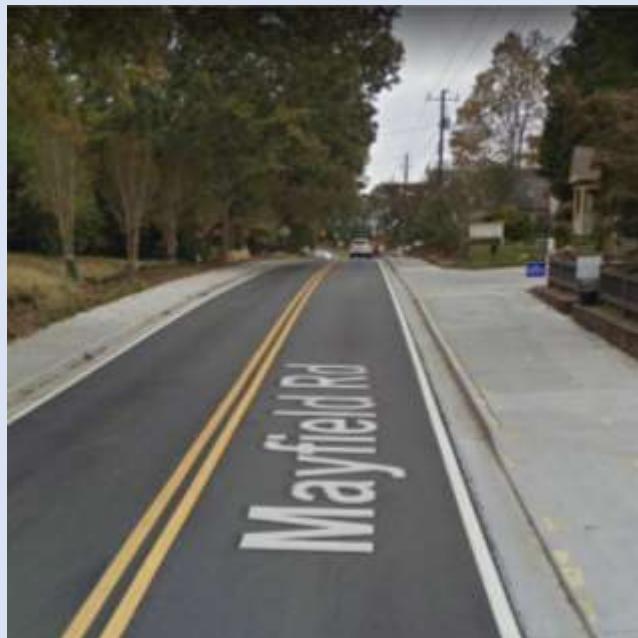
Parking Deck – 128 parking spaces (4,104 SF)

## Sustainability and Architecture

- A discernable center
- Housing within a 5 minute walk of the center
- A variety of dwelling types
- A variety of stores
- Flexible backyard ancillary buildings for working or living
- A school within a walking distance
- Playgrounds near dwellings (we have both public and private playgrounds)
- Connected streets
- Narrow shaded streets conducive to pedestrians and cyclist
- Buildings close to the streets at a pedestrian scale
- Parking and parking garages placed behind buildings
- Prominent civic/public buildings (city hall, churches, library)
- Parks (both public and private)
- Light pollution codes (we have night sky ordinance)
- Heat islands (parking groves)
- Stormwater management (we have regional stormwater management on all quadrants)
- Historic and existing building reuse
- Walkable streets (sidewalks and pathways)
- Mixed use buildings (vertically integrates)
- Community participation (visionary studies)
- A decision process for neighborhood development (form based codes)

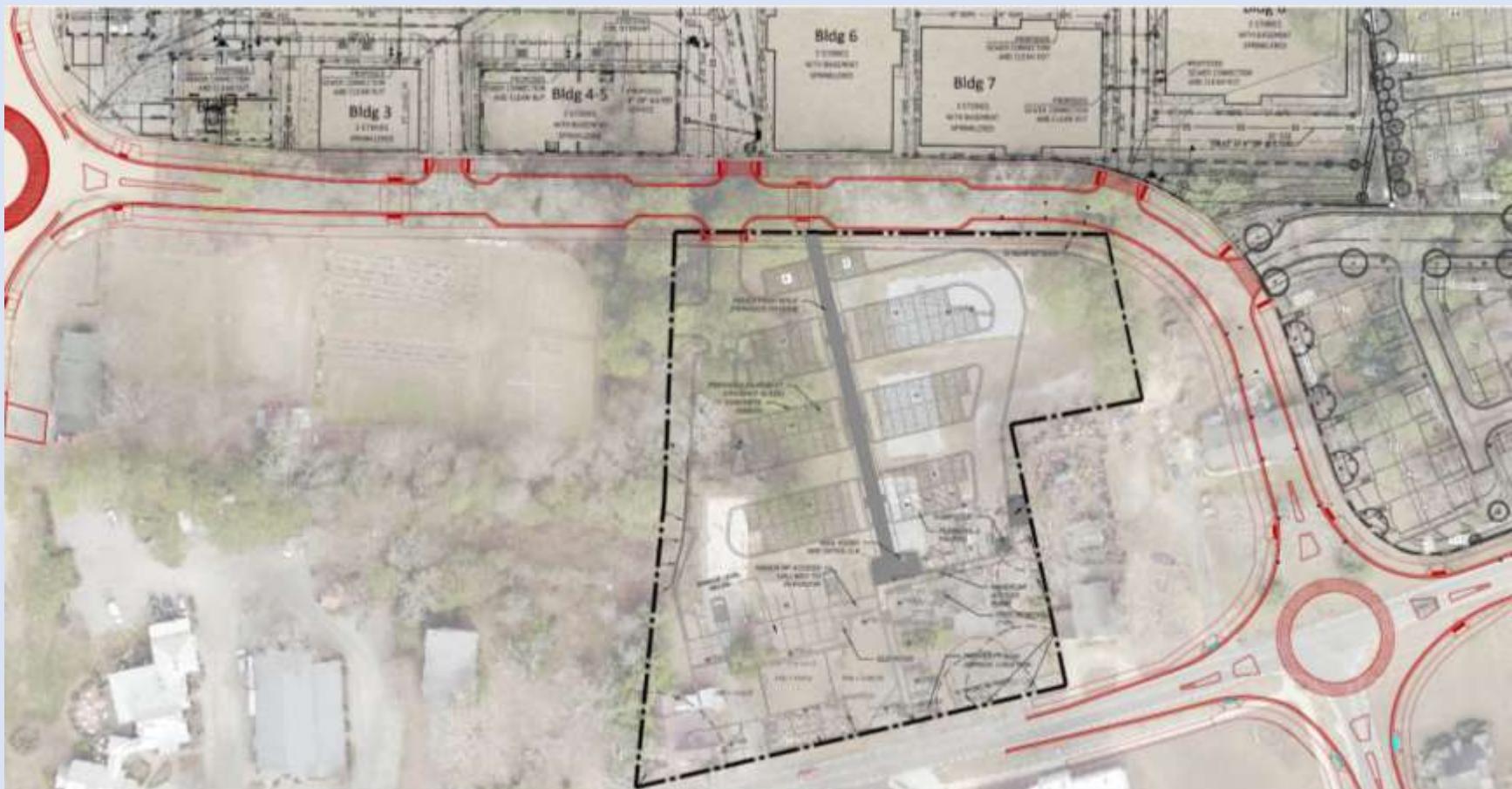
## Road Infrastructure

### Completed Projects



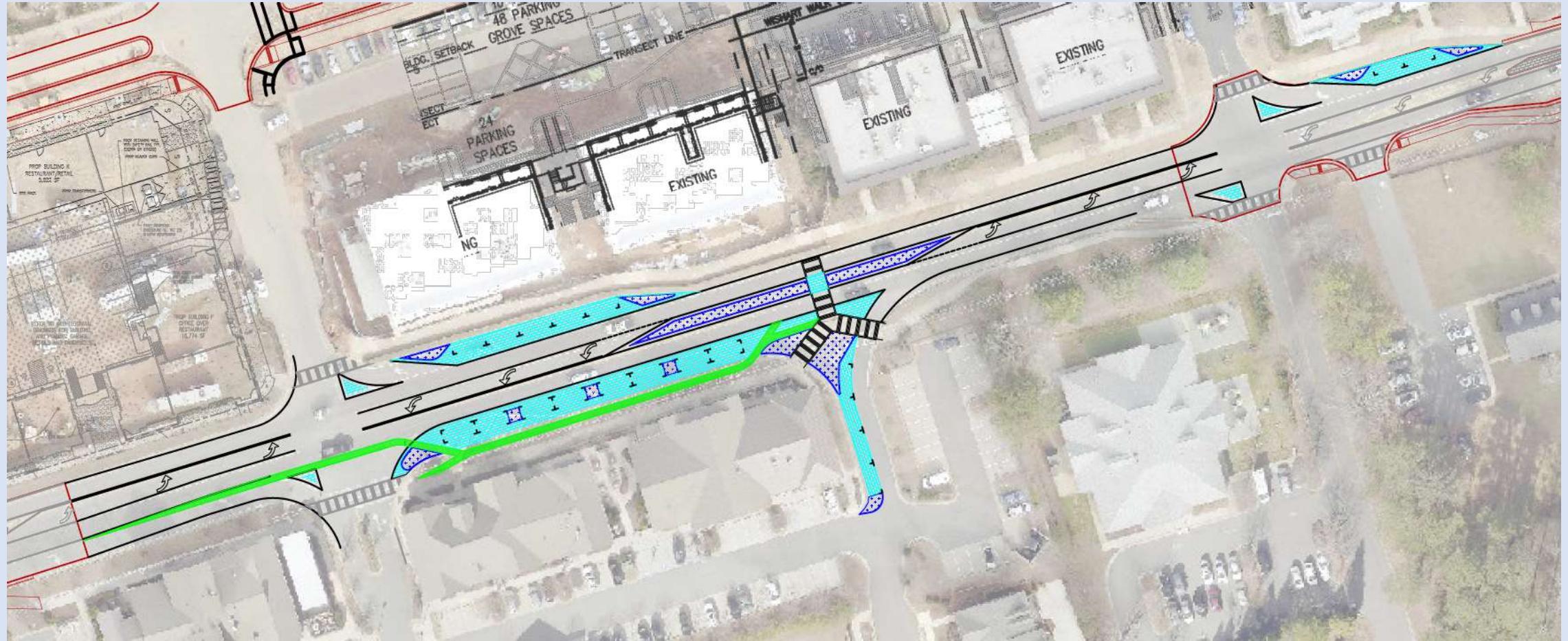


## Road Infrastructure



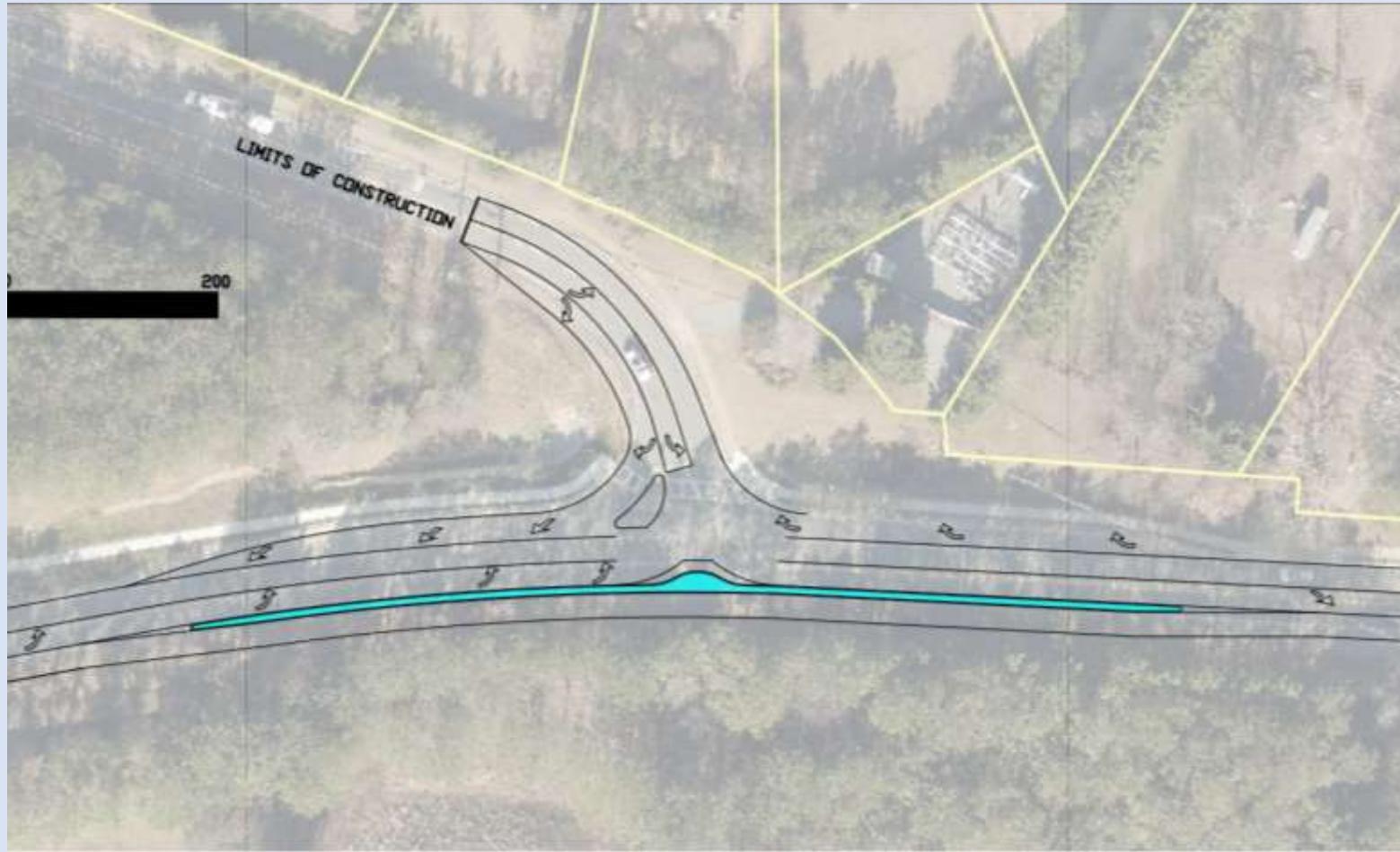
**Charlotte Drive Extension**

## Road Infrastructure



**Crabapple Streetscape**

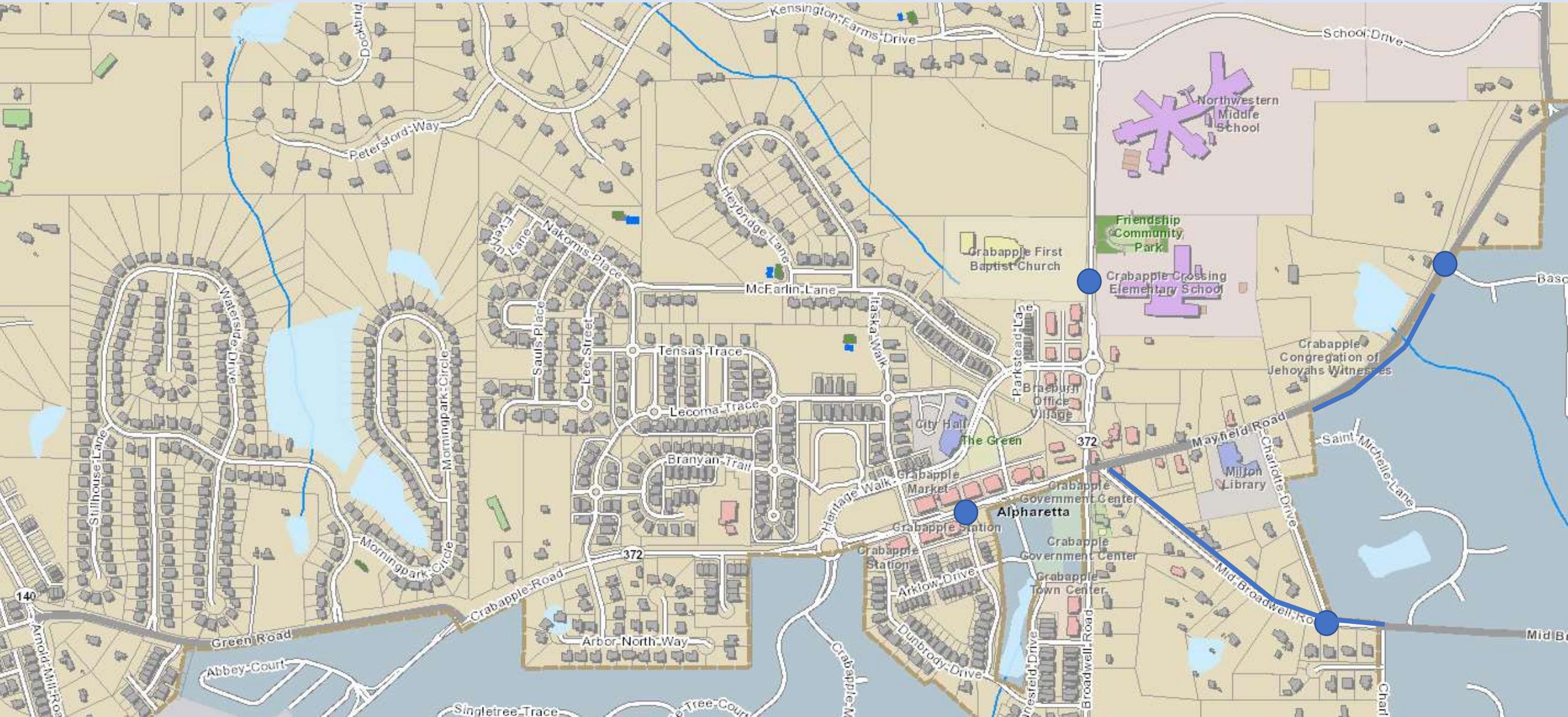
## Road Infrastructure



**Green Road Improvements**

- Streetlights
- HAWK Pedestrian Signal(s)
- Southeast Crabapple Connector

## Road Infrastructure



## Challenges and Strengths

### Strengths

- Clear Community Vision
- Form-based code
- Committed Stakeholders
- Part of the Atlanta Metropolitan Area
- Engaged Community



### Challenges

- Fragmented land ownership
- Balancing the public infrastructure with projects
- Preserving and enhancing Milton's unique character



**Questions**

**Thank You**



# DOWNTOWN MILTON / CRABAPPLE PLACEMAKING PLAN

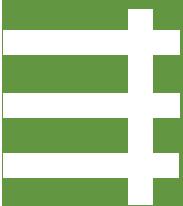
Approved on May 15, 2017

TSW >> Noell Consulting Group >> Toole Design Group >> City of Milton



## >> ACKNOWLEDGEMENTS

The Downtown Milton / Crabapple Placemaking Plan is a collaborative effort between the City of Milton, a consultant team, and the people of Milton. The consultant team was led by TSW and included Toole Design Group and Noell Consulting Group.



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# EXECUTIVE SUMMARY

- // Goals & Framework Plan
- // Planning Process
- // Recommendations
- // First Steps

## PLAN PURPOSE & GOALS

The City of Milton retained the TSW Team (the team) to conduct a Placemaking Plan for Downtown Milton / Crabapple in 2016. With the addition of the City Hall building and more commercial and residential development in Crabapple, the area is situated to become Milton's "Downtown." The purpose of this placemaking plan is to focus on parks and open space, street connections, pedestrian connections, and parking.

### Placemaking Goals

Through an extensive public outreach process, overall placemaking goals were established to guide the design decisions. The following items became the framework for the design decisions and placemaking goals (shown in the diagram to the right):

- Streets
- Trails
- Parks
- Development
- Parking



**LEGEND**

- Potential Parks & Open Space
- Existing Parks
- New Development
- Planned Roundabouts
- Proposed Roundabouts
- Planned Streets
- Potential Trails
- Streetscape Enhancements
- New Proposed Streets



# >> EXECUTIVE SUMMARY

# PLANNING PROCESS

## Research & Analysis

The team conducted an involved research and analysis process prior to making design and planning decisions, which included:

- Reviewing all previous, relevant plans since 2006 for the City of Milton and mapping where recommendations overlap;
  - Visiting and documenting the study area to understand the conditions;
  - Meetings with City of Milton Staff to understand projects in the pipeline;
  - Mapping community resources, historic resources, parking availability, connectivity and transportation, and susceptibility to change on an individual property basis;
  - Reviewing the Regulating Plan and Form-Based Code to ensure that recommendations comply.

The team shared a summary of the results of the research and analysis with the City of Milton and the public during all presentations and workshops. The maps to the top right show examples of the existing conditions maps.



Market Study

The purpose of the market study is to ensure that the proposed development scenarios as shown in this plan are based on actual, not made-up, demand. Accordingly, the numbers contained in the market study serve as the basis for the development proposal for each of the quadrants. The following characteristics are specific to Milton:

- Many families live here compared to the Atlanta Region average;
  - Adequate retail service exists within five miles of the study area;
  - Milton has a higher educational attainment level than the Region and the State;
  - There is a much higher median household income than the Region;
  - Milton is growing faster than many surrounding cities.

**Given Milton's unique characteristics,  
pent-up demand includes:**

- Room for residential growth over the next five years (phased with a mix of unit types);
  - Room for retail growth over the next five years;
  - Strong demand for rental housing;
  - Room for office growth after 2018;
  - Perceived issues with parking, which can be mitigated by valet parking, shared parking, or a potential parking deck in the future.

The Form-Based Code encourages small building types and will ultimately limit the amount of growth in Downtown Milton / Crabapple.



## Public Outreach

Meetings and workshops informed the placemaking goals and design recommendations, and public preferences directed revisions to the plan. The extensive public outreach process involved many methods to gather input about the vision for Crabapple, including:

- Stakeholder Focus Groups over a two-day period;
- Input from City Council discussions with the public about preferences for parks and green space;
- Two Steering Committee Meetings to guide the planning direction;
- A Walking Audit before the charrette (design workshop) to understand the conditions on Birmingham Highway, Mayfield Road, Crabapple Road, and some of the residential streets;
- A 3-Day charrette with all team consultants at Milton Public Library to create the first conceptual plan ideas;
- Two Public Open Houses to review the charrette results and the final recommendations (one at Olde Blind Dog, and one at Milton Public Library);
- A final town hall meeting in May 2017;
- City Council and Planning Commission hearings at City Hall.

*Above: Ian Lockwood of Toole Design Group leading the Walking Audit prior to the charrette.*

*Top, right: Examples of the mapping analysis conducted as part of the research.*

## Form-Based Code Review

The Team reviewed the Form-Based Code, the zoning code for the Crabapple Character Area, particularly for the Northwest and Northeast Quadrants because of the opportunity for development in both quadrants. The majority of the land in these quadrants is T4-Open, but T5 exists along Crabapple Road. These designations permit the highest level of density by-right (what is legally permitted as the code is written) in the study area; however, all designations in the Code promote low-density and small building types to preserve the Crabapple character. Key code items include:

- Maximum building footprints are 18,000 SF, with a 36,000 SF maximum building area
- Building units are 2,250 SF for commercial uses
- Each residential unit counts as one building unit
- Historic buildings, civic buildings (like City Hall), accessory dwelling units, and senior housing units do not count toward density;
- Transfer of Development Rights (TDR) is permitted to increase density.

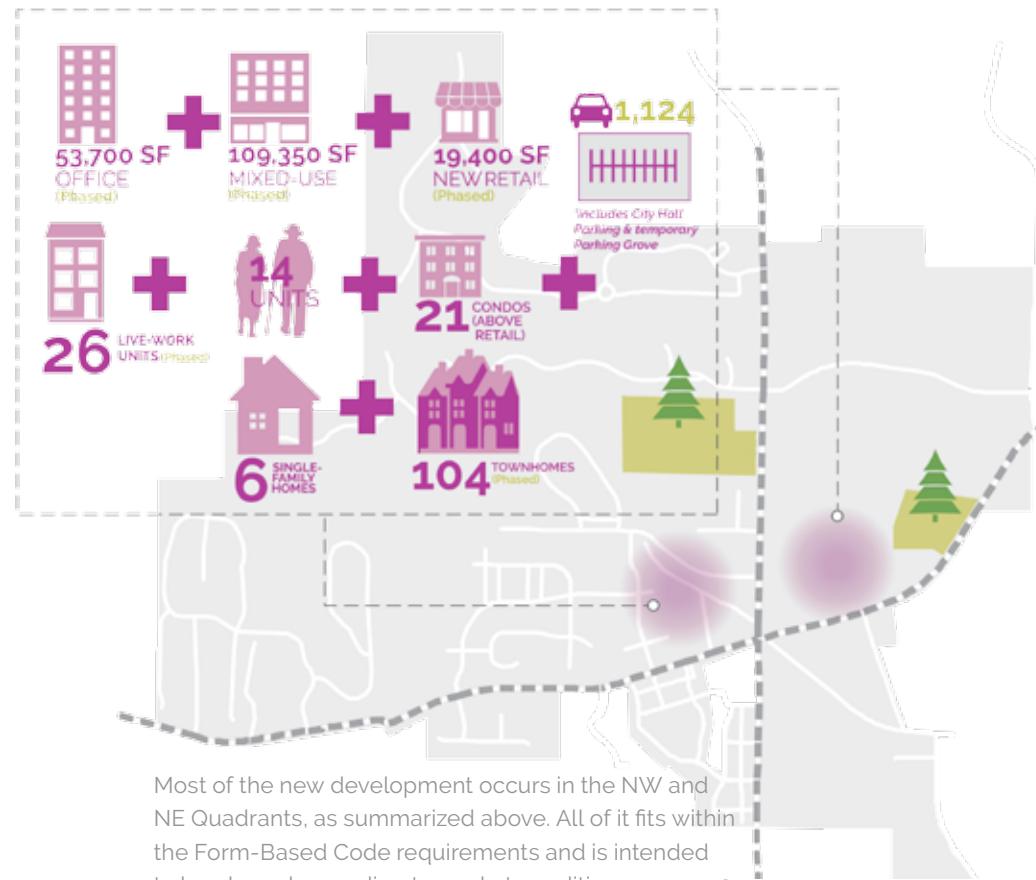
All of the recommendations put forth in this plan comply with the Form-Based Code (see appendix for calculations).

## >> EXECUTIVE SUMMARY

# PLACEMAKING PLAN OVERVIEW

The infographics to the right describe the overall recommendations for the entire Crabapple study area, but the main recommendations are:

- **Two new passive parks**
  - Crabapple Park (Birmingham Hwy)
  - Mayfield Park (Mayfield Road)
- **Streetscape enhancements**
  - Crabapple Road
  - Mayfield Road
  - Birmingham Highway
  - Heritage Walk (under construction)
- **Trail system on streets and between the schools** (4 miles total)
- **Short-term and long-term parking considerations**
  - On-street and parking lot spaces
  - Valet and / or shared parking
  - Locations for a potential parking deck identified
- **Mixed-use development** (meeting the Form-Based Code)
  - The Crossroads
  - Northwest & Northeast Quadrants
- **New Street connections**
  - Streets from the Regulating Plan
  - Realignment of existing streets in the NW Quadrant
  - Additional streets in NE Quadrant



The plan includes approximately 4 miles of trails (and on-street multi-use paths) to connect the schools, new parks, and the existing commercial area on Crabapple Road.



Two larger parks are recommended, which adds 28 acres of passive park space. In addition, approximately 2 acres of pocket parks and plazas were added to the development areas.



Approved May 15, 2017

DOWNTOWN MILTON PLACE MAKING PLAN xi

>> EXECUTIVE SUMMARY

## NORTHWEST & NORTHEAST QUADRANTS STREETSCAPES

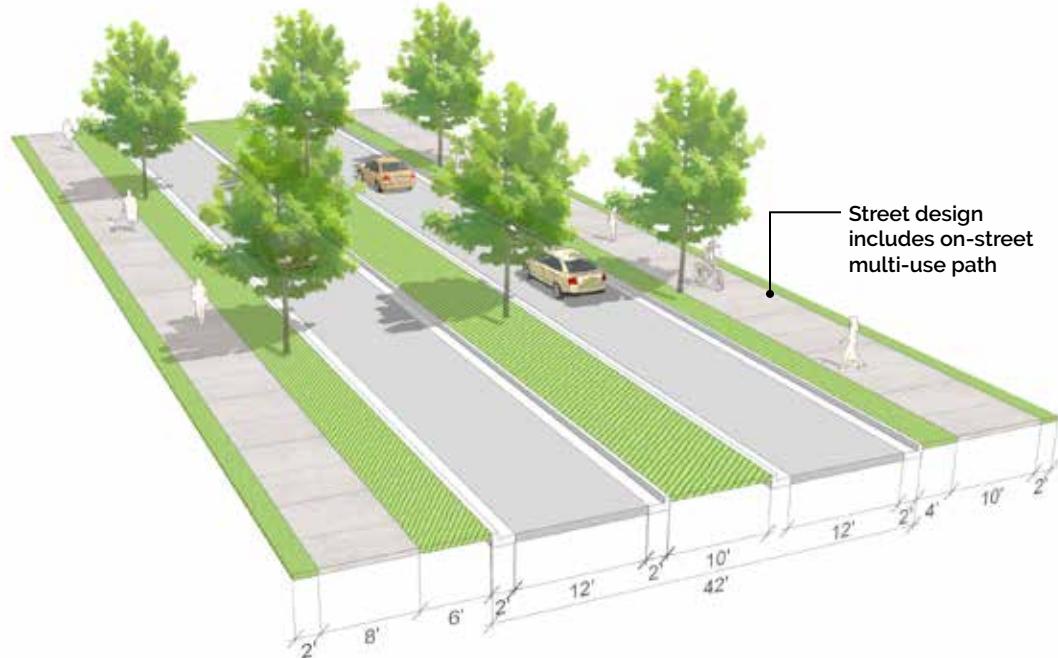
The plan recommends streetscape improvements for Crabapple Road, Heritage Walk, Birmingham Highway, and Mayfield Road. Heritage Walk is currently under construction, including the roundabouts at Birmingham Highway and Crabapple Road. Overall, the recommendations for each of the streets focus on changing the streetscapes to:

- Calm traffic speeds with narrower lanes;
- Create pedestrian and bicycle access to destinations throughout Crabapple (i.e. Milton Public Library, the schools, and the retail core);
- Provide more and wider sidewalks;
- Add on-street parking where possible;
- Provide safer intersection crossings;
- Add mid-block crossings;
- Add street trees and other streetscape furniture; and
- Bring the sidewalks closer to the front of the buildings to increase activity along the streets.



**S.1 Crabapple Road**

*Top: Many people cross Crabapple Road in the middle of the street because of the lack of crosswalks at intersections.*



**S.2 Heritage Walk - under construction** (City of Milton & GDOT plans, see appendix)



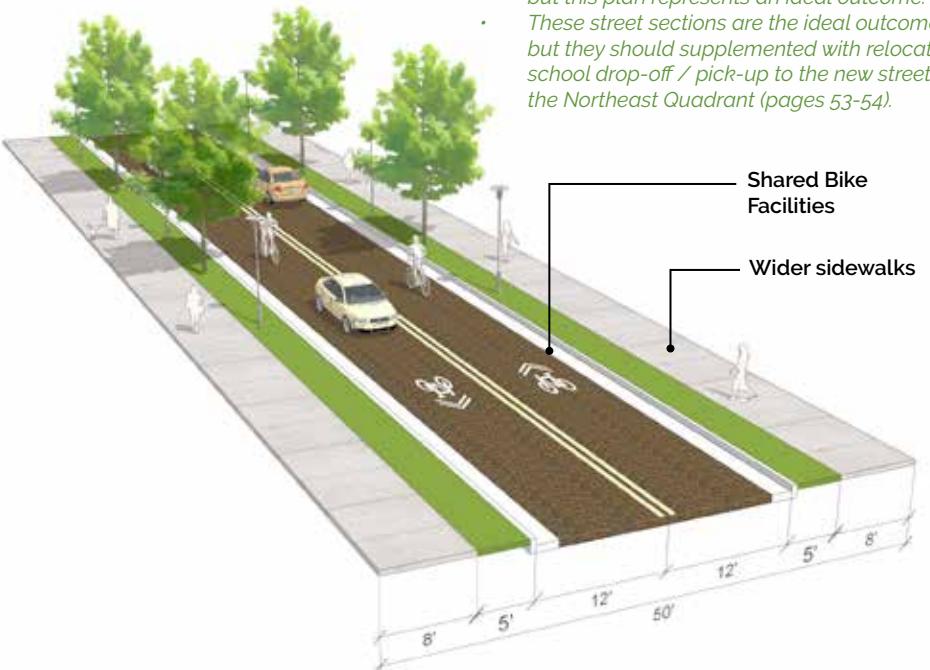
#### Long-term Recommendation for the Crossroads

The current project for the Crossroads is to add left-turn lanes on 3 sides to ease traffic flow, particularly at rush hour. The long-term project is to change this intersection to a roundabout (see Implementation Chapter).



**S.1 Birmingham Highway (70' ROW)**

- GDOT prefers 13.5' wide vehicle lanes, but this plan recommends 12' and 11' lanes to reduce traffic speeds.
- GDOT prefers wider on-street parking widths, but this plan represents an ideal outcome.
- These street sections are the ideal outcome, but they should be supplemented with relocating school drop-off / pick-up to the new streets in the Northeast Quadrant (pages 53-54).



