



C H A T H A M C O U N T Y - S A V A N N A H  
**METROPOLITAN PLANNING COMMISSION**

*Planning the Future - Respecting the Past*

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Melanie Wilson

*Executive Director*

July 27, 2021

Aaron Carpenter  
Supervising Senior Planner  
Planning & Government Services  
Coastal Regional Commission  
1181 Coastal Drive SW  
Darien, Georgia 31305

Re: Transmittal of the City of Garden City Comprehensive Plan for CRC Review

Dear Mr. Carpenter,

The Chatham County – Savannah Metropolitan Planning Commission (MPC) has prepared an update of the City of Garden City's Comprehensive Plan (the Plan). As growth and development continues in our region, this Plan provides a shared community vision for the future. The Plan as prepared by the MPC, examines Economic Development, Housing, Transportation, Land Use, and Broadband along with several other matters that impact the quality of life in our area, including Health, Education, Public Safety, Natural Resources, and Historic & Cultural Resources. The Plan includes a detailed listing of Community Goals and a Short-Term Work Program as a guide to the implementation of this vision.

Widespread public engagement and participation efforts were conducted by the MPC to gather the community's opinions and ideas. The Community Participation Element describes the process used to gather public input and the findings. Additionally, the Plan has been developed in harmony with several other key planning efforts in our region, including the Regional Water Plan and the Rules for Environmental Planning Criteria. These plans were considered during the development process and a number of the key strategies were included within the Plan.

A copy of Garden City's Comprehensive Plan has been included for your review and submittal to the Georgia Department of Community Affairs.

Please call me at 912-651-1446 or email me at [wilsonm@thempc.org](mailto:wilsonm@thempc.org) or contact Jackie Jackson at [jacksonj@thempc.org](mailto:jacksonj@thempc.org) or at (912) 651-1479 with any questions or comments regarding this document.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Melanie Wilson', with a long horizontal flourish extending to the right.

Melanie Wilson  
Executive Director

cc: Jackie Jackson; Director of Advance Planning & Special Projects  
File

Encl: Garden City Plan 2040 Comprehensive Plan



**Office of the Mayor**

City Hall/100 Central Avenue  
Garden City, Georgia 31405

**Don Bethune**  
Mayor

July 21, 2021

Coastal Regional Commission  
1181 Coastal Drive SW  
Darien, Georgia 31305

RE: Garden City Comprehensive Plan Update Submittal

The City of Garden City has completed an update of its current comprehensive plan and is submitting it with this letter for review by the Coastal Regional Commission (CRC) and the Department of Community Affairs (DCA).

I certify that we have held the required public hearings and have involved the public in development of the plan in a manner appropriate to our community's dynamics and resources. Evidence of this has been included with our submittal.

I certify that appropriate staff and decision-makers have reviewed both the Regional Water Plan covering our area and the Rules for Environmental Planning Criteria (O.C.G.A. 12-2-8) and taken them into consideration in formulating the City's Comprehensive Plan.

If you have any questions concerning our submittal, please contact the Chatham County – Savannah Metropolitan Planning Commission (MPC), the City's designated planning agency, with specific questions or comments.

Melanie Wilson; Executive Director  
Chatham County – Savannah  
Metropolitan Planning Commission  
110 East State Street  
Savannah, Ga. 31401  
[wilsonw@thempc.org](mailto:wilsonw@thempc.org)  
912-651-1440

Sincerely,

Don Bethune  
Mayor

Encl: Garden City Comprehensive Plan

Garden City  
Comprehensive Plan



**Adoption Dates**

Adopted by  
~~October 31st, 2021~~

Adopted by  
October 31st, 2021





DRAFT



**ADVANCING TOGETHER.  
REDEFINING TOMORROW.**

**DRAFT**

**A RESOLUTION BY THE MAYOR AND COUNCIL OF GARDEN CITY, GEORGIA,  
AUTHORIZING THE TRANSMITTAL OF THE GARDEN CITY COMPREHENSIVE PLAN FOR  
REVIEW BY THE COASTAL REGIONAL COMMISSION AND DEPARTMENT OF  
COMMUNITY AFFAIRS AS REQUIRED BY THE GEORGIA PLANNING ACT OF 1989**

Whereas, the last full Comprehensive Plan was developed in 2006 and then updated in October 2016; and

Whereas, since the issues and challenges facing the community continue to change from when the Goals and Objectives were updated in the last 2016 Comprehensive Plan; and

Whereas, community input was gathered by the Chatham County – Savannah Metropolitan Planning Commission through virtual meetings, community events, social media, websites, a public online and written survey, and other channels to gauge the public's priorities for Savannah; and

Whereas, the Chatham County – Savannah Metropolitan Planning Commission updated the Comprehensive Plan to address economic development, land use, transportation, housing, and quality of life elements; and

Whereas, those Goals and Objectives have been incorporated into the Work Program of the Comprehensive Plan for Garden City, Georgia; and

Whereas, the Georgia Coastal Regional Commission (CRC) and the Georgia Department of Community Affairs must review Garden City's Comprehensive Plan to ensure consistency with neighboring jurisdictions, consistency with Region 12's adopted regional plan, and verify compliance with Georgia's Minimum Standards and Procedures for Local Comprehensive Planning;

BE IT THEREFORE RESOLVED that the City of Garden City does authorize the transmittal of the Garden City Comprehensive Plan for review by the Coastal Regional Commission and Department of Community Affairs as required by the Georgia Planning Act of 1989.

Adopted this 19<sup>th</sup> day of July, 2021

GARDEN CITY, GEORGIA

By:   
Don Bethune, Mayor

Attest:   
Rhonda Ferrell-Bowles, City Clerk



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DRAFT

# ACKNOWLEDGEMENTS

## Introduction

Garden City 2040 is the culmination of collaboration over this past year and would not have been possible without the time, knowledge and energy of those persons listed and to the hundreds of community members who came to events, participated in virtual public meetings, attended steering committees, answered our survey and provided their invaluable input.

The Chatham County—Savannah Metropolitan Planning Commission (MPC) would like to thank Garden City's City Council for engaging our organization in this important project. The continued support and participation of these community leaders is vital. Our sincere appreciation is expressed to these individuals. The MPC was pleased to have the opportunity to assist and support the community in developing Garden City's Comprehensive Plan Update.

## Garden City Mayor & Council Members

**Don Bethune**—*Mayor*

**Marcia Daniel**—*District 1*

**Debbie Ruiz**—*District 2*

**Natalyn Bates Morris**—*District 3*

**Richard Lassiter, Jr.**—*District 4*

**Kim Tice**—*District 5*

**Bessie Kicklighter**—*Mayor Pro Tem*

## Garden City Staff

**Ron Feldner**—*City Manager*

**James P. Gerard**—*City Attorney*

**Scott Robider**—*Assistant City Manager*

**Rhonda Ferrell**—*Clerk of Council*

**Gil Ballard**—*Chief of Police*

**Corbin Medeiros**—*Fire Chief*

**Cliff Ducey**—*Parks and Recreation Director*

**Ben Brengman**—*Information Technology Director*

**Jon Bayer**—*Public Works Director*

## Technical Assistance

### Chatham—Savannah Metropolitan Planning Commission Staff

**Melanie Wilson**—Executive Director MPC  
**Pamela Everett**—Assistant Executive Director  
**Jackie Jackson**—Director of Advance Planning  
**Lara Hall**—Director of SAGIS  
**Marcus Lotson**—Director of Development Services  
**Leah G. Michalak**—Director of Historic Preservation  
**Mark Wilkes**—Director of Transportation

**David Ramsey**—Information Services & Mapping  
**Debbie Burke**—Natural Resource Planner  
**Nic Fazio**—Senior Planner  
**Kait Morano**—Planner  
**Aislinn Droski**—Assistant Planner  
**Asia Hernton**—Assistant Planner  
**Kiakala Ntemo**—Contract Planner

### Special Thanks

**Patty McIntosh, AICP**—Contract Planner

### Steering Committee

**Don Bethune**—Mayor  
**Ron Feldner**—City Manager

**Jeff Ashley**  
**Marcia Daniel**  
**Gerald Ethridge**  
**Richard Lassiter**  
**Barbara O'Neal**  
**Phil Phillips**  
**Scott Robider**  
**Donna Williams**



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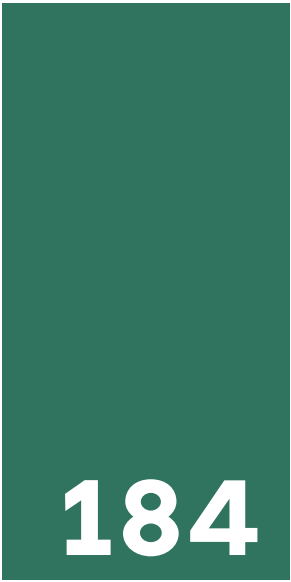
TRANSPORTATION



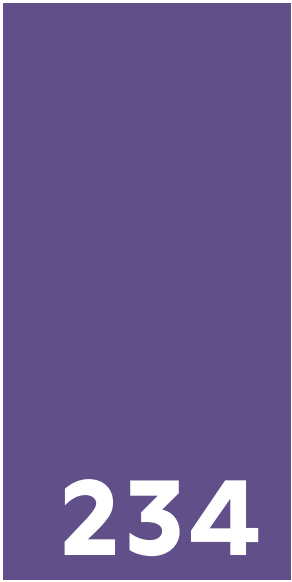
HOUSING



NATURAL  
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QUALITY OF LIFE



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# WELCOME LETTER

## LETTER FROM THE MAYOR



**Don Bethune, Mayor of Garden City**

A handwritten signature of Don Bethune in black ink.

This update is the product of a multitude of different types of public engagement endeavors and careful consideration by City staff and our City Council. An approved update is critically needed to ensure Garden City is able address the challenges and opportunities that we face today.

We recognize that in a time of crisis, such as COVID-19, while tracking and responding to immediate needs, considering the broader goals and vision of the City is challenging. Hence, the Garden City's 2040 Comprehensive Plan will serve as the appropriate guidance as we all work together to make Garden City a safe, family-oriented and business friendly community.

Public engagement has been a hallmark of the Comprehensive Plan update process. Through various engagement events and venues, the Metropolitan Planning Commission (MPC), serving as the agent for this update process, has heard from residents, community stakeholders and City representatives.

The Comprehensive Plan update that we are submitting reflects the key insight from the various participants as to the policies and actions that will prepare Garden City to manage the future changes with an eye toward equity, resilience, and shared prosperity. On behalf of the entire City Council and City staff, I want to express our gratitude and reaffirm our support as we continue to move Garden City forward together.

# EXECUTIVE SUMMARY

## Garden City 2040

Garden City's Comprehensive Plan is the community's principal guiding or "vision" document—designed to formulate a coordinated, long-term planning program to maintain and enhance the health and viability of the jurisdictions. The Comprehensive Plan lays out the desired future for Garden City, and relates how that future is to be achieved. The plan serves as a resource to both the public and private sector by projecting how land will develop, how housing will be made available, how jobs will be attracted and retained, how open space and the environment will be protected, how public services and facilities will be provided, and how transportation facilities will be improved. In short, Garden City's Comprehensive Plan is intended to provide for consistent policy direction.

Garden City's City Council and local community leaders will use the Garden City 2040 Comprehensive Plan in the following ways:

### **The Future Land Use Map shall be referenced in making rezoning and capital investment decisions:**

It provides a representation of the community's vision helping to guide development based on community preferences and also indicates character areas where various types of land uses should be permitted.

### **The Comprehensive Plan provides policies that help guide day-to-day decisions:**

These policies are reflections of community values identified through public outreach efforts. These policies will be used as guidelines in the analysis of rezoning decisions and other capital investment decisions.

### **The Comprehensive Plan includes an Implementation Program that will direct public investment and private initiative:**

Plan implementation is carried out through the adoption and revision of regulations, including zoning and development codes, and through the completion of projects and programs outlined in the Community Goals and Community Strategic Plan and Work Program. The Comprehensive Plan is a living document and should be updated regularly as conditions change and shifts occur in public policy.

The following pages describe the results of public participation that informed and guided the this planning document.

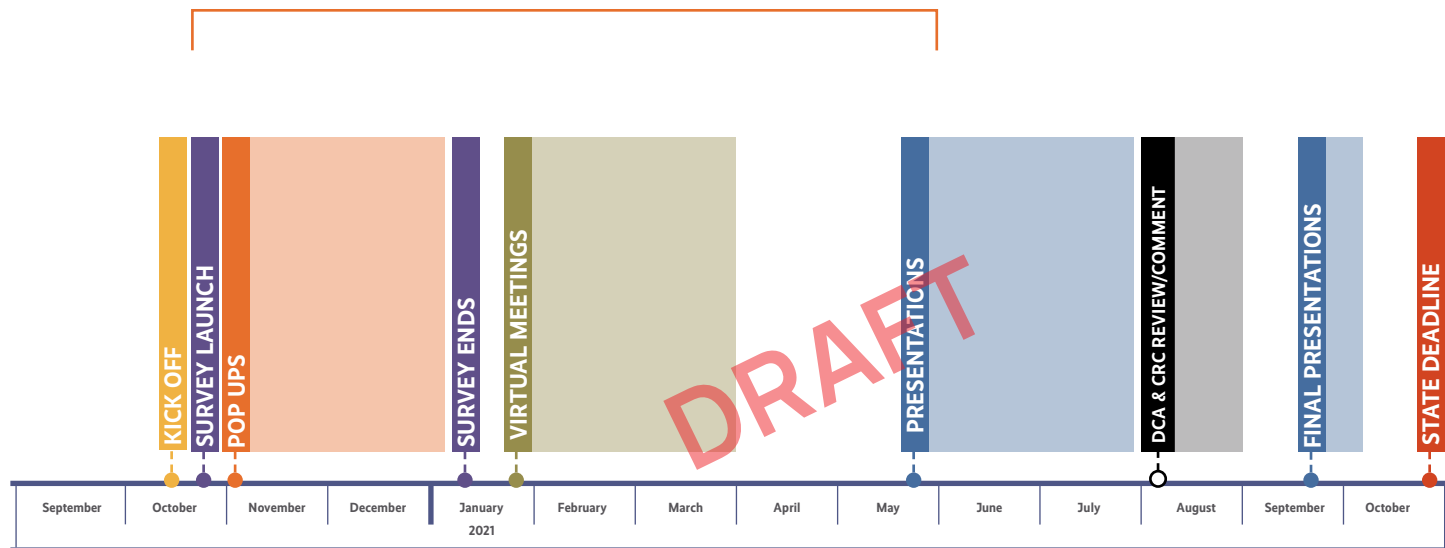


# PLAN SCHEDULE

The comprehensive planning process required approximately eighteen months to complete. From March 2020 to October 2021, the MPC worked closely with city planning staff, the city council, and citizens of Garden City to identify issues, share strengths and develop visions, goals, and strategies for Garden City 2040.

City council along with various stakeholders regularly reviewed planning concepts, and provided feedback on critical issues.

## PUBLIC ENGAGEMENT PHASE



### UNDERSTAND & EXPLORE

- Project Launch & Work Plan
- Background Review & Research
- Survey Launch
- Comment Mapper Launch
- Pop-ups Begin

### ENGAGE & DEVELOP

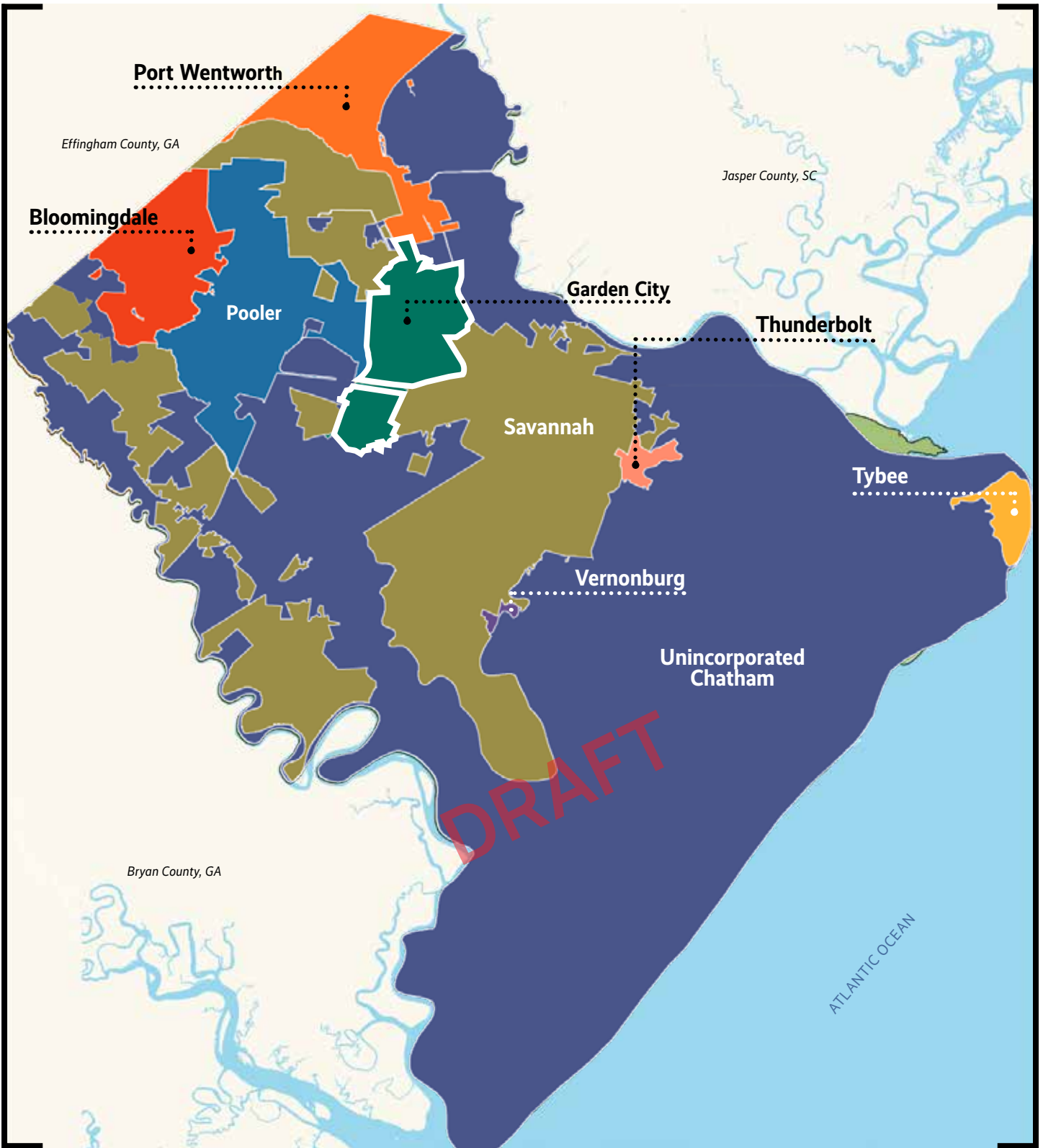
- Draft Element Visions & Goals
- Draft Short Term Work Programs
- Public Engagement Evaluation
- Virtual Meetings
- Subcommittee Meetings

### REFINE & FINALIZE

- Draft Plan Development
- Plan Refinement
- Draft Presentations
- DCA & CRC Review
- Final Presentation & Adoption

### FINAL PLAN

## PLANNING PHASES



# WHY DO WE PLAN?

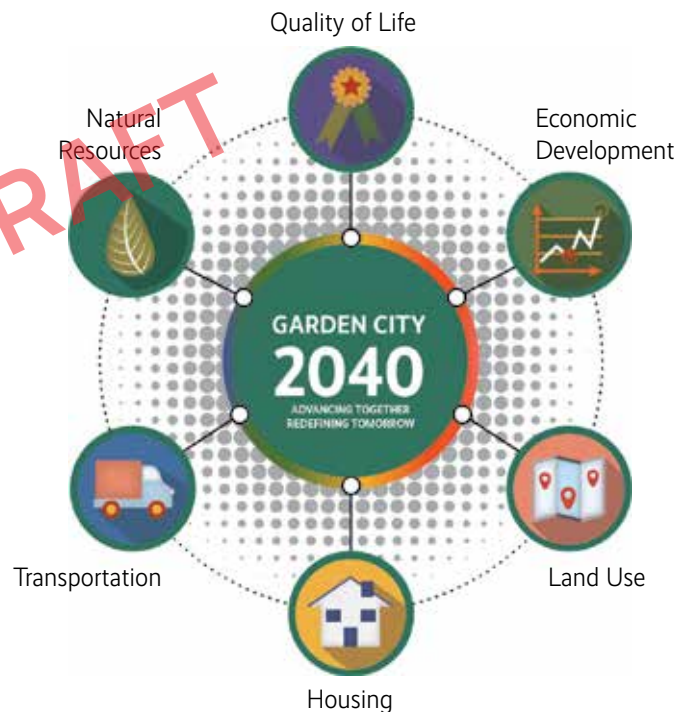
The Georgia Planning Act requires that cities and counties maintain comprehensive plans that help shape future growth. These plans generally recognize the physical, economic, social, political, and aesthetic factors of a community and are developed in a process that includes thoughtful analysis and robust public engagement.