**S.2 Birmingham Highway (50' ROW)**

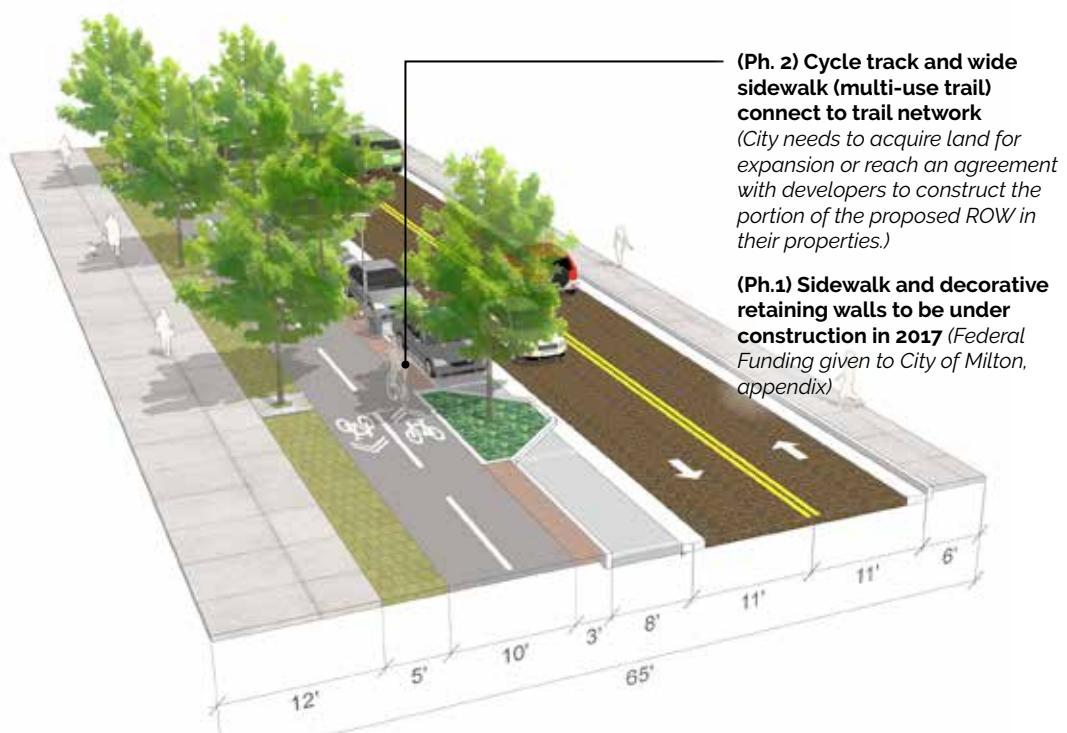


\*\*A HAWK signal is a **H**igh-**I**ntensity **A**ctivated **c**ross**W**a**K** beacon used to stop road traffic and allow pedestrians to cross safely.

Mayfield Road



Birmingham Highway



S.1 Mayfield Road Proposed Section for Phase 2

Birmingham Highway would receive 32 on-street parking spaces from Crabapple Park south to the Crossroads.



## >> EXECUTIVE SUMMARY

# NORTHWEST & NORTHEAST QUADRANTS

## PARKS & TRAILS

### Mayfield Park

The 7-acre park on Mayfield Road functions as an educational, passive park and enhances the site's natural and built features. A boardwalk extends across the lake and the existing small island, connecting to the overall trail network, and an amphitheater provides space for outdoor classes for the schools or small community events. The community garden could offer plots to local residents and students.

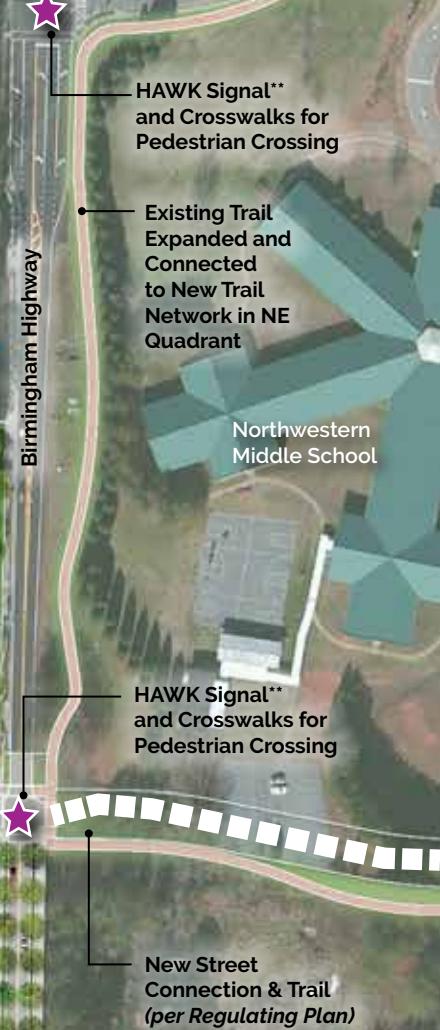
### Crabapple Park

Two property owners own this land, so the City will need to purchase the land at fair market value or work with the owners to ensure that their goals are met. This 21-acre passive park includes walking trails, lawns, an amphitheater, a community garden, and an orchard. The stream and wooded areas buffer the most active use in the park - the proposed dog park. Trails form loops for exercise and walking routes and connect across Birmingham Highway to the schools and the development east of the Crossroads.



### Trails

Trails run through the two proposed parks, north to the school properties, and along key streets (as shown in the street sections) to create a network that connects pedestrians and cyclists to important destinations within the Crabapple area.



## LEGEND

■■■■ New Street Connection (Regulating Plan)

★ HAWK\*\* Signal

*\*\*A HAWK signal is a High-Intensity Activated crossWaK beacon used to stop road traffic and allow pedestrians to cross safely.*



Existing Rectangular Rapid Flashing Beacon (RRFB), to be upgraded to a HAWK signal

Crabapple Crossing Elementary School



0' 100' 200' 400'

## >> EXECUTIVE SUMMARY

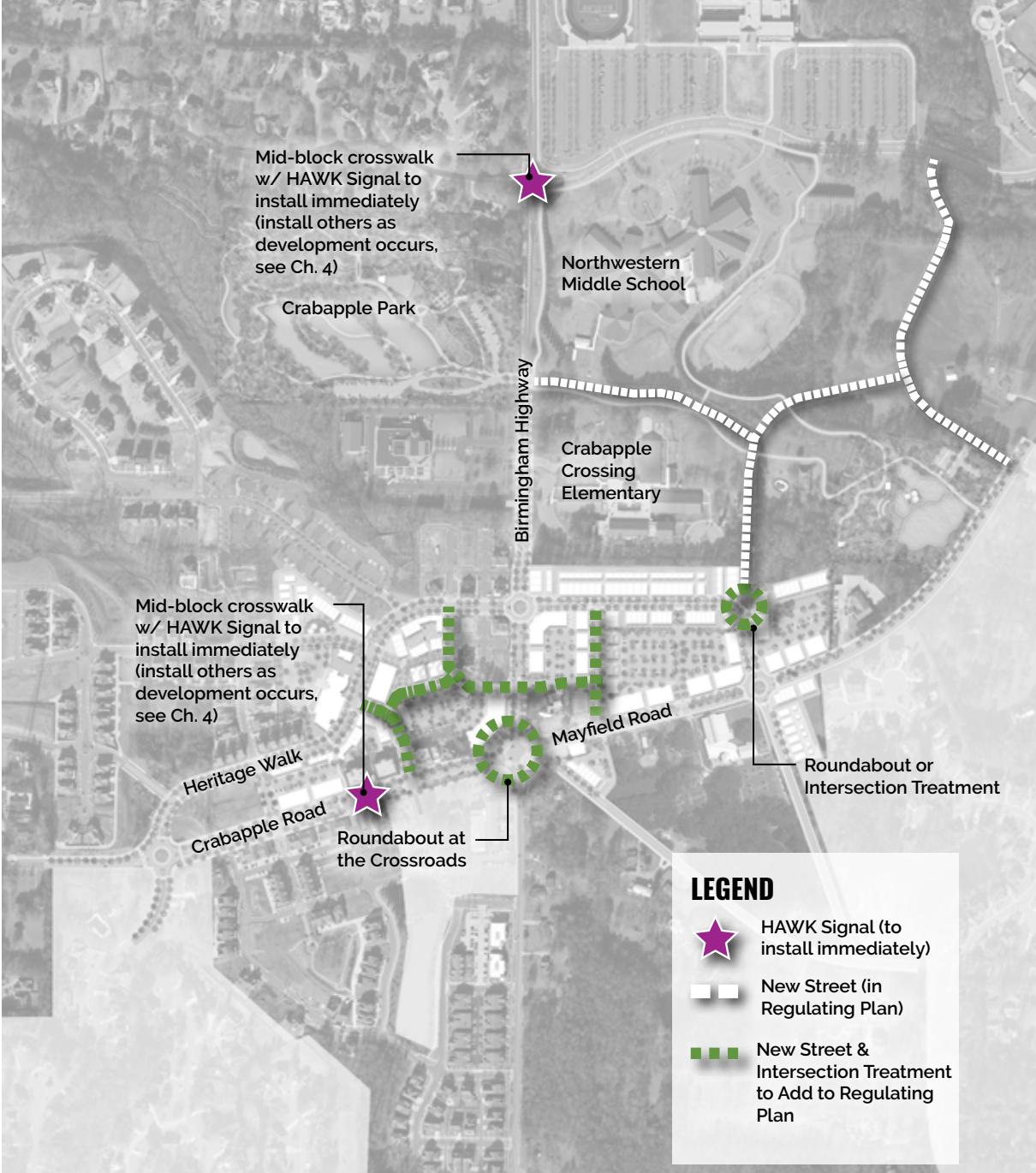
# IMPLEMENTATION STRATEGY

The implementation strategy was divided by project type, rather than a sequential timeline: streetscape enhancements, parks and trails, parking deck feasibility, shared / valet parking, and new street construction. As needed, the City of Milton should establish relationships with developers that want to build in the Northwest and Northeast Quadrants to ensure that appropriate, connected, and mixed-use development is constructed.

As City funds become available and as developers assemble land, the projects can be phased accordingly and concurrently. However, projects that will make an immediate impact in Crabapple are prioritized, including:

- Adopting the additional street network into the Regulating Plan;
- Determining the parking management strategy and feasibility of a deck; and
- Constructing parks.

Projects that enhance the vehicle and pedestrian circulation networks are important to implement first because they form the framework for future growth.



## >> Streets to Add to Regulating Plan & HAWK Signals to Install

## SHARED / VALET PARKING

Shared and / or valet parking can relieve some of the issues with attracting commercial growth, the desire to add restaurants in Crabapple, and with hosting events in public spaces. Studying the program's success will help determine the need for a future parking deck.

- City and owners identify parking lots and valet stands as started in this placemaking plan;
- Commercial tenants can establish shared parking agreements as an interim solution;
- City and property owners establish metrics to study the programs, such as demand at rush hour and during events, customer satisfaction, and efficiency of the program;
- City measures the success of the programs, and relief on parking pressure in order to use the results in determining the need for a parking deck.

## POLICY CHANGES

The City should add the roundabout at the Crossroads and the streets marked on the map to the right to the Regulating Plan to set the policy foundation for the street network to be constructed. These streets are new with the proposed development schemes or are realigned versions of the current streets. Although in progress, the City of Milton should ensure that the alcohol license and distance requirements are reduced, so that restaurants can be added to the commercial area along Crabapple Road.

## ACQUIRE LAND AND RIGHT-OF-WAY

The City should start negotiations with GDOT to gain control of Crabapple Road to accommodate future streetscape changes. Additionally, as needed, they should purchase ROW on Crabapple Road and Mayfield Road or establish relationships with the developers / property owners to ensure the proposed streetscape improvements are made. Finally, if necessary, the City should purchase the land outlined for parks at fair market value. The City can begin these acquisition tasks immediately to ease the construction of public space: the streetscapes, parks, and trails.

Parks and trails offer connectivity to neighboring uses and positive social impact. Some projects are in motion, and will be completed faster:

- Construction of Heritage Walk;
- Construction of the roundabouts connecting Heritage Walk to Crabapple Road and Birmingham Highway; and
- Sidewalks on the south side of Mayfield Road.

The mixed-use developments in the Northwest and Northeast Quadrants (mixed-use, retail, office, and residential units) can be added when the market can support them. The development schemes can be concurrent phases because they are developer-driven (private sector) projects.

## >> FIRST STEPS

The City can initiate some projects immediately to ease development pressure and ensure that the goals of the placemaking plan are met with future development. These include:

- Implementing shared and / or valet parking;
- Making policy changes;
- Acquiring land and right-of-way (ROW) as needed for parks and streetscape enhancements; and
- Installing two key HAWK signals on Crabapple Road and Birmingham Hwy.



*\*\*This chapter provides the research and plan review basis for the placemaking recommendations. The maps and photos show the on-the-ground conditions.\*\**

# CHAPTER 1 >> EXISTING CONDITIONS

- // History & Site Context
- // Analysis Maps & Plan Review
- // What Has Been Accomplished To-Date?

## >> SITE CONTEXT

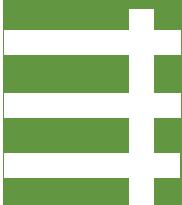
The City of Milton was established in 2006. The Downtown Milton / Crabapple Placemaking Plan study area is defined by the Crabapple character area boundary established by the Comprehensive Plan in 2011 and updated in 2016 (map to the right). Overall, the City of Milton has a low population density. A vast majority of the land is zoned for agricultural and equestrian uses, but allows for residential uses; however, the Regulating Plan and Form-Based Code for the Downtown Milton / Crabapple area (2015) permits more flexible uses. The Comprehensive Plan designated Crabapple as an area of growth and a receiving area for the Transfer of Development Rights (TDR) program.

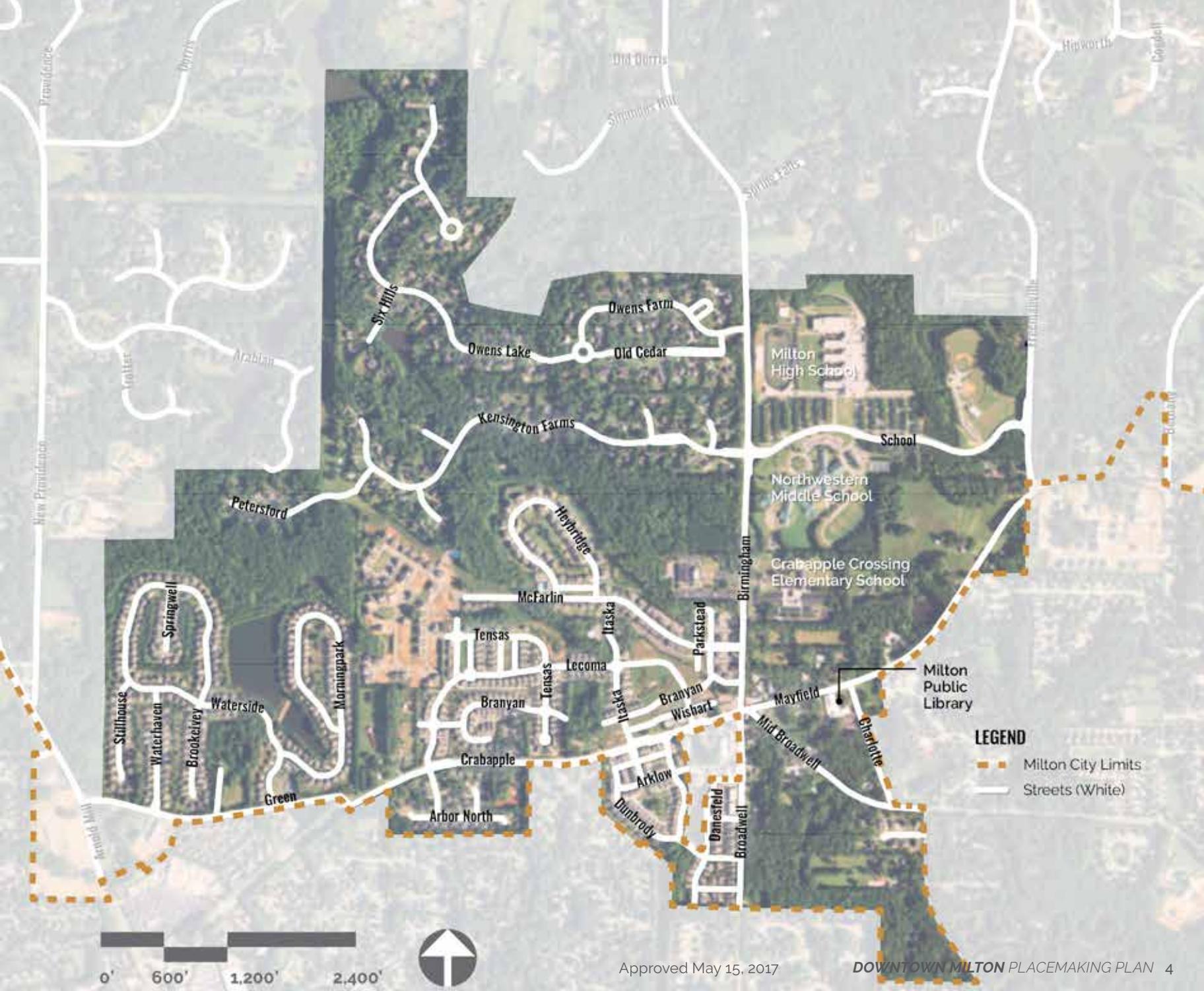
### Project Introduction

With the addition the Milton City Hall and more commercial and residential development in Crabapple, the area is situated to become Milton's "Downtown." The purpose of this placemaking plan is to focus on parks and open space, street connections, pedestrian connections, and parking.



*Above: One of the historic buildings at the Crossroads at Birmingham Highway and Crabapple Road.*





## >> COMMUNITY RESOURCES

The Downtown Milton / Crabapple area includes many important community resources, which are places where people can gather or public amenities that serve the community (government departments, schools, libraries). The map to the right shows the community resources in Downtown Milton / Crabapple, and shows their proximity to each other. The proximity of all three schools, the public library, the Broadwell Pavilion, the Crabapple Baptist Church, and the Jehovah's Witness Kingdom Hall help to enhance the walkability of the Crabapple area and vitality of the commercial development along Crabapple Road because people could walk between the places for their errands and needs. The resources noted above serve as draws for additional business and residential units. The addition of more destinations within walking distance of each other through future development will increase the pedestrian activity and success of the entire area.

### >> Schools & Churches

The area is fortunate to have three Fulton County Schools. Although the pick-up and drop-off causes traffic congestion, these facilities are great community resources for the following reasons:

- Students could walk to school with improved pedestrian facilities;
- Community groups use the facilities;
- The Performing Arts program at the High School hosts great events;
- The land presents opportunities to fulfill the need for more usable open space;
- Parking lots could be managed to accommodate parking needs in the short-term (see pages 59 to 60 for more detail).

The Crabapple Baptist Church is also a cooperative and involved community facility.

### >> City Facilities

The new Milton Public Library hosts many community events and provides a location for residents to gather or host meetings. Students, in particular, can benefit from the library because of the educational support it provides. The newly-constructed City Hall will help create the "Downtown" feel for Crabapple and bring more daily activity to

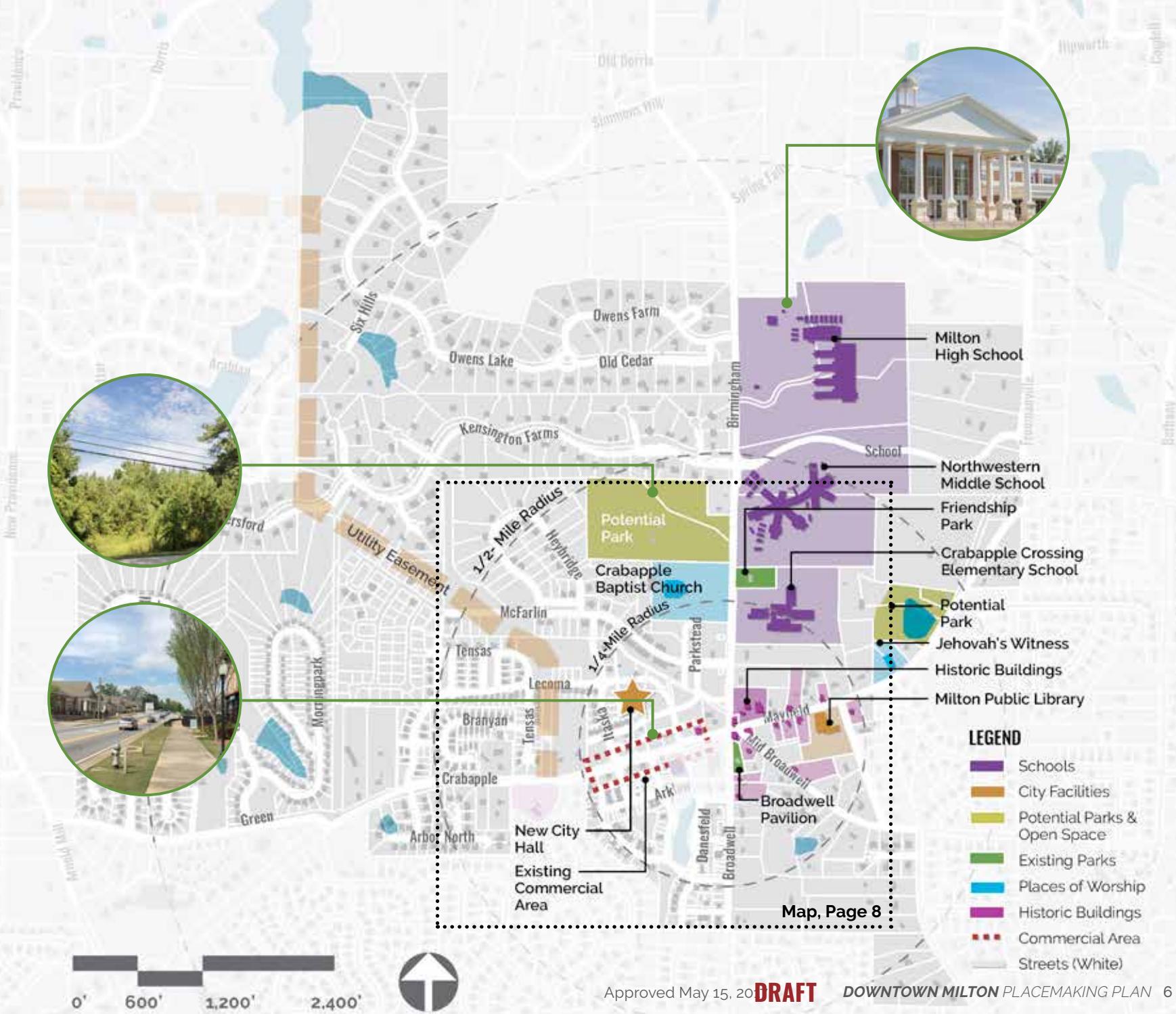
the area because of the number of workers at City Hall and the errands that Milton residents will make at the facility.

### >> Potential Parks & Open Space

Friendship Park on Birmingham Highway is used by the elementary school, but use for the general public during the day is prohibited. This park has a large lawn, playground, basketball court, and walking paths. The Broadwell Pavilion and adjacent street are used for festivals and events that attract thousands of people. Additional park space will complement these facilities and create a more cohesive parks and open space network (diagram on page 30).

### >> Commercial Area

Great restaurants and shops line the commercial core along Crabapple Road, which presents an opportunity for additional commercial development. However, parking capacity presents an issue with increased development.



Approved May 15, 2017 **DRAFT**

DOWNTOWN MILTON PLACEMAKING PLAN 6

## >> HISTORIC RESOURCES

Downtown Milton / Crabapple is home to multiple historic buildings; however, the buildings are not formally recognized on a local or national register. Because of the lack of protection, these buildings can be demolished and redeveloped. The Form-Based Code provides incentives of additional square footage for developments that keep and incorporate the 'historic' structures. The majority of the buildings are at the Crossroads or along Mayfield Road east of the Crossroads.

### Key buildings to note are:

- The Cotton Gin (to the right);
- Milton's Restaurant;
- The two commercial buildings on the northeast and southeast corners of the Crossroads (to the right).

Single-family homes make up most of the other historic buildings. The historic buildings at the Crossroads present an opportunity for adaptive reuse to create a center for Crabapple, and to offer architectural character inspiration for other future buildings.



*Above Left: This is the commercial building on the southeast corner of the Crossroads, between Mid Broadwell and Broadwell.*

*Top Right: This is the Cotton Gin building, east of Milton's Restaurant on Mayfield Road.*

*Middle Right: This image shows the commercial building on the northeast corner of the Crossroads.*

**\*\*NOTE:**

- Historic Buildings are not formally designated
- They can be demolished and redeveloped
- The Form-Based Code offers incentives for additional square footage in developments that incorporate the historic structures

**LEGEND**

- Historic Buildings\*\*
- Existing Parks
- Parcels
- Buildings
- Streets (White)

## >> SUSCEPTIBILITY TO CHANGE

Great opportunity exists to change the use of parcels and buildings in Downtown Milton / Crabapple, particularly near the Crossroads and in the Northeast (NE) Quadrant. The map to the right shows the susceptibility to change by parcel for the study area, which is divided into three categories:

### Parcels Not Susceptible to Change

Parcels not susceptible to change either have historic structures on them, newly-constructed buildings, single-family housing, or the land use is a public facility, such as a park or City Hall. Although noted as "not susceptible to change," historic structures that are underutilized could be potential opportunities for adaptive re-use while maintaining the character of the area.

### Parcels Somewhat Susceptible to Change

Generally, parcels that are somewhat susceptible to change have structures that are not historically significant or land uses that can relocate. In this case, Crabapple Baptist Church, the Alpharetta courthouse,



and some large open space parcels owned by Homeowners' Associations are somewhat susceptible to change.

### Parcels Highly Susceptible to Change

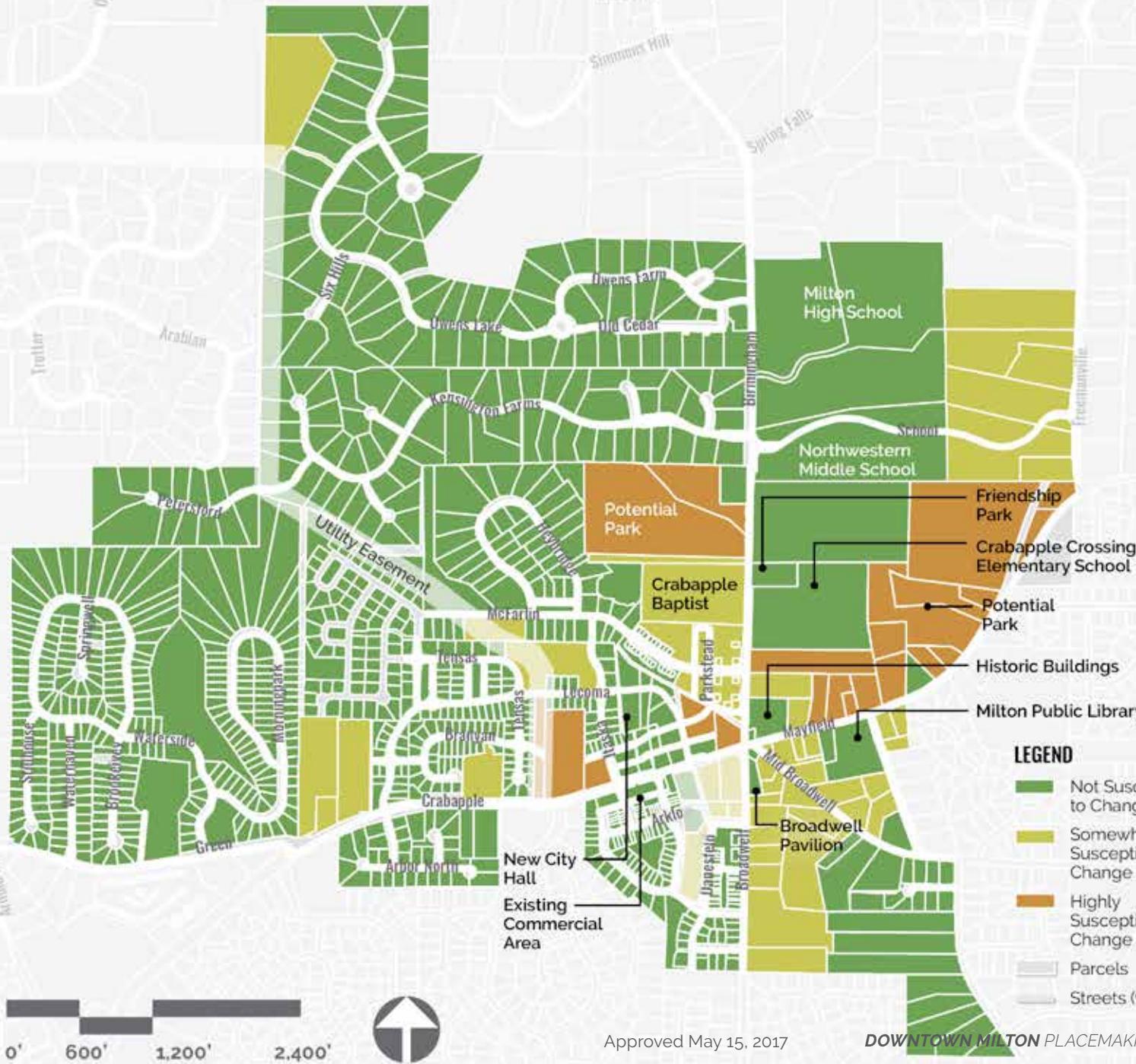
Parcels marked as highly susceptible to change have surface parking, vacant structures, lack development, or have uses that could relocate given a larger development goal.



*Above Left: Single-family homes and condominiums are examples of parcels that are not susceptible to change.*

*Top Right: This is the potential park location on Mayfield Road, and it is an example of parcels that are highly susceptible to change.*

*Middle Right: Crabapple Baptist Church is somewhat susceptible to change because the parking could be managed or used differently, and the potential park just north of the parcel may affect the church property.*



## >> CONNECTIVITY

The map to the right shows the existing, planned, and potential points of connection in Downtown Milton / Crabapple.

### Streets

Few street connections exist in the single-family residential neighborhood areas north and west of the Crossroads, limiting access to the existing commercial area. The plan proposes new street connections, including Heritage Walk (under construction) and an extension of Charlotte Drive, which was included in the November 2016 TSPLOST vote as a priority project. Crabapple Road, Mayfield Road, Heritage Walk, and Birmingham Highway present opportunities for improvement. These streets could support on-street parking and need slower traffic because the adjacent uses could serve pedestrians - restaurants and shops along Crabapple Road and Heritage Walk, and the schools on Birmingham Highway. Many intersections are signalized, two new roundabouts are under construction at Heritage Walk, and one is planned at Charlotte Drive.

### Trails

The Milton Trail Plan, created in 2007 and updated in 2012, recommended many

trail connections with varied material treatments. Some (shown in light yellow on the map) need to be revised because of new development. As shown in the green, land around the schools could be used for trails to increase access to the schools, new development, and proposed parks.

### Intersections & Mid-Block Crossings

The City has planned improvements for the intersection of Birmingham Highway and Broadwell Road, including left-turn lanes on three sides. One mid-block crossing with a Rectangular Rapid Flashing Beach (RRFB) signal exists in the study area, right next to the elementary school. Other opportunities for mid-block or improved intersection crossings exist on Crabapple Road for visitors to both commercial developments and on Mayfield Road as the corridor develops.

### Sidewalks

The sidewalk network is disconnected and inconsistent, particularly on major thoroughfares. A sidewalk connection from the existing commercial area on Crabapple Road to the Milton Public Library on Mayfield Road is in progress. Further improving the sidewalk network could enhance the potential trail network, creating a more connected community.



*Top: Wide traffic lanes on Crabapple Road reduce pedestrian safety. The current businesses fronting the street would benefit from streetscape improvements.*

*Middle: Birmingham Highway has inconsistent and narrow sidewalks. The right-of-way adjacent to most of the schools' properties does not have sidewalks.*



# >> SUMMARY OF PREVIOUS PLANS

Many plans have been created for Downtown Milton / Crabapple and the City of Milton since the City was formed in 2006. The adjacent map and legend show the main, relevant points to this placemaking plan.

## Common Themes from Multiple Plans:

- Improve the conditions on Crabapple Road, including crossing options
- Create a cohesive trail network connecting schools, public space, and neighborhoods
- Make intersection improvements to ease traffic congestion
- Enhance the street network with the addition of streets and improving current street functionality
- Create public spaces and parks in the Crabapple area
- Allow denser development in the Crabapple area
- Preserve the rural character and viewsheds on streets
- Consider a parking deck to accommodate more development

## The following plans were reviewed:

- Current construction documents for sidewalk improvements and Heritage Walk (under construction)
- Downtown Milton Wayfinding (2016)
- Crabapple Form-Based Code (2015)
- City-made concept drawings for the property on Mayfield with the lake (2014)
- City of Milton Conservation Plan (2014)
- Downtown Parking Study (2014)
- Tree Management & Key Policy Actions (2012)
- Comprehensive Parks & Recreation Master Plan (2012)
- Crabapple LCI (2012)
- City of Milton 2030 Comprehensive Plan (2011)
- Milton Visioning Study (2011)
- City of Milton Comprehensive Transportation Plan (2009)
- City of Milton Safe Routes to School (2009)
- Milton Trail Plan (2007)
- The Traffic Calming Program

Many recommendations from the plans have been implemented or are in-progress (either under construction or construction documentation) at the time of this report.

## LEGEND

### Planning Efforts

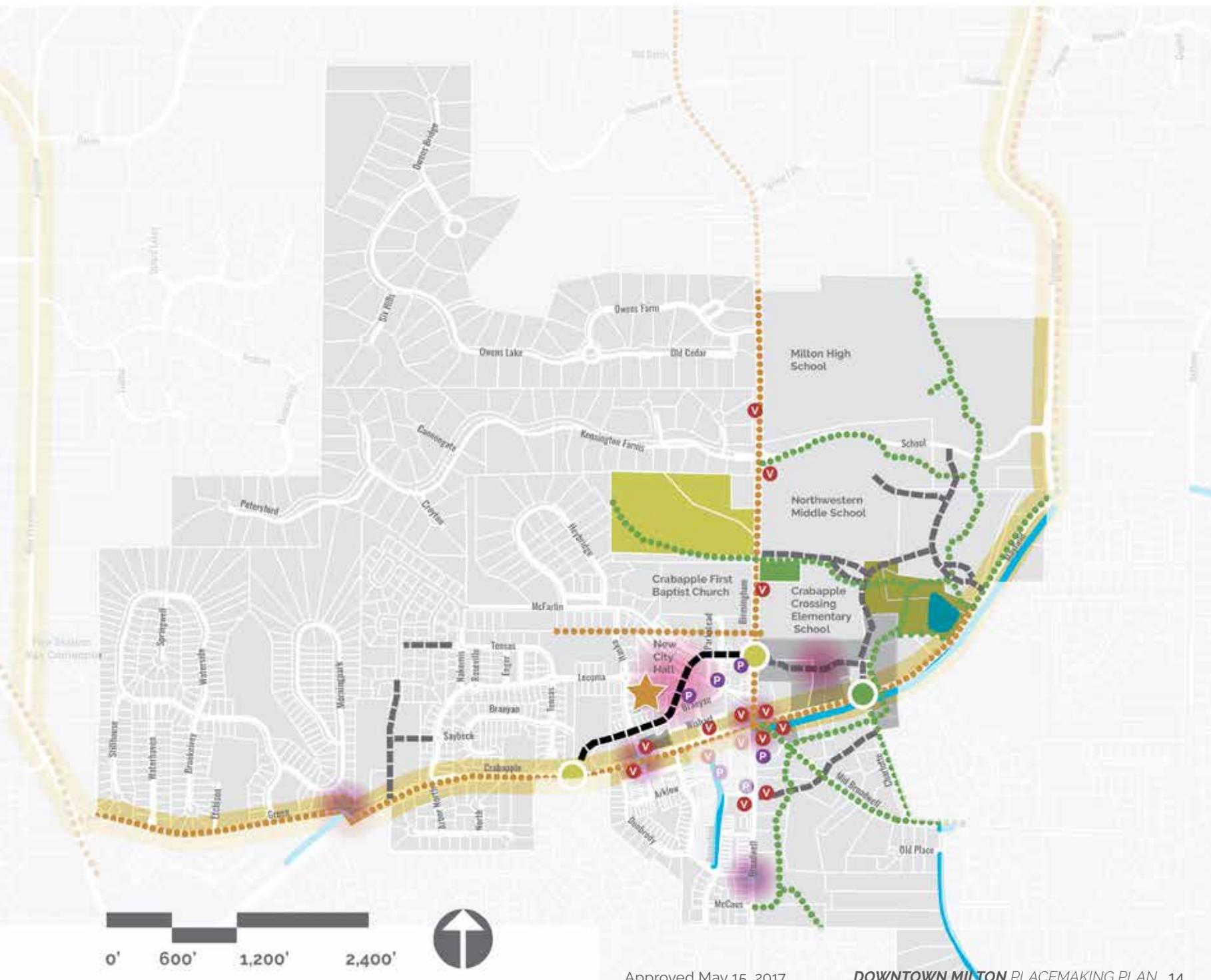
- Potential & Planned Parks
- Potential Parking Deck
- Intersection Treatment
- New Roundabout
- New Streets
- Trails (2012 LCI)
- Trails (Multiple Plans)
- Bike Facilities / Trails in 2016 TSPLOST
- Vehicle Wayfinding Sign
- Pedestrian Wayfinding Sign

### In-Progress Items

- New City Hall
- Potential Development
- New Sidewalks
- New Street
- New Roundabouts

### Base Information

- Parcels
- Streets (white)
- Existing Parks
- Water Bodies



Approved May 15, 2017

DOWNTOWN MILTON PLACEMAKING PLAN 14

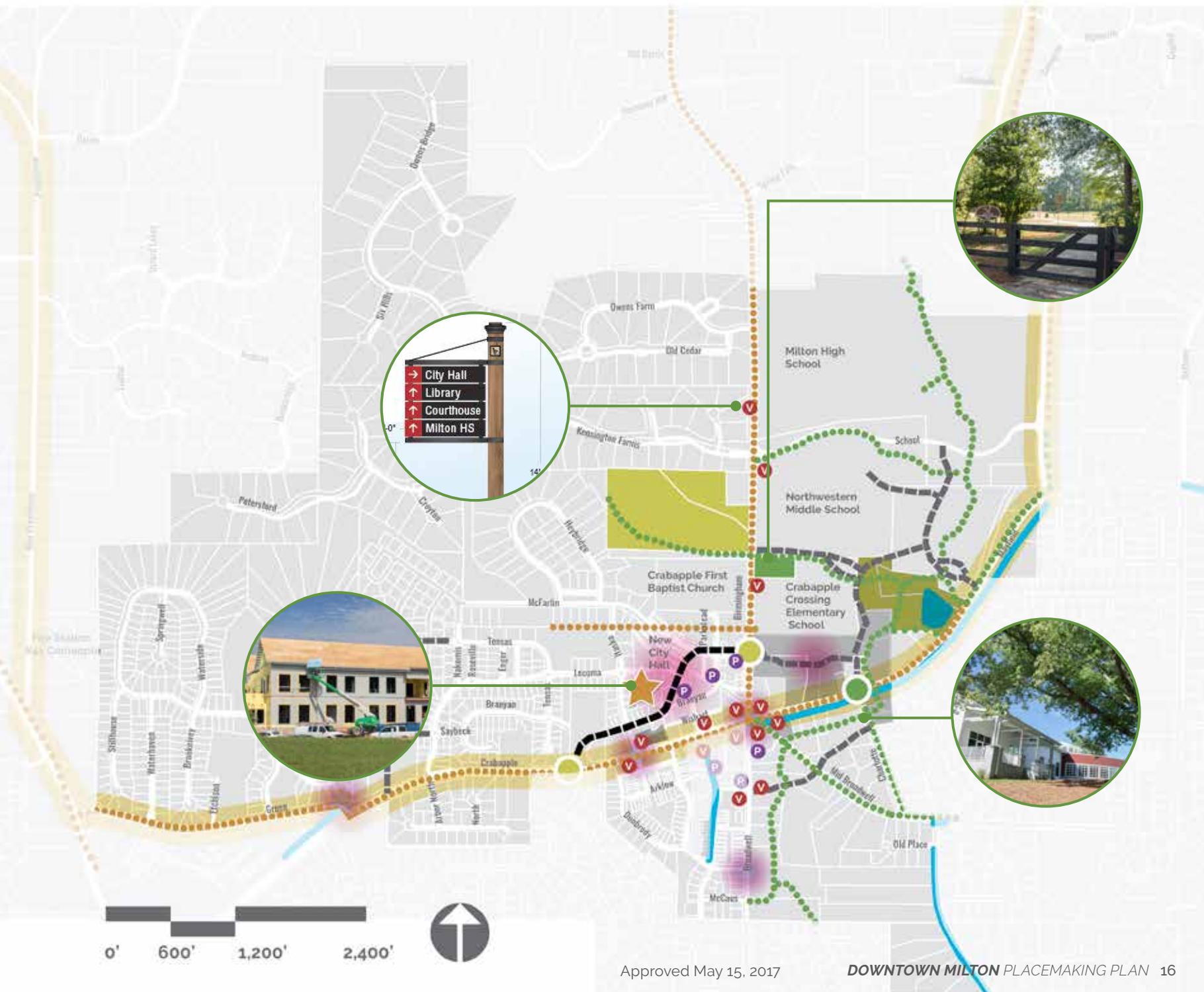
## >> WHAT'S BEEN ACCOMPLISHED TO-DATE?

The City of Milton has worked diligently to implement many of the previous planning studies and development continues to grow in Downtown Milton / Crabapple. The timeline to the right shows the most influential plans relevant to this placemaking plan, and the items that have been completed.

Many of the plans' recommendations overlapped, such as the need for more parks and open space and a "Village Green," the desire for trail connections, bike connections, enhanced street network, improved sidewalks, and the need for parking to accommodate new development. Though locations for some of these items differed slightly, the consensus was generally the same for the area's need for the facilities.

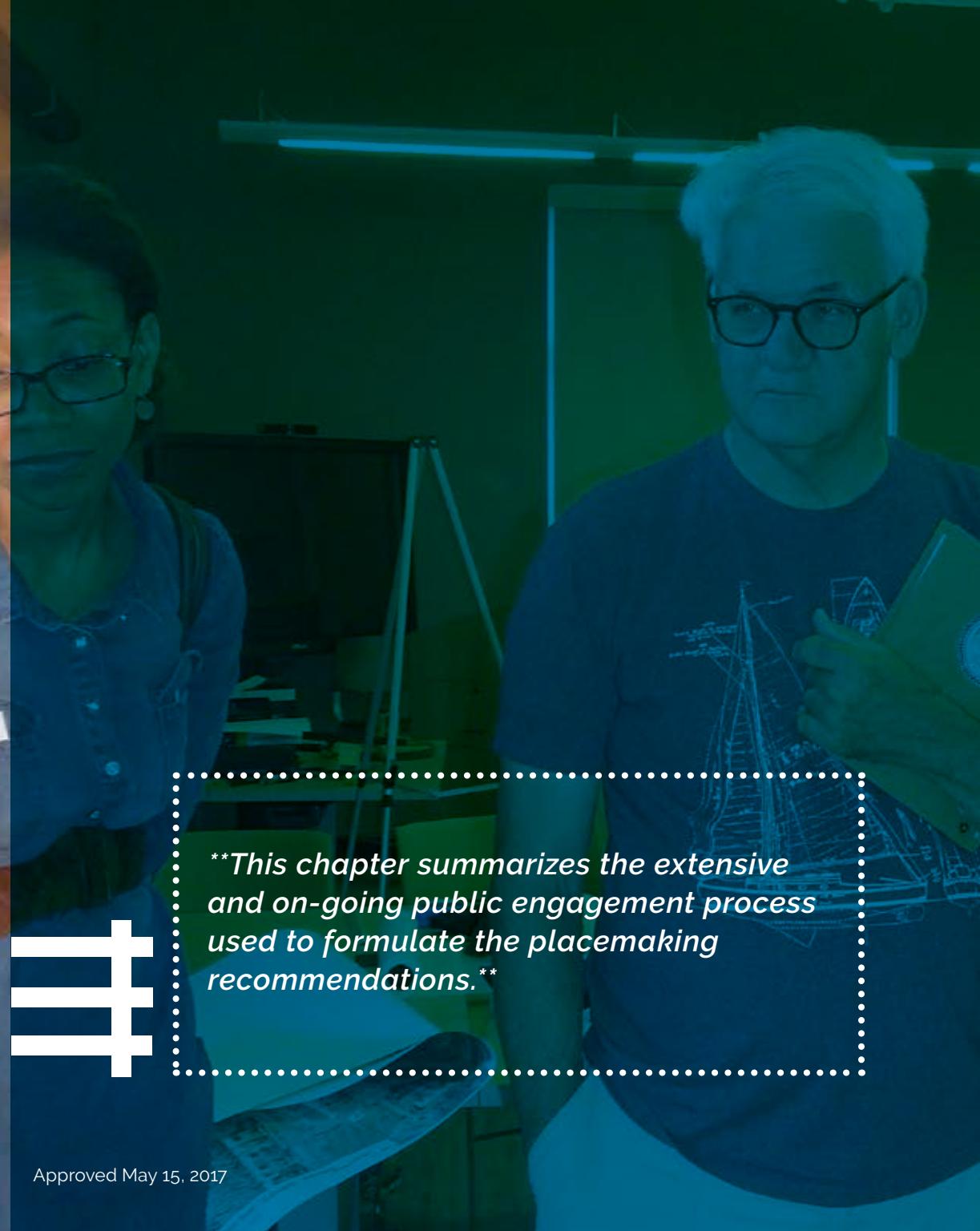
### PLANNING STUDIES (2006-PRESENT)

- 2006: CITY OF MILTON ESTABLISHED
- 2009: MILTON COMPREHENSIVE TRANSPORTATION PLAN COMPLETE
  - \*\* Key Recommendations: removal of right-turn lanes on Crabapple Road & change streetscape; bypass road north of Crabapple Road; intersection and crossing improvements
- 2011: MILTON COMPREHENSIVE PLAN COMPLETE & MILTON VISIONING PLAN COMPLETE
- 2012: CRABAPPLE LCI COMPLETE (Recommended Form-Based Code & parking study)
  - Safe Routes to School recommendations implemented
  - Friendship Park Complete
  - Parking Study completed
- 2015: CRABAPPLE FORM-BASED CODE & REGULATING PLAN COMPLETE
  - New Milton Library constructed & opened
  - Broadwell Pavilion Complete
  - City Hall under construction
  - Heritage Walk and connecting roundabouts at Birmingham Highway and Crabapple Road under construction
  - Construction documents for additional sidewalks on Mayfield Road east of the Crossroads
  - 2016: Plans for intersection improvements (left turn lanes) at Birmingham Highway & Crabapple Road
  - 2016: Additional commercial development under construction
  - 2016: City of Milton Wayfinding Signage Plan complete
- 2016: COMPREHENSIVE PLAN & COMPREHENSIVE TRANSPORTATION PLAN UPDATED
- PRESENT: DOWNTOWN MILTON / CRABAPPLE PLACEMAKING PLAN



Approved May 15, 2017

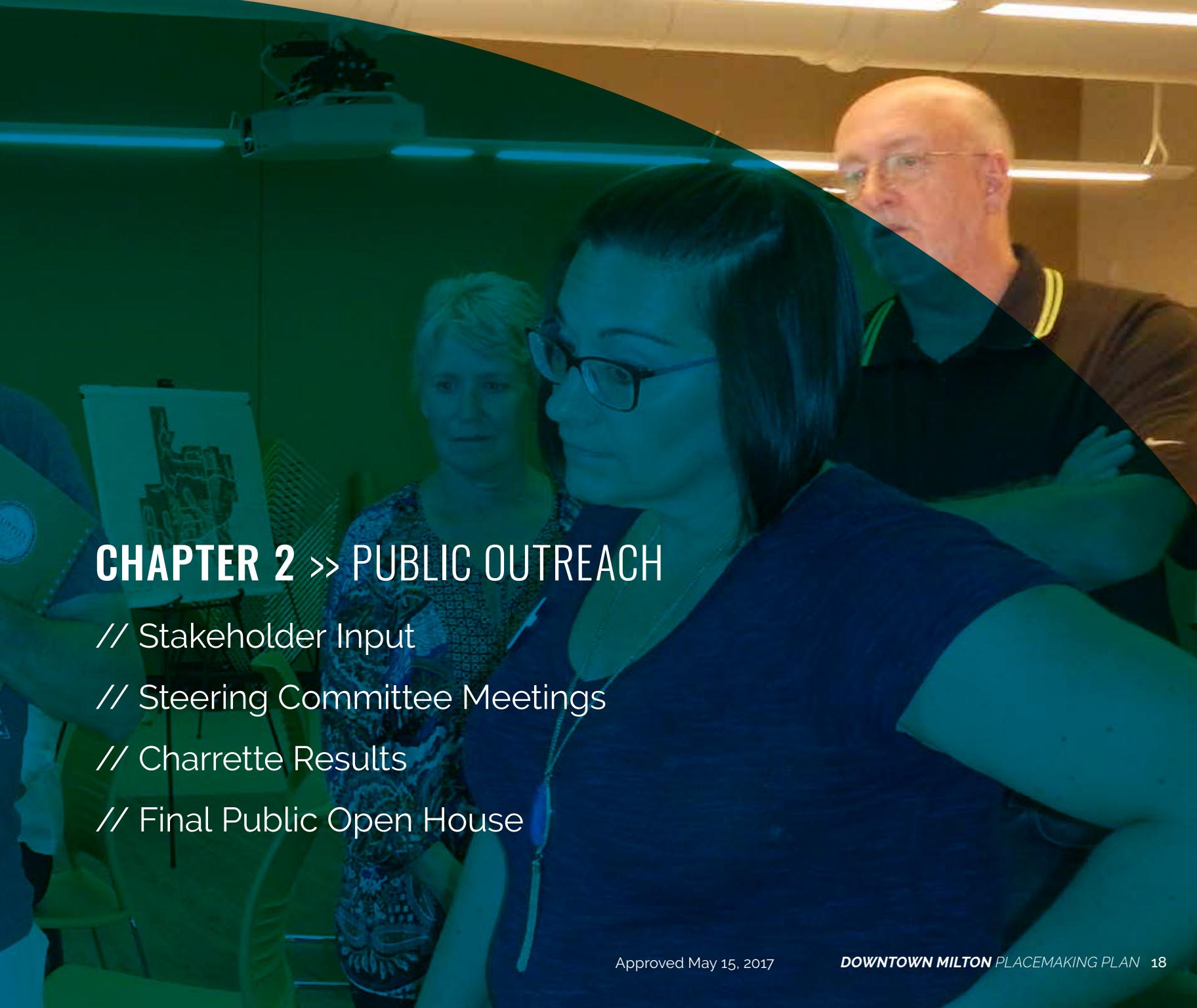
DOWNTOWN MILTON PLACEMAKING PLAN 16



*\*\*This chapter summarizes the extensive and on-going public engagement process used to formulate the placemaking recommendations.\*\**



Approved May 15, 2017



## CHAPTER 2 >> PUBLIC OUTREACH

- // Stakeholder Input
- // Steering Committee Meetings
- // Charrette Results
- // Final Public Open House

## >> PUBLIC OUTREACH

The outreach for this effort drew from many on-site public input opportunities and many of the previous plans' feedback. The team conducted stakeholder meetings and focus groups, met with a steering committee, and hosted a 3-Day Design Charrette.

### **Stakeholder Focus Groups - July 12 and 13**

The first stakeholder interviews and focus groups were held July 12 and 13, 2016, at the Milton Public Library. Each group met for an hour, and participants were welcome to stay for as long as they wished. The team focused on the following concerns:

- Parking management and / or the location of a parking deck;
- Parks and open space and two potential locations for a new park;
- Streetscape improvements, particularly on Crabapple Road and Birmingham Highway;
- Trail locations and an increased sidewalk network.

The infographics to the right illustrate the items that were discussed most and the opinions associated with them. Many of the items from previous plans were confirmed as desired recommendations.

## PEDESTRIAN & BIKE FACILITIES AND STREETS



Many stakeholders noted that pedestrians should come first when considering transportation networks. Wider sidewalks that connect to each other are highly desired. One stakeholder noted that sidewalks should not "go to no where." Stakeholders highly supported multi-use trails to connect the schools, the commercial area, and current and future green space. Streets should be improved with mid-block crossings, better crosswalks, and slower traffic.

## PARKS & OPEN SPACE



Both park options (one on Birmingham Highway and one on Mayfield Road) were desired. Overall, a passive green space with gathering places or an amphitheater was preferred over active recreation and sports fields. Many stakeholders noted that a dog park would be successful.

## DEVELOPMENT

Many noted the importance of adding a grocery store in Crabapple, potentially in the Northeast Quadrant. A performing arts center would be well-used by community groups and school performances. The school facility cannot accommodate all the groups or the number of people that wished to attend shows.



# PARKING



Stakeholders agreed that the parking issue should be addressed to accommodate future development. Many suggested that a parking deck could go in the Northeast Quadrant or behind the current retail on Crabapple Road. Few people argued against on-street parking, even on residential streets. Some noted that parking management may be the best way to address the issue at this time.

## THE CROSSROADS



Most stakeholders agreed that the Shell Station at the Crossroads should be redeveloped. This will need to happen to accommodate the recommended roundabout (*long-term project, page 48*).



It was suggested that pavers be used in the intersection to differentiate the historic Crossroads and slow the traffic.

### Steering Committee Meeting #1

The first steering committee meeting was held on July 12 at 6:00 PM at the Milton Public Library. The team gave a presentation about the potential for streetscape improvements, trail connections, sidewalk improvements, and potential park programming and design. The team also discussed the planning process and gave notice of future meetings and the design charrette.

### Greenspace Public Input from June 2016

#### City Council Meeting

On June 6, 2016, a City Council meeting was held to discuss greenspace needs and desires, as part of an initiative directed by the Planning Commission for the proposed greenspace bond. The Commission used an online survey and held meetings to gather feedback about the criteria for the future of greenspace and parks.

#### The following groups were established, in order of importance according to the feedback:

- Provide trails and / or greenway connections;
- Preserve open space (pastures, horse farms, large tracts of land, passive use areas, greenspace between subdivisions);

- Protect important natural resources;
- Preserve rural areas, views, and "feel;"
- Add parks, mostly passive and / or unimproved parkland, and passive pocket parks;
- Protect historic resources;
- Provide areas for wildlife habitat;
- Protect areas with water, ponds, stream buffers, and watershed areas.

#### In addition, factors to consider in land acquisition for parks included:

- The preservation of trees and avoidance of clearcutting;
- Using buildable land unless the non-buildable part of the land is small or the land is used for trails;
- Acquiring land from willing landowners and do not use eminent domain to acquire land;
- Acquiring land adjacent to existing, protected greenspace;
- Parcels that meet two or more criteria will be prioritized.

### Steering Committee Meeting - August 31

The second steering committee meeting, held on August 31, 2016, at the Milton City Hall, discussed the first chapter of this report and the upcoming charrette in September. TSW gave a brief presentation

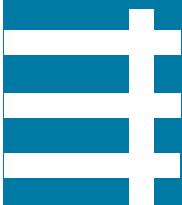
about the findings of the initial analysis, which included mapping, site visits, the market study, and reviewing previous plans (Chapter 1). The TSW Team also vetted the goals of the placemaking plan with those in attendance. Attendees made the following suggestions about the goals and analysis:

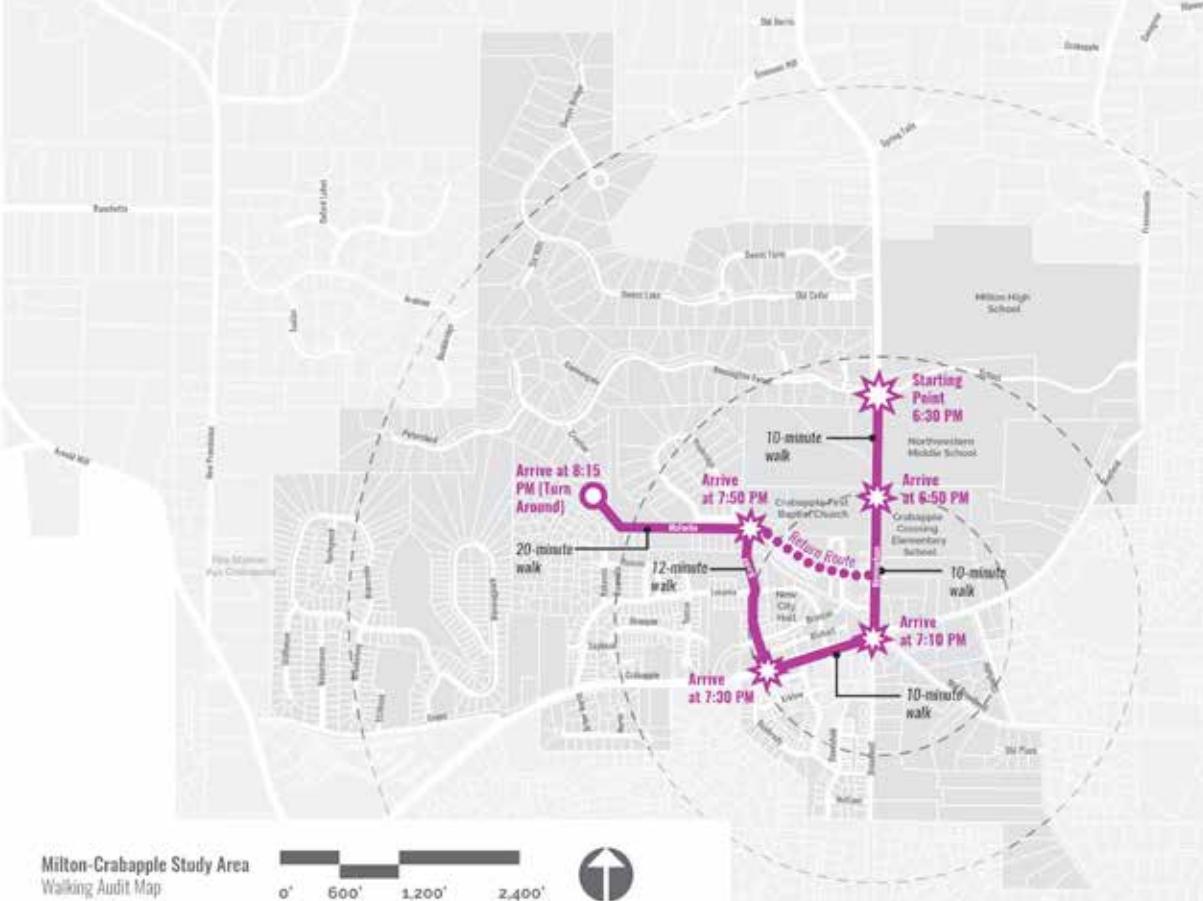
- Ensure that the parking management strategy becomes a parking management plan, so that it is implemented.
- Revise the susceptibility to change map by adding parcels around Mayfield and Mid Broadwell to the "highly susceptible to change" category.
- Consider connections between Crabapple Baptist Church and the commercial area using the strip of land between the church property and the commercial property north of McFarlin Lane.

Feedback also included information regarding ownership of certain parcels, particularly those comprising the potential park on Birmingham Highway. Overall, the analysis portion of the planning process was met with enthusiasm and positivity. The TSW Team also provided information regarding the charrette and walking audit, encouraging the steering committee to attend and pass the word along to others.



*Above: The walking audit took participants along major corridors throughout the Downtown Milton /Crabapple area to examine the pedestrian facilities and conditions.*





Above: The walking audit map with the route and stops.

### Pre-Charrette Walking Audit - September 6

The team took 21 participants on a walking audit of Downtown Milton /Crabapple to describe the pedestrian and traffic conditions along major corridors in the study area. Ian Lockwood with Toole Design Group led the tour, which was a two-hour loop shown in the map above.

The walking tour was intended to educate participants about the ways to improve pedestrian conditions, reduce traffic speeds and congestion, and create a "downtown experience" prior to the commencement of the design work during the charrette, which took place the following three days.

### Walking Audit Findings

The main items discussed during the walking audit included:

- The potential for a road diet on Crabapple Road;
- The current design speed of streets, allowing cars to travel more quickly;
- The need for more sidewalks that are wider and connected to each other;
- The ability to reduce lane widths as a traffic calming method;
- The need to create alternative routes to alleviate traffic congestion on major thoroughfares, like Birmingham Highway and Crabapple Road;
- The potential for trail connections between schools, parks, and retail.

## >> CHARRETTE RESULTS

The TSW Team hosted a charrette at the Milton Public Library on September 7th and 8th, 2016, and worked independently in the TSW office on September 9th to finalize graphics. The public was invited to visit the team throughout both days at the library, and an informal public open house was held on the evening of September 7th.

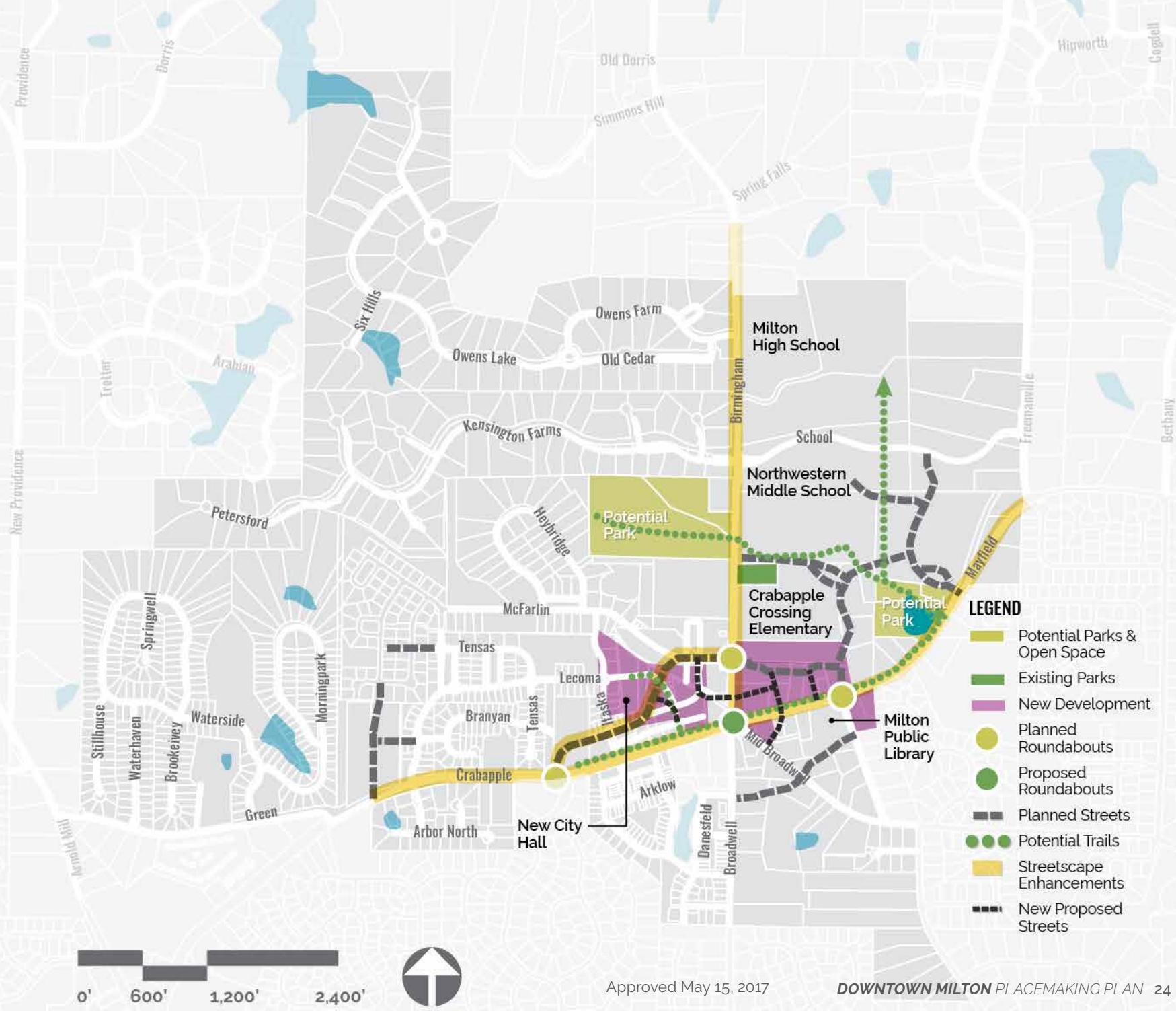
The following items became the framework for the design decisions and placemaking goals (shown in the diagram to the right):

- Streets
- Trails
- Parks
- Development
- Parking

The stakeholder committee, City of Milton, and TSW Team established the overall placemaking goals prior to the charrette at the second steering committee meeting to guide the design decisions.