Garden City 2040 serves as the comprehensive plan for Garden City. The plan follows the minimum standards and procedures for local government planning set out in O.C.G.A. 50-8-7.1(b), reflecting the principles of partnership and the unique needs, conditions, and aspirations of the community.

To ensure that public participation in the planning process will result in meaningful implementation through zoning and other administrative mechanisms, a policy of "consistency" was discussed at public meetings. This proposed policy was strongly endorsed by the public. Garden City 2040 will be reviewed and amended prior to amending zoning or other implementing ordinances. In other words, official policy established in Garden City 2040 will become the basis for zoning amendments.

The six planning elements shown below are highlights of Garden City 2040.

- Quality of Life
- Economic Development
- Land Use
- Housing
- Transportation
- Natural Resources



# COMPONENTS OF GARDEN CITY 2040

Garden City 2040 is to be a tool used in evaluating future proposals and policy changes to ensure consistent decisions are made. Each element is comprised of a vision statement, goals, objectives and strategies to accomplish the vision. These terms, often used to describe policy recommendations are described below:

## ELEMENT:

These are the primary elements that must be included, at a minimum, in each community's Comprehensive Plan

## VISION:

Each element contains a vision statement that is supported by multiple goals. A vision statement can become a compass, pointing the way to a common direction.

## GOAL:

General overarching, broad statements describing the direction that a community wants to go.

## OBJECTIVES:

Express the kinds of action that are necessary to achieve the stated goals without assigning responsibility to any specific action.

## STRATEGIES:

Statements of specific actions that should be taken, identifying that responsible party/parties, the time frame within which the action should occur, and other details for implementation of occur.



## HOUSING

### In 2040...

*Garden City is a Safe, Family-Oriented and Business Friendly Community.*

### GOAL:

1. Improve neighborhood stability where all residents, regardless of income, can occupy, maintain and improve their homes without undue financial hardship

### Objectives:

- A. Assist households annually avoid eviction, foreclosure, property loss or homelessness

### Strategy:

- i. Survey and designate historically significant industrial buildings, complexes, and other at-risk infrastructure.





# GLOSSARY OF TERMS

For the purpose of these rules, the following words shall have the meaning as contained herein unless the context does not permit such meaning.

	Definitions
<b>Character Areas</b>	<p>A specific geographic area or district within the community that:</p> <ul style="list-style-type: none"> <li>Has unique or special characteristics to be preserved or enhanced,</li> <li>Potential to evolve into a unique area with more intentional guidance of future development,</li> <li>Requires special attention due to unique development issues.</li> </ul> <p>Each character area is a planning sub-area within the community where more detailed, small-area planning and implementation of certain policies, investments, incentives, or regulations may be applied in order to preserve, improve, or otherwise influence its future development patterns in a manner consistent with the Community Goals</p>
<b>Community</b>	Local jurisdiction (county or municipality) or group of local jurisdictions (in the case of a joint plan) that are preparing a local plan
<b>Comprehensive Plan</b>	<p>A plan meeting these Minimum Standards and Procedures. The comprehensive plan must be prepared pursuant to the Minimum Standards and Procedures for preparation of comprehensive plans and for implementation of</p> <p>comprehensive plans, established by the Department in accordance with O.C.G.A. 50-8-71(b) and 50-8-72</p>
<b>Comprehensive Planning Process</b>	Planning by counties or municipalities in accordance with the Minimum Standards and Procedures in O.C.G.A. 50-8-71(b) and 50-8-72
<b>Conflict</b>	<p>Any conflict, dispute, or inconsistency arising:</p> <ul style="list-style-type: none"> <li>Between or among plans, or components thereof, for any counties or municipalities, as proposed, prepared, proposed to be implemented, or implemented</li> <li>Between or among plans for any regions, as proposed, prepared, proposed to be implemented, or implemented</li> <li>Between or among plans, or components thereof, for any counties or municipalities and plans for the region which include such counties or municipalities, as such plan are proposed, prepared, proposed to be implemented, or implemented</li> </ul>
<b>Core Elements</b>	<p>Community, Goals, Needs and Opportunities, and Community Work Program.</p> <p>These are the primary elements that must be included, at a minimum, in each community's Comprehensive Plan</p>

Terms not defined in these rules but defined in O.C.G.A. 50-8-1, et seq, shall have the meanings contained therein.

	Definitions
<b>Core Elements</b>	<p>Community, Goals, Needs and Opportunities, and Community Work Program.</p> <p>These are the primary elements that must be included, at a minimum, in each community's Comprehensive Plan</p>
<b>County</b>	Any county of this state
<b>Days</b>	Meaning calendar days, unless otherwise specified
<b>Density</b>	An objective measurement of the number of people or residential units allowed per unit of land, such as dwelling units per acre
<b>Department</b>	Department of Community Affairs established under O.C.G.A.50-8-1
<b>Governing Body</b>	Board of Commissioners of a county, sole commissioner or a county, council, commissioners, or other governing authority of a county or municipality
<b>Infrastructure</b>	Man-Made structures which serve the common needs of the population, such as: sewage disposal systems; potable water systems; potable water wells serving a system; solid waste disposal sites or retention areas; stormwater systems; utilities; piers; docks; navigation channels; bridges; roadways
<b>Qualified Local Government</b>	Any county, municipality, or other political subdivision of the state
<b>MPO</b>	Metropolitan Planning Organization, a federally designated agency created in urban areas containing more than 50,000 people that are charged with conducting comprehensive, coordinated planning processes to determine that transportation needs of their respective constituencies, and prioritizing and programming projects (bicycle and pedestrian projects) for federal funding
<b>Minimum Standards and Procedures</b>	Minimum Standards and Procedures, including the minimum elements which shall be addressed and included, for preparation of comprehensive plans, for implementation of comprehensive plans, for updates of comprehensive plans including update schedules, and for participation in the coordinated and comprehensive planning process



## Definitions



## Precedents



## PLAN 2040 Survey



## Facts

	Definitions
<b>Mediation</b>	The process to be employed by the Department and Regional Commissions for resolving conflicts which may arise from time to time in the comprehensive planning process. Procedures and guidelines to govern mediation are as established by the Department pursuant to O.C.G.A. 50-8-7. I(d)
<b>Municipality</b>	Any municipal corporation of the state and any consolidated government of the state
<b>Plan</b>	The comprehensive plan for any county or municipality
<b>Plan Amendment</b>	A change to the adopted plan that occurs between plan updates. Amendments of the adopted plan are appropriate when the conditions, policies, etc., on which the plan is based, have significantly changed so as to materially detract from the usefulness of the plan as a guide to local decision making, or when required by the Department as a result of changes to the Minimum Standards and Procedures
<b>Plan Update</b>	A more or less complete re-write of the plan, which shall occur approximately every five years, in accordance with the recertification schedule maintained by the Department
<b>Planning</b>	The process of determining actions which state agencies, Regional Commissions, and local governments propose to take
<b>Qualified Local Government</b>	A county or municipality that adopts and maintains a comprehensive plan as defined in these Minimum Standards and Procedures.
<b>Regional Commission</b>	A Regional Commission established under O.C.G.A 50-8-32
<b>Regional Plan</b>	The comprehensive plan for a region prepared by the Regional Commission in accordance with the standards and procedures established by the Department

	Definitions
<b>Rules for Environmental Planning Criteria</b>	Those standards and procedures with respect to natural resources, the environment, and vital areas of the state established and administered by the Department of Natural Resources pursuant to O.C.G.A. 12-2-8, including, but not limited to, criteria for the protection of water supply watersheds, groundwater recharge areas, wetlands, protected mountains and protected river corridors.
<b>Service Delivery Strategy</b>	The intergovernmental arrangement among municipal governments, the county government, and other affected entities within the same county for delivery of community services, developed in accordance with the Service Delivery Strategy law. To ensure consistency between the plan and the agreed upon strategy: <ul style="list-style-type: none"> <li>The services to be provided by the local government, as identified in the plan, cannot exceed those identified in the agreed upon strategy</li> <li>The service areas identified for individual services that will be provided by the local government must be consistent between the plan and Strategy</li> </ul> As provided in Code Section 36-70-28 (b)(1), Service Delivery Strategies must be reviewed, and revised if necessary, in conjunction with county comprehensive plan updates
<b>Supplemental Planning Recommendation</b>	The supplemental recommendations provided by the Department to assist communities in preparing plans and addressing the Minimum Standards and Procedures. The plan preparers and the community are encouraged to review these recommended best practices where referenced in the Minimum Standards and Procedures and choose those that have applicability or helpfulness to the community and its planning process.
<b>Update Schedule</b>	The schedule or schedules for updating comprehensive plans on an annual or five-year basis as provided for in paragraph (2)(b) of Section 110-12-1-.04 of these Rules. The term "Update Schedule" also means an additional schedule for the review of Service Delivery Strategy agreements by counties and affected municipalities on a ten-year basis in conjunction with comprehensive plan updates





# COMMUNITY PARTICIPATION

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# COMMUNITY PARTICIPATION

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## Introduction

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Through the Community Participation Plan, the Garden City 2040 team sought to gather the community's opinions, priorities, and visions about the future of the area. An in depth public engagement effort was made in the months leading up to the draft of Garden City 2040, and included a public survey, pop-up events, and virtual meetings. Specifically, this community participation plan sought to engage the public on issues which are addressed primarily in the comprehensive plan.

# COMMUNITY PARTICIPATION PROGRAM

The vision for Garden City 2040 represents the voice of our community. Through the two-year planning process, Garden City community members shared their unique perspectives on what makes their community great and their suggestions for improvements. The goal of the engagement process was to bring as many voices into the planning effort as possible, to get a wide range of ideas and perspectives, and build a broad base for implementing Garden City 2040.

The Garden City 2040 process collected valuable input from diverse platforms, community members, and stakeholders to shape the Plan's vision and goals. The outreach process involved a variety of different approaches, which are listed below:

- 14 Virtual Public Meetings
- 10 Email Blasts (Over 1,500 Email Recipients)
- 6 Quarterly Newsletters
- 1 MPC Annual Report
- Press Releases (Traditional Media Interviews)
- Garden City Online Promotion
- Online Interactive Comment Mapper (~300 Comments)
- Social Media (Instagram, Twitter, Facebook)
- Utility Bill Messages
- 4 Pop-up events
- Dedicated Website
- Online Survey (101 Participants)

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# COMMUNITY SURVEY

## Survey Overview

MPC staff team developed a survey aimed at collecting a wide range of input. The survey was intended to be more in-depth than previous comprehensive plan updates and took approximately 25 minutes to complete. The survey aimed to collect a wide range of input and covered various topics including:

- Quality of Life (Historic Preservation)
- Housing
- Land Use
- Natural Resources (Sea Level Rise)
- Transportation
- Economic Development

The survey was open from October 23, 2020 to January 19, 2021. A total of 101 were received from Garden City's residents.

The 24-question survey consisted of multiple choice and open-ended response questions. The MPC staff participated in the survey development and made suggested changes prior to publication. The survey was available online and in print versions, and was offered in Spanish for communities where English is not the primary language.

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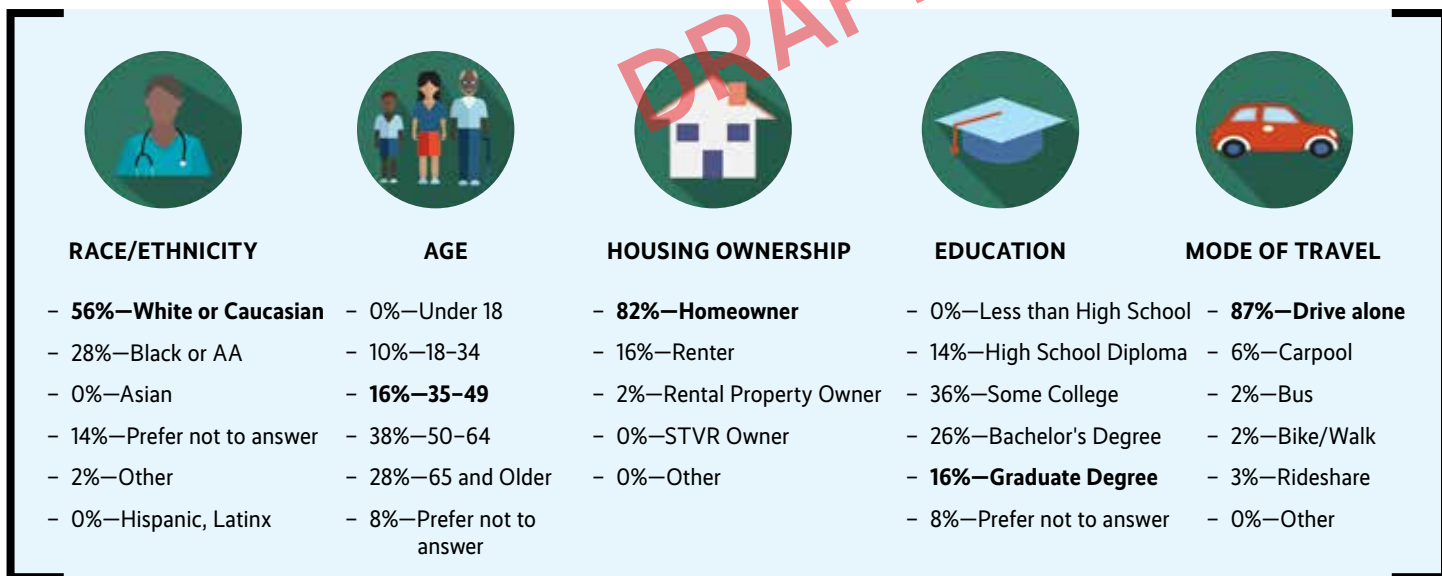
## Survey Respondents

To get a better understanding of the citizens that participated in the Plan 2040 Survey, additional information about each respondent was requested.

The survey informational questions included:

- What is your race/ethnicity?
- What is your age?
- Which housing category describes you?
- What is your highest level of education?
- What is your primary mode of travel?

## Survey Respondents By The Numbers



# SWOT ANALYSIS

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>- Very low property tax rate</li> <li>- Continual business development and bringing new people into the city</li> <li>- Location, perfectly placed within the county</li> <li>- New school complex being built</li> <li>- Public safety presence is strong and well known</li> <li>- Can be both a strength and a weakness: low millage rate</li> <li>- Jurisdictions are working together</li> <li>- Close proximity to Savannah and tourism (both people and dollars brought into the community)</li> </ul>	<ul style="list-style-type: none"> <li>- Limited housing type options</li> <li>- Limited water and sewer in southern area of city limiting growth</li> <li>- Need more people to both work here AND live here</li> <li>- City needs more restaurants and services for the residents</li> <li>- Garden City lacks the "sense of place" that a community needs</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>- Tiny homes could be beneficial to the city</li> <li>- Broaden housing options and types for residents both new and existing</li> <li>- Capitalize on the city's economic and business activity</li> <li>- Partnership with Georgia Ports Authority</li> <li>- Create work programs</li> <li>- Expand entertainment opportunities</li> <li>- Reduce crime and poverty</li> <li>- More Emphasis on vocational training</li> <li>- More services for new residents (like grocery stores, shopping, parks, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Congestion and traffic due to trains going to and from the Georgia Ports Authority</li> <li>- Lack of land to build new housing developments, subdivisions, senior housing, affordable housing</li> <li>- Lack of grocery stores within the city</li> <li>- The City's poverty rate has increased due to the impacts of COVID-19</li> <li>- Lack of water and sewer in certain areas</li> </ul>

# PLAN 2040 SURVEY QUESTIONS

## Quality of Life

1. How strongly would you agree with the following statements about the quality of life topics?
2. Please rate your satisfaction with the following public amenities and services in your community?
3. In your opinion, what are the most important historic preservation actions?
4. Do you have any additional comments about quality of life?

## Housing

5. Which categories describes you?
6. How strongly would you agree with the following statements about housing topics?
7. Please rank the following housing options in order of how they should be prioritized in the next 5 years, with 1 being the highest priority and 5 being the lowest?
8. In your opinion, do we need more, less, or about the same of the following housing types?
9. Do you have any additional comments about housing?

## Land Use

10. Compared to recent trends, do you think we should encourage the following types of development more, less, or about the same over the next 10 years?
11. Please rank the following growth scenario in terms of your preference. On each map below, Chatham County's existing populated areas are shown in orange and possible areas of new growth under that scenario are shown in yellow.
12. Do you have any additional comments about land use?

## Natural Resources

13. How strongly would you agree with the following statements about natural resources?
14. How important are the following objectives to you?
15. Which of the following strategies would you support to protect resources from hazards related to climate change?
16. Do you have any additional comments natural resources?

## Transportation

17. What is your primary mode of travel?
18. How strongly do you agree with the following statements about transportation?
19. Do you have any additional comments about transportation?

## Economic Development

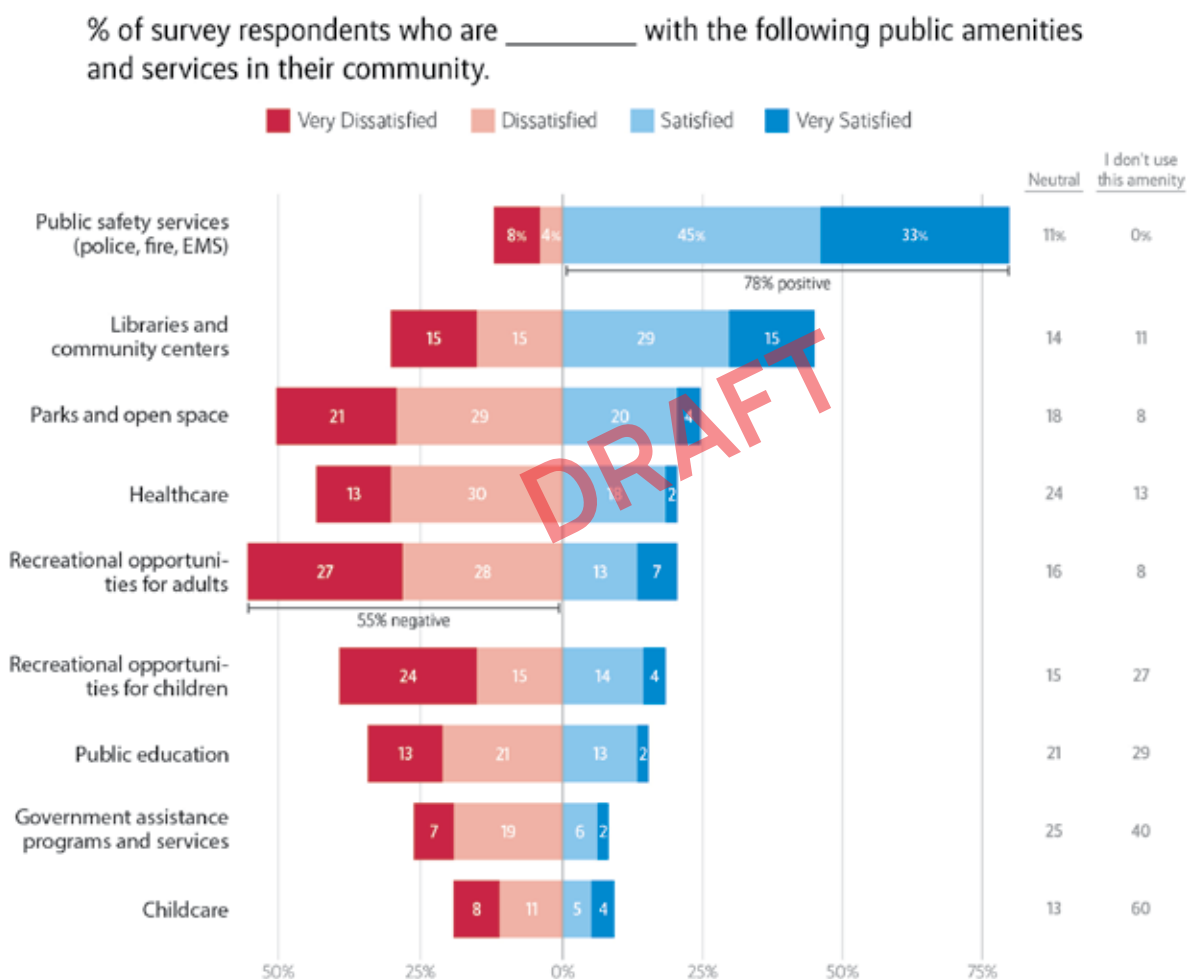
20. On a scale from 1 to 5, with 1 being the most negative and 5 being the most positive, how would you rate the general growth in the past 5 years?
21. How strongly would you agree with the following statements about economic development?
22. How important are the following objectives to you?
23. Do you have any additional comments about economic development?
24. Are there other priorities or issues not covered in this survey that you think are important to consider as part of the Comprehensive Plan?





## Quality of Life

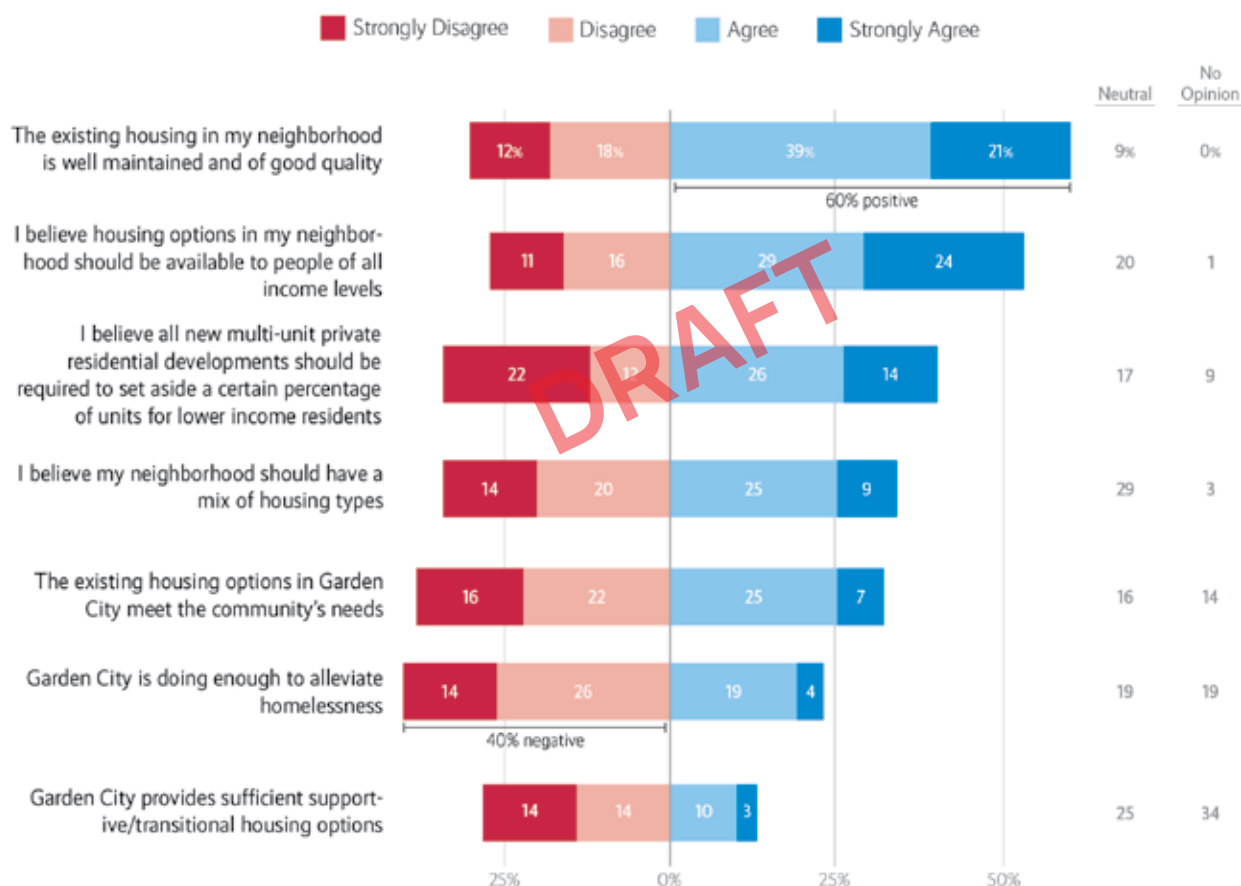
1. How strongly would you agree with the following statements about the quality of life topics?
2. **Please rate your satisfaction with the following public amenities and services in your community?** (Results Below)
3. In your opinion, what are the most important historic preservation actions?
4. Do you have any additional comments about quality of life?



## Housing

1. Which categories describes you?
2. **How strongly would you agree with the following statements about housing topics?** (Results Below)
3. Please rank the following housing options in order of how they should be prioritized in the next 5 years, with 1 being the highest priority and 5 being the lowest?
4. In your opinion, do we need more, less, or about the same of the following housing types?
5. Do you have any additional comments about housing?

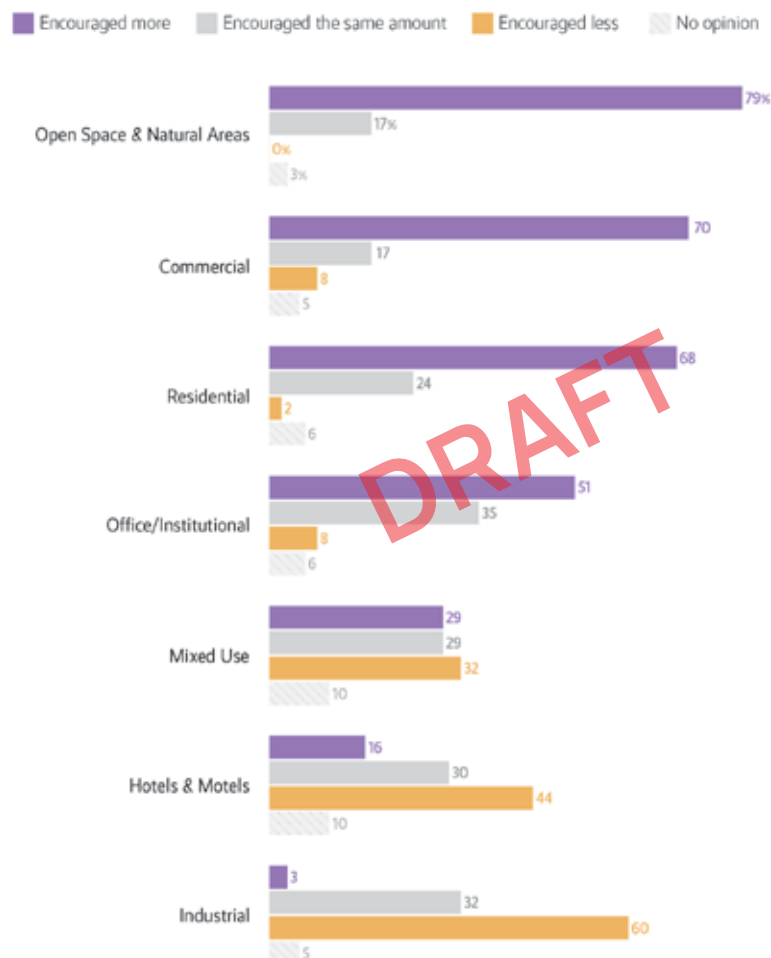
% of survey respondents who \_\_\_\_\_ with the following statements about housing in Garden City.



## Land Use

1. Compared to recent trends, do you think we should encourage the following types of development more, less, or about the same over the next 10 years? (Results Below)
2. Please rank the following growth scenario in terms of your preference. On each map below, Chatham County's existing populated areas are shown in orange and possible areas of new growth under that scenario are shown in yellow.
3. Do you have any additional comments about land use?

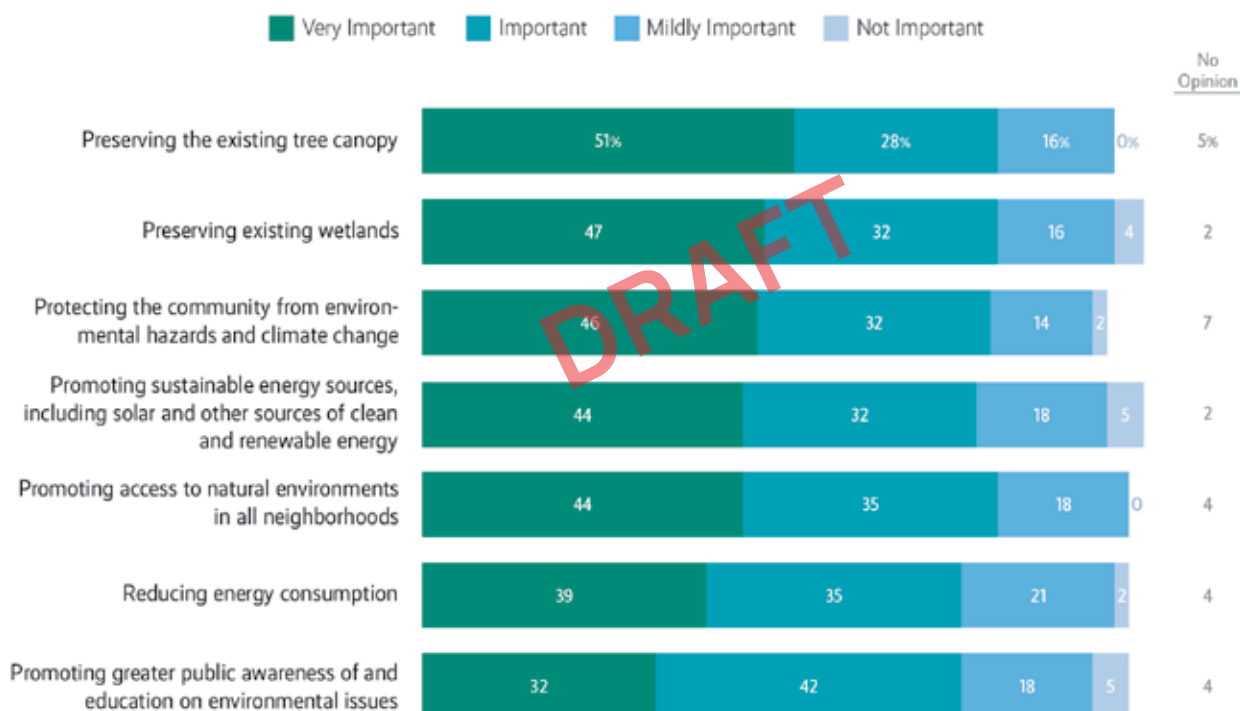
% of survey respondents who think the following types of development should be encouraged more, less, or about the same over the next 10 years.



## Natural Resources

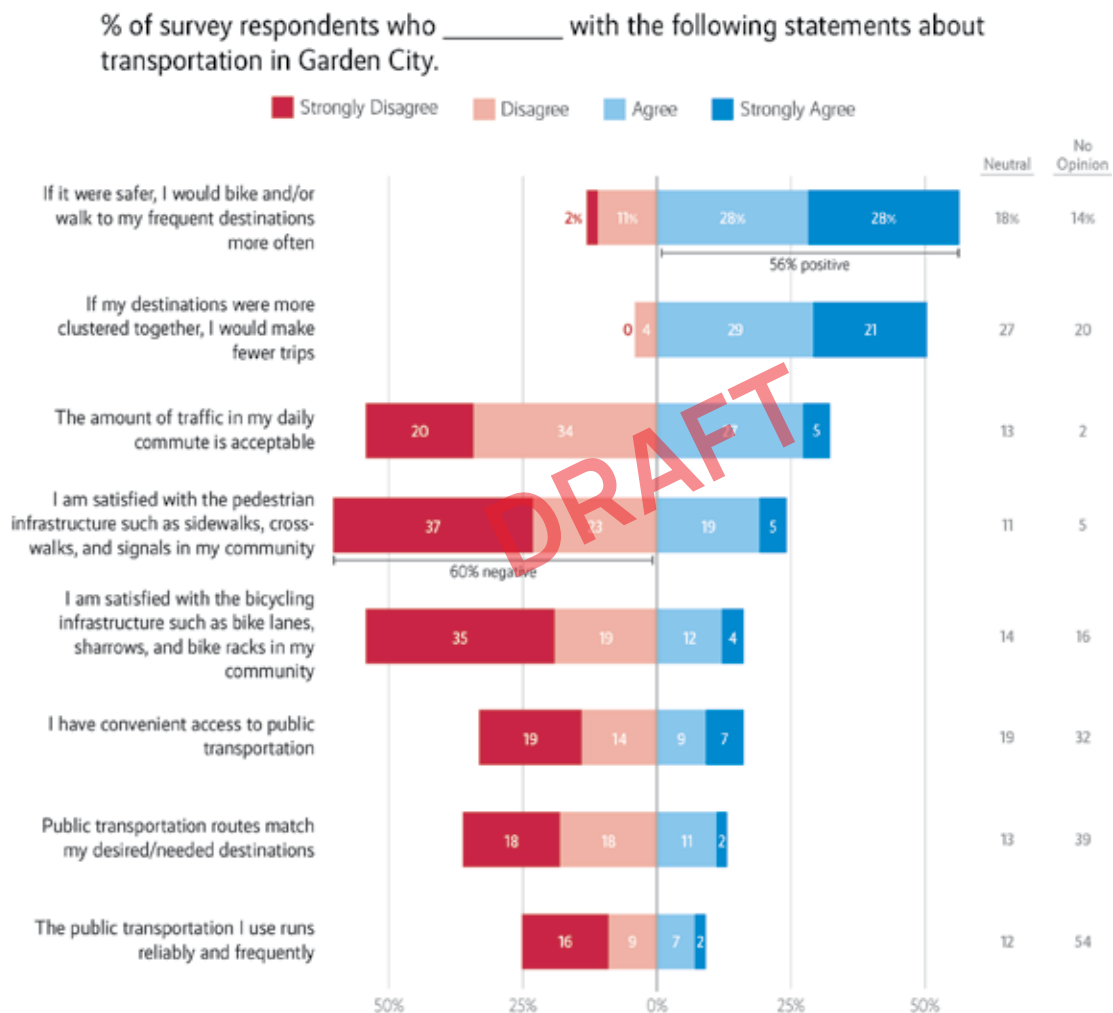
1. How strongly would you agree with the following statements about natural resources? (Results Below)
2. How important are the following objectives to you?
3. Which of the following strategies would you support to protect resources from hazards related to climate change?

% of survey respondents who say the following natural resource objectives are \_\_\_\_\_.



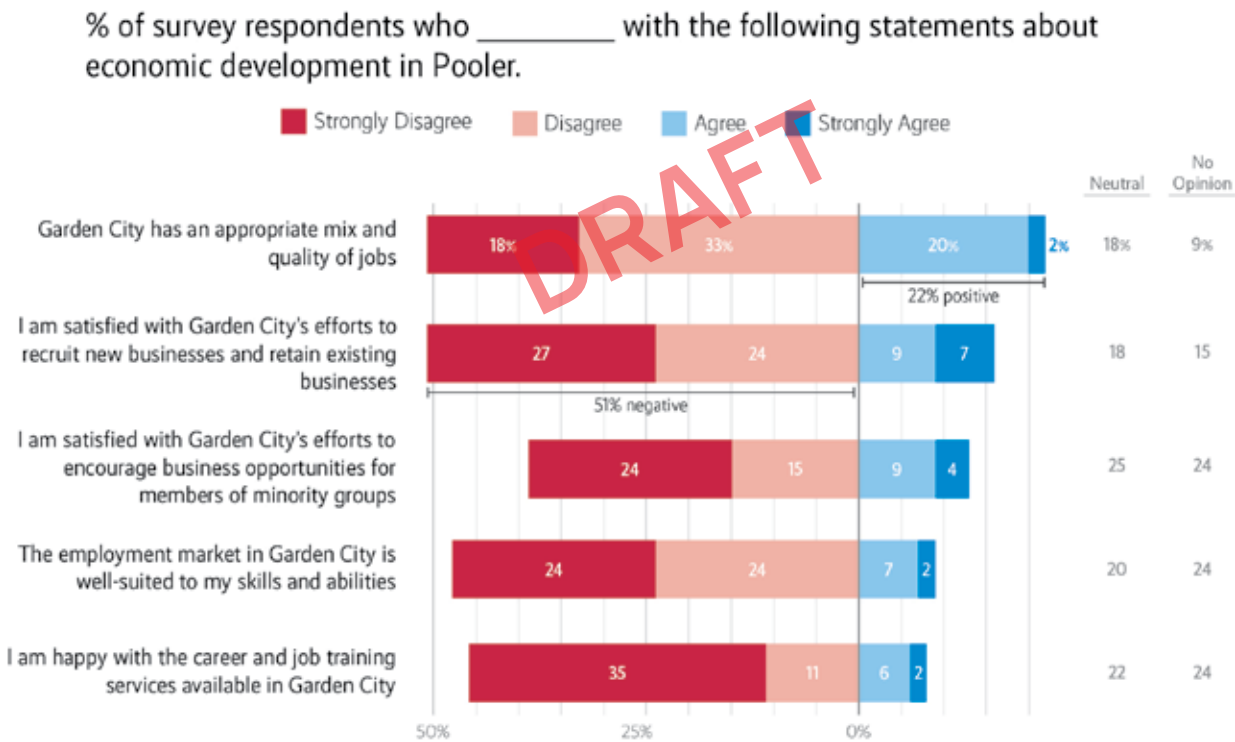
## Transportation

1. What is your primary mode of travel?
2. How strongly do you agree with the following statements about transportation? (Results Below)
3. Do you have any additional comments about transportation?



Economic Development

- 1. On a scale from 1 to 5, with 1 being the most negative and 5 being the most positive, how would you rate the general growth in the past 5 years?
- 2. How strongly would you agree with the following statements about economic development? (Results Below)
- 3. How important are the following objectives to you?
- 4. Do you have any additional comments about economic development?
- 5. Are there other priorities or issues not covered in this survey that you think are important to consider as part of the Comprehensive Plan?