Design and planning recommendations shown in this chapter are the direct results of the charrette and were revised as needed after the charrette for the final recommendations, which are shown in the next chapter.





Approved May 15, 2017

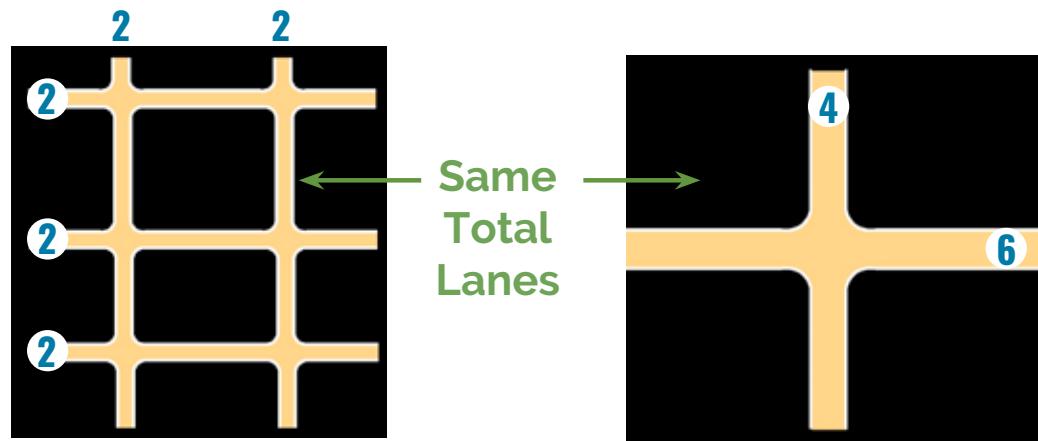
DOWNTOWN MILTON PLACEMAKING PLAN 24

## >> Charrette Results: Streets

The overall goal for streets was to increase the street network to alleviate traffic on major corridors, like Crabapple Road and Birmingham Highway. As shown in the diagram to the right, multiple streets provide the same number of lanes as larger streets, but they provide drivers (and pedestrians and cyclists) with more route options. These recommendations build on the street network and roundabout at Charlotte and Mayfield established in the Regulating Plan (shown with gray dashed lines on the map to the right). Adding to the street network would allow the pick-up / drop-off to be removed from Birmingham Highway, which would reduce congestion. Another long-term recommendation is to add a roundabout at the Crossroads.

Recommendations for the existing streets include adjustments to Crabapple Road, Birmingham Highway, and Mayfield Road, which include removing deceleration lanes, reducing car lane widths, widening sidewalks, and accommodating cyclists.

## Network and Car-Carrying Capacity



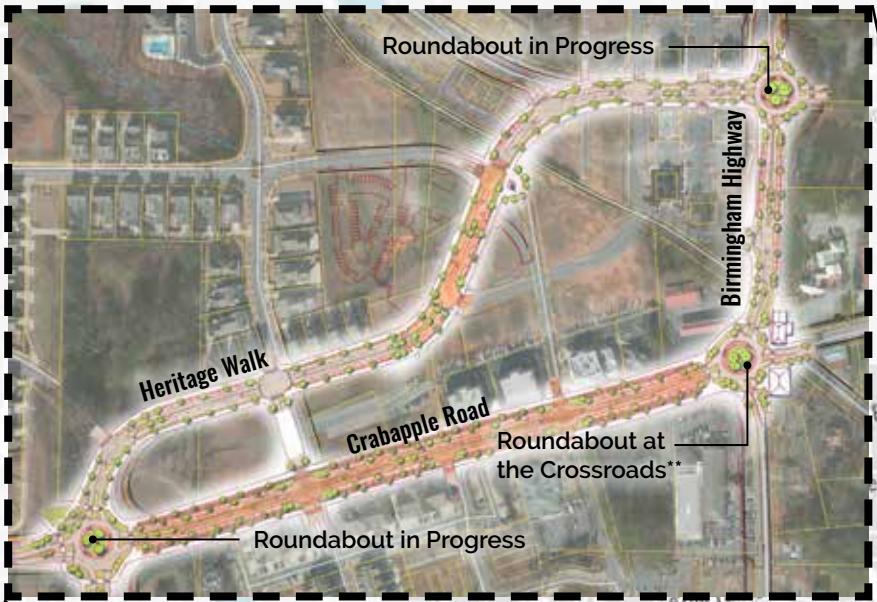
## More Car-Carrying Capacity

### Consistent Recommendations for Streets:

- Add street network
- Remove deceleration lanes and reduce lane widths
- Enhance and increase sidewalks and bike lanes
- Add street trees and street furniture
- Provide gateways into Crabapple at the roundabouts
- Bring sidewalks closer to buildings to enhance street activity
- Add on-street parking
- Change paving in key areas

*Above: This diagram shows how a more complete street network accommodates the same number of lanes of vehicle traffic, while allowing users more route options and reducing traffic congestion.*

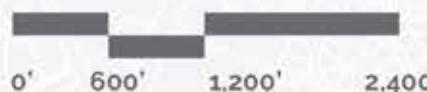
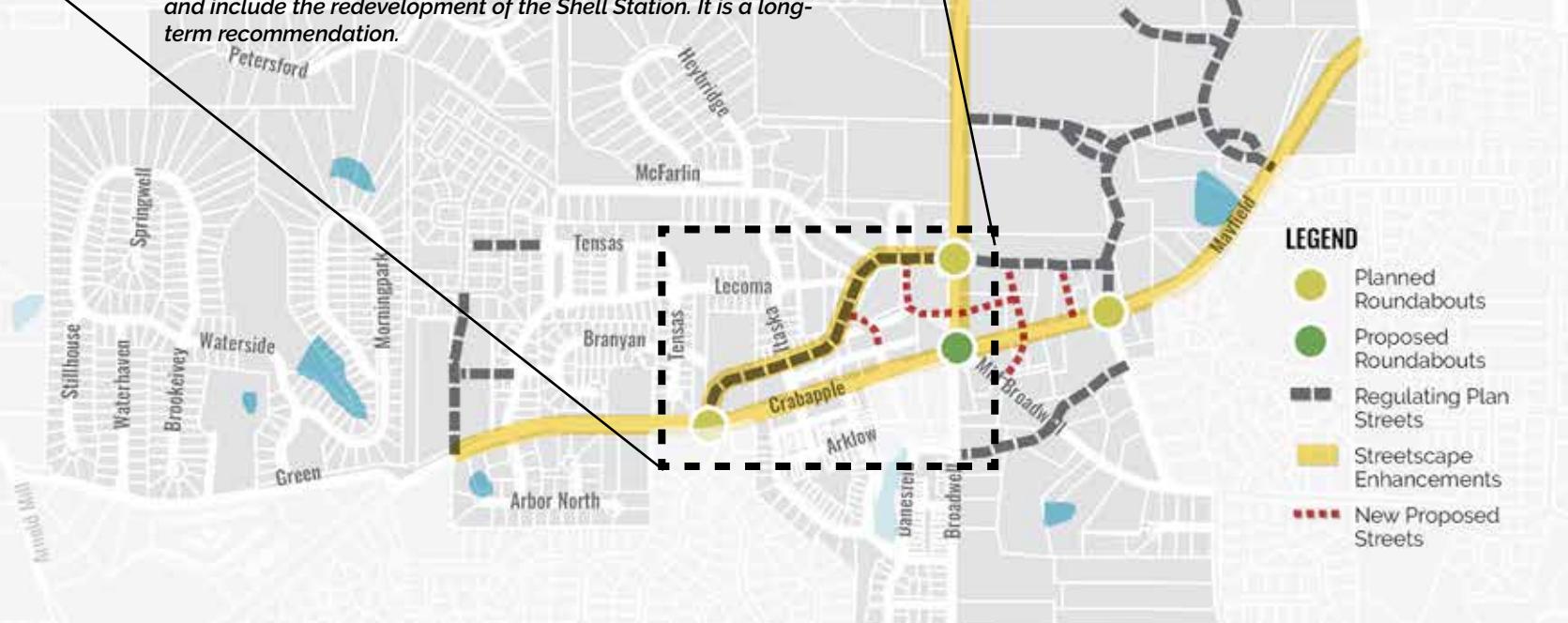
*Right: This diagram shows the street network enhancements and an enlarged plan for Crabapple Road and Birmingham Highway.*



Roundabout at the Crossroads\*\*

Roundabout in Progress

*\*\*Roundabout at the Crossroads must receive GDOT approval and include the redevelopment of the Shell Station. It is a long-term recommendation.*



## >> Charrette Results: Trails & Bike Facilities

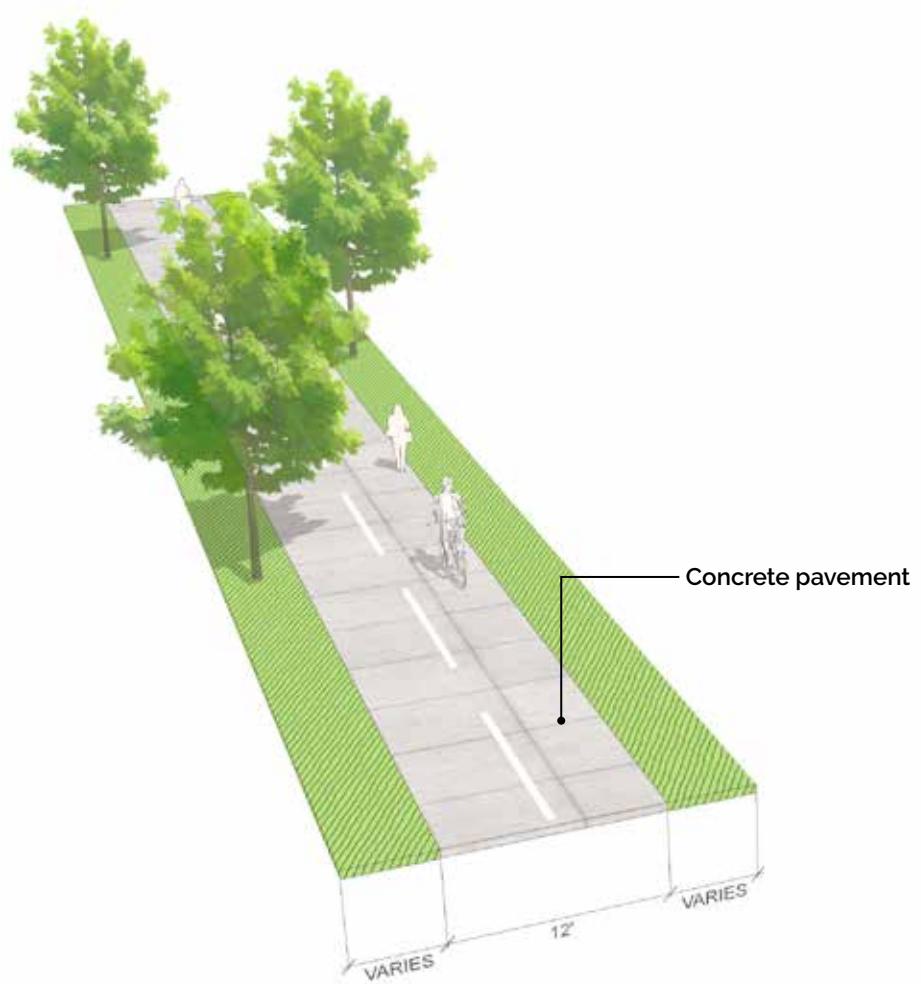
The overall goal for trails and bike lanes was to create a network that connects parks, sidewalks, the schools, and development near the Crossroads and in the Northeast Quadrant, so that users could reach much of Crabapple by walking or biking. The plan includes both off-street and on-street trails. The trail along Mayfield Road (pages 54, 57) will link the new development to the school properties and across Birmingham Highway to the proposed large park (Crabapple Park).

### The on-street portions include:

- On-street spur on Lecomia starting at City Hall and connecting to Heritage Walk and Crabapple Road (page 46);
- Separated bike lanes and a wider multi-use path on Crabapple Road (page 47);
- Multi-use trail and cycle-track (two-way bike lane) on the north side of Mayfield Road (page 57).

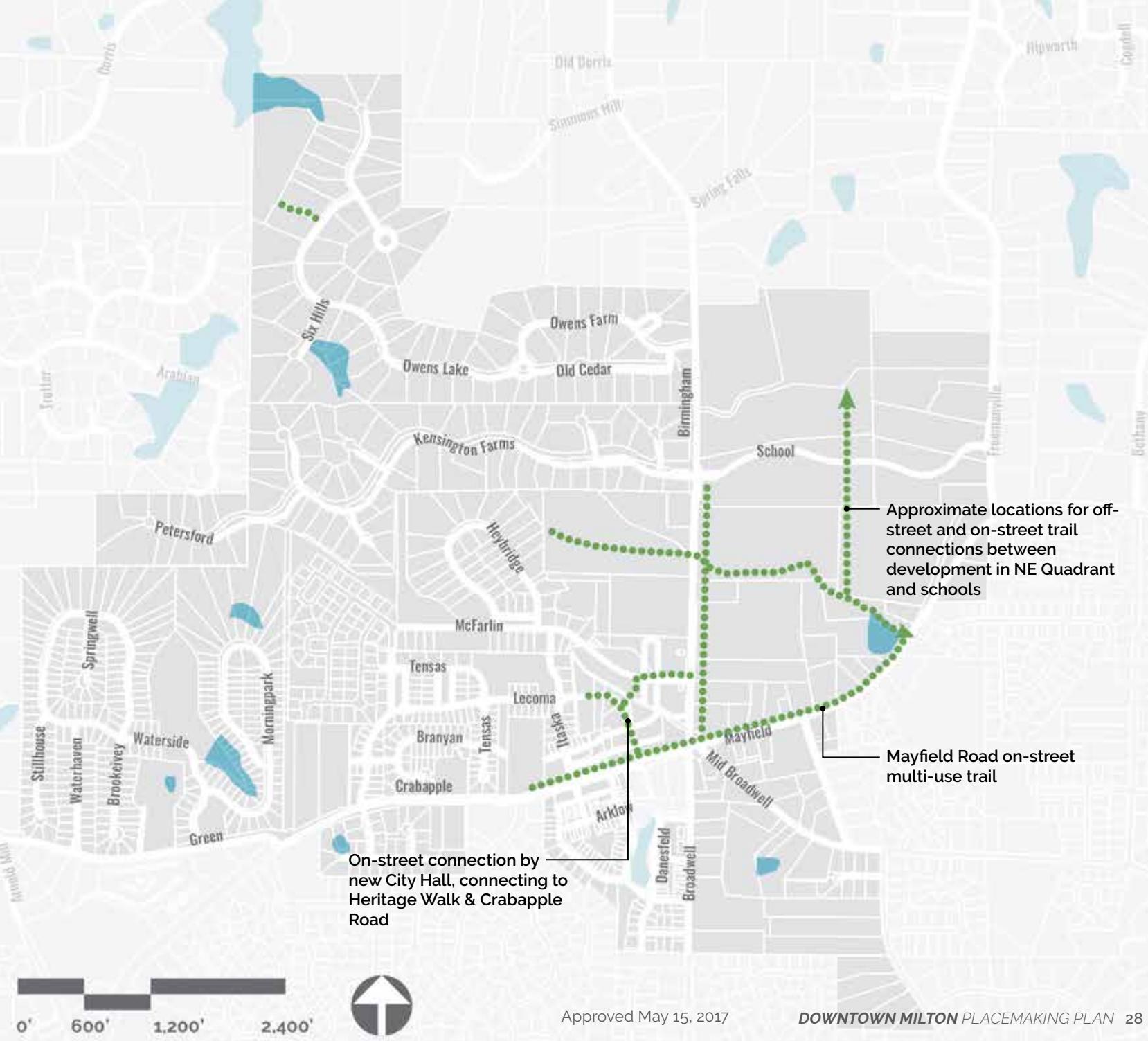
### Trail Design Considerations:

- The off-street trails between the schools and parks are currently designed to be a 12' wide concrete trail.
- On-street portions widen existing sidewalks or add new facilities along the streets.



Above: This is the design for off-street trails between the schools and development in the Northeast Quadrant.

Right: This diagram shows the trail network for the study area.



## >> Charrette Results: Parks & Open Space

The potential Crabapple Park on Birmingham Highway, potential park on Mayfield Road, Friendship Park, schools, stream buffers, and trails form the parks and open space network in the Crabapple area. The idea is to treat these spaces as one and connect them to each other and to other parts of Crabapple through trails and sidewalks. All of this land can be used for active (at the schools) and passive (at the parks) recreational needs. The two potential parks bookend the larger open space area.

At the charrette, two passive park options were created for Crabapple Park on Birmingham Highway, and one design option was created for Mayfield Park on Mayfield Road. For Crabapple Park, it is important to note that some of the land currently designed may not be available for purchase because of the property owner's desires.

**\*\*Both parks' designs were adjusted after the charrette to accommodate changing conditions (Chapter 3).\*\***

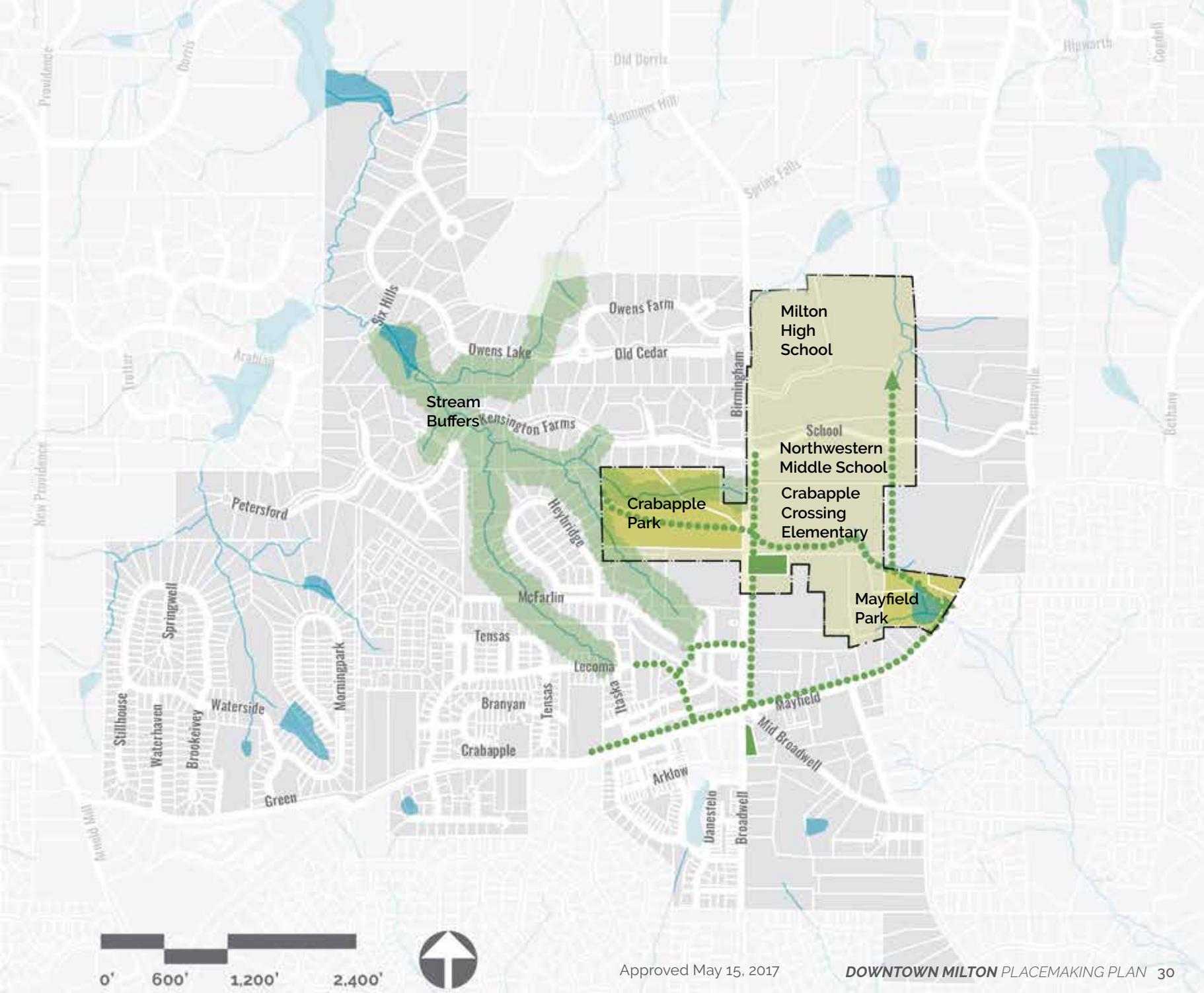


### Crabapple Park Concept 1:

- T2 in Form-Based Code
- 47 single-family homes and 9 townhomes overlook the park
- Ring road connects the to the street extension across Birmingham Highway
- On-street parking on the road
- Connection to City Hall via a trail spur in the southwest corner
- Passive park with a series of gathering spaces offering different activities

Above: This plan shows one of the concepts for the Crabapple Park.

Right: This diagram shows the parks and open space network in the Downtown Milton / Crabapple study area.



Approved May 15, 2017

DOWNTOWN MILTON PLACEMAKING PLAN 30



**\*\*This Crabapple Park design concept was chosen as the preferred concept in the Final Recommendations (Chapter 3, page 49), and it was revised as needed.**

#### Crabapple Park Concept 2 Considerations:

- T2 in Form-Based Code
- Trail network connects through the park to the schools
- Some parking provided
- Connection to City Hall via a trail spur in the southwest corner
- Passive park with a series of gathering spaces offering different activities

*Above: This plan shows the second concept for Crabapple Park.*

*Right: This plan shows the design concept for the small park on Mayfield Road.*



#### Mayfield Park Concept Considerations:

- T2 in Form-Based Code
- Uses existing asphalt drive for a trail that connects to the schools north of the site and the internal trails
- Development southwest of the park fronts the park and Mayfield Road
- Passive park with an educational focus

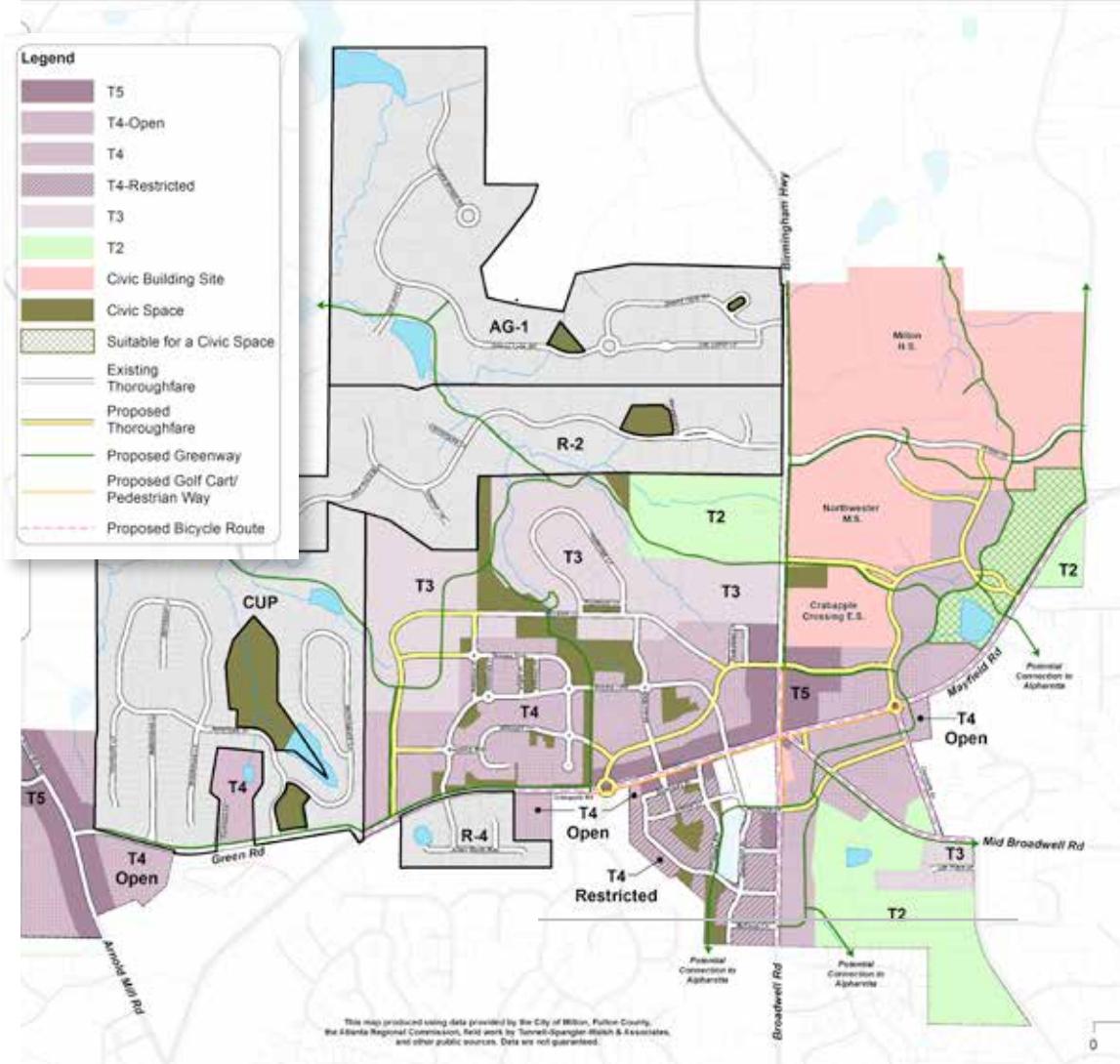
**\*\*This Mayfield Park design concept was revised as needed for the final recommendations (Chapter 3, page 58).**

## >> Charrette Results: Development

The plan proposes new mixed-use development in both the Northwest and Northeast Quadrants, as set forth in the Regulating Plan, the current Zoning Ordinance (adjacent, right), and desires expressed in the stakeholder meetings. Residential units, retail, and office uses are included in the development schemes.

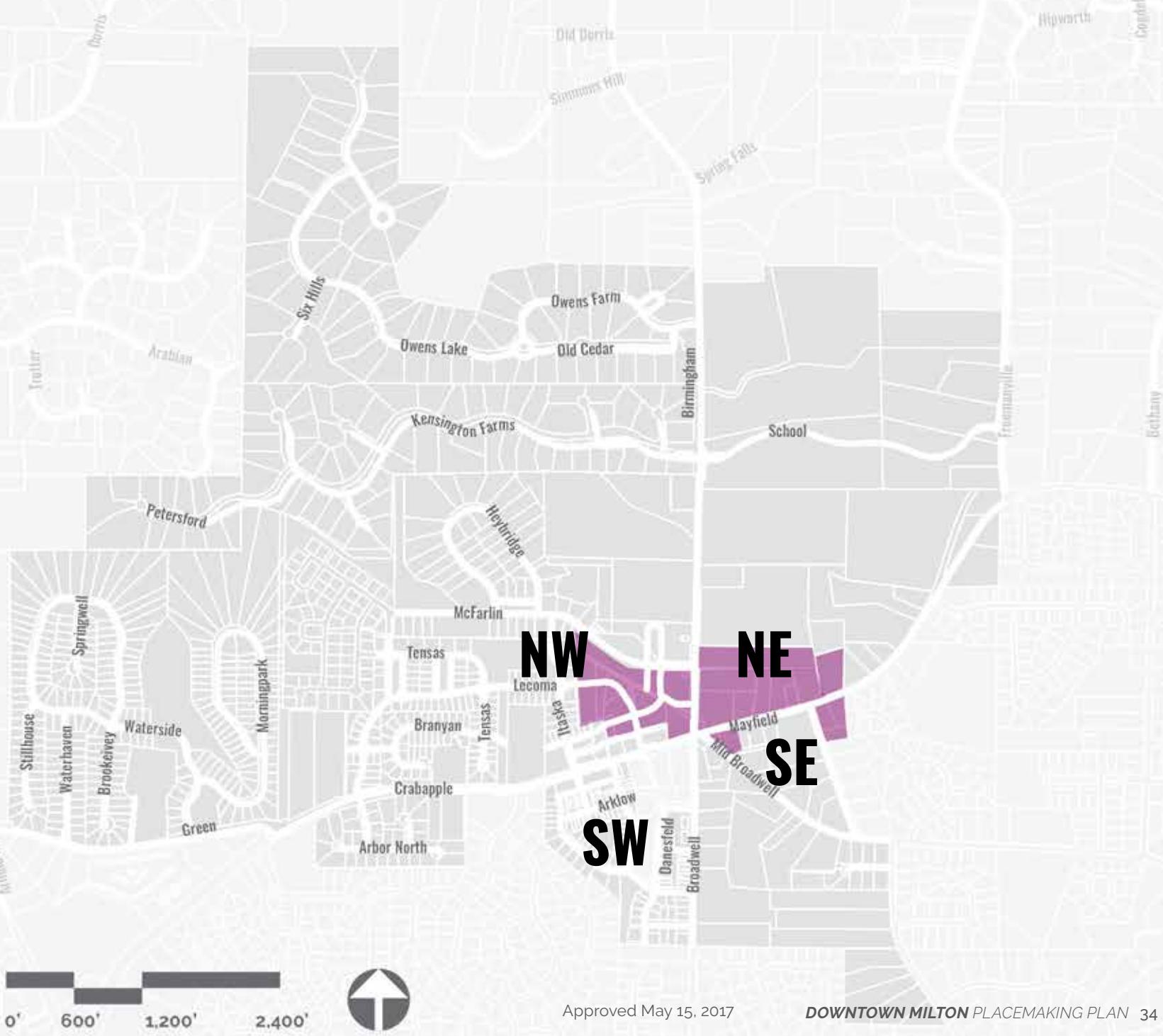
### Form-Based Code Zoning Summary:

- T5 along Crabapple Road and at the Crossroads
- T4-Open in the other development parcels
- Designations promote low-density and small building types
- Maximum building footprint is 18,000 SF with 36,000 SF total maximum building area
- Building Units: 2,250 SF for commercial
- Each residential unit is counted as one (1) building unit
- Historic buildings, civic buildings, accessory dwelling units, and senior housing units do not count towards density
- Can use TDR to increase density



Above: The Crabapple Regulating Plan (the current Zoning Ordinance) from 2012.

Right: This diagram shows where development is recommended in the study area.



## NW Quadrant Development Summary

The recommendations focus on infill development around the current commercial core along Crabapple Road, the new City Hall, and the Crossroads. This area is already experiencing growth with the development of additional commercial space, residential units, and the newly-constructed City Hall. The proposed development scheme, which meets the current T4-Open and T5 Form-Based Code requirements (Chapter 3), includes:

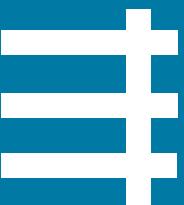
- Townhomes;
- Mixed-use at the Crossroads (1 level);
- Office;
- On-street trails to City Hall, Crabapple Road, and Heritage Walk;
- A potential parking deck location;
- Open space near City Hall;
- Additional streets and realignments of existing streets;
- Redevelopment of the Shell Station site with mixed-use development.