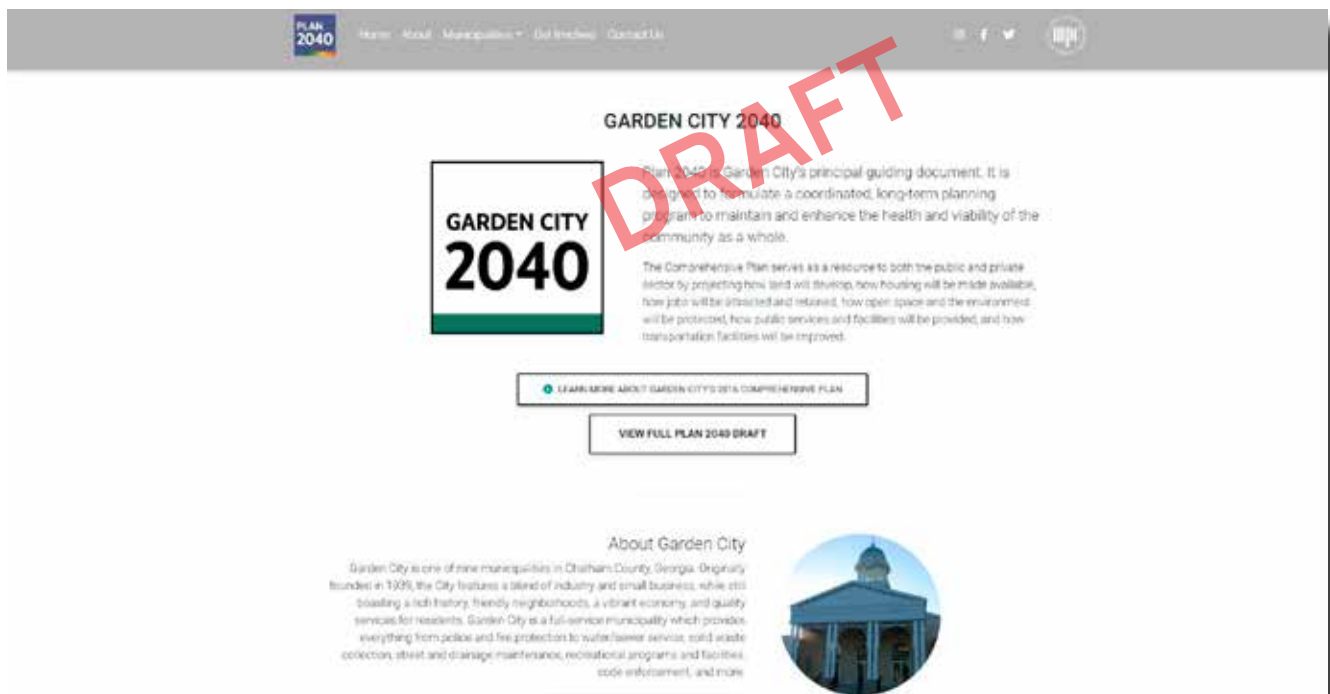


# WEB PAGE

## Web Page Overview

To engage the community further, the Garden City 2040 team designed and maintained a web page to be the dedicated platform for all planning, public outreach and social media information.

The web page was set up and designed to be user friendly, easily read and interactive for all users. The page included a diverse mix of information including a project summary, history, a virtual meeting library, comment mapper, draft chapters, and a bulletin board of upcoming events.

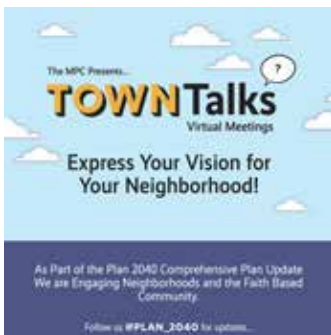




# SOCIAL MEDIA

## Social Media Overview

While the web page served as a platform for all of the planning documents, the social media page served as an advertising platform to engage the public on upcoming events, meetings, pop-up events and announcements. The social media platforms used to advertise Garden City 2040 included Instagram, Facebook, and Twitter.





# COMMENT MAP

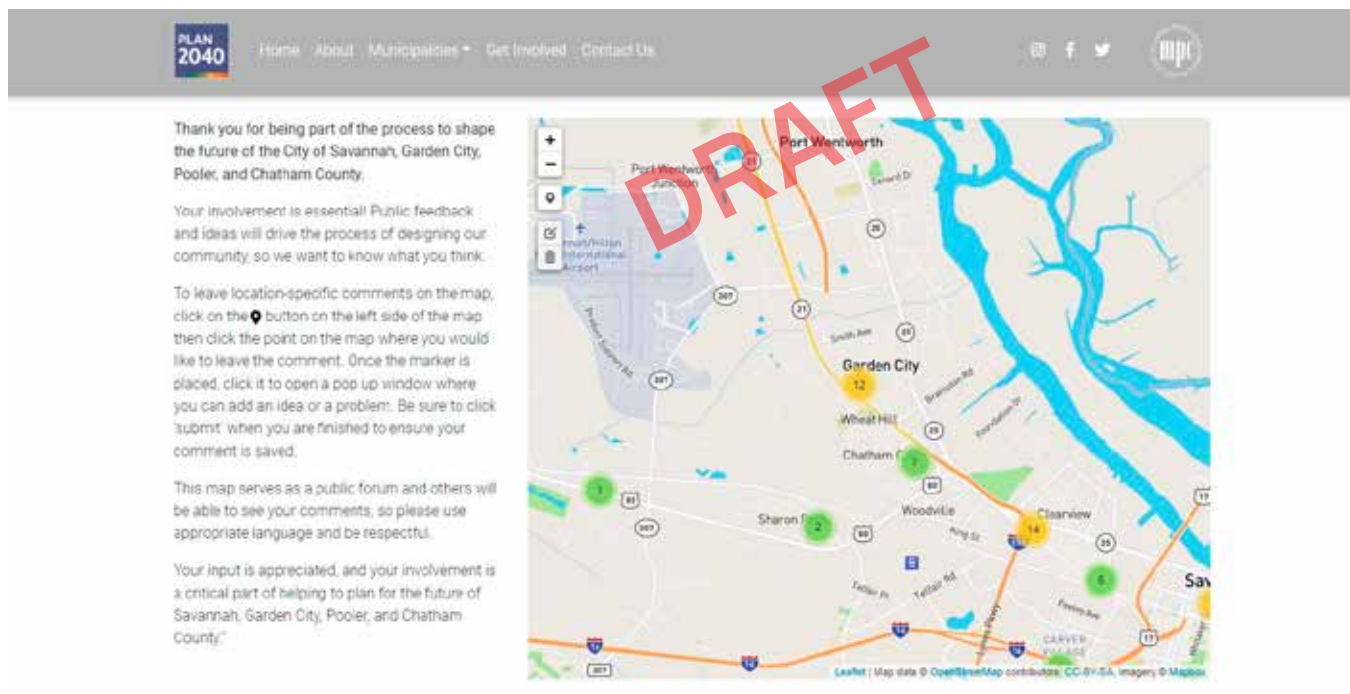
## Comment Map Overview

To ensure that the Garden City 2040 public outreach methods were widespread and equitable, the Garden City 2040 team created a comment mapping tool to collect additional feedback. This technique was a new tool that allowed the community members to geolocate "Ideas" and "Problems" in their community.

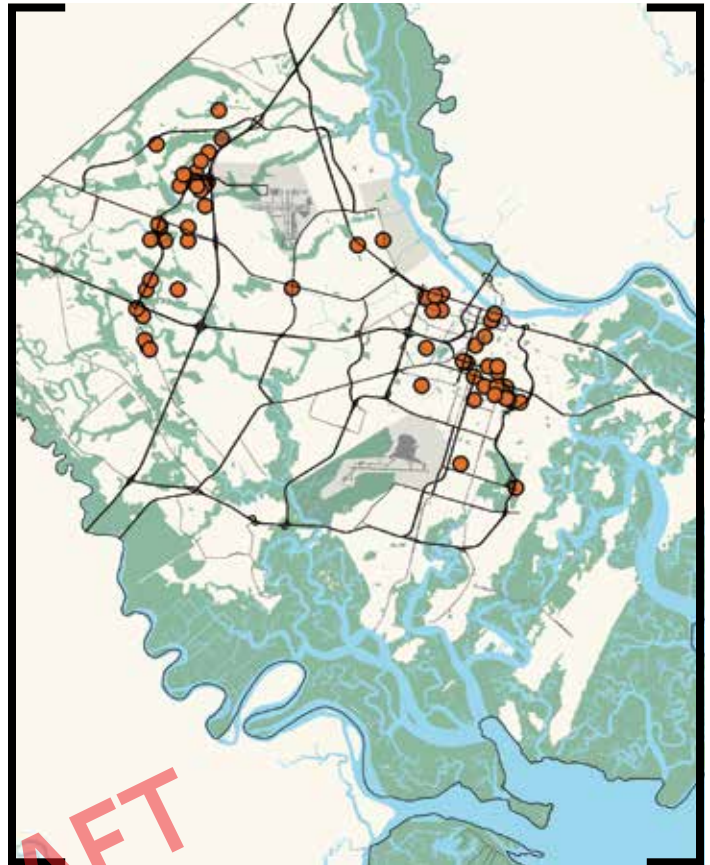
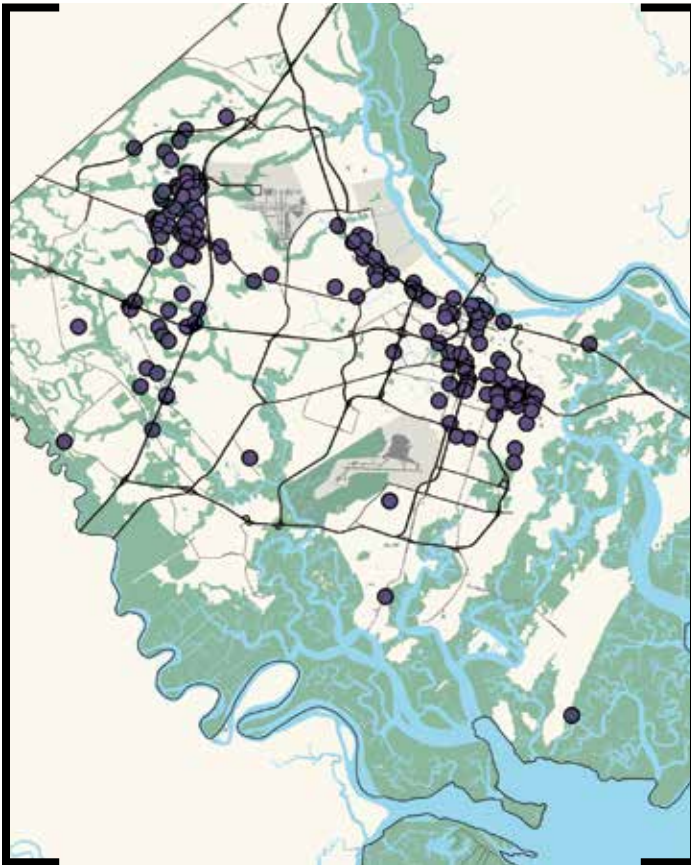
The collection process revealed opportunities in the community and provided insights into where future neighborhood plans and corridor studies might be needed. It also served as a starting point for future public outreach.

The major "Ideas" and "Problems" that were uncovered with the comment mapper revealed that food insecurity, neighborhood trash/maintenance, and walkability are hindering the quality of life of the citizens of Garden City.

The data represented is from October 23, 2020 to June 10, 2021. This resource will remain active and will be used as an additional method of public comment for future Garden City 2040 engagement opportunities.



## Response Locations



## What We Heard

### IDEAS

- Grocery Store
- Community Center
- More Sidewalk Connections
- Mixed Use Housing
- Street Lighting
- Dog Park
- Bike Lanes
- Movie Studio
- Pocket Parks
- Community Beautification Projects

### PROBLEMS

- CAT Bus Stops
- Traffic Congestion
- More Buffering Between Residential & Industrial Uses
- Flooding
- Excess Trash & Litter
- Lack of Housing Options
- Incomplete Sidewalk Connections
- More Tree Canopy
- Major Ditch & Canal Drainage Improvements Needed



# COMMUNITY OUTREACH POP-UPS

## Community Outreach Overview

The Garden City 2040 team conducted a series of nine community pop-up events throughout Garden City. The pop-up events were held at various times to reach as many residents as possible across the County.

Following CDC recommended COVID-19 safety measures, the Garden City 2040 team also offered virtual meetings to supplement the community outreach effort.

There were six virtual meetings that included an overview of Garden City 2040, polls, and opportunities for community feedback on progress.

These events were advertised and offered to community or faith-based organization responding to email blasts and other communications.

- Chatham Recycles—"Haunted Recycling" (October 24, 2020)
- Starland Yard—"Mini-Market" (October 28, 2020)
- Forsyth Park—"Farmer's Market" (November 21, 2020)
- Garden City Senior Center— (November 24, 2020)
- Forsyth Park—"Farmer's Market" (December 21, 2020)

Over 100 residents attended these pop-ups and provided over 500 comments.



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# MEETINGS

## Internal Meetings & Committee Meetings

- Georgia Coastal Indicators Coalition—(August 19, 2020)
- TCC & CAC—(August 20, 2020)
- ACAT—(August 24, 2020)
- CORE MPO—(August 26, 2020)
- Garden City's City Council Meeting—(September 21, 2020)
- Georgia Coastal Indicators Coalition—(October 7, 2020)
- UGA Graduate Studies Class—(October 14, 2020)
- TCC & CAC—(December 3, 2020)
- ACAT—(December 7, 2020)
- CORE MPO—(December 9, 2020)
- Garden City's Stakeholder Meeting—(December 16, 2020)
- Garden City's Stakeholder Meeting—(January 12)
- TCC—(February 18)
- CORE MPO—(February 24)
- Georgia Coastal Indicators Coalition—(March 5)
- Georgia Coastal Indicators Coalition—(June 2)
- Garden City's City Council Meeting—(July 19)
- Garden City's City Council Meeting—(TBD)

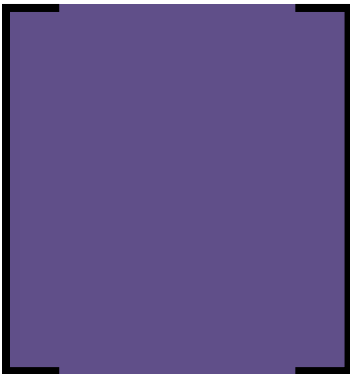
## Public Meetings

- Garden City Public Meeting—(December 9, 2020)
- Virtual Meeting Round 1—(January 26)
- Virtual Meeting—(January 27)
- Virtual Meeting Round 2—(February 22)
- Virtual Meeting—(February 23)
- Virtual Meeting Round 3—(March 30)
- Virtual Meeting—(April 9)

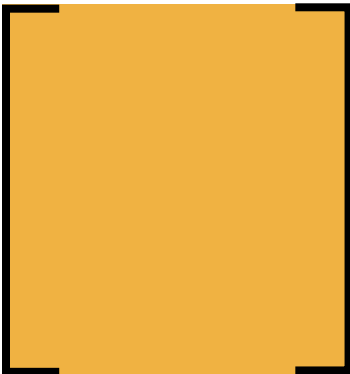


# KEY TAKEAWAYS

## VIRTUAL MEETINGS

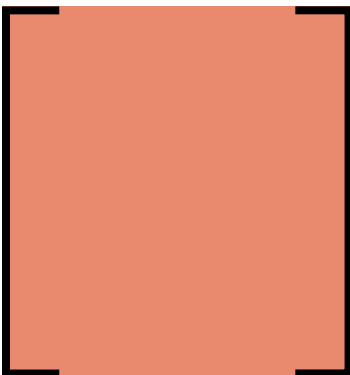


- Lighting concerns
- Beautification of streetscape
- New holiday lights needed
- Gateway signage and beautification measures
- Need for another grocery store
- More commercial services
- Great police force, Garden City feels safe
- City is doing a good job at eradicating condemned and blighted housing
- City needs more opportunities for community outreach
- Better access to farmer's markets
- Need to address issues with trash and litter



### HOUSING

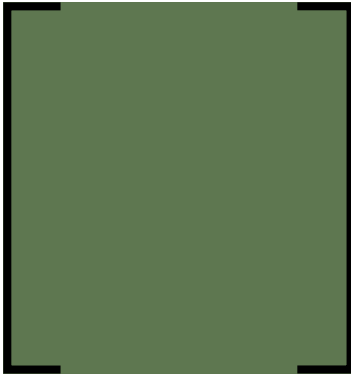
- First-time home buyers and senior housing should be the city's top priority
- Not enough diversity of housing
- More single-family housing is needed
- More dedicated senior housing communities
- Age in place housing is needed
- Interest in tiny homes



### LAND USE

- The city needs an "anchor"
- Make Garden City a "destination"
- Creation of an entertainment district
- More "Mom & Pop Stores" and less big box
- More park space
- Interest in small business
- City lacks a "sense of place"





# COMMUNITY PROFILE ELEMENT

DRAFT

# 01



# COMMUNITY PROFILE

## Introduction

Originally founded in 1939, Garden City features a blend of industry and small business, and boasts a rich history, friendly neighborhoods, a vibrant economy, and quality services for its residents. As a full-service municipality, the city provides multiple services from police and fire protection to water/sewer service, solid waste collection, street and drainage maintenance, recreational programs and facilities, code enforcement, and more.

Garden City is defined by responsive, visionary leadership through its seven member City Council. From its founding in 1939 until 2009, it operated under a mayor-council form of government. The city has since adopted a council-manager form of government, with the mayor, one at-large council member and five district-elected council members. The city operates and funds its municipal services via a combination of property taxes, sales taxes, user fees and other sources.



# GARDEN CITY

## Population

As of 2018, Garden City had an estimated population of 8,936 with a population density of 616 people per square mile. U.S. Census records show the population increased rapidly from 1970–1980 and continued to grow until reaching its peak of 9,962 in 2000. By 2010, the population had decreased slightly and has remained at approximately the same level until today.

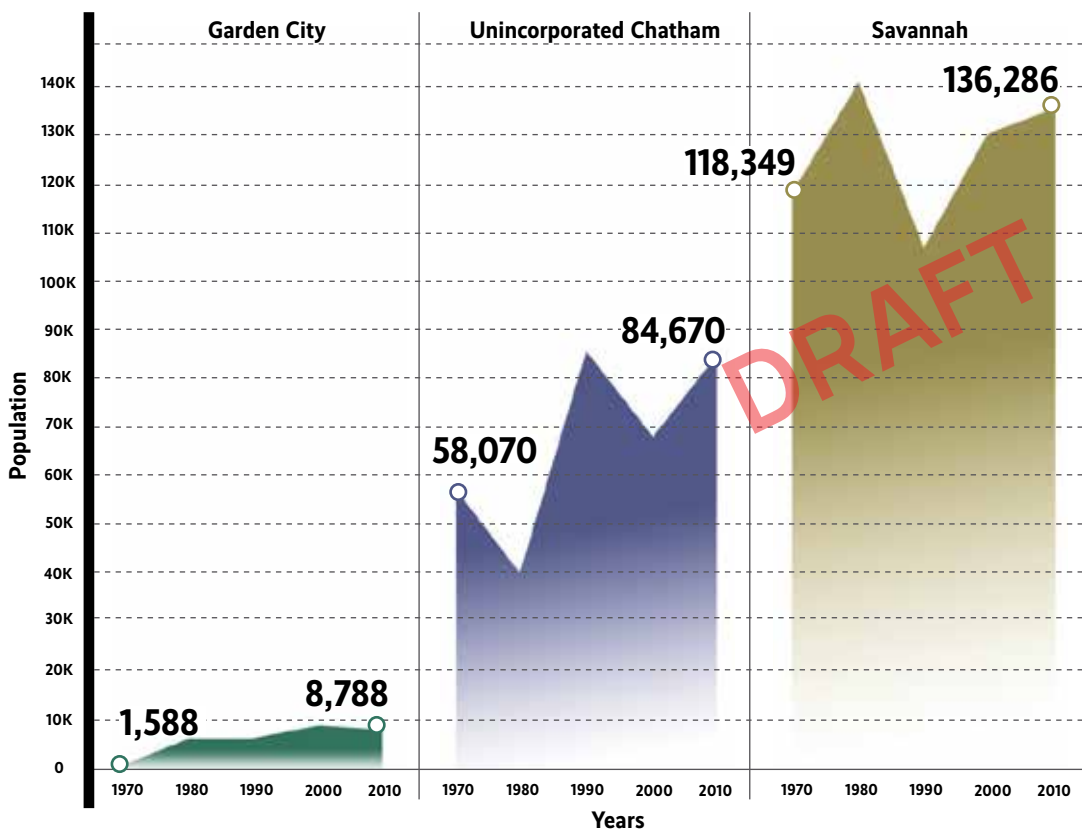


Figure 1.1–Population Comparison, 1970–2010  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Population Growth, 1970–2018

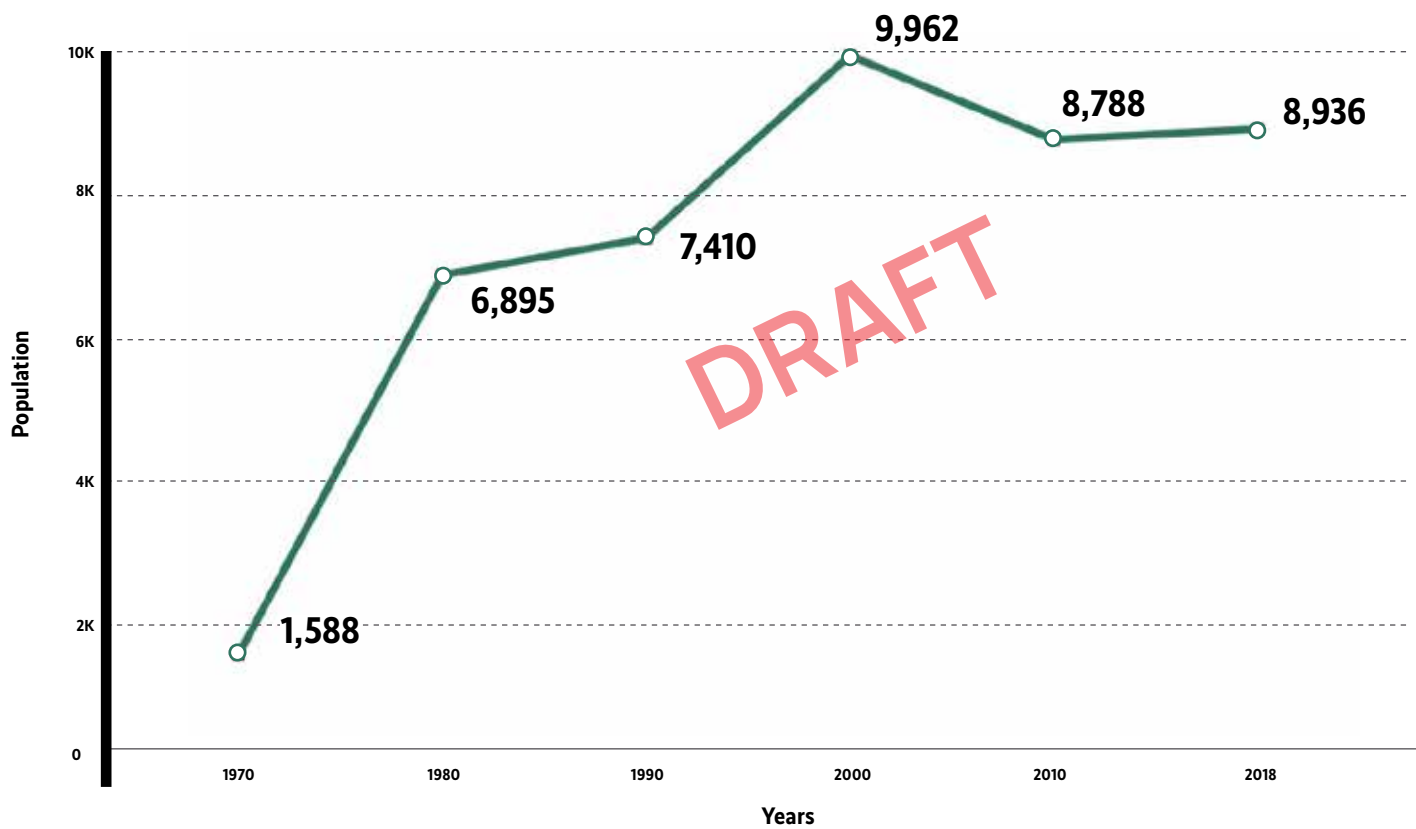


Figure 1.2–Population Growth, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Gender & Age

Of the 8,936 people that lived in Garden City in 2014–2018, 48.5% were female, and 51.5% were male. Residents of Garden City had the youngest median age of any municipality in Chatham County at 31.1 years, which is nearly seven years younger than the national median (37.9 years).

The population of Garden City has gotten younger since 2010, when the median age was 35.3 years. Possible reasons for this could be that younger people are moving into the city, older residents are moving away from the city, and/or that existing residents are having more children. In particular, the amount of 25–34 year olds increased nearly 10% in the years since 2013–by 2018, this cohort made up more than one-fifth of the total population of Garden City.

That same year, children under the age of 18 made up 28.2% of the population, while nearly one in eight residents were over age 65 (12.8%).

## Gender Characteristics, 2014–2018



## Median Age Characteristics, 2014–2018

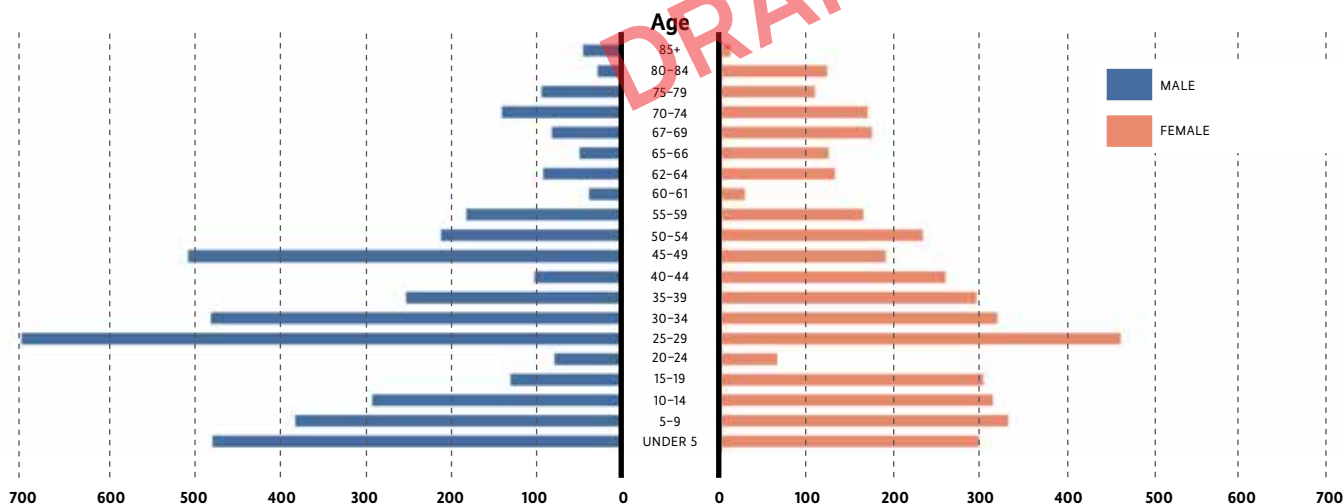
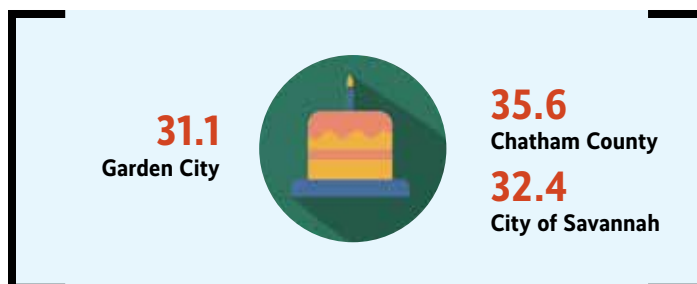


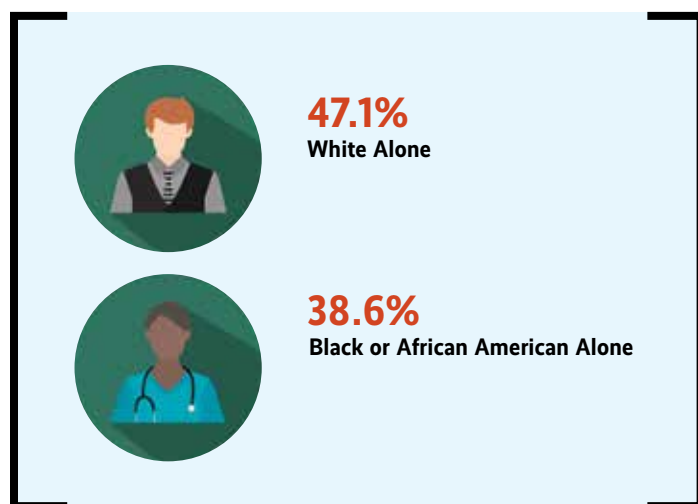
Figure 1.3–Population Pyramid, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Population Diversity & Ethnicity

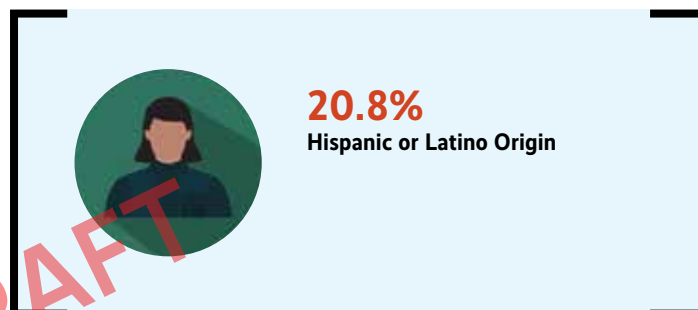
In 2014–2018, Garden City was one of the more diverse municipalities in Chatham County. While the largest racial group was white (47.1%), 38.6% of residents identified as black or African American and 5.8% identified as being of two or more races. These racial breakdowns represent people who reported only one race (aside from the "two or more races" category). One in five residents in Garden City identified as Hispanic or Latino (20.8%)(those who identified as Hispanic or Latino may be of any race(s)), which is the largest proportion of Hispanic or Latino residents in the county.

Garden City's population has been growing more diverse since the 1970's. In the past fifty years, the non-white share of Garden City's population has doubled from roughly 25% in 1970 to 52.9% 2018.

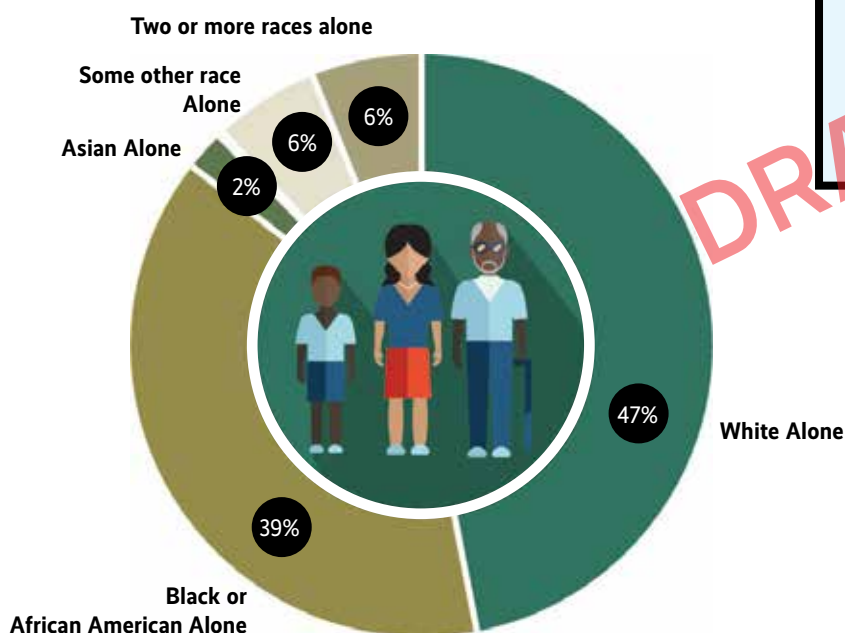
## Racial Majority Characteristics, 2014–2018



## Ethnicity, 2014–2018



### Population by Race, 2014-2018



**Figure 1.4–Population by Race, Garden City**  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Diversity Index

The diversity index determines the likelihood that two people chosen at random from a given area will be from different racial or ethnic groups. Higher values indicate more diversity in an area and lower values indicate less diversity.

On Map 1.1, block groups with high racial and ethnic diversity index scores are shown in blue. These calculations are based on the methodology described in “Mapping the USA’s diversity from 1960 to 2060” in USA TODAY.

## Race & Ethnicity Changes, 1970–2010

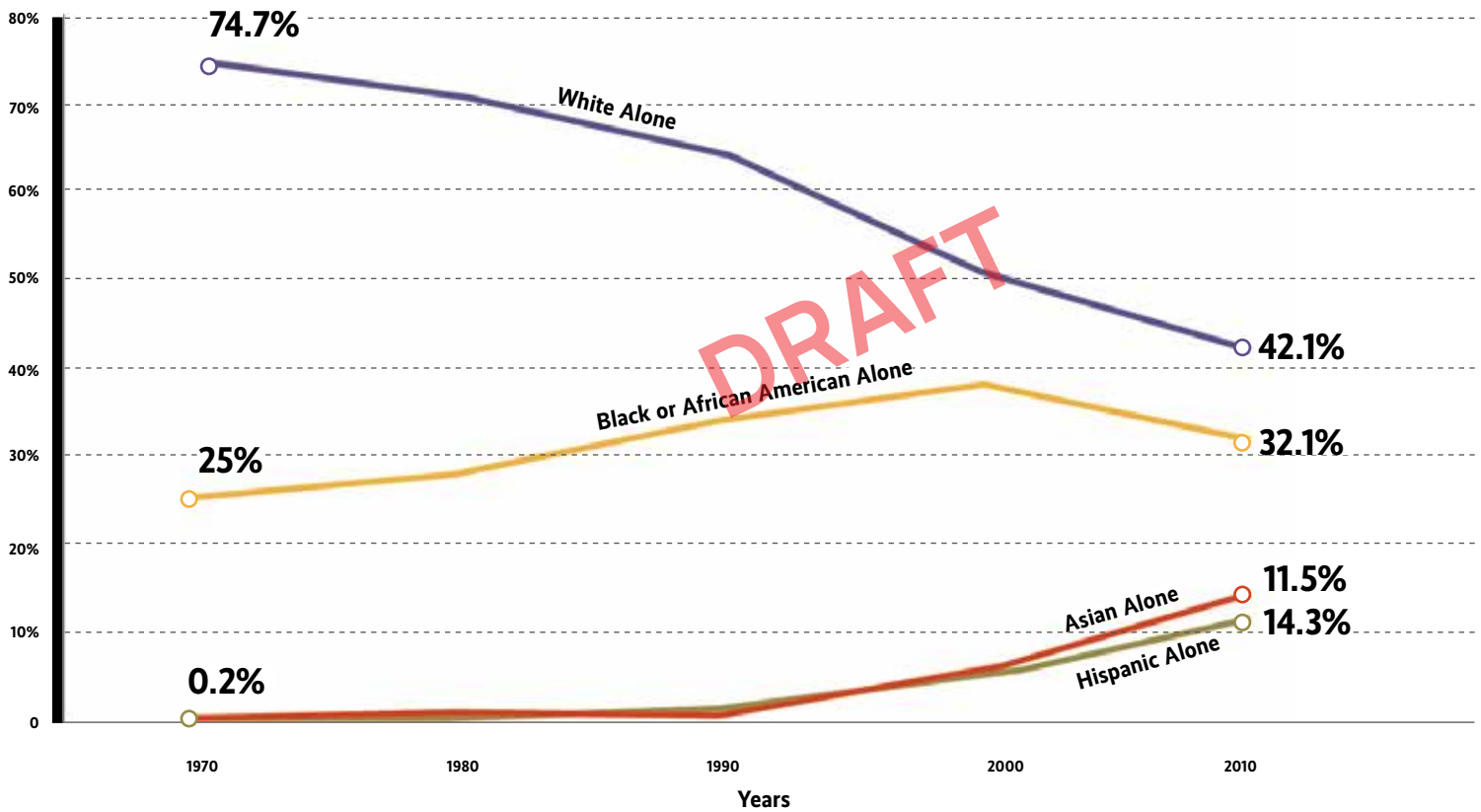


Figure 1.5–Race & Ethnicity Over Time, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Employment

In 2014–2018, 66.0% of people 16 years and older were employed in the civilian labor force and 3.4% were unemployed; 30.7% of residents over 16 were not in the labor force. This is significant progress over the 2009–2013 period, when just 52.8% of residents were employed in the labor force. An estimated 81.0% of employed people in Garden City were private wage and salary workers in 2018; 10.2% worked in federal, state, or local government; and 8.8% were self-employed in their own (not incorporated) business.

The unemployment rate in Chatham County had been declining steadily from mid-2011 until March 2020, when the economic impacts of the COVID-19 pandemic were felt across the country. In April 2020, the monthly unemployment rate skyrocketed to 16.5%, higher than the rates of both Georgia (12.2%) and the United States (14.8%).

## Unemployment Rate, 1992–2019

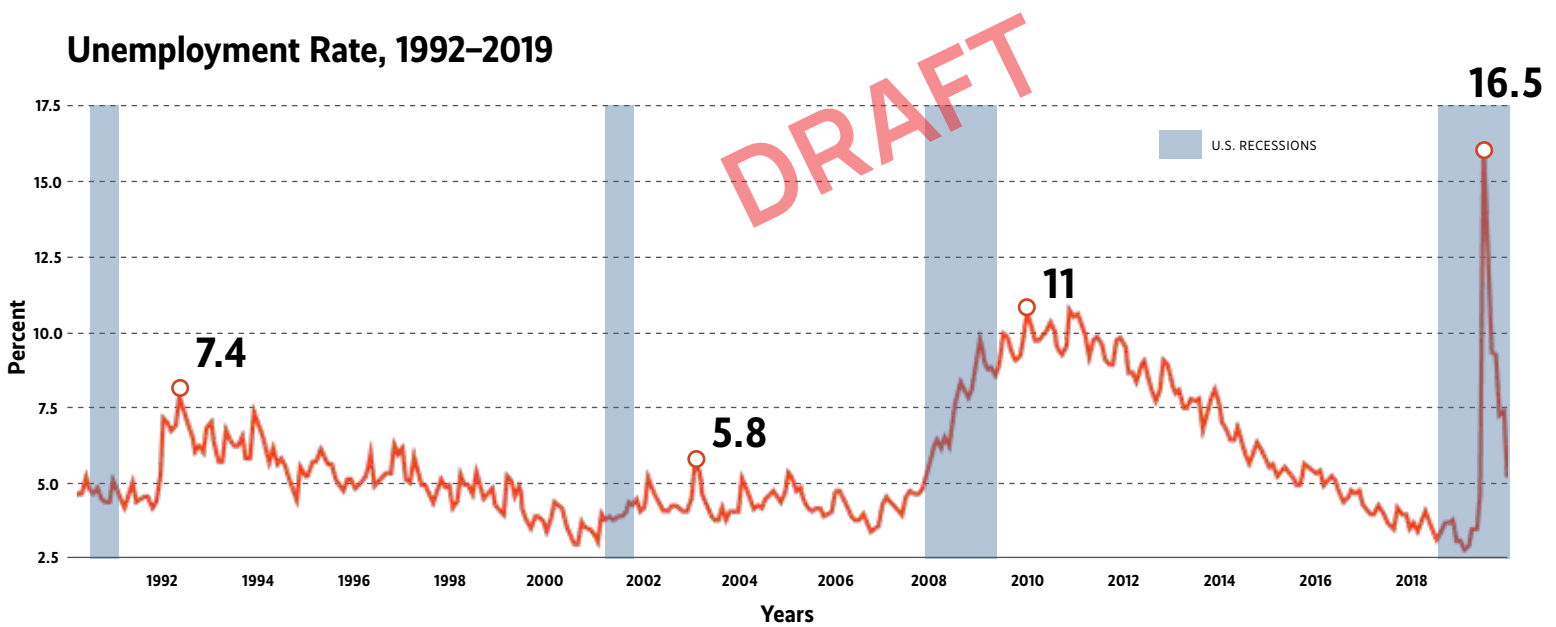


Figure 1.6–Unemployment Rate in Chatham County  
Federal Reserve Economic Data (FRED)



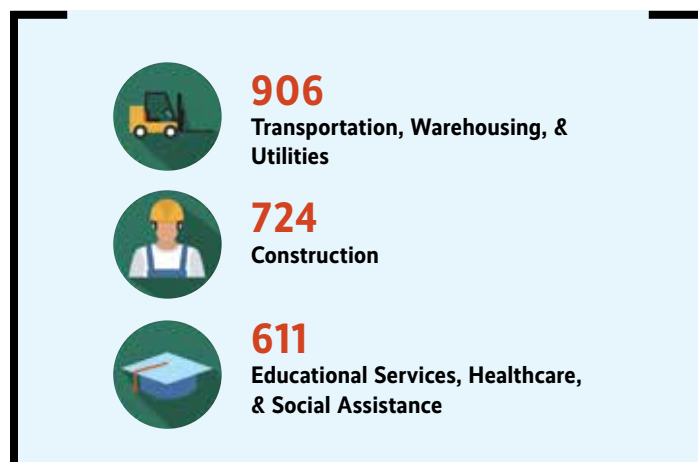
## Industry

In Garden City, the three largest industries by employment in 2018 were transportation, warehousing, and utilities (906 employees); construction (724); and educational services, health care and social assistance (611). Collectively, these industries added nearly 1,000 jobs from the 2009–2013 period, over half of which were in the transportation, warehousing, and utilities industry. This industry also saw the greatest growth in employment during that time, increasing by 10.8 percentage points.