*Top, left: The New City Hall construction as of August 2016.*

*Middle: New commercial development at Itaska and Crabapple Road under construction in August 2016.*

*Top, right: Townhomes and residential units in the new development will adhere to the current standards.*





*Top: Proposed development in the NE Quadrant works with many existing buildings with historic value, including the Cotton Gin (page 7).*

## NE Quadrant Development Summary

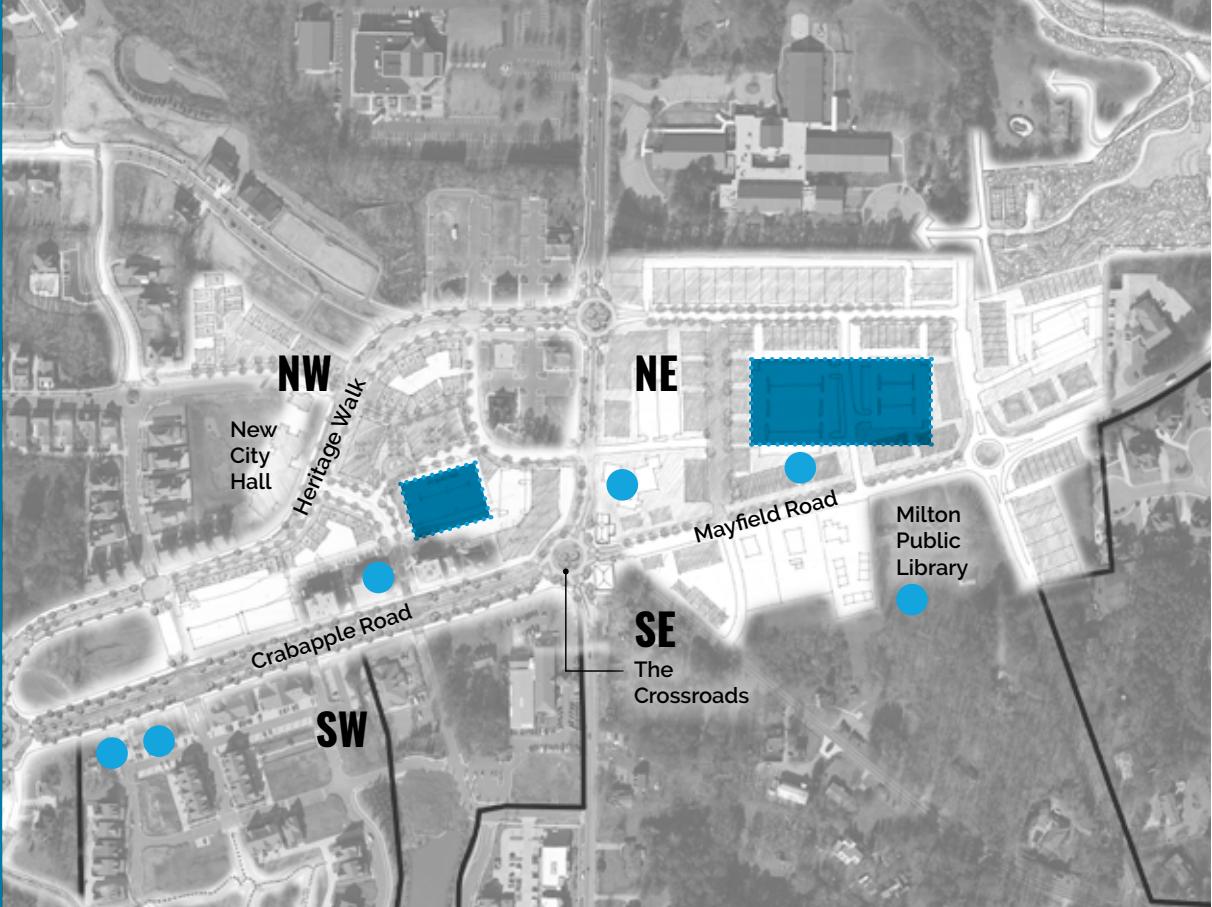
The recommendations focus on mixed-use development along Mayfield Road near the Milton Public Library and adjacent to the proposed park, east of the Crossroads. This area is slated for greater connectivity with additional street and trail connections recommended in the Regulating Plan (page 33) and others from this plan (page 26). This concept plan (Chapter 3) accommodates the street connections, trail connections, and the requirements for the Form-Based Code. The development code analysis in the appendix (page 79) describes how the recommendations fit the code.

- T4 in Form-Based Code;
- T5 at the Crossroads;
- Trails to parks, schools, City Hall;
- Potential parking deck location north of Mayfield Road;
- Farm-to-table restaurants and community gardens;
- Adjustments to the Mayfield Road street section;
- New street connections;
- Potential for more development on northern lots.

## >> Charrette Results: Parking

The team analyzed the existing parking inventory and calculated future demand based on the square footage of restaurants; however, on-street parking spaces were not included in the inventory. The diagram on the adjacent page shows the current inventory and the highest evening demand. The analysis was completed to determine the viability of a parking deck in the study area to support additional commercial development. The image to the right shows the potential locations in the study area for a parking deck if feasible, and potential locations for valet stands. The plan was drawn to accommodate either a surface parking lot or parking deck if the City decides to pursue the option in the future.

The analysis determined the feasibility and cost of surface parking lots, a parking deck, and a valet service as a parking management strategy. Shared parking agreements could also be an interim solution.

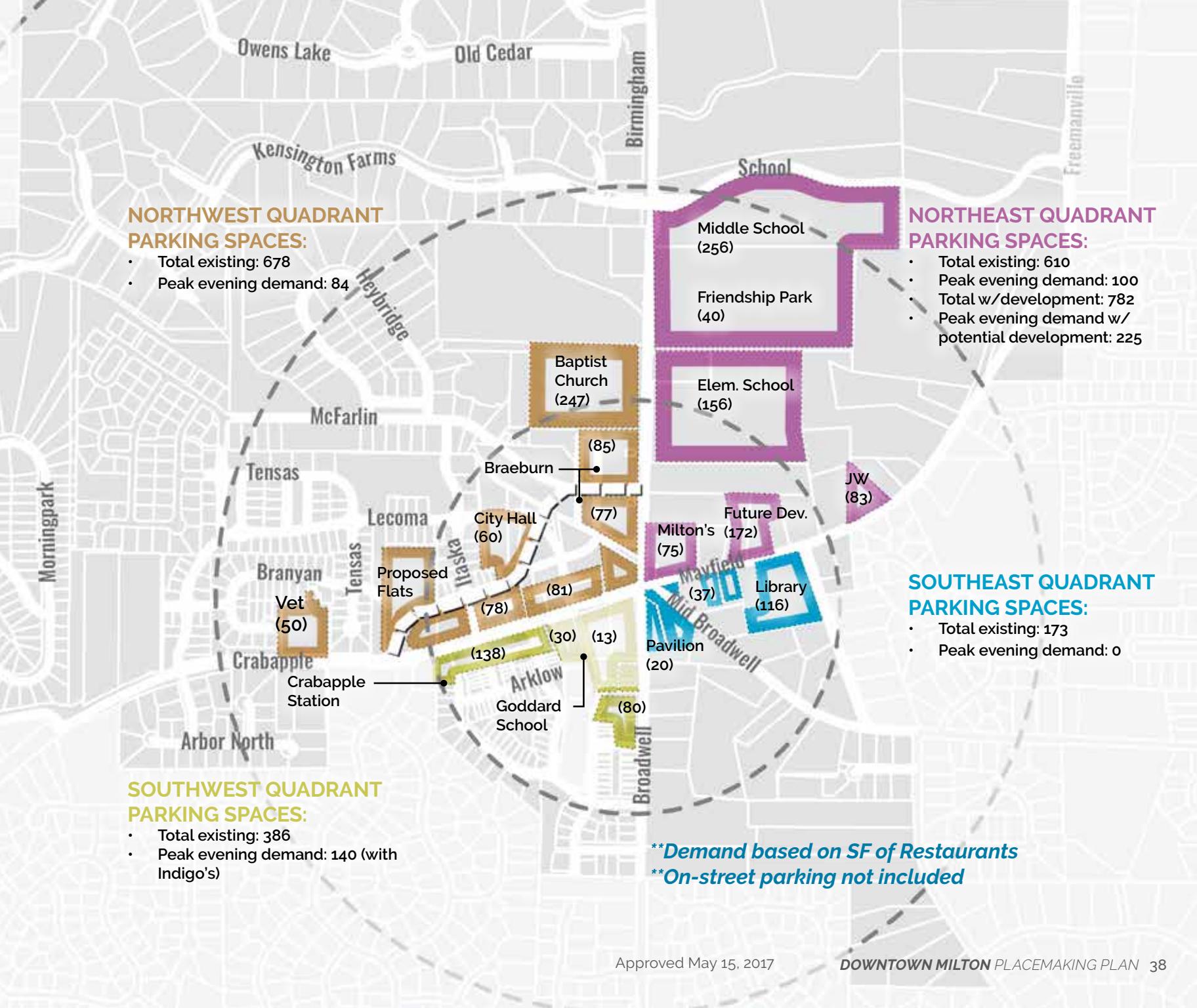


Potential  
Parking Deck

Potential  
Valet Stand

Above: The blue boxes represent the potential locations for a parking deck in the future.

Right: This diagram shows the parking inventory and demand at peak evening hours.



## >> PUBLIC OPEN HOUSE

The TSW team hosted a public open house at the Milton Public Library on November 30, 2016, to display the final recommendations (Chapter 3) and implementation strategy (Chapter 4). Approximately 65 residents were in attendance. Despite many questions and concerns, most feedback about the final recommendations were positive, particularly regarding the streetscape changes on Crabapple Road, Mayfield Road, and Birmingham Highway and the two park designs. Some key comments that were addressed in the final report are:

- Consider moving the dog park from Crabapple Park to Mayfield Park because of noise adjacent to single-family homes;  
*Moved the dog park farther into Crabapple Park to reduce noise.*
- Add sidewalks along the entire Charlotte Drive corridor;  
*Sidewalks added to Charlotte Drive and Mid Broadwell Road.*
- Note the importance of accommodating handicap parking greater than the regulations require;  
*Made note of this next to the parking infographics in Chapter 3.*

- Ensure that developers build the sidewalks along their properties on public streets where necessary.

*Noted this in the implementation section (Chapter 4).*

Some concerns were addressed during the meeting by TSW team and the City representatives (answers in blue below):

- Concerns about the level of density;  
*Density meets requirements of Form-Based Code.*
- Concerns about the plan being "law of the land" rather than a conceptual guideline for future development;  
*This plan provides a framework so that future development adheres to the goals of the community established in previous plans and the Form-Based Code. What will be built will differ from what is drawn.*
- Concerns about historic structures being removed for new development.  
*No historic structures were removed.*
- Questions about the future of the Shell Station at the Crossroads;  
*Owner still has two years on the lease. The plan is to redevelop it when possible.*
- Questions about the amount of traffic new streets will bring or alleviate.  
*Additional streets and roundabouts will reduce congestion on larger corridors.*





# FINAL STEPS

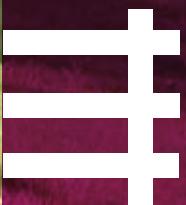
- ★ Present Recommendations to Planning Commission (2017)
- ★ Approval and adoption by Planning Commission (2017)
- ★ Additional Final Public Hearing (2017)
- ★ City Council Workshop Session
- ★ Approval and adoption by City Council (May 2017)
- ★ The City starts the first steps noted in Chapter 4

## >> ADDITIONAL TOWN HALL MEETING

The TSW team and the City of Milton presented the Placemaking Plan at an additional public hearing on April 20th, 2017, at the new Milton City Hall. Some key comments that were addressed in the final report are:

- Retail in front of Milton's in the NE Quadrant and associated parking ratios:  
*Removed the small retail buildings and ensured parking ratios in the NE Quadrant meet requirements.*
- Liner townhomes in the NW Quadrant and associated parking:  
*Removed one townhome and provided a one-way alley for parking access.*
- Parking in general;  
*All conceptual developments were double-checked to ensure accordance with the Form-Based Code.*

Many residents expressed concerns about traffic congestion, pedestrian safety, road network, the completion of the roundabouts, and project prioritization and funding. The City of Milton answered all of these questions with completion timelines and explained the project processes.



*\*\*This chapter shows the placemaking recommendations, but the plans only represent an idea of what the future could look like, assuming the assemblage of multiple parcels for larger developments. The key components are the infrastructure improvements (streets, sidewalks, parks). Development will follow or occur concurrently. All recommendations fit within the Form-Based Code and parking requirements. All future designs will need to comply with all of the City of Milton's requirements\*\**

## CHAPTER 3 >> FINAL RECOMMENDATIONS

// Placemaking Plan Summary

// Northwest Quadrant

// Northeast / Southeast Quadrants

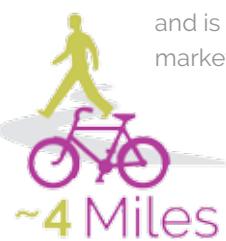
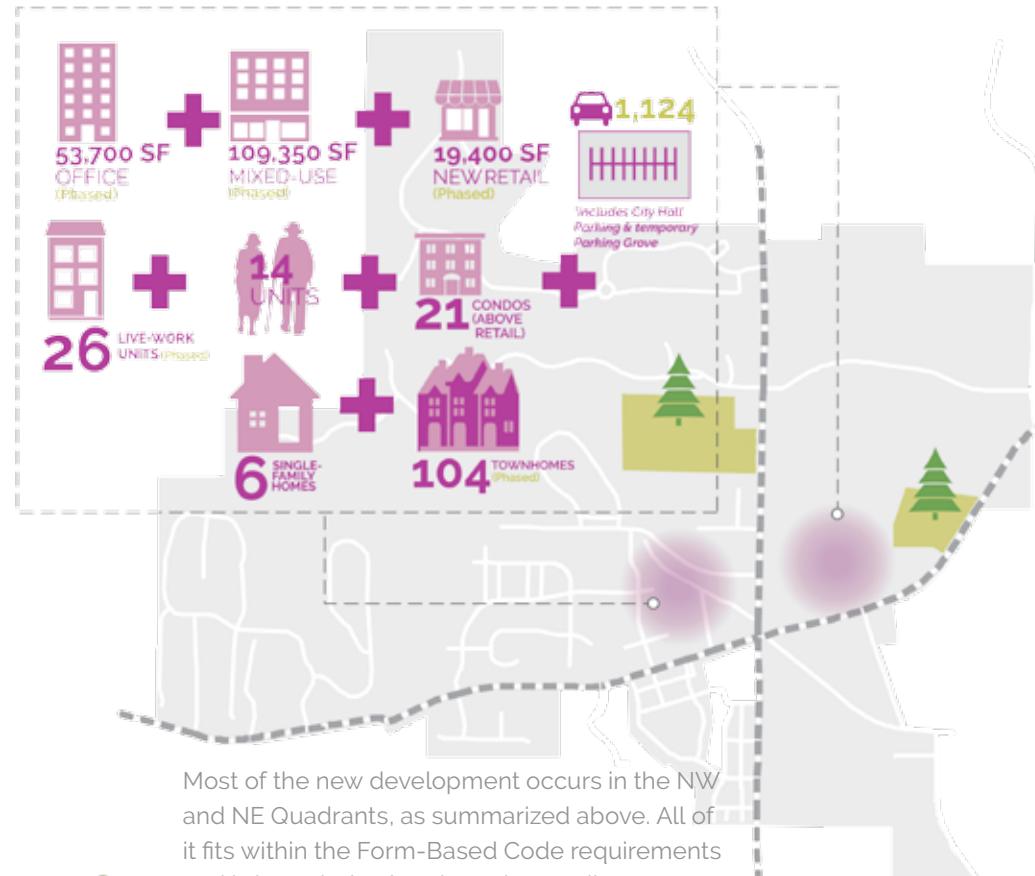
// Parking Recommendations

## >> PLACEMAKING PLAN

The final recommendations for the placemaking plan include:

- **Mixed-use development** (meeting the Form-Based Code and assuming assemblage of multiple parcels)
  - The Crossroads
  - Northwest Quadrant
  - Northeast Quadrant
- **Two new passive parks**
  - Crabapple Park on Birmingham Highway
  - Mayfield Park on Mayfield Road
- **Short-term and long-term parking considerations**
  - On-street and parking lot spaces
  - Valet parking or shared parking
  - Locations for a potential parking deck identified
- **Streetscape enhancements**
  - Crabapple Road
  - Mayfield Road
  - Birmingham Highway
  - Heritage Walk (under construction)
- **Trail system on streets and between the schools** (4 miles total)

The infographics to the right describe the overall recommendations for the entire Downtown Milton / Crabapple study area.



The plan includes approximately 4 miles of trails (and on-street multi-use paths) to connect the schools, new parks, and the existing commercial area on Crabapple Road.



~2 ACRES  
POCKET PARKS

Two larger parks are recommended, which adds 28 acres of passive park space. In addition, approximately 2 acres of pocket parks and plazas were added to the development areas.





## >> NORTHWEST QUADRANT DEVELOPMENT

The Northwest Quadrant is bound to the east by Birmingham Highway and to the south by Crabapple Road. This area includes the current commercial core of Crabapple, the newly-constructed Milton City Hall, and the additional retail development underway on Crabapple Road. This placemaking plan recommends additional office, mixed-use, and residential development to complete the town center.

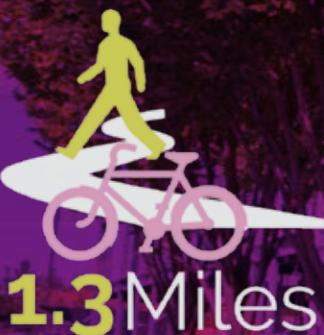
### Northwest Quadrant Recommendations:

- Reroute Lecomia Trace and add a small new connection street
- Office development at Lecomia Trace and the new connection street
- Add new townhomes on the northern edge and along Heritage Walk
- Redevelop the Shell Station site and replace with a mixed-use (office and retail) building and a roundabout at the Crossroads (long-term project; current project is to add left-turn lanes)
- Improve the Crabapple Road streetscape (page 47) to include on-street parking and bike facilities
- Add on-street trails to connect to Crabapple Road and Mayfield Road



Development in the Northwest Quadrant could include office, townhomes, and mixed-use development at the Crossroads. The above square footage total does not include the commercial development currently under construction. All development is projected to be phased, with new street connections preceding building construction.

### DEVELOPMENT INCLUDES OTHER AMENITIES



84 on-street parking spaces are added on Itaska, Lecomia, and Crabapple Road. Parking lots include the new City Hall lot, parking behind the new retail, a temporary parking grove, and a lot that is appropriately-sized for a potential deck. All parking must accommodate sufficient handicap parking spaces.



Trails are integrated with on-street multi-use paths on Crabapple Road, Heritage Walk, Lecomia Trace and connect to the Northeast Quadrant and Crabapple Park via Birmingham Highway. Small plazas and open space areas create pocket parks by the offices and townhomes.



*Includes City Hall  
Parking & temporary  
Parking Grove*

## LEGEND

• • • Multi-Use Trail

● Current Historic Buildings

★ HAWK\*\* Signal

*\*\*A HAWK signal is a High-Intensity Activated crossWalK beacon used to stop road traffic and allow pedestrians to cross safely.*



## >> NORTHWEST QUADRANT

### CRABAPPLE ROAD AND HERITAGE WALK STREETSCAPES

The plan recommends streetscape improvements for Crabapple Road and Heritage Walk. Heritage Walk is currently under construction, including the roundabouts at Birmingham Highway and Crabapple Road.

#### Crabapple Road Recommendations:

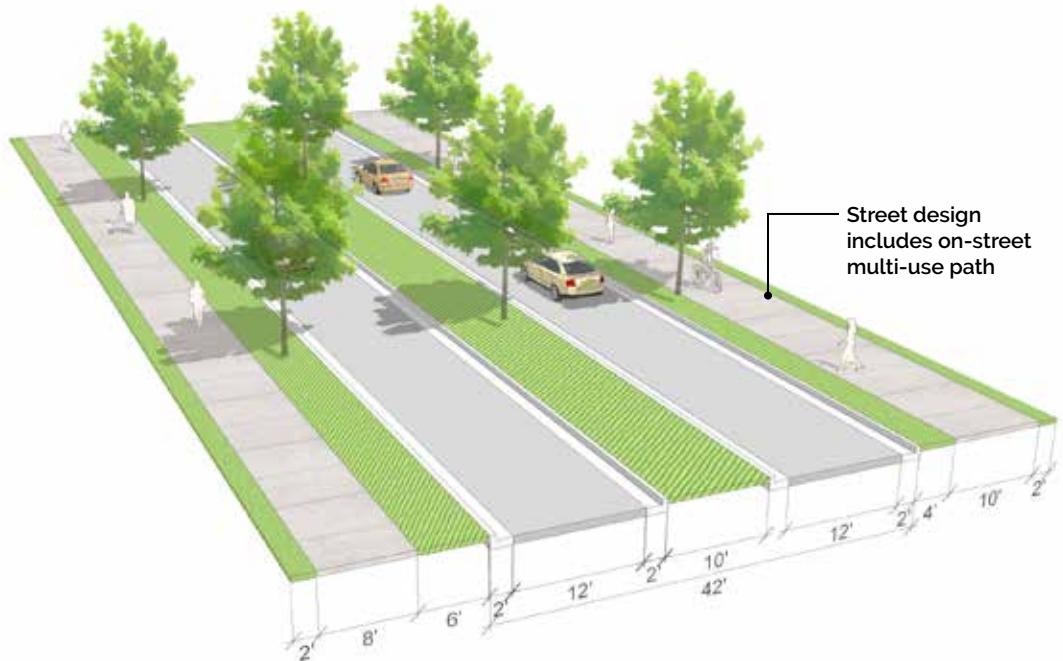
- Remove deceleration and turn lanes
- Create a left-turn lane
- Reduce vehicle lanes to 11' wide
- Move sidewalks to the fronts of the buildings
- Add a tree lawn and tree bulb-outs
- Add bike lanes on both sides of the street
- Provide on-street parking and valley gutters
- Add crosswalks at intersections and a mid-block crossing

#### Heritage Walk Progress:

- The new street planned by the City of Milton and GDOT (S.2) is under construction (2017)
- The connecting roundabouts at Crabapple Road and Birmingham Highway are under construction (2017)



S.1 Crabapple Road



**S.2 Heritage Walk - under construction** (City of Milton & GDOT plans, see appendix)



#### Long-term Recommendation for the Crossroads

The current project for the Crossroads is to add left-turn lanes on 3 sides to ease traffic flow, particularly at rush hour. The long-term project is to change this intersection to a roundabout (see Implementation section of the report).

## >> NORTHWEST QUADRANT

### CRABAPPLE PARK

#### Crabapple Park Use

This 21-acre passive park includes walking trails, lawns, an amphitheater, a community garden, and an orchard. The stream and wooded areas buffer the most active use in the park - the proposed dog park. Trails form loops for exercise and walking routes, and connect across Birmingham Highway to the trails that lead to the schools and the development east of the Crossroads.

#### Land Ownership

Two property owners own this land, so the City will need to work with the owners to ensure that their goals are met or purchase the land at fair market value in order to construct the park.

**21 ACRES**

**TWO PARCELS OWNED BY TWO PROPERTY OWNERS\*** \*The City of Milton must coordinate with property owners

**PARK AMENITIES**

The park is approximately 21 acres and is a passive park with multiple amenities, woodlands, and trails.

**21 ACRES**

**111**

Two small parking lots accessible from the park entry drive provide 111 parking spaces within the park. Access is supplemented by trail connections from the schools and on-street parking on Birmingham Highway (page 51).

The park includes a 1-acre dog park, an amphitheater for community and school events, an orchard, grand lawn, community garden, and small pavilions for picnics and gathering spaces.

The park includes 1.3 miles of internal trails through and around the woodlands and park amenities. Pedestrian bridges cross the stream running along the northern edge of the park.

Approved May 15, 2017



## LEGEND

■■■■ New Street Connection (Regulating Plan)

★ HAWK\*\* Signal

**\*\*A HAWK signal is a High-Intensity Activated crossWALK beacon used to stop road traffic and allow pedestrians to cross safely.**



0' 100' 200' 400'



## >> NORTHWEST QUADRANT

### BIRMINGHAM HIGHWAY STREETSCAPE

Streetscape improvements are recommended for Birmingham Highway in order to prioritize pedestrians, slow traffic, and improve the connections between the proposed Crabapple Park and to the schools. Making the street easier to cross could allow more students to walk to school. The addition of new street network in the NE Quadrant (pages 53-54), which would accommodate school drop-off and pick-up, could remove traffic from Birmingham Highway during rush hour.

#### BIRMINGHAM HIGHWAY RECOMMENDATIONS

The 70' right-of-way (ROW) extends north from the Crossroads and narrows to 50' north of Crabapple Crossing Elementary. The ROW (S.1) includes on-street parking, shared lanes for bicycles and cars, tree bulb-outs, and wider sidewalks on both sides that connect to the proposed trail network and accommodate pedestrians and cyclists. The 50' ROW (S.2) extends north through the remainder of the study area (with expansion at school entrances with HAWK signals) and includes wider sidewalks, crosswalks, shared lanes for bicyclists and cars, and a wider tree lawn separating pedestrians from the street.



Birmingham Highway would receive 32 on-street parking spaces from Crabapple Park south to the Crossroads.



*Top, left: Signs clutter the small buffer between traffic and the sidewalk.*

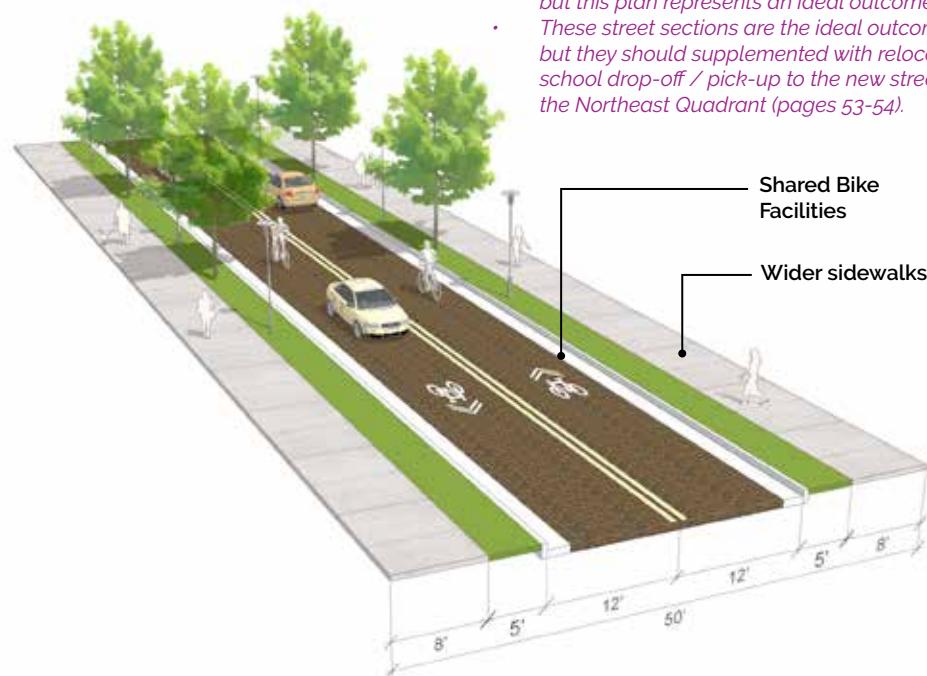
*Top, right: Birmingham Highway across from the proposed Crabapple Park currently has narrow sidewalks.*

*Middle, right: The wide car lanes at the mid-block crossing to the elementary school makes Birmingham difficult to cross. The new section reduces the crossing distance with on-street parking and tree bulb-outs that widen the sidewalk at the intersections.*



**S.1 Birmingham Highway (70' ROW)**

- GDOT prefers 13.5' wide vehicle lanes, but this plan recommends 12' and 11' lanes to reduce traffic speeds.
- GDOT prefers wider on-street parking widths, but this plan represents an ideal outcome.
- These street sections are the ideal outcome, but they should be supplemented with relocating school drop-off / pick-up to the new streets in the Northeast Quadrant (pages 53-54).



**S.2 Birmingham Highway (50' ROW)**

# >> NORTHEAST & SOUTHEAST QUADRANTS DEVELOPMENT

## Mixed-Use

The proposed development in the Northeast and Southeast Quadrants conforms to the requirements of the Form-Based Code and corresponding Regulating Plan (appendix, page 79). This area becomes a mixed-use environment with live-work units, residential units (some units above retail), senior housing, retail, and office. New development fronts Mayfield Road and the new streets. If deemed necessary in the future, a parking deck is possible in the large parking lot south of the Charlotte Drive extension and east of the new shared street.

## Connectivity

The expanded street network follows the Regulating Plan and adds two new streets to create connected blocks. These streets can accommodate some of the school traffic, reducing the impact on Birmingham Highway during rush hour. The trail network is expanded to connect with Crabapple / Mayfield Road, the schools, and Crabapple Park west of Birmingham Highway. All new streets include sidewalks, and existing streets receive wider sidewalks.

## CONNECTIVITY

The plan adds 6 new streets or street extensions in this quadrant with 1.8 miles of trail, which include the multi-use path on Mayfield Road and trails leading to the schools and internal to the park.



## PARKING



On-street parking and surface parking lots are added to accommodate the growth in development. All parking must accommodate sufficient handicap spaces.

## MAYFIELD PARK

The 7-acre park will be an amenity for the adjacent development.



## DEVELOPMENT\*

\*Conforms with Form-Based Code with TDR (appendix, page 79)



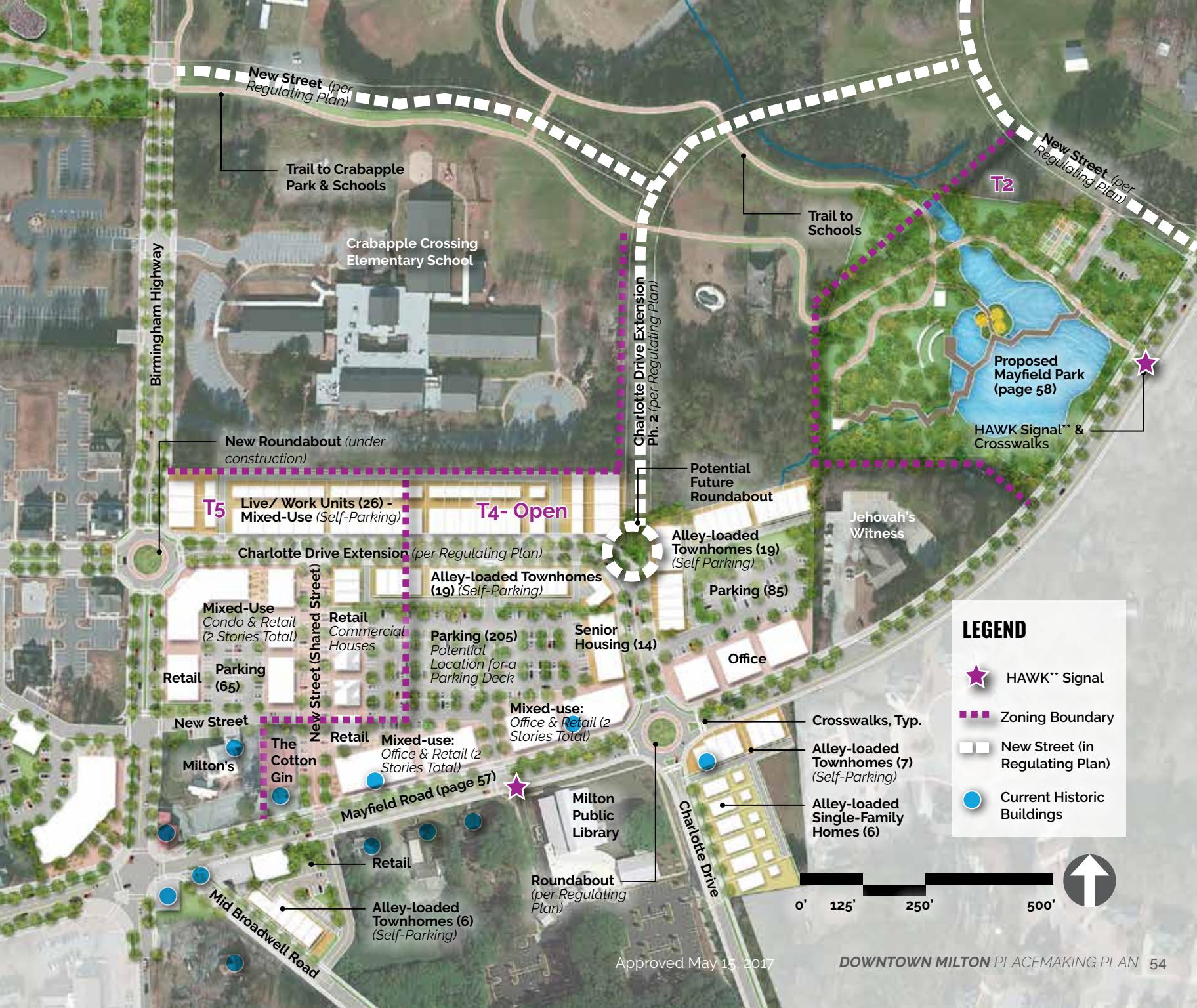
Townhomes, single-family homes, live-work units, condos, and senior housing units will be phased and will help support new retail and office.



Significant mixed-use development (with TDR) is added to this quadrant. Calculations for all development and parking are in the appendix, page 79.



The passive park includes a community garden, amphitheater, boardwalk, and use of the existing lake.