Location quotient (LQ) is a measurement of how concentrated a particular industry is in an area relative to the nation as a whole. It compares the industry's share of local employment to the U.S. average. A LQ of 1 indicates an industry is providing the same share of jobs locally as it is nationally, a LQ above 1 indicates a higher-than-average concentration locally, and a LQ below 1 indicates jobs in that industry are less concentrated locally than the national average. The LQ for industries in Garden City is shown in Figure 1.7.

The transportation, warehousing, and utilities industry was nearly 4 times more concentrated than the national average in 2018. As discussed above, this industry made up the largest share of Garden City's workforce—one in five residents were employed in it in 2018—and experienced the most growth between 2014–2018. The construction industry was also nearly 2.5 times more concentrated in Garden City than the country as a whole.

## Largest Industries by Employment, 2014–2018



## Industry Sector Concentration, 2014–2018

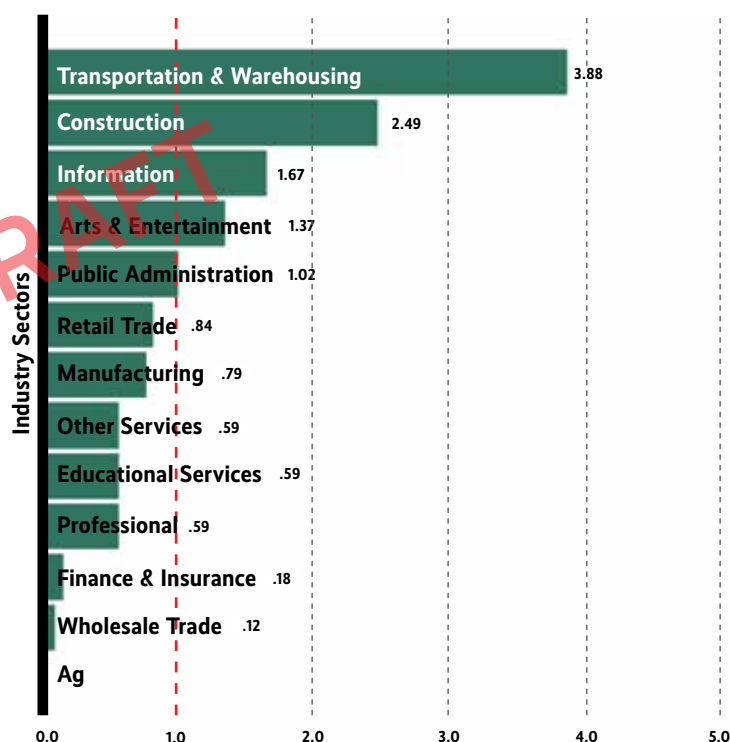


Figure 1.7—Industry Sector, Garden City

U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates





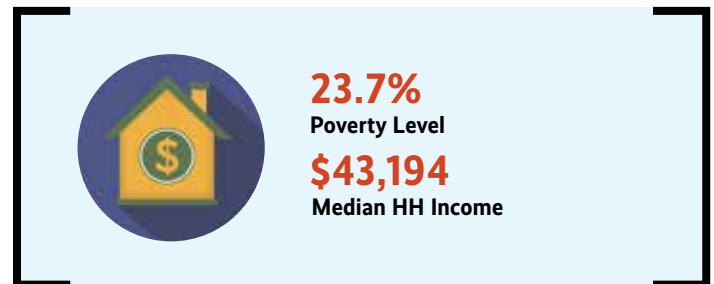
## Income & Poverty

In general, household incomes in Garden City have increased significantly in recent years. In 2014–2018, the median income of households was \$43,194, an increase of more than \$10,000 from the 2009–2013 period. The distribution of household incomes in 2009–2013 and 2014–2018 is shown in Figure 1.8.

The recent rise in median household income was driven by both a decrease in the share of households making less than \$35,000 and an increase in households making \$35,000 to \$150,000. Households making \$50,000 to \$150,000 annually saw the greatest growth between the two periods of time, and by 2018, one in four households fell into this income category.

An estimated 23.7% of people in Garden City lived below poverty level in 2018. Nearly four in ten children under 18 lived in poverty (39.2%), compared to adults aged 18–64 (18.3%) and seniors aged 65 and older (13.9%).

## Poverty & Income Characteristics, 2014–2018



Likewise, females were overrepresented in the population living below poverty level: while females made up only 48.4% of the total population, they made up 57.0% of the population living in poverty.

## Median Household Income Change

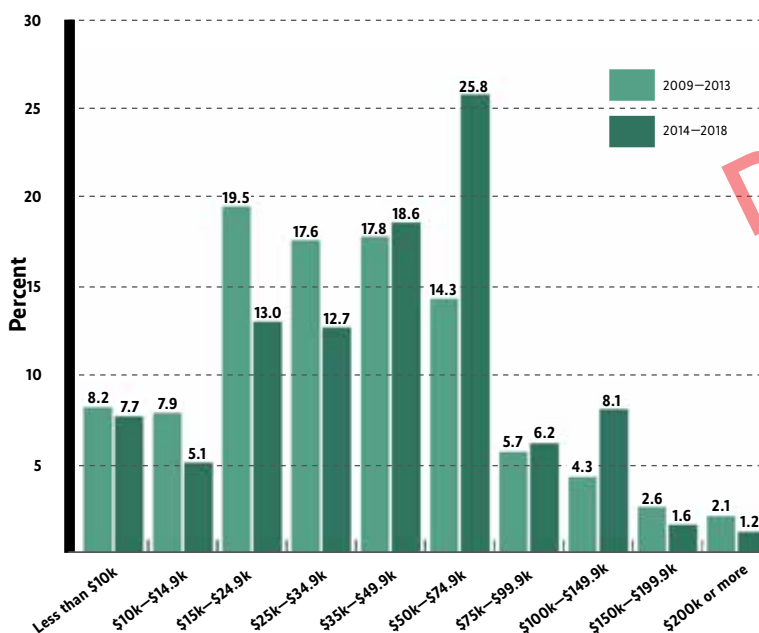


Figure 1.8–Median Household Income Change, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Status of Poverty by Age, 2014–2018

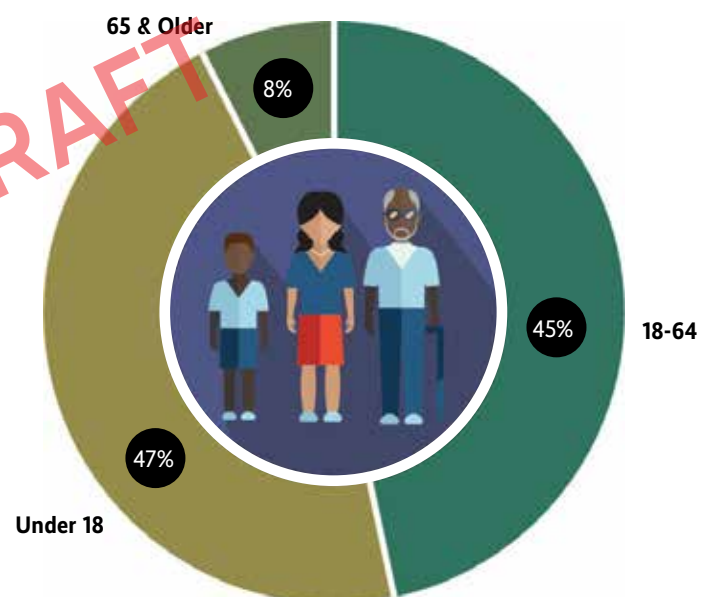
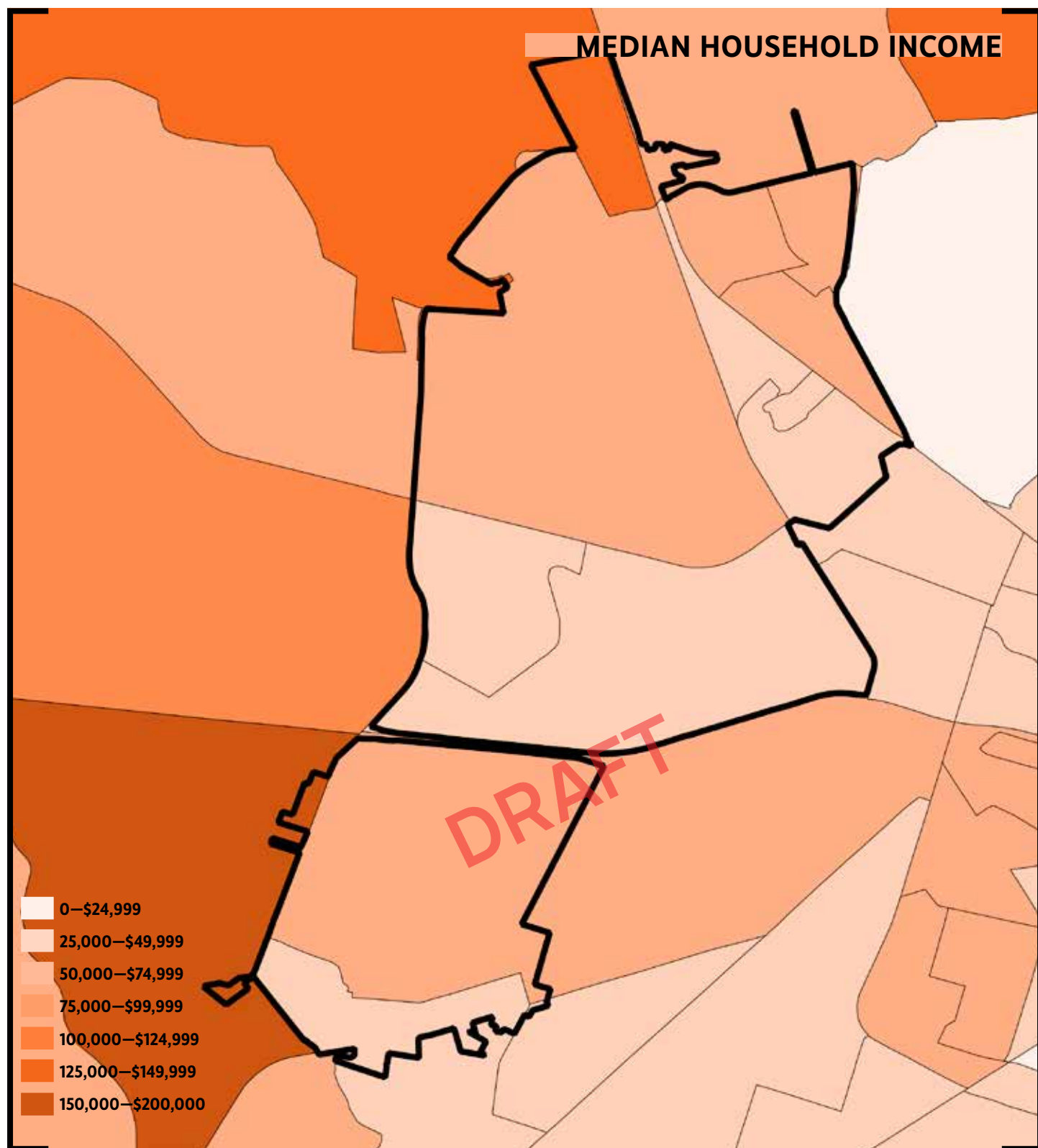


Figure 1.9–Poverty Age Status, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



Map 1.2—Median Household Income by Block Group, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

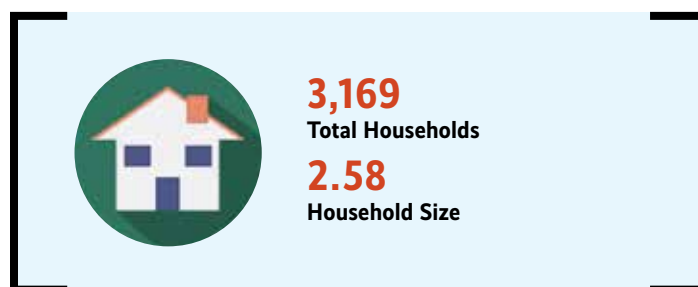


## Households & Families

National trends throughout the 20th Century that saw a long-term decline in household size as families had fewer and fewer children over time began to reverse in the 21st Century. This is mirrored in the change in average household size in Garden City from 2000 to 2010, growing slightly from 2.56 to 2.58 people. In 2014–2018, the average household size had increased to 2.88 people. This rise is likely driven by changes in household composition in recent years; although families are postponing childbearing and having fewer children overall, the share of young adults living with their parents has increased at a greater pace, as has the share of multigenerational households.

In 2014–2018, there were an estimated 3,169 households in Garden City. Families made up 58.7% of households, while 41.3% were people living alone or with other nonfamily members.

## Household & Size Characteristics, 2014–2018



## Household by Type, 2014–2018

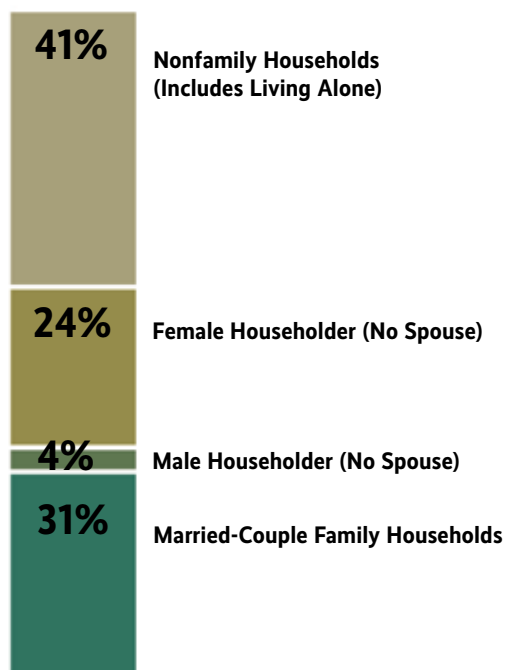


Figure 1.10–Household by Type, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Marital Status, 2014–2018

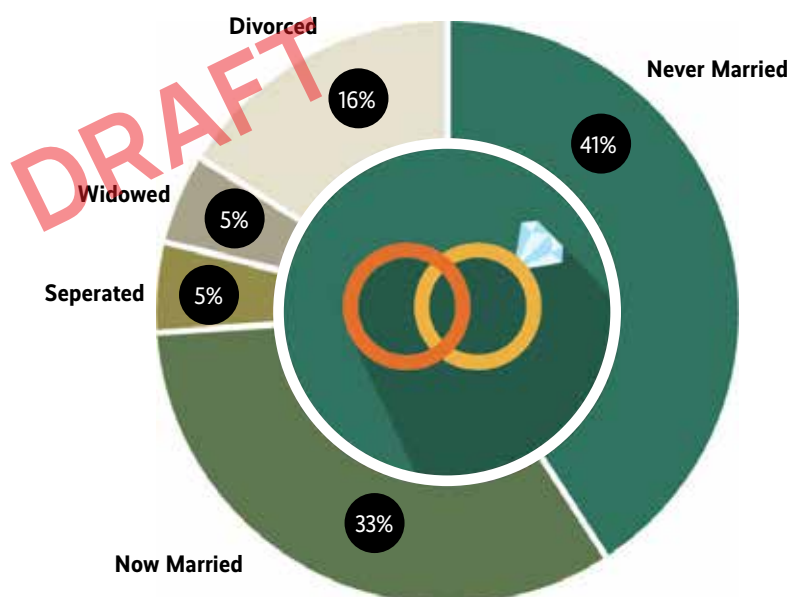


Figure 1.11–Marital Status Population 15 Years and Over, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Housing Units, Ownership & Tenure

There were an estimated 3,552 housing units in Garden City in 2014–2018, roughly half of which were single-unit structures, which includes both detached and attached residences (i.e., townhomes). Nearly 90% of units were occupied, primarily by renters (65.3%), with homeowners inhabiting roughly one out of every three occupied housing units (34.7%).

The estimated rental vacancy rate, or amount of rental stock that is vacant for rent, was just 2.7% while the homeowner vacancy rate was 7.6%. For comparison, the national rental and homeowner vacancy rates for the same year were 6.0% and 1.7%, respectively.

## Housing Characteristics, 2014–2018



## Housing Types, 2014–2018

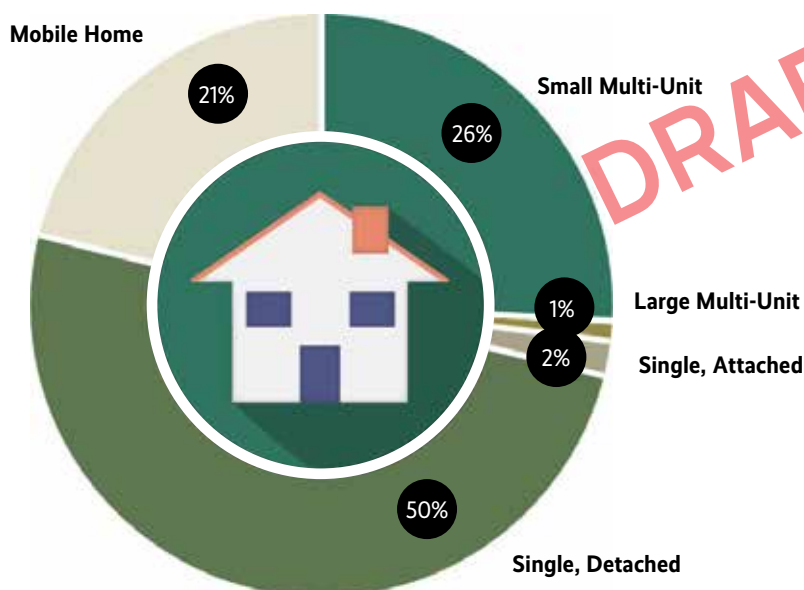
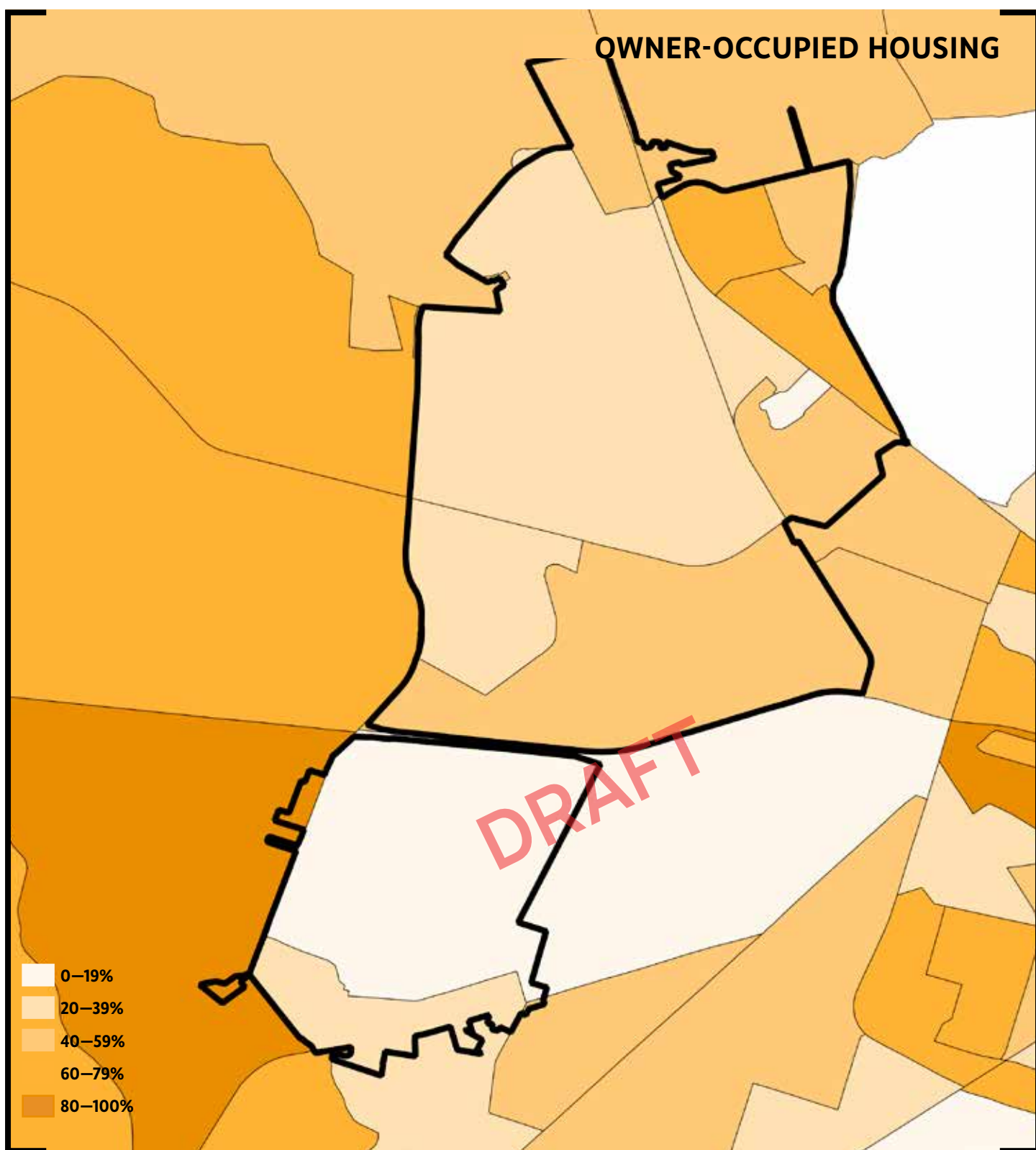


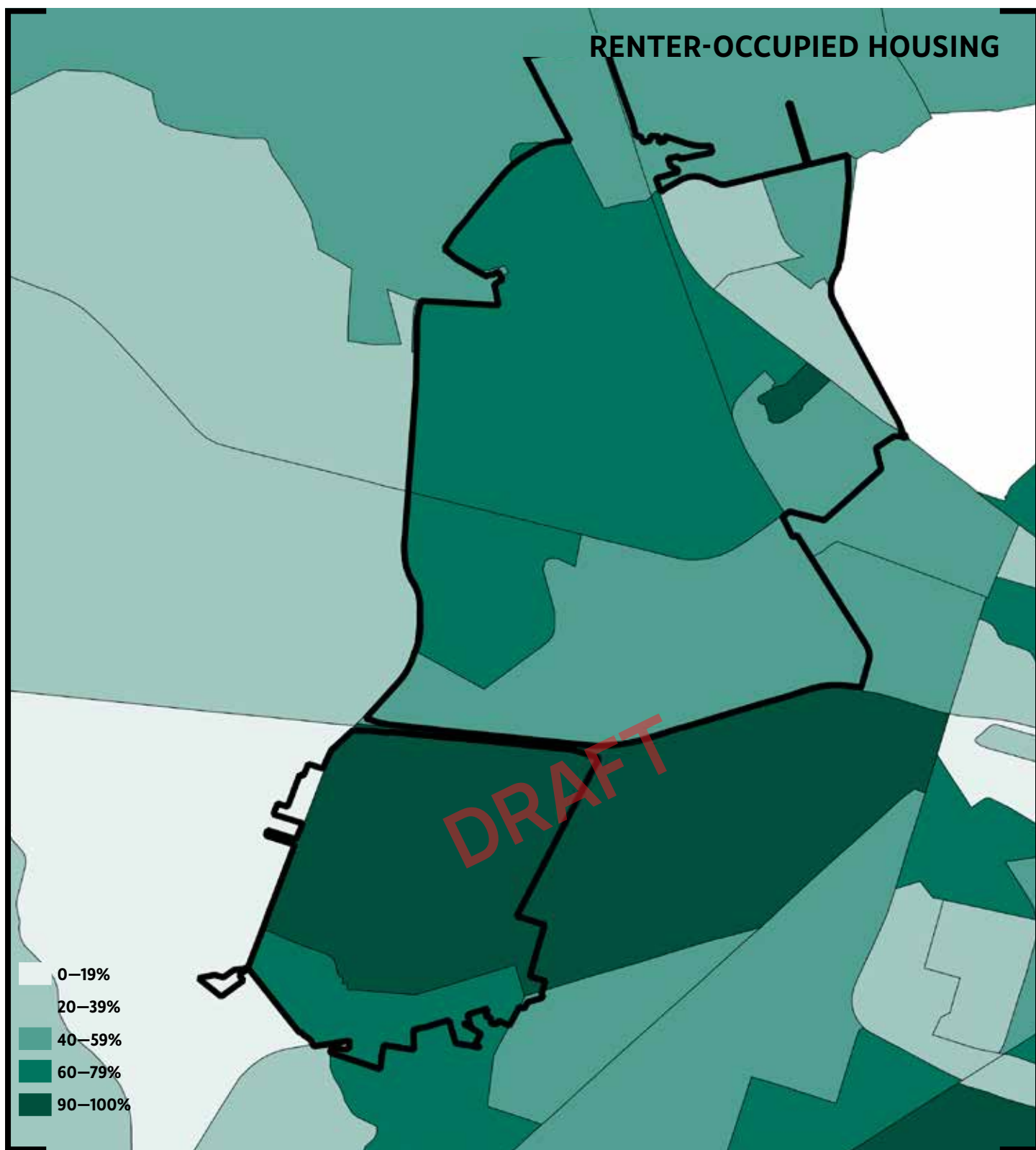
Figure 1.12–Housing Type, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates





Map 1.3—Percent Owner-Occupied Housing by Block Group, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates





Map 1.4—Percent Renter-Occupied Housing by Block Group, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Housing Value & Costs

In 2014–2018, the median property value of owner-occupied residences in Garden City was \$124,600. The 45.5% of owner-occupied units that had a mortgage typically spent an estimated \$1,119 per month on housing costs, while those without a mortgage (54.5%) spent an estimated \$430 per month. Of households with a mortgage, 24.6% were considered cost-burdened, paying at least 30% of their monthly income toward housing expenses.

According to the U.S. Department of Housing and Urban Development, cost-burdened households “may have difficulty affording [other] necessities such as food, clothing, transportation, and medical care.” This is a notable increase from 2006–2010, when 18.9% of households with a mortgage were cost-burdened.

## Housing Characteristics, 2014–2018



For renters in Garden City, the median gross rent was \$855 in 2018 and 37.3% of rental households were cost-burdened, down 7.5 percentage points from the share of cost-burdened renters in 2006–2010.

## Gross Rent as a Percentage of Household Income, 2014–2018

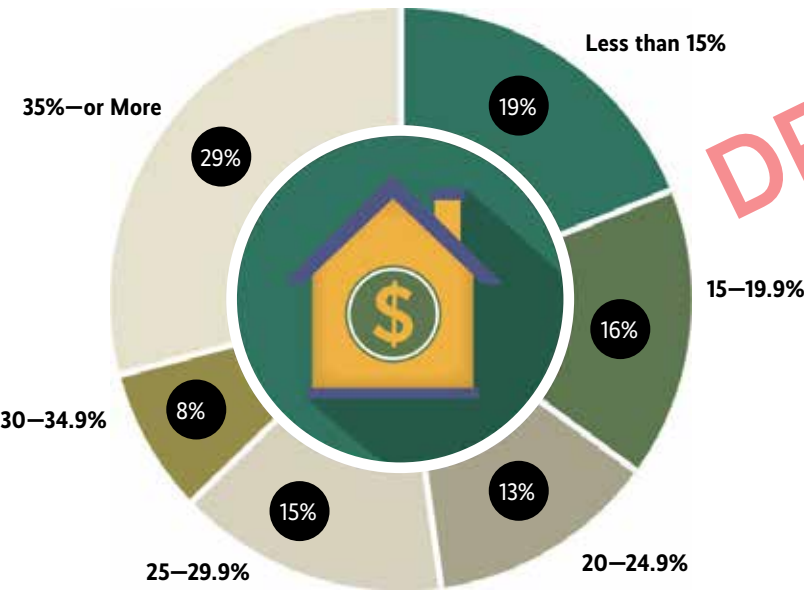


Figure 1.13–Cost Burdened Renter, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

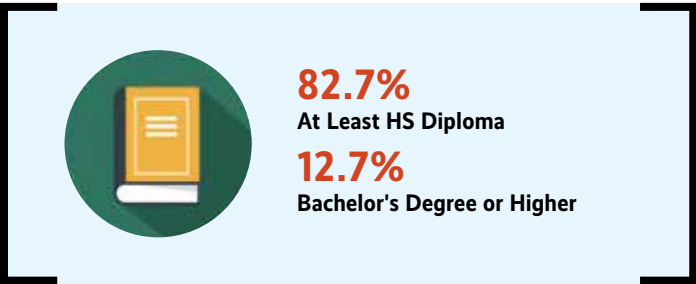




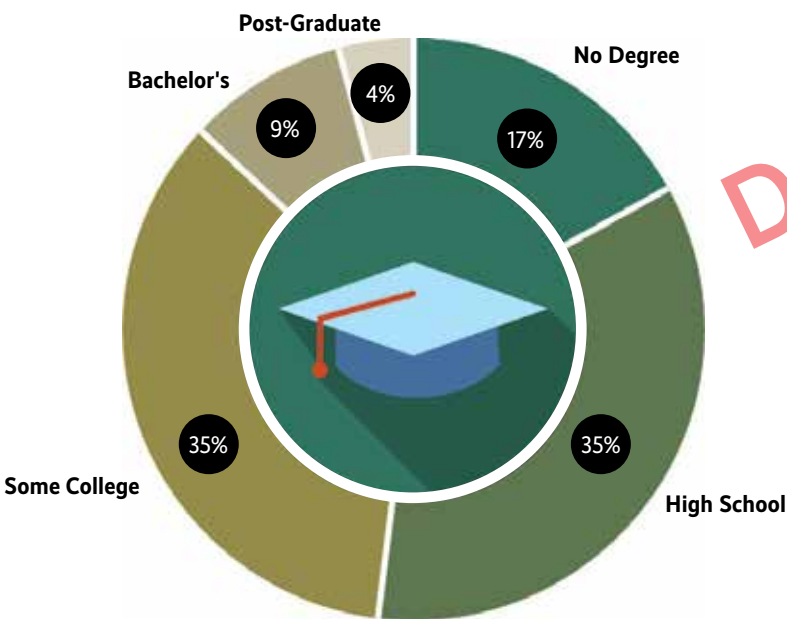
## Educational Attainment

In Garden City, most people over age 25 held a high school diploma (including high school equivalency degree) or higher in 2018 (82.7%), while 12.7% held a bachelor's, graduate, or professional degree. These are roughly the same proportions as 2009–2013. Of note, however, is the increase in the share of residents who had some college experience but did not obtain a degree, which rose from 19.4% in 2013 to 26.6% in 2018. Figure 1.14 illustrates the breakdown of educational attainment in Garden City.

## Educational Characteristics, 2014–2018



## Educational Attainment, 2014–2018

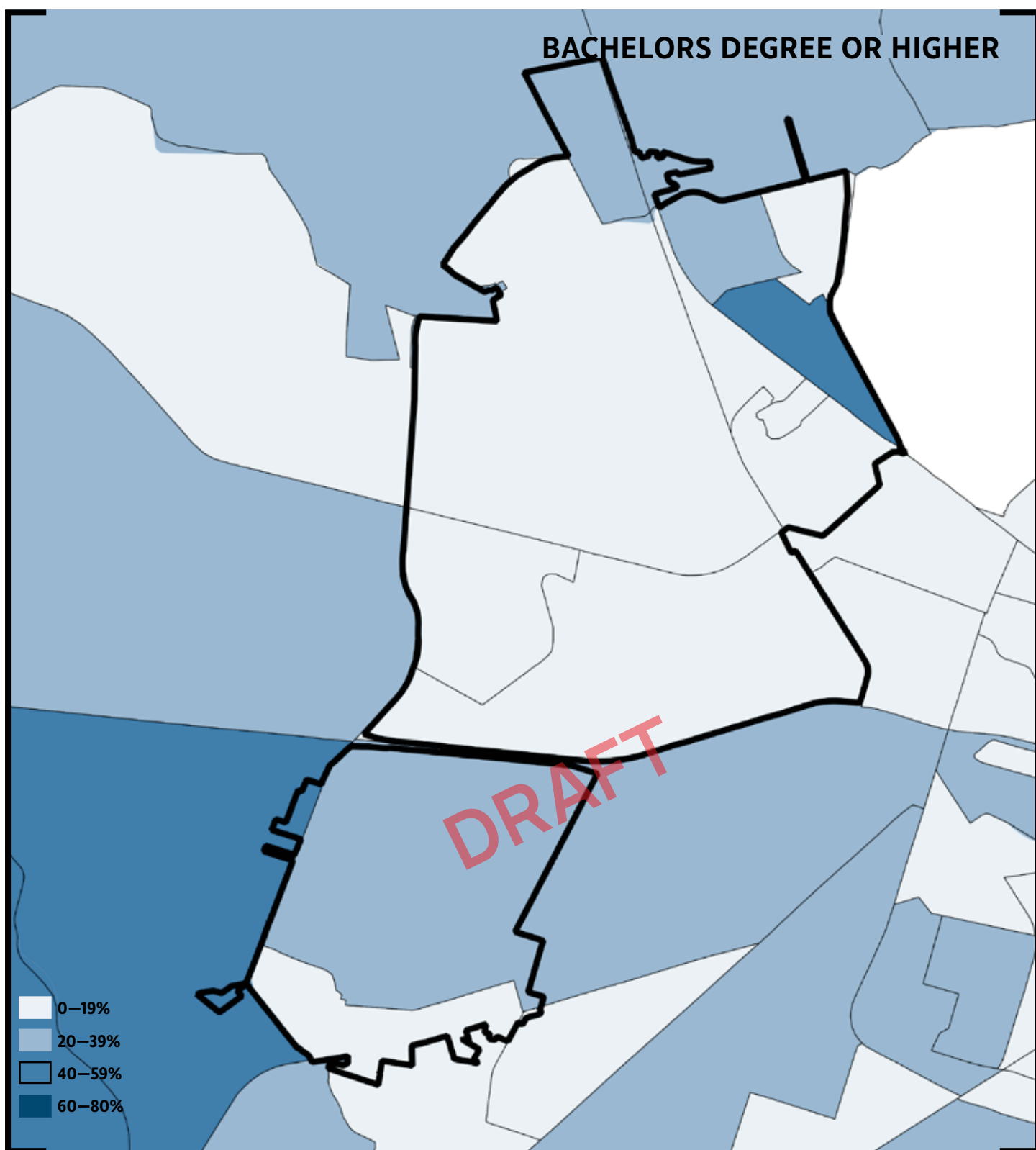


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Figure 1.14–Educational Attainment, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## BACHELORS DEGREE OR HIGHER



Map 1.6—Percent Bachelors Degree or Higher by Block Group, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Nativity

In 2014–2018, 85.5% of the population in Garden City were U.S. natives and 14.5% were foreign-born. This is the highest percentage of foreign-born residents of all of the municipalities in Chatham County, and is a significant increase of 6.2 percentage points from the 2009–2013 period. Of those residents born outside the United States, nearly 90% came from Latin America (including the Caribbean, Central America, and South America). While the foreign-born population has increased in recent years, the percentage of residents from Latin America has remained approximately the same since 2013.

In 2018, nearly one in four people over the age of 5 spoke a language other than English at home, with Spanish (18.3%) being most prevalent among non-English speaking households.

## Languages Spoken at Home, 2014–2018

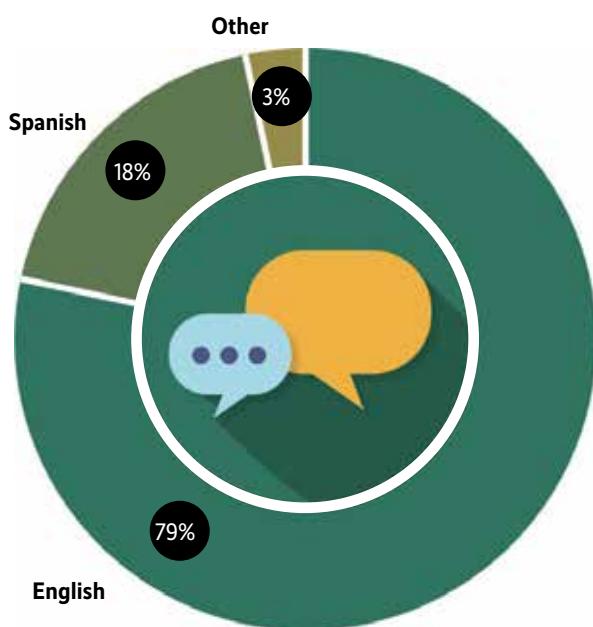
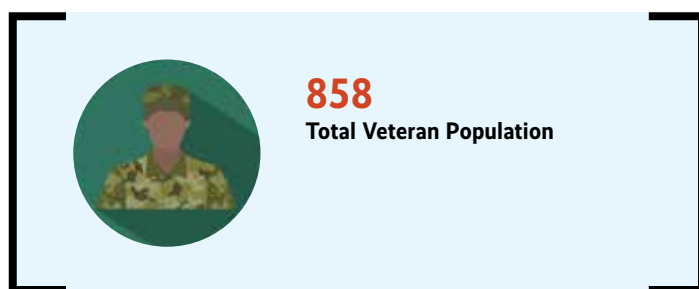


Figure 1.15–Language Spoken at Home, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Veteran Status

In 2014–2018, approximately 9.6% of adults living in Garden City were veterans, which is a slightly higher percentage than the state of Georgia (8.2%) and the country as a whole (7.5%). The period of military service for veterans living in Garden City is shown below. Please note that some veterans may have served in more than one of the periods listed, so percentages in the graph may not sum to 100%.