# >> NORTHEAST & SOUTHEAST QUADRANTS DEVELOPMENT

## Shared Street Example

The proposed development in the Northeast and Southeast Quadrants conforms to the requirements of the Form-Based Code and corresponding Regulating Plan (appendix, page 79). This area includes a shared street connecting to the Charlotte Drive Extension (a TSPLOST priority project, see Implementation section), which is a curb-less condition, allowing the street to be closed for community events.

Shared streets prioritize pedestrians and cyclists while providing car lanes and on-street parking. Paving materials change to separate pedestrian and car areas. Commercial houses would line the east side of the street (see images to the right), and two-story, mixed-use buildings would be on the west side. These buildings could include offices, retail, or restaurants on the ground floor, and residential condo units on the second floor.





## >> NORTHEAST & SOUTHEAST QUADRANTS

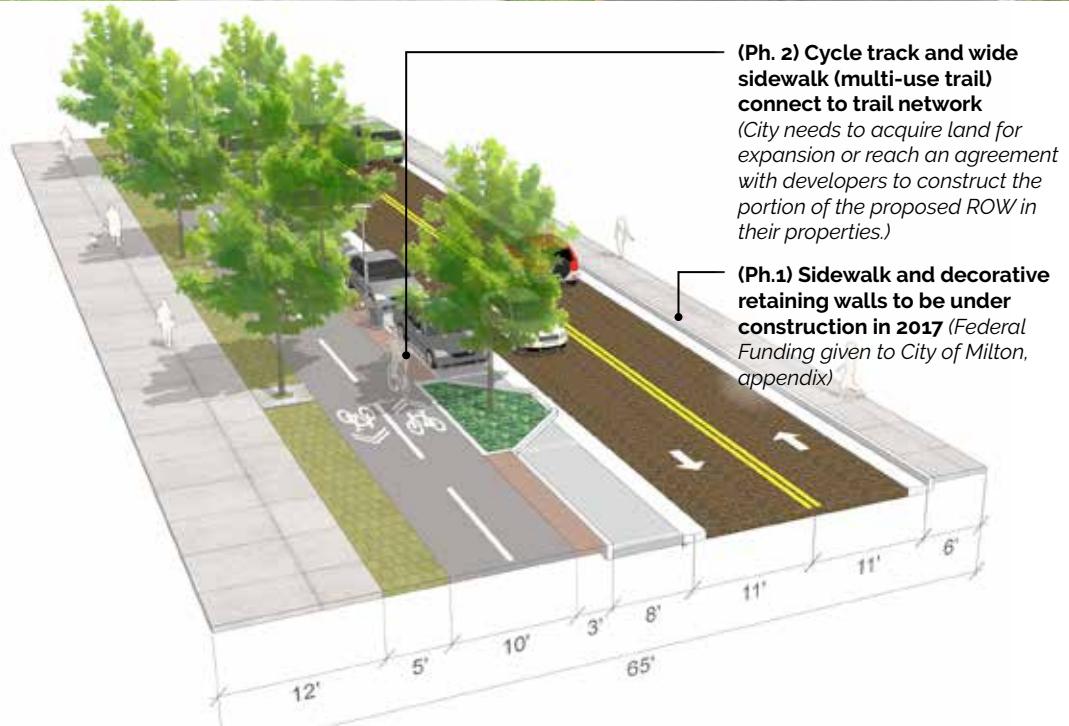
### MAYFIELD PARK & MAYFIELD ROAD

#### Mayfield Park

The 7-acre park on Mayfield Road functions as an educational, passive park and enhances the site's natural and built features. A boardwalk extends across the lake and the existing small island and runs along the stream, connecting to the overall trail network. An amphitheater provides space for outdoor classes for the schools or small community events. The community garden could offer plots to local residents and give students the opportunity to learn how to garden.

#### Mayfield Road

Streetscape improvements that integrate the current plans for a 6' sidewalk on the south side are recommended for Mayfield Road. The ROW is expanded to 65' wide to accommodate more pedestrian and bicycle amenities on the north side, including on-street parking, tree bulb-outs, a two-way cycle track (bike lane), a tree lawn, and a wider sidewalk adjacent to the new development, allowing space for outdoor seating or retail displays.



S.1 Mayfield Road Proposed Section for Phase 2



## >> PARKING RECOMMENDATIONS

### VALET VS. DECK

Based on the cost analysis and supply and demand of parking spaces at rush hour (page 38 shows the space count in each quadrant), this plan recommends the use of valet stands in each quadrant within the existing and future commercial development to accommodate increased parking demand. Additionally, commercial tenants could establish shared parking agreements. Potential locations for the valet stands are noted on the adjacent map:

- Olde Blind Dog (NW Quadrant)
- Milton's (NE Quadrant)
- Milton Public Library or New Development (SE Quadrant)
- Can's Taqueria (SW Quadrant)
- 850°F BarPizza (SW Quadrant)

The adjacent diagram describes three different scenarios: valet stand using existing parking, free self-parking with a parking deck, and a paid parking deck with valet. The cost comparison calculations are based on parking density of 3 spaces/1,000 SF of office for a 45,000 SF office building (135 spaces), acreage cost of \$500,000/acre, and a standard parking spot size of 350 SF (includes spot and drive lane).

## COST COMPARISON FOR SURFACE LOT VS. STRUCTURED PARKING

### SURFACE LOT

**Land Cost:** \$543,375

**Avg. per space cost:** \$2,000

**Total cost for 135 spaces:**

\$270,000

**Cost of Spaces + Land:**

\$813,375

### MILTON'S FINANCIAL BURDEN

Financial burden on the City of Milton to incentivize private development of a structured parking deck

**Structured - surface = \$2,160,325**

### STRUCTURED (DECK) PARKING

**Land Cost:** \$273,700

**Avg. per space cost:** \$20,000

**Total cost for 135 spaces:**

\$2,700,000

**Cost Spaces + Land:** \$2,973,700

## OPERATING EXPENSE FOR 3 PARKING OPTIONS

### VALET STANDS W/ EXISTING PARKING

Cost to add effective 135 spaces:

**\$16,875 / year**

Operating Valet:

**\$125 / space / year**



### FREE SELF-PARKING DECK ADDED

Cost of Maintenance:

**\$8,460 / year**

Cost of Insurance & Permits:

**\$17,796 / year**

Operating 135 spaces:

**\$202 / space / year**

### VALET STANDS W/ PARKING DECK

Cost of Maintenance:

**\$32,322 / year**

Cost of Insurance & Permits:

**\$21,300 / year**

Cost of Valet & Payment System:

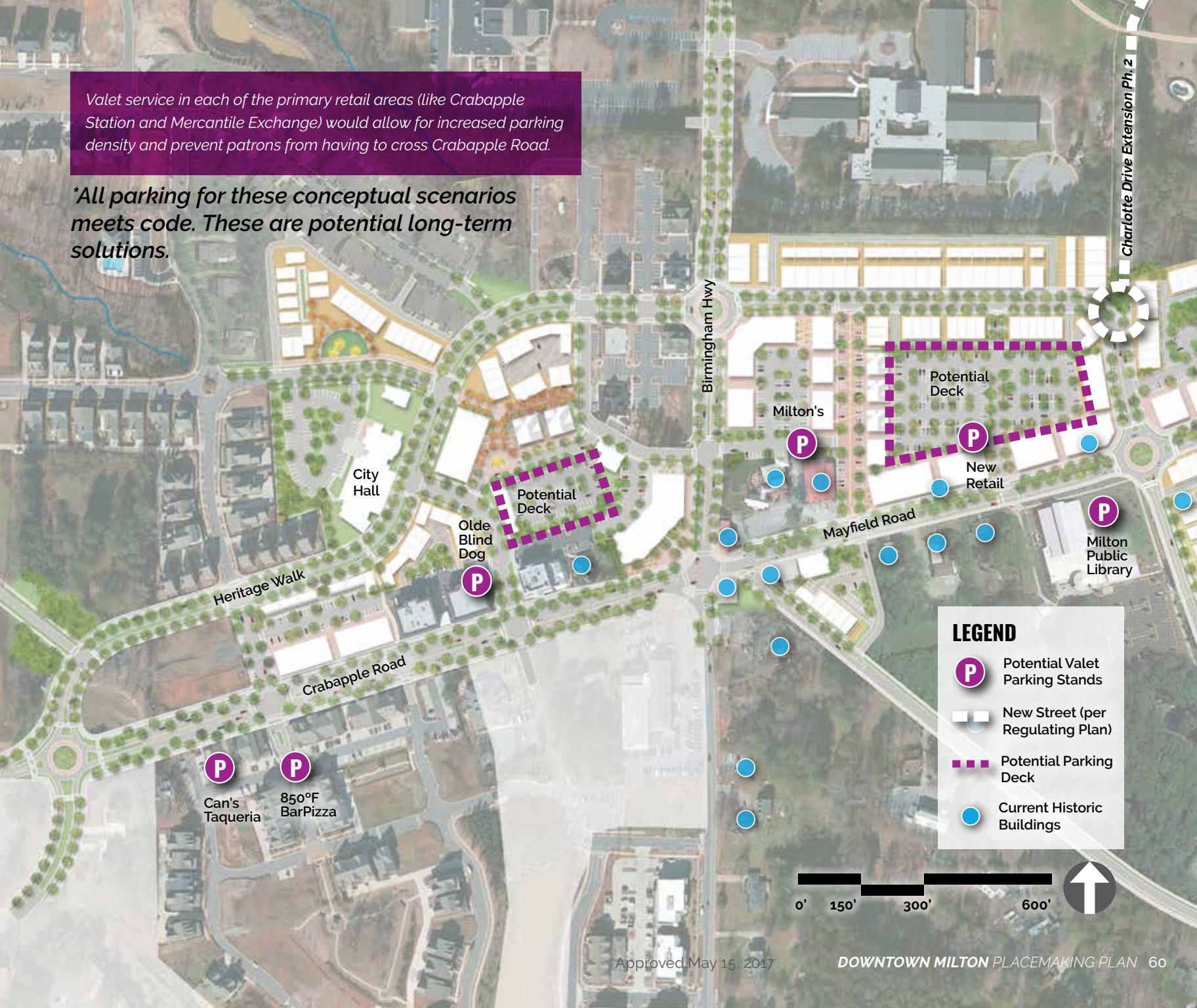
**\$46,833 / year**

Operating 135 spaces w/ valet: **\$744 / space / year**

*\*\*The estimated financial burden on Crabapple for a structured parking deck would include an initial expense of \$2.16 million and on-going maintenance costs between \$202 per space / year (self-park in deck) and \$744 per space / year (valet with deck). This would only include one garage and would require patrons to cross Crabapple Road in the event that the garage and their destination are NOT on the same side of Crabapple Road.*

Valet service in each of the primary retail areas (like Crabapple Station and Mercantile Exchange) would allow for increased parking density and prevent patrons from having to cross Crabapple Road.

*\*All parking for these conceptual scenarios meets code. These are potential long-term solutions.*





*\*\*This chapter summarizes the implementation strategy for the placemaking recommendations based on project type, with the key components being the infrastructure improvements (streets, sidewalks, parks). Development will follow or occur concurrently. The timeline for implementation varies based on the project type. All future designs will need to comply with all of the City of Milton's requirements\*\**

The background of the slide features a large, mature tree with a thick trunk and spreading branches, situated in front of a building. The building has a red wall on the left and a yellow wall with white trim on the right. A row of windows with green frames is visible on the red wall. The scene is set outdoors with sunlight filtering through the leaves.

## CHAPTER 4 >> IMPLEMENTATION

// Implementation Strategy

// First Steps

## >> IMPLEMENTATION STRATEGY

The implementation strategy focuses on project types, rather than a phased timeline. As City funds become available and as developers assemble land, the projects can be phased accordingly and concurrently. However, projects that will make an immediate impact in Crabapple are prioritized, including:

- Adopting the additional street network into the Regulating Plan;
- Determining the parking management strategy and feasibility of a deck; and
- Constructing parks.

Projects that enhance the car and pedestrian networks are important to implement first because they form the framework for future growth. Parks and trails offer connectivity to neighboring uses and positive social impact. Some projects are in motion\*\*, and will be completed faster:

- Construction of Heritage Walk;
- Construction of the roundabouts connecting Heritage Walk to Crabapple Road and Birmingham Highway; and
- Sidewalks on the south side of Mayfield Road.

The mixed-use developments in the Northwest and Northeast Quadrants can be added when the market can support them.

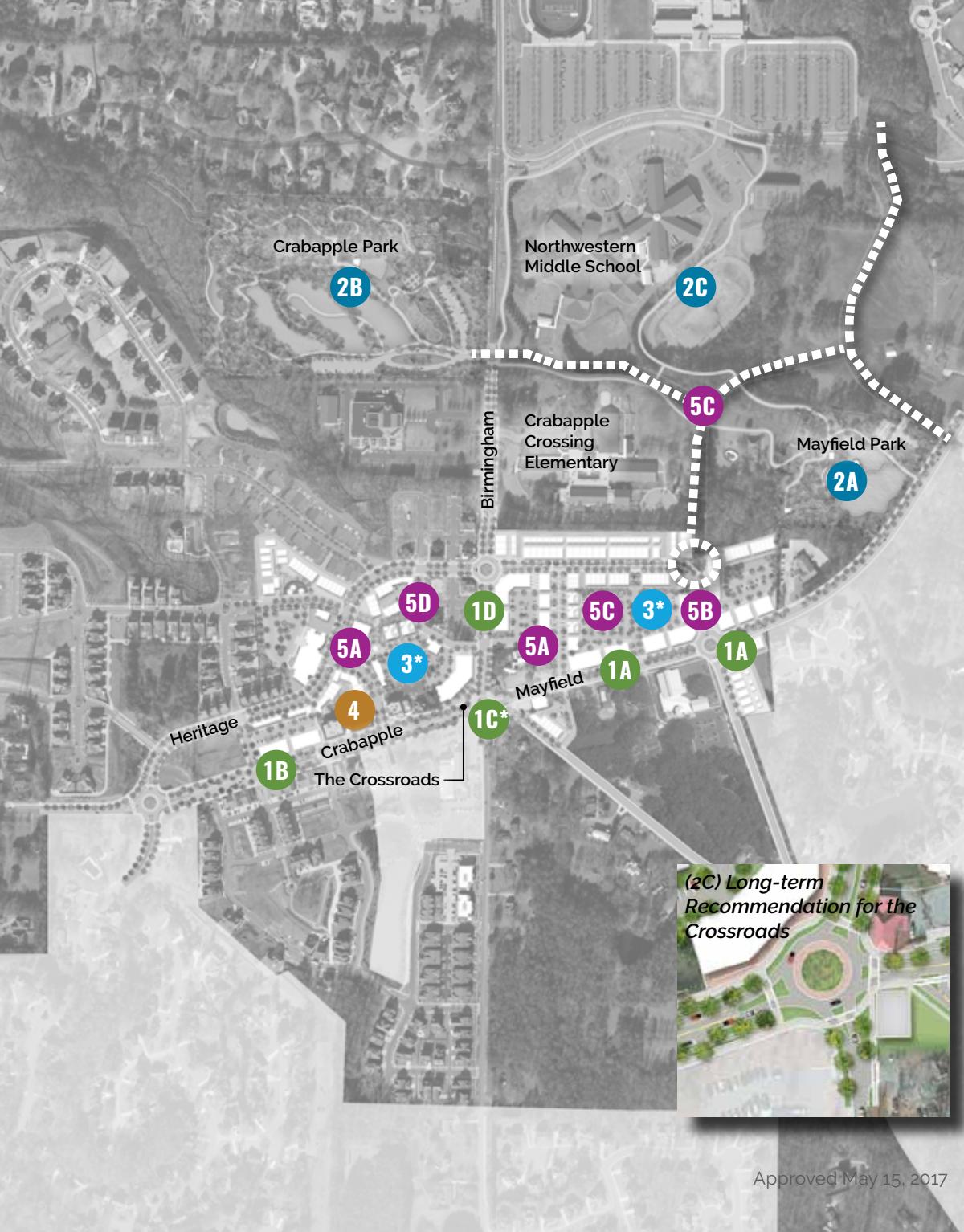
## DOWNTOWN MILTON / CRABAPPLE >> PROJECT LIST

### 1 - STREETSCAPE ENHANCEMENTS STRATEGY

#	PROJECT NAME	PROJECT DETAILS
1A	Mayfield Road - South Side**	City continues implementation of current sidewalk plans with awarded federal funding
1A	Mayfield Road - North Side land acquisition	City coordinates with property owners & developers to acquire ROW or establish an agreement
1A	Mayfield Road - North Side construction	City and developers construct new street section and roundabout at Charlotte Drive
1B	Crabapple Road land acquisition	City acquires ROW to the building fronts where needed and starts negotiations with GDOT to gain control of street
1B	Crabapple Road roadway	Remove the deceleration lanes and add on-street parking.
1B	Crabapple Road streetscape improvements	Restripe the road; install sidewalks, bike lanes, tree bulb-outs; add lights and furniture
1C*	Roundabout at the Crossroads - Shell Station site <b>(Current project is left-turn lanes)</b>	Purchase the land or negotiate with potential buyer for the Shell Station site in the NW corner of the Crossroads
1C*	Roundabout at the Crossroads* <b>(Current project is left-turn lanes)</b>	Design and install the roundabout at Crabapple Road and Birmingham Highway <b>(Long-term)</b>
1D	Birmingham Highway	Add on-street parking, sidewalks, bulb-outs according to 50' and 70' ROW sections (page 52)

### 2 - PARKS & TRAILS STRATEGY

#	PROJECT NAME	PROJECT DETAILS
2A	Construct Mayfield Park on Mayfield Road	City coordinates with property owner and / or developer to design and construct park
2B	Construct Crabapple Park on Birmingham Highway	City coordinates with property owners and / or developer to design and construct park
2C	Construct trails between schools and parks	Design and build trails between the schools and Mayfield Park and connecting to Crabapple Park
2C	Construct NW Quadrant Trails	City and developers construct on-street trails in the NW Quadrant ( <i>concurrently w/ streets</i> ), including those on Crabapple Road



## >> 1 STREETSCAPE ENHANCEMENTS

Pedestrian-oriented streets will enhance Crabapple's success. The City is installing sidewalks and retaining walls on Mayfield Road with federal funding. The City should coordinate with property owners and developers on the north side to acquire ROW and to build the on-street parking, multi-use path, tree lawns, and cycle-track (Phase 2, page 57). The first extension of Charlotte Drive and roundabout at Mayfield Road (Phase 1) will be constructed with TSPLOST funding, and Phase 2 of Charlotte Drive (extension to the north) will occur with the new street network construction. The sidewalks on Crabapple Road should be moved next to the buildings to encourage street side activities in front of retail. Left turn lanes at the Crossroads will be added first, but the City should begin the negotiation process with GDOT to obtain control of Crabapple Road west of the Crossroads and acquire ROW or coordinate with property owners to construct the streetscape enhancements and the roundabout. Birmingham Highway should be enhanced with on-street parking, a reduction in travel lane width, and wider sidewalks (page 52).

## >> 2 PARKS & TRAILS

Mayfield Park in the NE Quadrant is the priority park to construct because of land availability, it could meet green space requirements for a developer, and the streetscape changes on Mayfield Road would provide pedestrian access to the park. Crabapple Park on Birmingham Highway is second priority. Next, the trails to the schools, parks, and on-street trails in the NE and NW Quadrants should be constructed because of the additional connectivity and public open space they provide.

## >> CONCURRENT PROJECTS

The private sector will drive the development schemes for the Northwest and Northeast Quadrants (mixed-use, retail, office, and residential units), which can be completed and phased concurrently.

### NW QUADRANT DEVELOPMENT

The recommendations meet the Form-Based Code requirements (appendix, page 75), and the City should ensure that the new street alignments and trails are constructed to improve the circulation network. This development focuses on office and residential units that support the current commercial businesses.

### NE QUADRANT DEVELOPMENT

The development shown on page 54 meets the Form-Based Code. It will be important for the City to ensure that the property owners and developers construct their projects according to the Regulating Plan and the framework established in this placemaking plan. The construction of the street network is the most important piece, in order to improve connectivity and flexibility in development at the block level.

## DOWNTOWN MILTON / CRABAPPLE >> PROJECT LIST

### 3\* - PARKING DECK FEASIBILITY / STRATEGY\*

#	PROJECT NAME	PROJECT DETAILS
3A	Public / private coordination (City of Milton, commercial tenants, property owners)	City, tenants, and property owners coordinate and determine the cost structure and feasibility. Determine if the location noted Northwest Quadrant (page 46) is the best location. *
3B	Design the parking deck	City and / or property owners hire firm to design the deck and attached office buildings, if applicable (page 46)
3C	Construct the parking deck	Construct the deck in the Northwest Quadrant

### 4 - SHARED PARKING / VALET STRATEGY

#	PROJECT NAME	PROJECT DETAILS
4A	Establish agreement with commercial tenants	City coordinates with commercial tenants willing to participate in valet parking and / or shared parking program
4A	Coordinate with valet company	City identifies and contacts with a valet company
4B	Establish valet stands and parking lots to use	City and commercial tenants decide on locations for stands and which parking lots to use
4C	Unveil the program	Valet stands are installed and operating plan is established, and the City announces the program

### 5- NEW STREET CONSTRUCTION STRATEGY

5A	Add new streets in Regulating Plan	Ensure proposed new streets and roundabouts / intersection treatments are added to Regulating Plan (map on page 68)
5B	Charlotte Drive Extension	Start construction of Charlotte Drive Extension and roundabout at Mayfield (TSPLOST priority project)
5C	Northeast Quadrant Street Network	Construct new streets, alleys, alignments, and intersection treatments in NE Quadrant
5D	Northwest Quadrant Street Network	Construct new streets, alignments, and alleys in NW Quadrant



## >> 3 PARKING DECK

If deemed necessary through the use and study of the valet and /or shared parking program, the City and property owners will determine the feasibility and cost of a parking deck. As of this plan, the parcels between the City Hall and the Crossroads are most appropriate for a parking deck, but another space in the NE Quadrant\* could become more feasible as development occurs along Mayfield Road (pages 53-56).

## >> 4 SHARED / VALET PARKING

Valet or shared parking can solve issues with potential retail clients and the need for more parking. This recommendation makes use of existing parking lots and infrastructure to reduce the amount of parking that must be constructed to accommodate growth. The City and commercial property owners should coordinate to find a valet company and establish the operating plan, locations for valet stands, and parking lots to use. In the interim, commercial tenants can establish shared parking agreements.

## >> 5 NEW STREETS

The City should add the proposed new streets and intersection treatments in the NW and NE Quadrants into the Regulating Plan (page 68). The streets in the NE Quadrant should be prioritized to provide development flexibility within the blocks, and to relieve traffic (particularly school traffic) on Birmingham Highway. The Charlotte Drive Extension (5B) is a TSPLOST priority project, but the intersection will need adjustment when a connecting street is added. The streets in the NW Quadrant should be built next or as private development occurs.

## >> FIRST STEPS

The City of Milton can initiate some projects immediately to ease development pressure and ensure that the goals of the placemaking plan are met with future development. As needed, the City of Milton should establish relationships with developers that want to build in the Northwest and Northeast Quadrants to ensure that appropriate, connected, and mixed-use development is constructed. The first steps set the stage for future development and can begin immediately.

The first steps include:

- Starting the process to implement valet and / or shared parking;
- Making important policy changes in the Regulating Plan;
- Acquiring right-of-way and land identified for parks (as needed); and
- Installing HAWK Signals at important intersections to start training drivers to look and stop for pedestrians.

### SHARED / VALET PARKING

Shared and / or valet parking can relieve some of the issues with attracting commercial growth, the desire to add restaurants in Crabapple, and with hosting events in public spaces. Studying the program's success will help determine the need for a future parking deck.

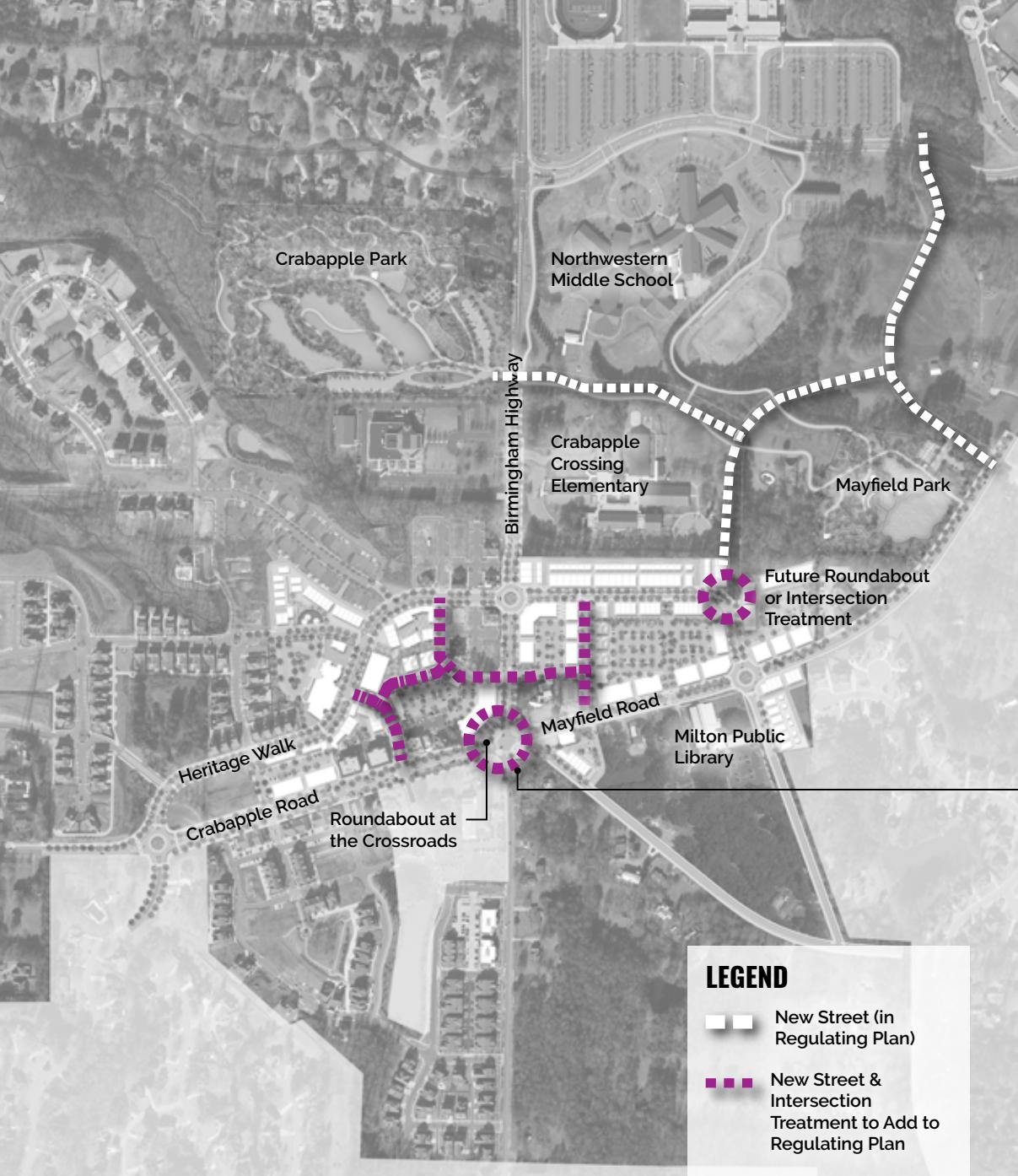


### POLICY CHANGES

The City should add the roundabout at the Crossroads and the streets marked on the map to the right to the Regulating Plan to set the policy foundation for the street network to be constructed. These streets are new with the proposed development schemes or are realigned versions of the current streets. Although in progress, the City of Milton should ensure that the alcohol license and distance requirements are reduced, so that restaurants can be added to the commercial area along Crabapple Road.

### ACQUIRE LAND AND RIGHT-OF-WAY

The City should start negotiations with GDOT to gain control of Crabapple Road to accommodate future streetscape changes. Additionally, as needed, they should purchase ROW on Crabapple Road and Mayfield Road or establish relationships with the developers / property owners to ensure the proposed streetscape improvements are made. Finally, if necessary, the City should purchase the land outlined for parks at fair market value. The City can begin these acquisition tasks immediately to ease the construction of public space: the streetscapes, parks, and trails.



## >> Streets to Add to Regulating Plan

Approved May 15, 2017

(2C) Roundabout at the Crossroads: Potential Long-term Project (add to Regulating Plan)

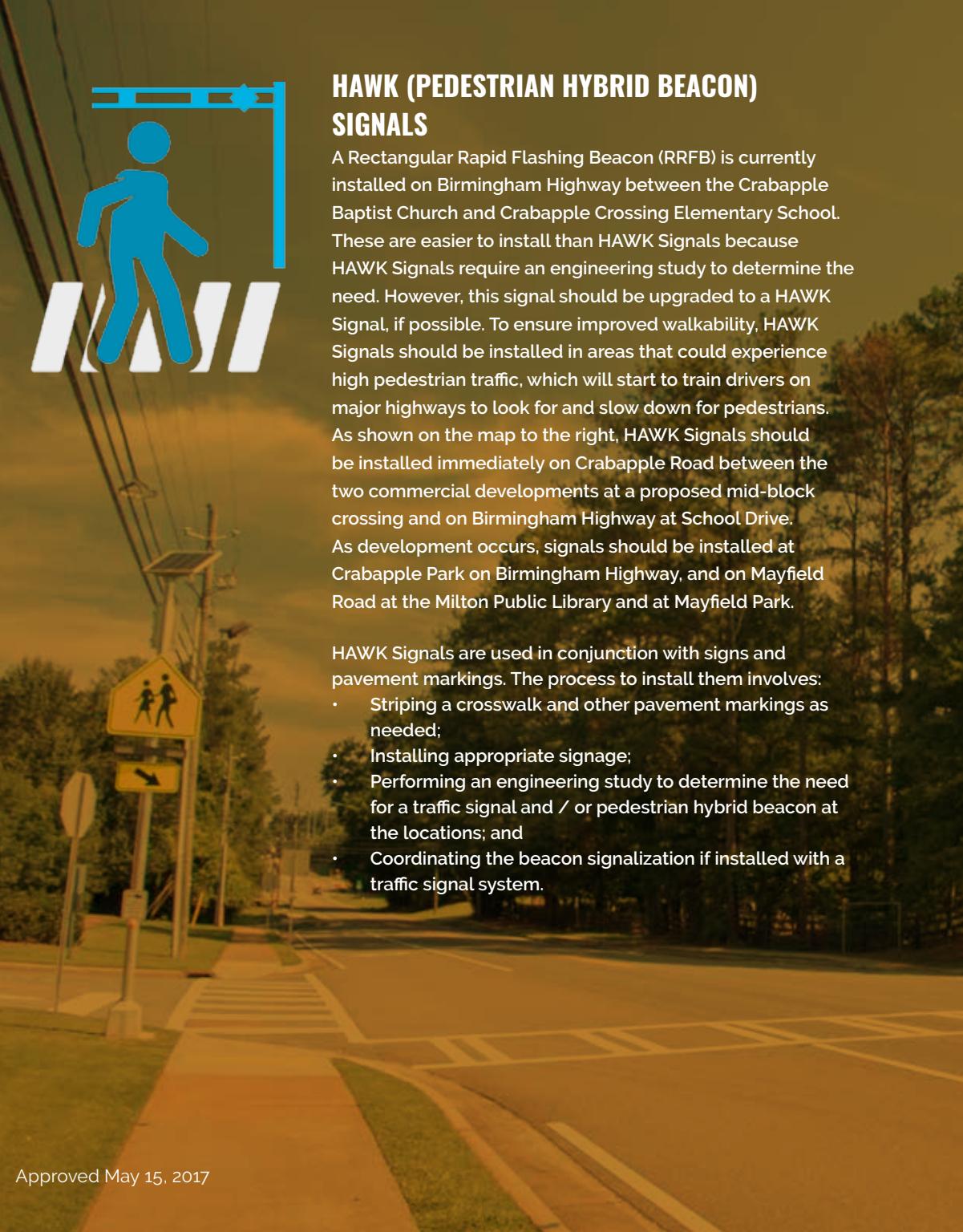


## >> FIRST STEPS

A HAWK signal is a **High-Intensity Activated crossWALK** beacon used to stop road traffic and allow pedestrians to cross safely. They are used at unsignalized locations to assist pedestrians in crossing a street or highway at a marked crosswalk. A summary for the installation process is outlined to the right, but more information can be found in Chapter 4F of the Manual on Uniform Traffic Control Devices (MUTCD) from the Federal Highway Administration. An interim opportunity would be to install Rectangular Rapid Flashing Beacons, which is what is installed at Crabapple Elementary School, at the identified locations while the engineering studies are being conducted to determine the need for HAWK Signals (see right).



HAWK Signal Example



### HAWK (PEDESTRIAN HYBRID BEACON) SIGNALS

A Rectangular Rapid Flashing Beacon (RRFB) is currently installed on Birmingham Highway between the Crabapple Baptist Church and Crabapple Crossing Elementary School. These are easier to install than HAWK Signals because HAWK Signals require an engineering study to determine the need. However, this signal should be upgraded to a HAWK Signal, if possible. To ensure improved walkability, HAWK Signals should be installed in areas that could experience high pedestrian traffic, which will start to train drivers on major highways to look for and slow down for pedestrians. As shown on the map to the right, HAWK Signals should be installed immediately on Crabapple Road between the two commercial developments at a proposed mid-block crossing and on Birmingham Highway at School Drive. As development occurs, signals should be installed at Crabapple Park on Birmingham Highway, and on Mayfield Road at the Milton Public Library and at Mayfield Park.

HAWK Signals are used in conjunction with signs and pavement markings. The process to install them involves:

- Striping a crosswalk and other pavement markings as needed;
- Installing appropriate signage;
- Performing an engineering study to determine the need for a traffic signal and / or pedestrian hybrid beacon at the locations; and
- Coordinating the beacon signalization if installed with a traffic signal system.



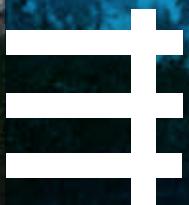
"A HAWK signal is a **H**igh-**I**ntensity **A**civated cross**W**a**K** beacon used to stop road traffic and allow pedestrians to cross safely.

(2C) Roundabout at the Crossroads: Potential Long-term Project (add to Regulating Plan)





*\*\*This appendix summarizes many analysis steps the team took to vet the placemaking recommendations. The market study shows the demand for residential, retail, and office growth that Crabapple could support. Streetscape projects show current City of Milton efforts, and the development code analyses demonstrate how the proposed developments meet the Form-Based Code requirements.\*\**



## **APPENDIX >>**

- // Crabapple Green Park Alternatives
- // Current Streetscape Projects
- // Development Code Analysis
- // Market Study Summary

## >> CRABAPPLE GREEN PARK ALTERNATIVES IN THE NORTHWEST QUADRANT

The development framework within the Northwest Quadrant leaves room for flexibility in terms of future development driven by the private market. A village green, called "Crabapple Green," has been proposed by others near the current mixed-use development on Crabapple Road, which would be similar in size to the village green in Seaside, Florida (image to the right). The green would provide a downtown community green space. The two proposed options are:

- Crabapple Green facing City Hall along Heritage Walk (currently under construction);
- Crabapple Green adjacent to the roundabout (currently under construction) on the vacant property facing Crabapple Road



### CRABAPPLE ROAD OPTION

This option would be placed on the corner of the vacant land along Crabapple Road at the roundabout. All of the proposed development for the Northwest Quadrant in Chapter 3 could be accommodated with this option, as this land was noted for short-term parking and long-term development. However, a lack of development on the east side of the park and the high-speed traffic on Crabapple Road could detract from the success of the green space.

### CITY HALL OPTION

This option would remove some proposed townhomes and office space (from this Placemaking Plan) across from the New City Hall and behind the current mixed-use buildings. Additionally, Lecoma Trace would be realigned. However, all other proposed development from Chapter 3 could be accommodated with this park recommendation.

*Top: Both Crabapple Green options are approximately the same size as the village green in Seaside, Florida.*



## >> CRABAPPLE GREEN PARK ALTERNATIVES IN THE NORTHWEST QUADRANT

The images to the right show the proposed character for the two options for Crabapple Green. Both options include a large lawn with an amphitheater / stage, plaza space with seating, and parking.



## CRABAPPLE ROAD OPTION (IMAGES BY OTHERS)



Approved May 15, 2017

## >> NORTHWEST QUADRANT

### FORM-BASED CODE ANALYSIS

The development numbers and parking counts were calculated for each Quadrant. The proposed development fits within the Form-Based Code requirements (the zoning code for Crabapple). The chart to the right demonstrates the building unit breakdown for the Northwest Quadrant, determined by the zoning designations and parcel boundaries. Commercial uses are retail, office, and mixed-use (office and retail), and residential units are townhomes. The City Hall does not count toward density.

The T4, T4-Open, and T5 areas are currently below the by-right density permitted, as shown in the chart to the right. This means that more residential or commercial building units could be constructed in these areas by-right (what is legally permitted as the code is written) and with TDR, and/or senior housing. The challenge will be adding enough parking on the site. If valet becomes an acceptable method in the future, the parking needs may be mitigated without building a parking deck.

### >> Northwest Quadrant Development Code Analysis

T-5		Building	SF	
Zoning	T-5	J	18,000 SF	
Acres	10.04			
<b>Building Units</b>				
By-Right (g/ac)	90.36			
By TDR (14/ac)	140.56			
As Drawn	80.92			
<b>Residential</b>				
Existing			15	
Proposed			0	
Dwelling Units:			15	
Building Units:			15	
<b>Non-Residential</b>				
Existing (SF)			133,875	
Proposed (SF)			18,000	
Remove Existing (SF)			3,565	
Building Units			66	
T-4 Open		Building	SF / Units	
Zoning	T-4 Open	B	15 units	
Acres	11.34	C	10 units	
<b>Building Units</b>				
By-Right (5/ac)	56.7	D	6 units	
By TDR (9/ac)	102.06	E	25,000 SF	
As Drawn	56.02	F	3,400 SF	
		G	3,400 SF	
		H	3,500 SF	
		I	3,000 SF	
<b>Residential</b>				
Existing			8	
Proposed			31	
Dwelling Units:			39	
Building Units:			39	
<b>Non-Residential</b>				
Existing (SF)			0	
Proposed (SF)			38,300	
Building Units			17	
T-4		Building	SF / Units	
Zoning	T-4	A	22 units	
Acres	15.63			
<b>Building Units</b>				
By-Right (5/ac)	78.15			
By TDR (9/ac)	140.67			
As Drawn	64.00			
<b>Residential</b>				
Existing			42	
Proposed			22	
Dwelling Units:			64	
Building Units:			64	
<b>Non-Residential</b>				
Existing (SF)			0	
Proposed (SF)			0	
Building Units			0	
T-2		Building	SF / Units	
Zoning	T-2	-	-	
<b>Non-Residential</b>				
City Hall (Existing)			22,769	

\*\*Calculations are based on data provided by the Fulton County Tax Assessor and analyzed using ArcGIS. Data are not guaranteed.

\*\*\*Existing Non-Residential in T5 includes the commercial currently under construction (2017)

## LEGEND

X Building Code (see chart to left)

P# Parking Lot # (see chart to left)

- - - Zoning Code Boundary

● Historic Buildings

A

Alley-loaded  
Townhomes (22)  
(Self Parking)

B

Townhomes (15)  
(Self Parking)

T5

T4

Lecoma Trace

Open space

Lecoma Trace

P2

Parking (54)

T4

T2

New City Hall

New development  
in progress (Flats)

Itasca Walk

T4-Open

T4-Open

E

Office

F

Office

G

Office

H

Plaza

I

T5

T5

T5

J

T4-Open

T4-Open

C

Townhomes (10)  
(Self Parking)

Heritage Walk (under construction)

D

Townhomes (6)  
(Self Parking)

P1

Retail (under  
construction)

T4-Open

T4-Open

T4-Open

P5

Temporary Parking Grove  
(Long-term plans for  
development)

P5

## >> NORTHWEST QUADRANT

### FORM-BASED CODE ANALYSIS

The parking count for the Northwest Quadrant is shown in the chart to the right. By including on-street parking and recognizing that tenants may establish shared parking agreements (as is historically a precedent in Crabapple), the amount of parking provided slightly exceeds the requirement. Townhomes are self-parked. This calculation also includes existing parking spaces (for existing development), and the short-term parking lot adjacent to the roundabout. The breakdown of commercial space could vary based on the development in the future. The surface parking lot (P3) is sized appropriately to accommodate a parking deck if that is deemed necessary in the future.

### >> Northwest Development Parking Analysis

Parking Lot Street	Parking #
P1	51
P2	54
P3 (Potential Deck)	78
P4	24
P5	200
Street (Crabapple Road)	58
Street (Lecoma Trace)	15
Street (Itaska)	11
Existing Lots	78
Existing Street Spaces (Lecoma)	4
<b>TOTAL</b>	<b>573</b>

**Required Parking** **560**

\*\*Townhomes, Single Family Homes, and Live/Work Units are Self-Parked and are not included in parking count

\*\*CONCEPTUAL parking counts are based on  
1 per residential unit, 4/1,000 for commercial  
2/1000 SF for office in T5 and T4-Open

## LEGEND

X Building Code (see chart to left)

P# Parking Lot # (see chart to left)

- - - Zoning Code Boundary

● Historic Buildings

A

Alley-loaded  
Townhomes (22)  
(Self Parking)

T4

B

Townhomes (15)  
(Self Parking)

T5

Lecoma Trace

Open space

Lecoma Trace

P2

Parking (54)

T2

New City Hall

E

Office

F

Office

G

Plaza

H

P3

Parking (78)

(Potential Parking Deck)

T5

Parking (24)

Mixed-

use

(office &

retail)

J

P4

Street

wide

Redeigned w/

trail

Lecoma Trace

sidewalk

sidewalk

realign

w/

trail

# >> NORTHEAST & SOUTHEAST QUADRANTS

## FORM-BASED CODE ANALYSIS

The development numbers and parking counts were calculated for each Quadrant. The proposed development fits within the Form-Based Code requirements (the zoning code for Crabapple). The charts to the right demonstrate the unit breakdown for the Northeast and Southeast Quadrants by Block, determined by the zoning designations and parcel boundaries to create logical land assemblages. Commercial uses are retail, office, and mixed-use (office and retail, or commercial with upper story condo units).

As drawn, Block B is reaching the maximum density permitted with TDR; however, Block A has room for additional density through TDR. The challenge will be adding enough parking on the site. For example, the live-work units north of the Charlotte Drive extension are placed there instead of larger mixed-use buildings because the parcel's width north of the Charlotte Drive Extension limits the number of parking spaces and building size. If valet parking becomes an acceptable method, the parking needs may be mitigated without constructing a deck.

## >> Northeast and Southeast Quadrant Development Code Analysis

Block A		Building	SF / Units	Concept Plan
Zoning	T-5	A	15 Units	Residential
Lots	Acres	B	12,900 SF / 11 units	Live-Work Units
12645 Birmingham Hwy (front)	2.1918	C	5,400 SF	Townhouse Units
810 Mayfield Rd	1.0384	D	3,750 SF / 3 units	Condo Units
790 Mayfield Rd	0.1579	E	3,000 SF / 3 units	Senior Units
800 Mayfield Rd	1.1523	F	4,500 SF / 4 units	Dwelling Units:
12655 Birmingham Hwy	2.3100	G	7 units	Building Units:
	<b>6.8504</b>	H	2,500 SF	
		I	2,500 SF	
<b>Building Units</b>				<b>Commercial</b>
By-Right (g/ac)	<b>61.65</b>			Commercial
By TDR (t4/ac)	95.91			Building Units
As Drawn	<b>58.36</b>			34.550
				15.356

Block B		Building	SF / Units	Concept Plan
Zoning	T-4 Open	J	2,500 SF	Residential
Lots	Acres	K	3,000 SF	Live-Work Units
12645 Birmingham Hwy (rear)	2.3008	L	21,000 SF (total)	Townhouse Units
830 MAYFIELD RD	1.0686	M	15,400 SF (total)	Multifamily Units
860 MAYFIELD RD	0.4603	N	12 units	Senior Units
870 MAYFIELD RD	1.4378	O	7 units	Dwelling Units:
840 MAYFIELD RD	1.2509	P	4 units	Building Units:
850 MAYFIELD RD	1.4416	Q	14,000 SF (total)	
	<b>7.96</b>	R	16,800 SF (total)	
<b>Building Units</b>		S	14 units	<b>Commercial</b>
By-Right (5/ac)	<b>39.8</b>	T	9 units	Commercial
By TDR (g/ac)	71.64	U	4,900 SF	Building Units
As Drawn	<b>66.49</b>			77.600
				34.489

Block C		Building	SF / Units	Concept Plan
Zoning	T-4 Open	V	10 units	Residential
Lots	Acres	W	4,900 SF	Single-Family Units
900 Mayfield Road	2.0229	X	5,600 SF	Townhouse Units
	<b>2.0229</b>			Multifamily Units
<b>Building Units</b>				Senior Units
By-Right (5/ac)	<b>10.11</b>			Dwelling Units:
By TDR (g/ac)	18.21			Building Units:
As Drawn	<b>14.67</b>			10
				10
<b>Commercial</b>				
Commercial				10,500
Building Units				4,6667

Block D		Building	SF / Units	Concept Plan
Zoning	T-4 Open	Y	7 units	Residential
Lots	Acres	Z	6 units	Single-Family Units
875 MAYFIELD RD	0.6847			Townhouse Units
0 MAYFIELD RD	0.6705			Multifamily Units
0 CHARLOTTE DR	0.5216			Senior Units
	<b>1.8768</b>			Dwelling Units:
<b>Building Units</b>				Building Units:
By-Right (5/ac)	<b>9.38</b>			13
By TDR (g/ac)	16.89			13
As Drawn	<b>13.00</b>			
<b>Commercial</b>				
Commercial				0
Building Units				0

\*\*Calculations are based on data provided by the Fulton County Tax Assessor and analyzed using ArcGIS. Data are not guaranteed.

## Block A (T5)

## Block B (T4-Open)

## Block C (T4-Open)



### LEGEND

- X** Building Code (see chart to left)
- P#** Parking Lot # (see chart to left)
- Parcel Block Group Boundary
- Historic Buildings

## >> NORTHEAST & SOUTHEAST QUADRANTS FORM-BASED CODE ANALYSIS

More density could be achieved in this area, if desired, through additional Senior Housing units or TDR. The parcels to the northeast of Mid-Broadwell Road are also below the by-right (what is legally permitted as the code is written) permitted building units. By including on-street parking and recognizing that tenants may establish shared parking agreements (as is historically a precedent in Crabapple), the amount of parking provided exceeds the requirement. However, the excess parking allows for the potential for more restaurants to locate here. The breakdown of commercial space could vary based on the development, but this scenario assumes that anything that says "Mixed-Use (Office & Retail)" has retail on the ground floor and offices on the top floor(s). In reality, the ground floor could also accommodate offices. As noted, townhomes, live/work units, and single-family homes are self-parked. The second-story condo units would require one space per unit in the surface parking lots. The central surface parking lot (P2) is sized to fit a parking deck if needed in the future.

## >> Northeast and Southeast Quadrant Development Code Analysis Continued

Parcels NE of Mid-Broadwell		Building	SF / Units	
Zoning	T-4 Open Acres	AA BB	3,500 SF 6 Units	Concept Plan
<b>Lots</b>				<b>Residential</b>
MAYFIELD ROAD	1.0000			Single-Family Units 0
MID BROADWELL ROAD	1.0400			Townhouse Units 6
	<b>2.0400</b>			Multifamily Units 0
				Senior Units 0
				Dwelling Units: 6
<b>Building Units</b>				<b>Commercial</b>
By-Right (5/ac)	<b>10.20</b>			Commercial 5300
By TDR (9/ac)	18.36			Building Units 2,3556
As Drawn	<b>8.36</b>			

## >> Northeast and Southeast Quadrant Development Parking Analysis

Parking Lot / Street	Parking #
P1	65
P2	205
P3	85
P4	19
Street (Mayfield)	21
Street (New Shared Street)	81
Street (Charlotte Drive Extension)	43
<b>TOTAL</b>	<b>519</b>

Required Parking	449
**Townhomes, Single Family Homes, and Live/Work Units are Self-Parked and are not included in parking count	

\*\*CONCEPTUAL parking counts are based on 1 per residential unit, 4/1,000 for commercial

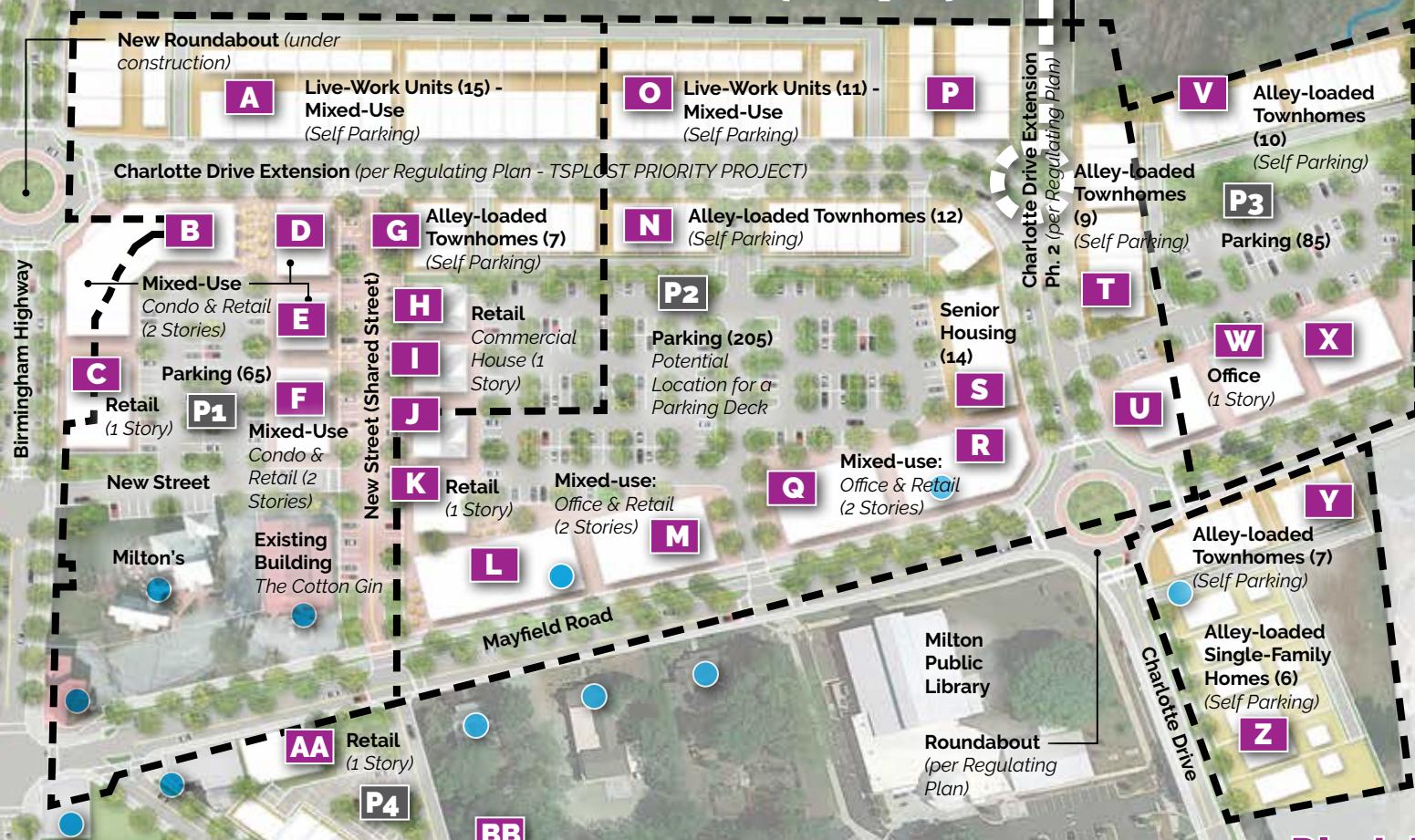
2/1000 SF for office in T5 and T4-Open

**\*\*Calculations are based on data provided by the Fulton County Tax Assessor and analyzed using ArcGIS. Data are not guaranteed.**

## Block A (T5)

## Block B (T4-Open)

## Block C (T4-Open)



## LEGEND

**X** Building Code (see chart to left)

**P#** Parking Lot # (see chart to left)

— Parcel Block Group Boundary

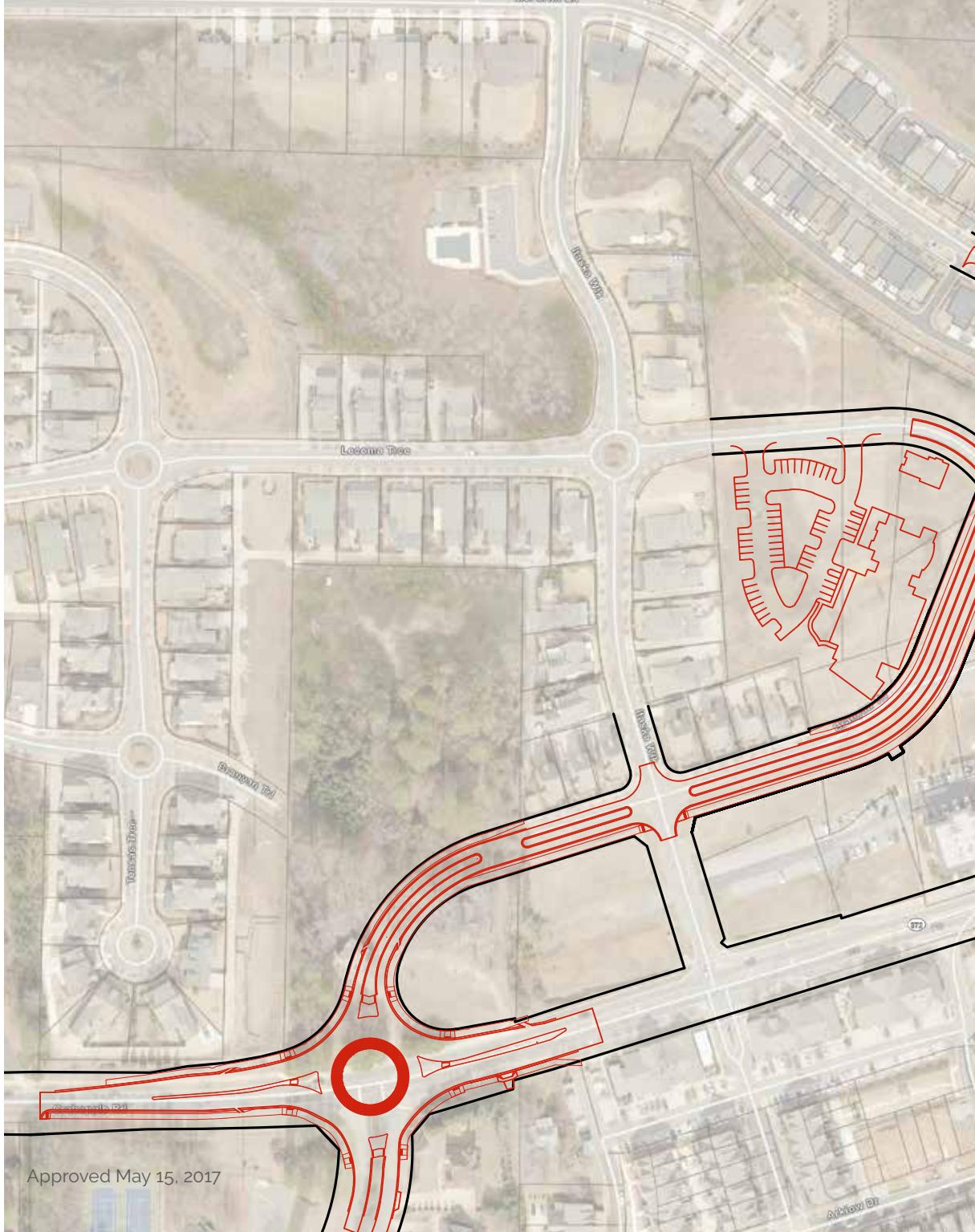
● Historic Buildings

## Block D (T4-Open)

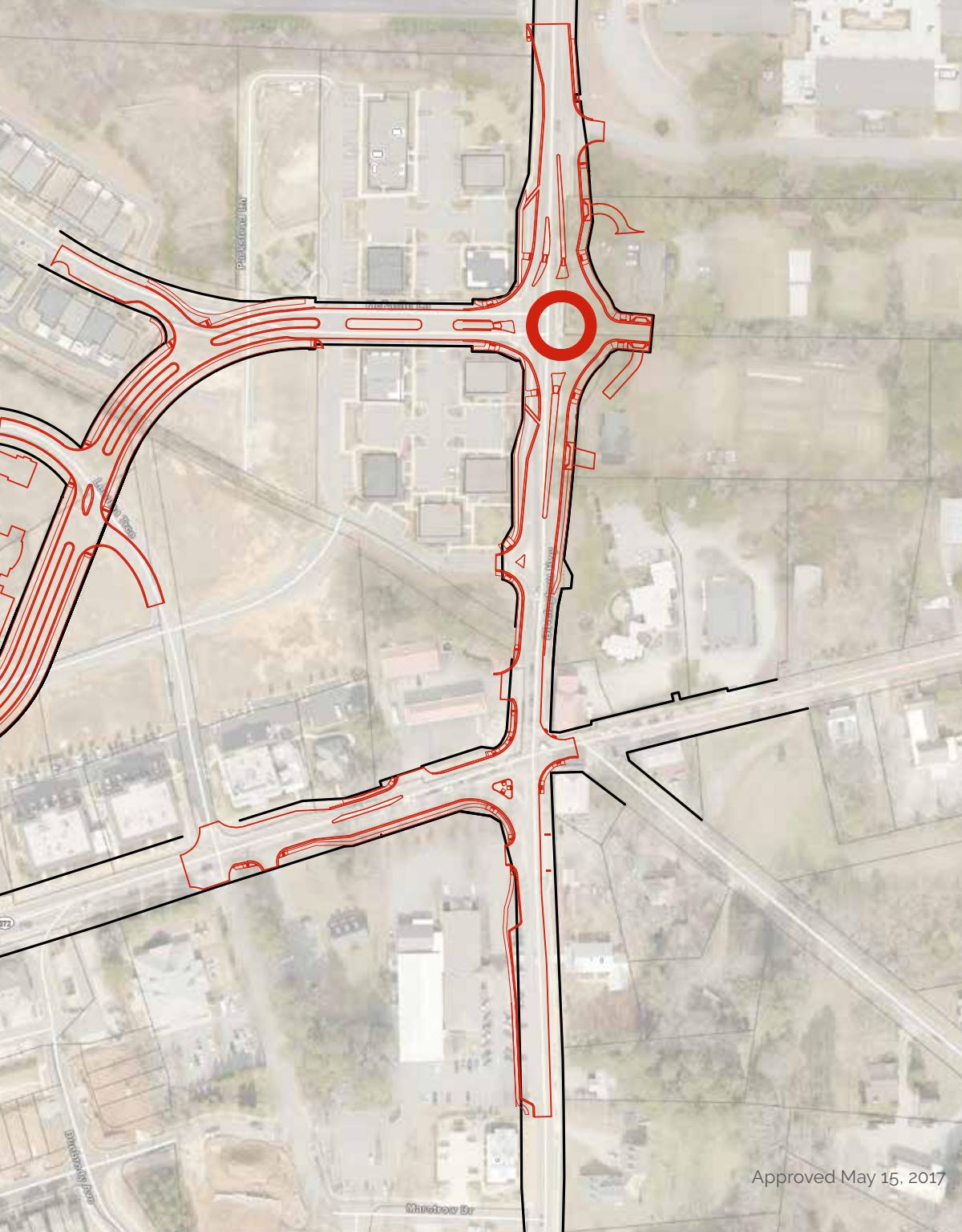
## >> CURRENT STREETSCAPE PROJECTS

### HERITAGE WALK

Heritage Walk and the connecting roundabouts are currently under construction. The plan to the right shows the Phase 1 construction.



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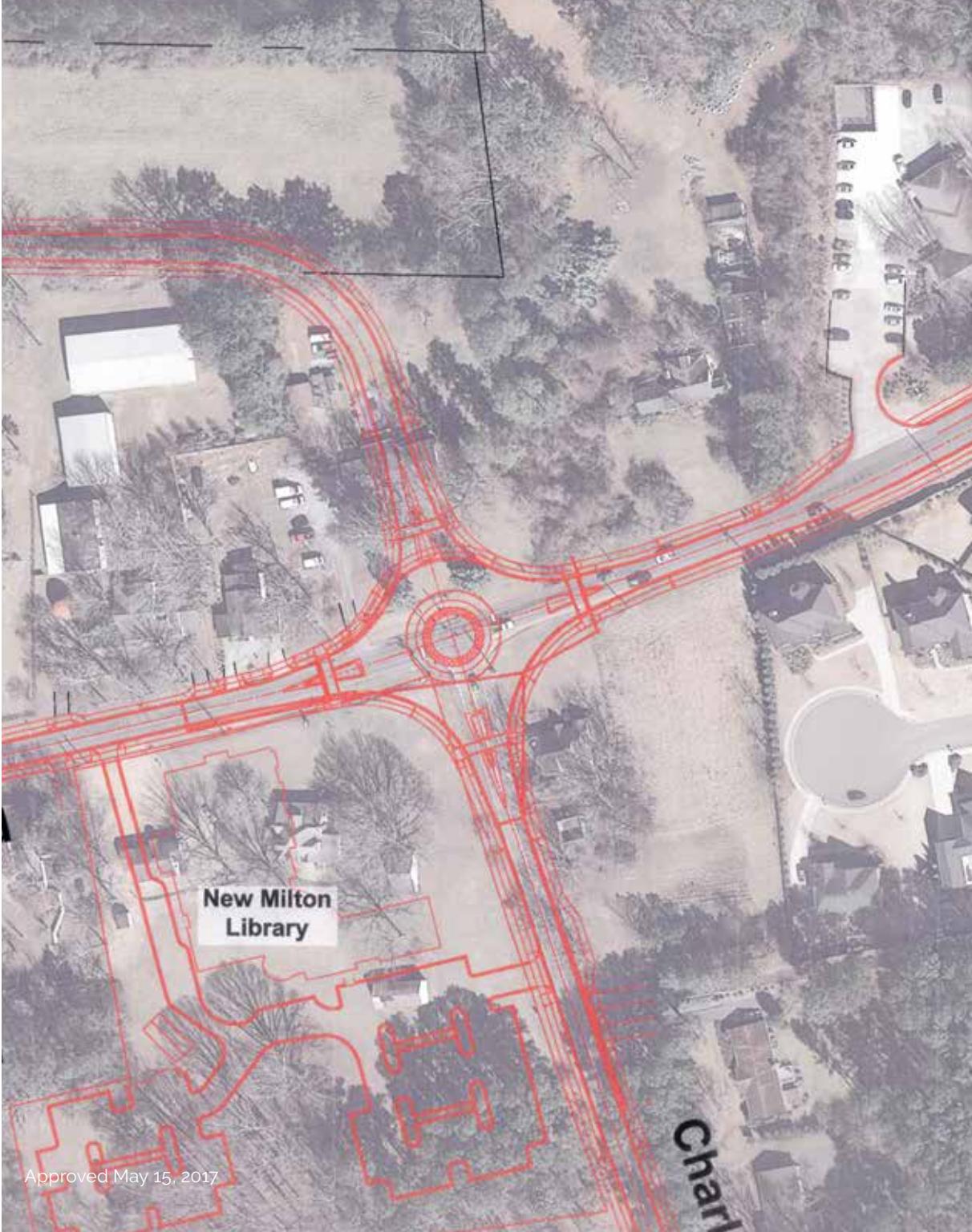


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## >> CURRENT STREETSCAPE PROJECTS

### CHARLOTTE DRIVE EXTENSION

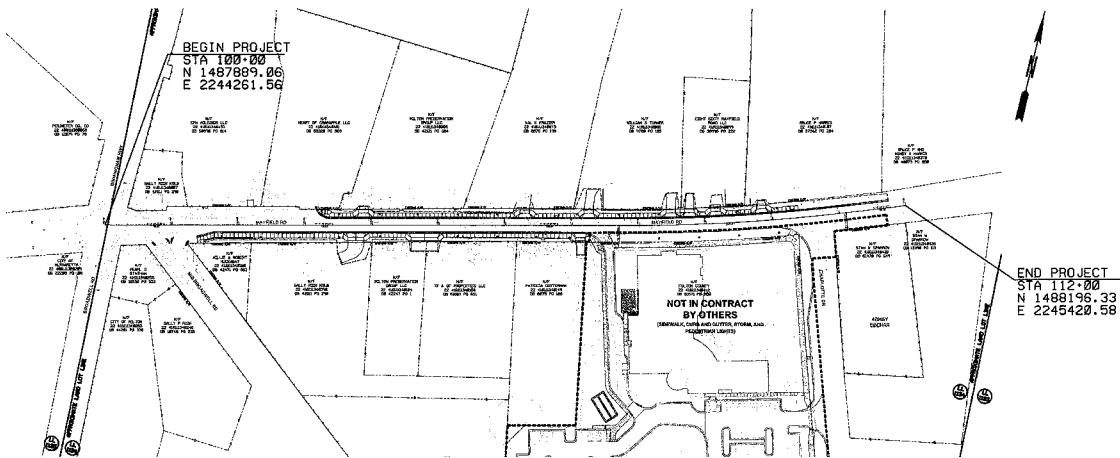
The November 2016 TSPLOST vote included the Charlotte Drive extension to Heritage Walk and the roundabout at Charlotte Drive and Mayfield Road (shown in the drawing to the right), which were recommendations in the Regulating Plan. The first phase will be constructed as shown; however, this placemaking plan recommended an improved intersection of Charlotte Drive with another new street going north (also in the Regulating Plan), as shown on page 54. This could be a future 'T' intersection or roundabout, depending on future planning and study.



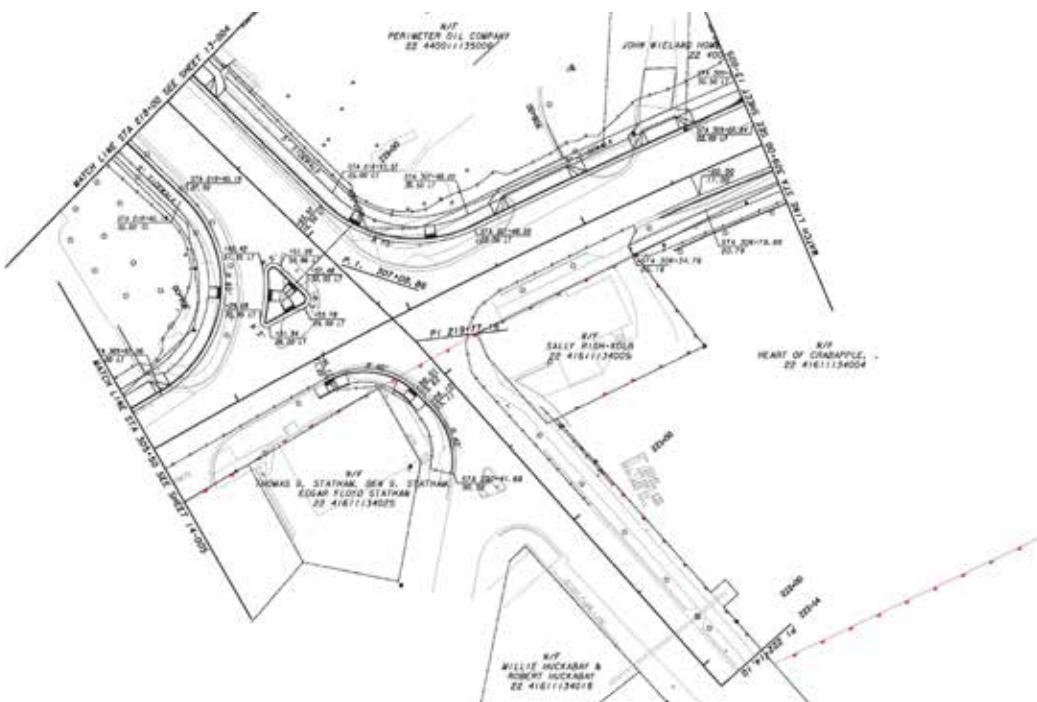
Approved May 15, 2017

## >> CURRENT STREETSCAPE PROJECTS

### MAYFIELD ROAD



The City of Milton was awarded federal funding to construct sidewalks and retaining walls along Mayfield, east from the Crossroads (as shown in the drawing to the left). These will be constructed as shown in the first phase; however, this placemaking plan recommended an expanded right-of-way with streetscape enhancements (page 57). The enhancements for the north side of the street will be put into place as development occurs along the corridor, or if the City of Milton acquires the ROW and funding to construct them.



### BIRMINGHAM & CRABAPPLE ROAD INTERSECTION

The Crossroads intersection of Birmingham Highway and Crabapple Road / Mayfield Road will be realigned to accommodate left-turn lanes on 3 approaches (left). As noted in the Implementation chapter, this is phase 1, but this Placemaking Plan recommends changing this intersection to a roundabout in the future.

## >> MARKET STUDY: MILTON TODAY

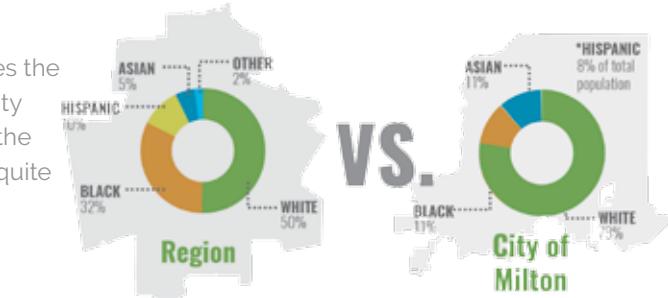
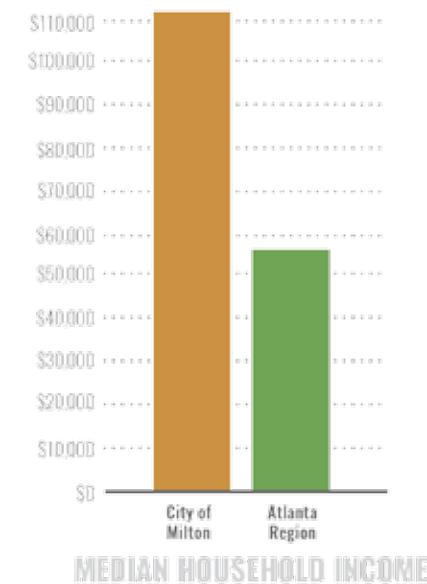
**The market study shows that there is room for growth over the next 5 years. Ultimately, the Form-Based Code will limit the amount of growth that occurs.**

The City of Milton is an Atlanta suburb in the desirable North Fulton area, which is also comprised of the cities of: Roswell, Johns Creek, Alpharetta, Sandy Springs, and Mountain Park. This area has attracted families because of low crime, great schools, and the proximity to the Atlanta employment cores. North Fulton as a whole experienced the greatest growth in the 1970s to the 1990s, but the City of Milton saw an increase in growth in the 2000s. The infographics on the following pages show how Milton and the Crabapple area compare to the Atlanta Region (the Region) and the peer cities of Alpharetta and Roswell. Generally, Milton has the following characteristics:

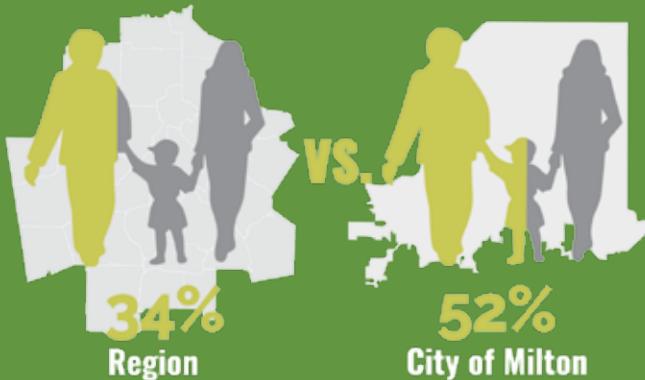
- Many families with children compared to the Atlanta Region average;
- Adequate retail service within 5 miles of the study area;
- Much higher educational attainment levels than the Region and the State;
- Much higher median household income than the Region;
- Faster growth than surrounding cities.



The infographic to the right describes the race / ethnicity breakdown of the City of Milton's population compared to the Atlanta Region's. The distribution is quite different for Milton and the Region.



The City of Milton has a much higher median household income than the Atlanta Region (at nearly double), and the median household income of the study area is even higher at nearly \$150,000. 75% of the households in the City of Milton earn more than \$75,000 per year.

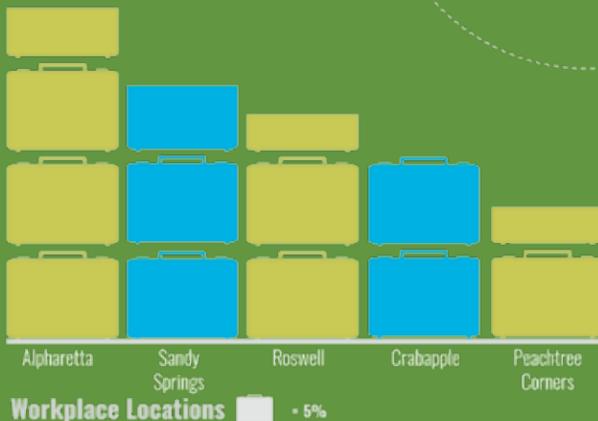


## FAMILIES WITH CHILDREN

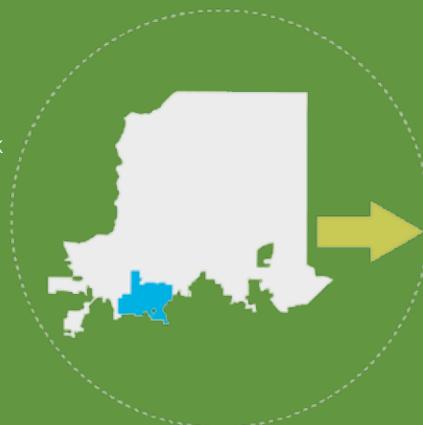
The City of Milton has a much higher percentage of families with children (52%) than the Atlanta Region as a whole (34%). Part of this is due to the housing product offered and the high-quality schools.

## COMMUTING & JOBS

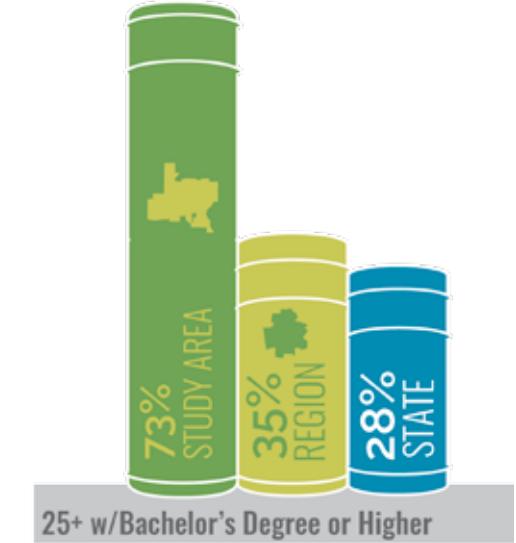
95% of Milton residents leave the city for work, but many work nearby (as shown below). There are also many people who work from home.



Crabapple residents mostly work north of I-285 perimeter, and the closest high-concentration job centers are Alpharetta and Roswell. The infographic to the left shows the top 5 workplace locations. 40% of residents work in Crabapple, Alpharetta, and Roswell.



**~95%  
Leave Milton  
FOR WORK**



The educational attainment of residents over the age of 25 in the study area is much higher than the Atlanta Region and the State of Georgia.



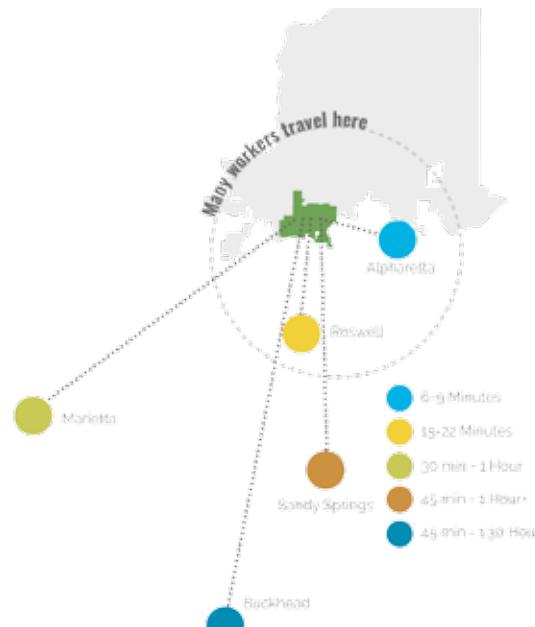
Overall, the schools in the study area are very good, with Northwestern Middle School and Milton High School both ranked as "above average" at 10/10 on GreatSchools.org.

## >> MARKET STUDY: EXISTING DEMAND

*The market study shows that there is room for growth over the next 5 years. Ultimately, the Form-Based Code will limit the amount of growth that occurs.*

## TRANSPORTATION DEMAND

The infographics on these pages show how Milton and the Downtown Milton / Crabapple area could accommodate transportation networks in the future based on current use of the networks and where demand lies. As noted on the previous page, many people commute out of Milton for work each day. While the study area has excellent proximity to Alpharetta and Roswell, it lacks convenient interstate access. To get into Sandy Springs, Buckhead, and Midtown, residents would have to battle an often busy and clogged interstate (see right for travel times).



Downtown Milton / Crabapple has a walk score of 54/100 (somewhat walkable), which is lower than neighboring Downtown Alpharetta and Downtown Roswell (very walkable).



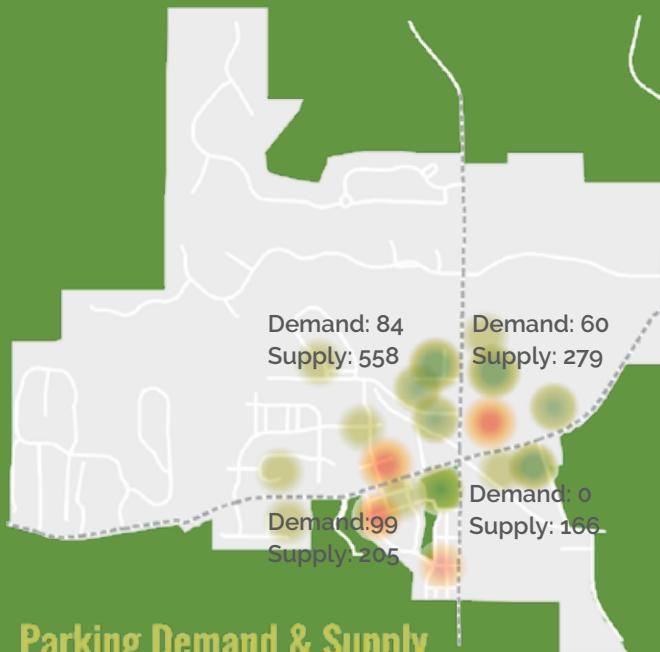
## CYCLING DEMAND

Most of the cyclists appear to use trails outside of Downtown Milton / Crabapple, particularly in the more rural areas of Milton and other areas in neighboring counties on state routes. Bike lanes on the major streets may serve the needs for cyclists (Data from Strava application).



## RUNNING & WALKING DEMAND

Downtown Milton / Crabapple has many in-town runners, and many people walk to destinations in this area. Much of the walking activity occurs on neighborhood streets. This presents a demand for walking and running trails, particularly if they connect to retail destinations.



The infographic to the left displays the parking demand and supply around the Crossroads. The study area was divided into quadrants for this analysis. The red indicates higher demand (darker red is higher demand) and the green indicates supply (darker green is higher supply). Supply far exceeds demand in each quadrant.



There are 715 parking spaces within 1/4 mile radius of the Crabapple Road corridor at the Crossroads that are likely to be vacant during peak restaurant hours, excluding the parking associated with the demand centers.

The schools and Crabapple Baptist Church have large parking lots that could serve some of the parking demand in the Northeast Quadrant and at the retail area located on Crabapple Road.

A central valet station in each quadrant could make use of these parking spaces for patrons of the businesses in Downtown Milton / Crabapple.

## PARKING OPTIONS

During the busiest restaurant hours, there is a negative perception of available parking. Three options exist for addressing the parking challenges:

- Central valet stands
- Parking structure
- Smart device-enabled parking applications

The existing commercial occupants could not support subsidizing a parking deck, which would make substantial public subsidies necessary. The most cost-effective and convenient solution may be adding central valet stations (pages 59-60). The infographic to the top right describes the number of spaces available that could be used for a central valet, within a reasonable walking distance of most of the community's destinations.

**The market study shows that there is room for growth over the next 5 years. Ultimately, the Form-Based Code will limit the amount of growth that occurs.**

## RESIDENTIAL DEMAND

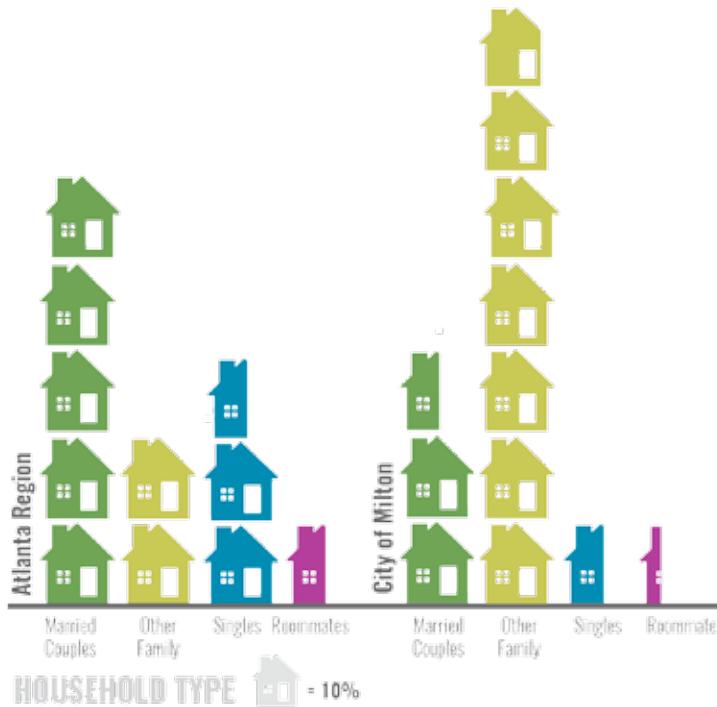
The current growth in the US housing market is dominated by Baby Boomers and Millennials, and will continue to be for the next ten years. However, the study area and City of Milton have a lower percentage of Millennials (7%) than the Atlanta Region. Older families are moving to Crabapple or choosing to age in place. As the Baby Boomers age out of single-family homes, there will be opportunities to attract empty nesters to Crabapple. In Fulton County, more single-family home permits were pulled in the northern part of the County in 2015, and on average, Milton has added 600 households per year since 2000. In 2014, approximately 85% of the housing units were valued at more than \$300,000.

These infographics show trends in Milton's housing market and potential housing demand. The city and the study area have market demand for additional housing units, including the following:

- For-sale attached condos
- For-sale detached homes
- For-sale attached townhomes
- Rental stacked flats with parking lots



The Downtown Milton / Crabapple study area has 941 households, and 90% of these are owner-occupied, leaving a small rental market. Few rental units exist because the current Form-Based Code's height and size limits are not conducive to 50+ unit apartment buildings. It will be necessary to offer rental units or condominiums to attract and accommodate Millennials and Baby Boomers.



Within the City of Milton there are nearly 12,500 households, and the vast majority (more than 90%) are made up of families (married couples, families with children, relatives, partners), particularly as compared to the Atlanta Region. "Other families" in this chart represents families with children, relatives, or partners in the household. Very few households in the City are made up of roommates (2%) or singles (5.5%).

## POTENTIAL DEMAND FOR HOUSING OVER 5 YEARS

*\*\*This does not represent what will be built, but what the market could support over a 5-year period.*



**10 HOMES  
PER YEAR**

**For-sale Attached  
Condos**



**50 HOMES  
PER YEAR**

**For-sale  
Detached Homes**



**24 UNITS  
PER YEAR**

**For-Sale Attached  
Townhome**



**60 UNITS  
PER YEAR**

**Stacked Flats with Parking Lots**

These infographics show the average housing demand per year until 2020. The housing demand numbers do not indicate that someone will build that number in a given year, but it is the average over time for the next 5 years.

It is important to add housing that reaches Millennials and Baby Boomers because they comprise most of the housing demand.

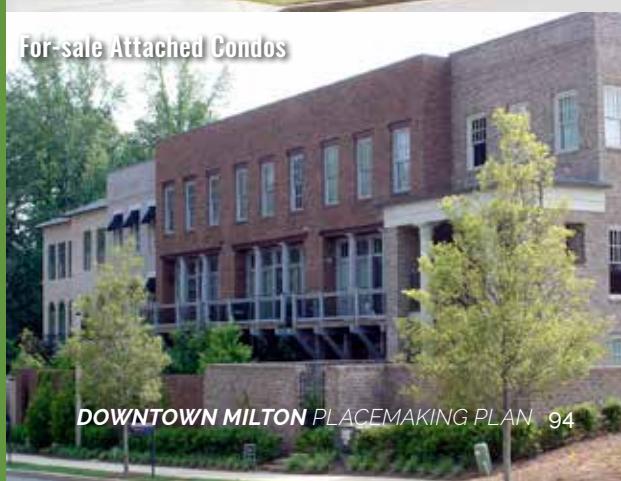
Downtown Milton / Crabapple does not contain any apartment communities, and the closest ones to the area are Avalon and Deerfield in Alpharetta. Demand for apartments exists, and the study area could absorb 300 stacked flat units over the next 5 years. They should be located near destinations and within walkable areas to ensure the land value continues to stay up.



**For-sale Attached Townhomes**



**For-sale Detached Homes**



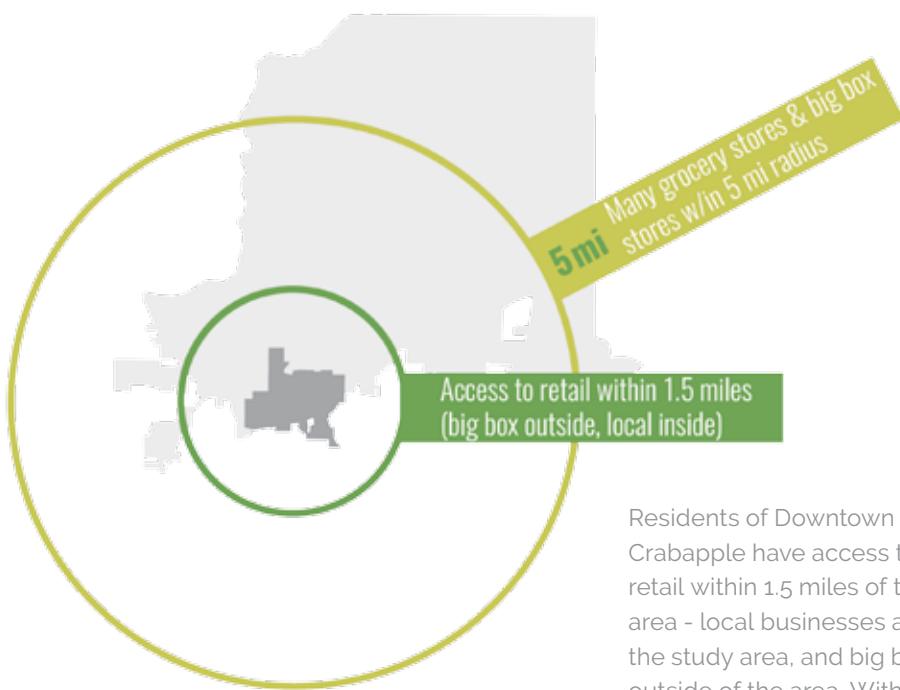
**For-sale Attached Condos**

**The market study shows that there is room for growth over the next 5 years. Ultimately, the Form-Based Code will limit the amount of growth that occurs.**

## RETAIL & OFFICE DEMAND

No new retail developments have occurred since 2009, but some are underway and several are currently planned. Downtown Milton / Crabapple is primarily served by shopping centers in Alpharetta and Roswell, and at the Avalon mixed-use development. Many of these places include big box stores, but the retail in Crabapple is generally small, local shops catering to niche markets. The study area is moderately served by restaurants, particularly at Avalon and near North Point Mall, and Crabapple is home to some local, highly-rated restaurants. Additionally, Crabapple is served by many grocery stores within 5 miles, and a Kroger and Publix within 1.5 miles of the study area.

The Downtown Milton / Crabapple retail market has been strong for 3 years with dropping vacancy rates and rents returning to historic rates, which has started to create a destination attracting visitors from other parts of the Atlanta Region. A strong demand exists for many types of dry good retailers that would fit within a traditional Downtown location with small stores.



Residents of Downtown Milton / Crabapple have access to significant retail within 1.5 miles of the study area - local businesses are within the study area, and big box stores outside of the area. Within 5 miles of the study area, there are many large grocery stores and big box stores

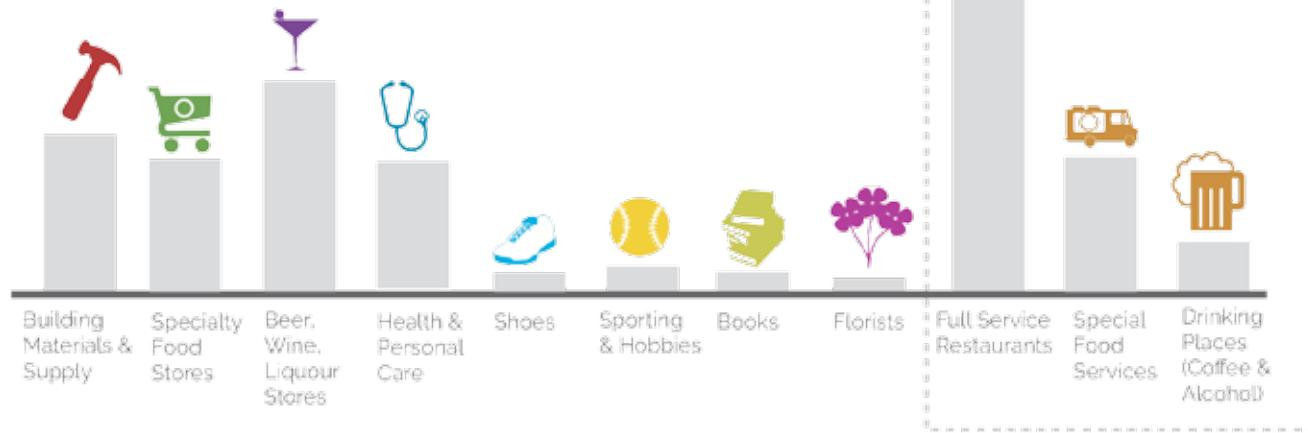
The current office developments (Crabapple Mercantile, Braeburn, Mayfield Station) in the study area will capture the forecasted demand in 2016 and 2017. By 2018, there will be excess demand, and the study area can support up to an additional 46,000 square feet through 2020, which could include a larger tenant.



**2018 - 2020  
46,000 SF**

# 105,606 SF\*

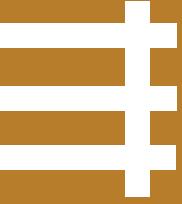
50,000 SF



Downtown Milton / Crabapple has an overall demand for 105,606 SF of new retail over the next 5 years, but some new retail spaces are planned or under construction, which would absorb some of this demand (32,000 SF). The graph above shows the industries, and amount, that Downtown Milton / Crabapple could support in relationship to each other. Full service restaurants, special food services, and drinking places make up 50,000 SF of the demand. Building materials and supply could make up 12,300 SF, beer / liquor / wine stores could make up 16,000 SF, specialty food stores could make up 10,300 SF, and health and personal care could support nearly 10,000 SF.

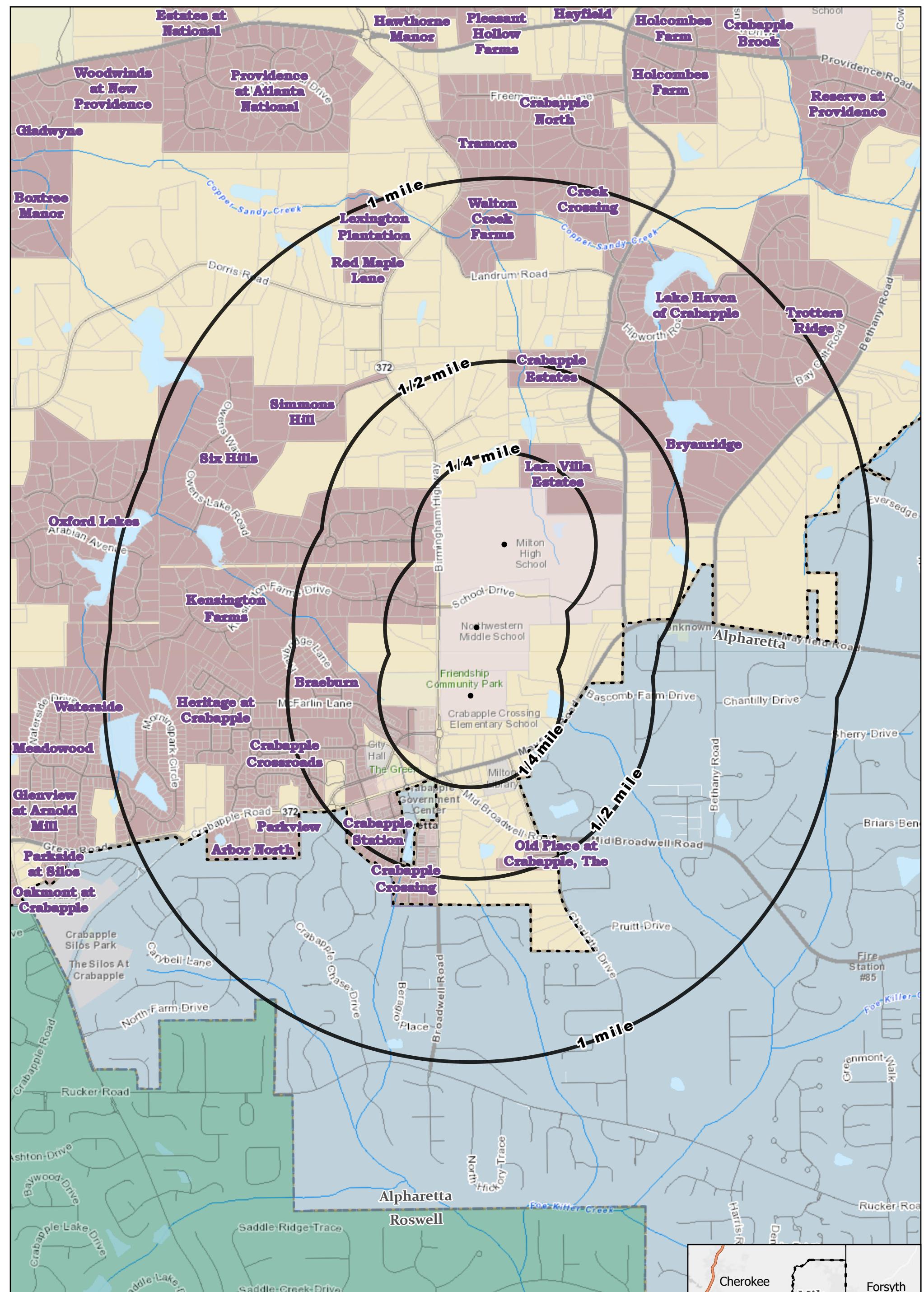
- The Form-Based Code will determine how much development can be accommodated in the future.
- Parking will become an issue as Crabapple becomes more of a destination.

**\*\*This does not represent what will be built, but what the market could support over a 5-year period.**

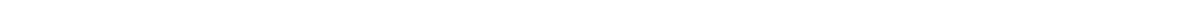


Noell Consulting Group  
Toole Design Group  
City of Milton

Approved May 15, 2017

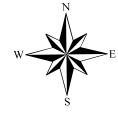


# Reference Map: Within 1 mile of Crabapple ES, NW MS & Milton HS



The map displays the following features:

- Distance Rings from Schools:** Concentric circles centered on each school building, representing distances of 0.25, 0.5, 0.75, and 1.0 miles.
- Subdivisions:** Shaded areas representing residential neighborhoods.
- Roads:** Labeled streets including Northgate Drive, Northgate Lane, and various unnamed roads.



0  $\frac{1}{4}$   $\frac{1}{2}$   $\frac{3}{4}$  1 Miles

-  Distance Rings from
  -  Subdivisions
  -  Milton City Limits
  -  Roswell City Limits