## Veteran Characteristics, 2014–2018



## Military Service for Adult Veterans

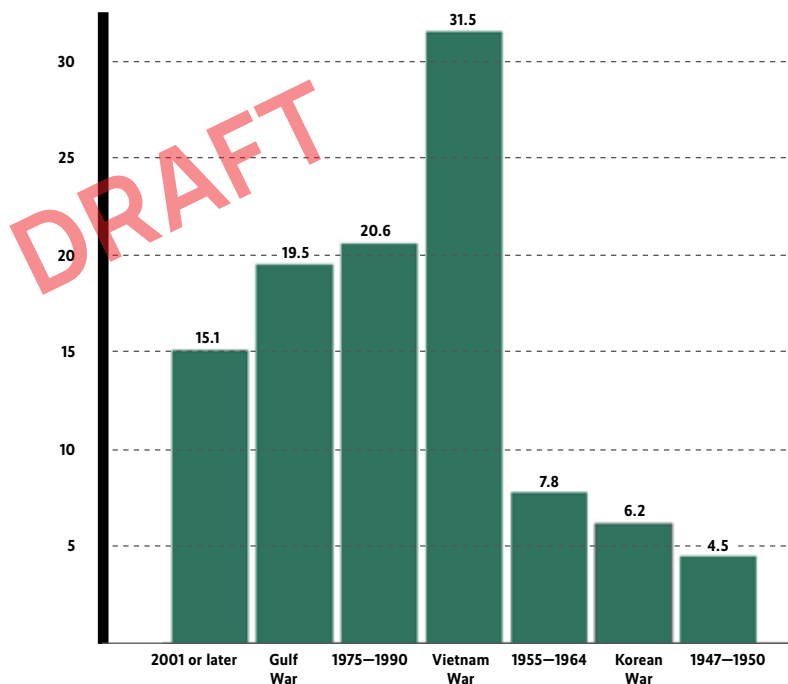


Figure 1.16–Period of Military Service for Adult Veterans, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Construction

The construction of residential buildings can be a good indicator of a community's growth. Figure 1.17 shows the residential construction trend in Garden City from 2010 to 2018. Estimating the population based on the number of building permits is useful in planning for roads and utilities because a residential dwelling unit represents the potential for population regardless of the occupant's official residence.

High demand for industrial and commercial uses in the northern part of the city along with the lack of water and sewer infrastructure in the southern portion of the city has led to minimal residential growth in since 2010.

### Construction Permits, 2010–2018

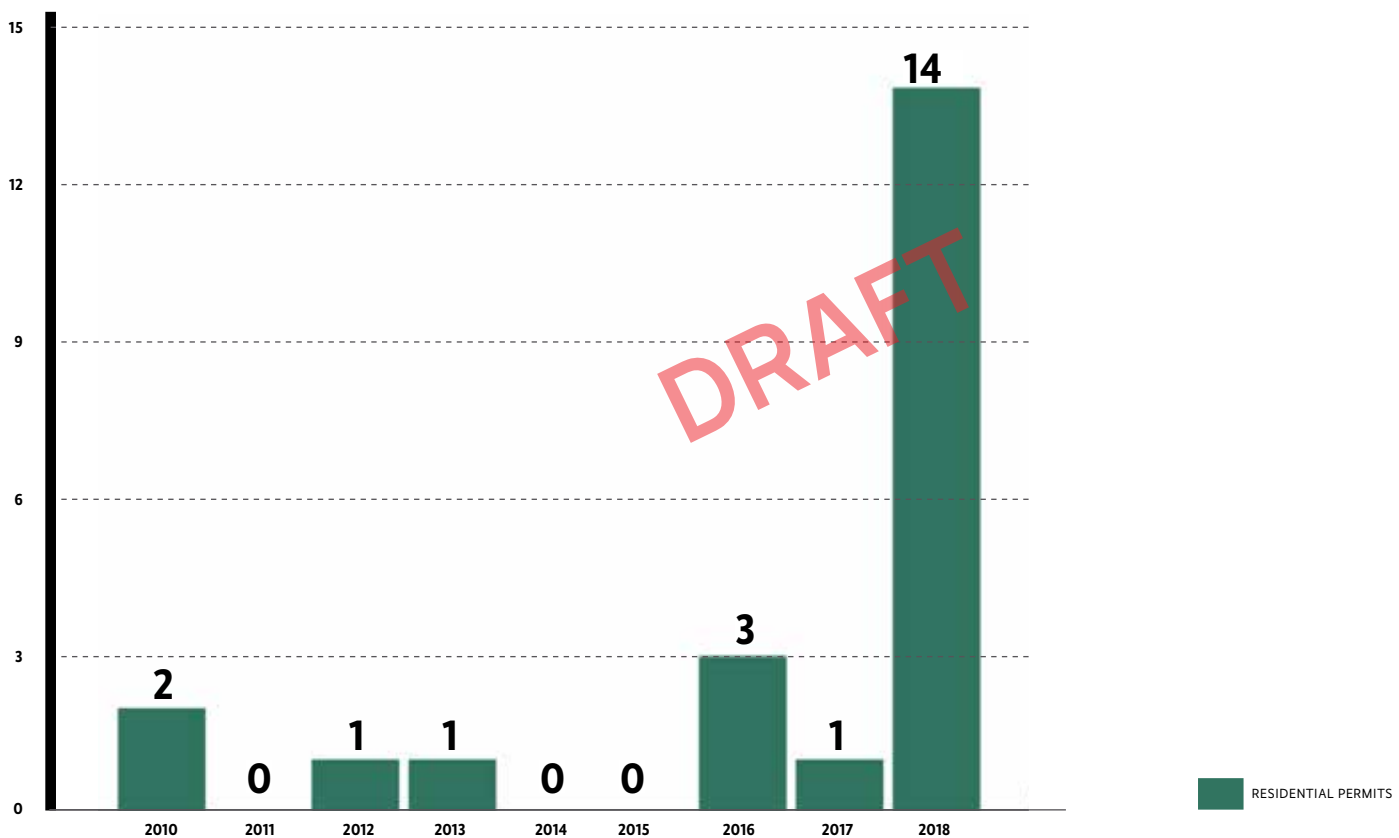


Figure 1.17–Construction Permits, Garden City  
Chatham County Building Safety & Regulatory Services

## COVID-19 Pandemic

COVID-19 has touched nearly every aspect of our community and our lives in the past year. Chatham County, like every county in the country, suffered the economic, social, educational, and health consequences of the pandemic that, at the time of writing, has killed over 569,000 Americans. As of April 5, 2021, Chatham County had a total of 19,608 confirmed COVID-19 cases, 394 confirmed deaths, and 1,561 hospitalizations due to COVID-19. At the time these data were acquired, there were an additional 24 probable deaths due to COVID-19 in Chatham County as well.

At the time of writing, the world is still seeing the impacts of COVID-19. Although Garden City-specific data is unavailable, limited data is available at the county-level and is represented here. As of February 2021, the employment rate in the county had decreased 5.8% compared to January 2020. These job losses have been concentrated primarily in low and middle wage jobs; in fact, the employment rate among workers in the top wage quartile has been above January 2020 levels since statewide stay at home orders were lifted on April 30, 2020. Workers in the bottom wage quartile, however, have remained hardest hit since last March, when the employment rate for low wage jobs dropped nearly 45% by mid-April 2020.

Unemployment claims in the county reached their peak the first full week of April 2020, when roughly 14,500 people filed an initial claim for unemployment benefits. This corresponds to a rate of 10.4 claims per 100 people in the labor force. The number of unemployment claims has generally been decreasing since then-as of the week ending October 31, 2020, there were 0.88 unemployment claims per 100 people in the county's labor force.

Small businesses have also been negatively impacted. As of February 2021, 33% fewer small businesses were open in Chatham County compared to January 2020 and total small business revenue had decreased by 38.5%. By mid-March 2021, however, total consumer spending in Chatham County had nearly rebounded back to January 2020 levels.

Overall, Chatham County residents spent 5% less time away from home in April 2021 compared to the start of last year when the pandemic began. When people did leave their residence during this time, the average amount of time spent elsewhere varied significantly depending on their destination.

- The total time spent at grocery stores in Chatham increased 2.9%
- Total time spent in parks increased 64.7%
- Total time spent at retail and restaurant locations increased 1.6%
- Total time spent at transit locations decreased 24%
- Total time spent in the workplace decreased 29.6%



## Percent Change in Employment

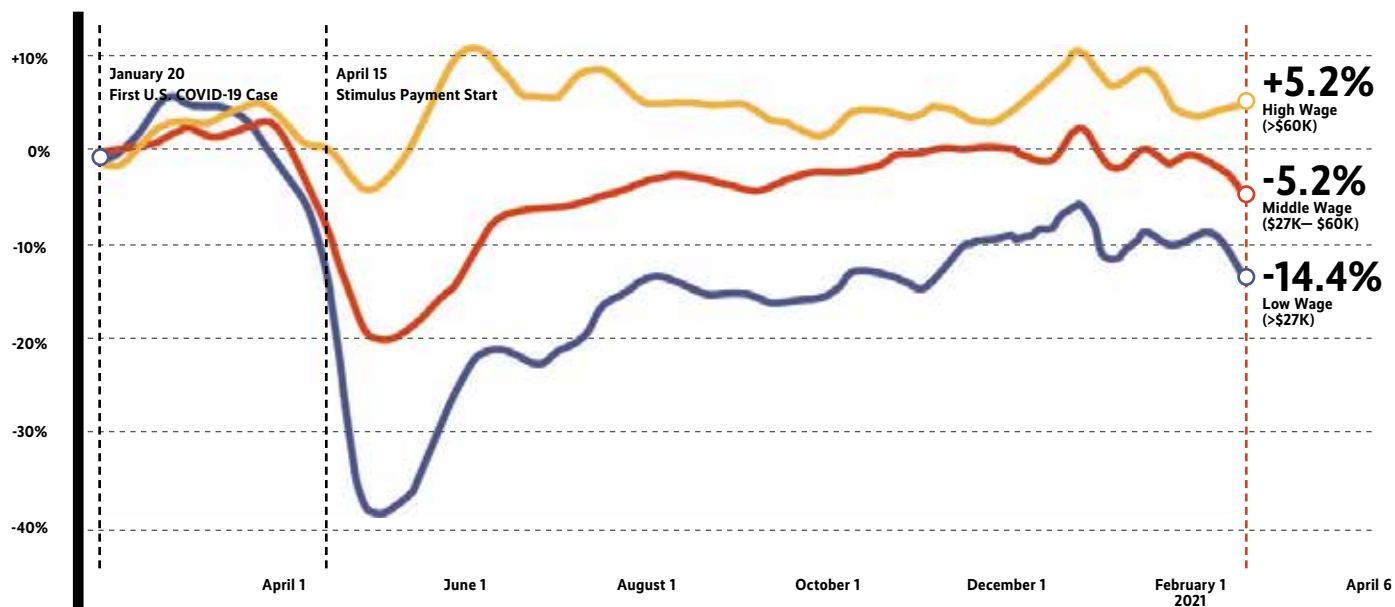


Figure 1.18–Percent Change in Employment, Chatham County

## Time Spent Outside Home Chatham County

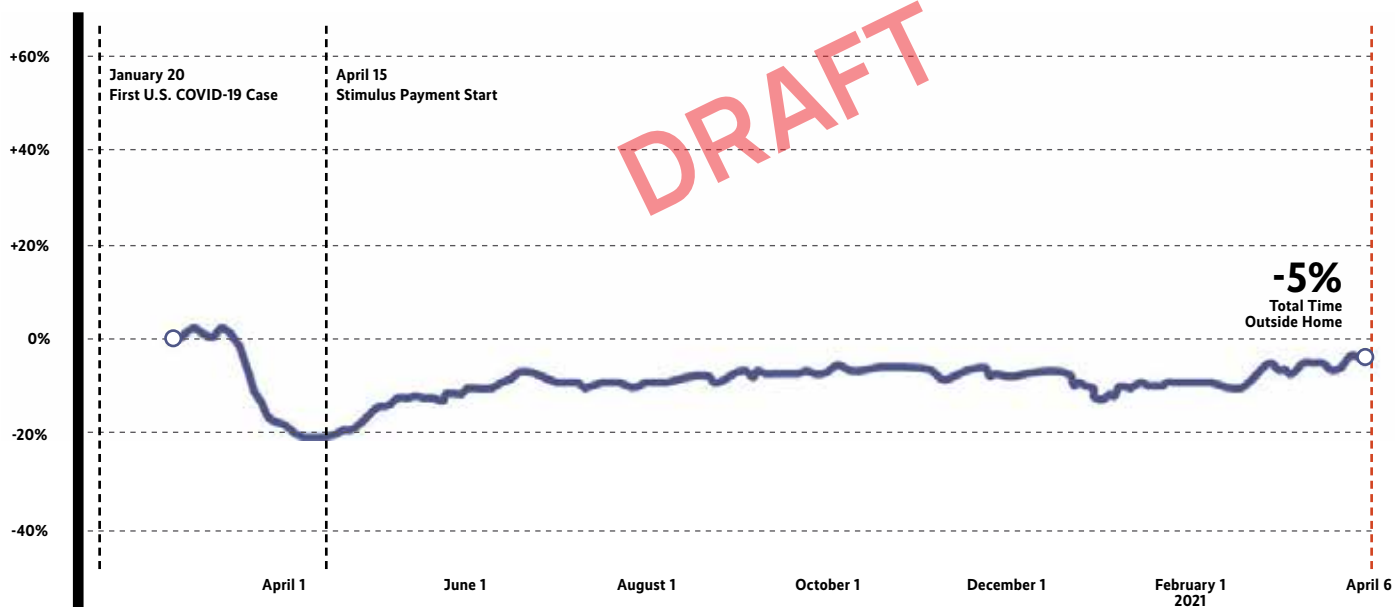


Figure 1.19–Percent Change in Time Spent Outside Home, Chatham County



# COMMUNITY GOALS ELEMENT

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# 02



# COMMUNITY GOALS

## Introduction

The visions and goals that emerged through the Garden City 2040 comprehensive planning process represent the voices of the community as expressed in virtual meetings, pop-up events and a survey conducted during 2020 and 2021.

The following results describe our community vision, goals and objectives for the next twenty years.

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# GARDEN CITY 2040

## VISION & GOALS

### Introduction

The Vision and Goals identify Garden City's direction for the future and are intended to serve as a guide to Garden City officials in day-to-day decision making. They are the product of public involvement and the following components:

- The Vision
- Goals
- Objectives

Each of these components was previously established in the city's prior Comprehensive Plan. Through the Garden City Plan update process community members were given opportunity to revisit and update each component.

### The Vision

The Vision paints a picture of what Garden City desires to become. The Vision statement offered below was refined through discussion with the city council, steering committee, and participants. The Vision is supported by the goals created to help shape Garden City's future development.

*Garden City is a Safe, Family-Oriented and Business Friendly Community*

”

### Goals

Priorities are long-term outcomes the city hopes to achieve by implementing the Comprehensive Plan. They are aspirational, expressing Garden City's collective desires and values.

The community identified a number of goals to achieve in order to make Garden City's Vision a continuing reality. The following goals represent the recurring themes, and like the Vision Statement, were derived from a review process involving city staff, the steering committee, and members of the public.

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*Promote Retail & Diversity of Housing Types*

*Implement the City's Adopted Redevelopment Plan*

*Update City Codes & Ordinances*

*Protect Neighborhoods from Industrial Impacts*

*Create Design Guidelines for Commercial & Residential Development*

*Branding The City through Marketing*

*Expand Passive & Active Recreation Opportunities*





## *Promote Retail & Diversity of Housing Types*

Throughout the planning process, increasing commercial and retail opportunities and providing a destination attraction for Garden City was a goal expressed by participants. Participants believed that opportunities have been lost by the business choosing to develop in surrounding areas instead.

At the heart of this goal is economic development and building long-term prosperity for all residents. It involves actively engaging the city and its economic development partners in business attraction and retention. The benefits of this goal include a strong tax base, a stable job market, and ready access to services and goods. The city seeks to promote the "blue collar aspect," of the economy and diversify with more retail and light commercial.

Efforts to provide a comprehensive management approach to retail and commercial development include at a minimum, a market analysis, market trends, and real estate selection which is particularly important to Garden City.

### **Objectives:**

- The city will develop a Comprehensive Economic Development Plan that takes into consideration a market analysis, market trends, and real estate selection
- The city will approve retail and commercial proposals, subject to other policies, if: they are appropriate to the scale and function of the area; are compatible with land use character within the zone; are consistent with adopted strategic framework including urban design themes, traffic management arrangements; and provides for convenient pedestrian and vehicle access and linkages to adjoining commercial centers



## *Implement the City's Adopted Redevelopment Plan*

Over the past twenty years, Garden City has experienced a significant shift from residential to industrial development, attributed to the growth of the Georgia Ports Authority. This changing dynamic in development led to disinvestment in some of the older neighborhoods, encroachment of industrial uses, and declining pockets of commercial and deteriorating buildings. The city is meeting the challenges related to housing, economic development and future development through the implementation of its Urban Redevelopment Plan.

The plan identifies three target areas, each with a unique development characteristic and varying needs as it relates to a redevelopment strategy. Garden City has established goals for housing within the redevelopment area which include eliminating substandard housing; encouraging quality infill development within established neighborhoods; creating affordable housing opportunities within the community; and creating a diverse housing stock in terms of housing types and densities. Additionally, the mix of commercial uses that serve a regional market is proposed for the commercial targeted redevelopment areas.

Garden City identified three target areas for redevelopment including the Garden City South Target Area; West Highway 21; and West Highway 21 Residential Area.

### **Objectives:**

- Approve quality infill development within established neighborhoods within the Urban Redevelopment boundaries that are consistent with the neighborhood in terms of architecture and design
- The city will identify and protect historic resources within the Urban Redevelopment boundaries





## *Update City Codes & Ordinances*

Garden City desires to manage growth and build a liveable city with successful neighborhoods and districts. The goal of auditing and updating ordinances is to ensure residents have the opportunity to live in a safe and continually healthy community with access to affordable homes, amenities and services, making good use of natural resources and transportation options for all forms of travel.

The current zoning ordinance gives the city the authority to control a number of items related to development, but does not currently identify or directly address “safe growth” objectives.

### **Objectives:**

- The city will update their ordinances to be user-friendly and easy to understand
- The city’s ordinances will be illustrated with graphics, diagrams and concise tables
- The city’s ordinances will allow for a streamlined development review process
- The city’s code update will be created so as to foster the desired type of redevelopment and future development with design standards and specific building material to change the aesthetics of the corridor
- The city will consider accounting for sea level rise trends when updating city policies



## *Protect Neighborhoods from Industrial Impacts*

Throughout the planning process, preservation of Garden City's neighborhoods was a dominant goal expressed by participants. The main purpose of this goal focuses on including a balanced approach to the city's transportation system that serves to protect the neighborhood development areas from adverse impacts from port related traffic and encouraging connectivity.

### **Objectives:**

- The city shall protect and improve the character and integrity of neighborhoods from negative impacts resulting from traffic related to the GPA
- The city shall coordinate with GDOT and other relevant agencies in planning mitigation strategies where impacts are expected within Garden City
- Garden City will explore a "complete streets policy"
- Garden City will improve connectivity throughout the city
- Garden City will address safety and mobility issues that may arise for all road uses and users of multi-modal

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## *Create Design Guidelines for Commercial & Residential Development*

Thoughtful design components play an important role defining a community and can distinguish it as a desirable destination. Participants in the planning process recognize that design guidelines can reinforce the positive identity of a community's commercial core and contribute to neighborhood character.

Design guidelines are intended to address some of the most common, overarching challenges in planning commercial developments within Garden City.

The prime areas of opportunity for attaining high quality design in commercial projects include: enhancing the quality of the pedestrian experience along commercial corridors; nurturing an overall active street presence; protecting and conserving the neighborhood architectural character; establishing height and massing transitions between residential and commercial uses; maintaining visual and spatial relationships with adjacent buildings; and optimizing opportunities for high quality infill development that strengthens the visual and functional quality of the commercial environment within the context of Garden City.

### **Objectives:**

- The city will create and adopt design guidelines for commercial corridors that define key elements and determine patterns and standards that should be adhered to when developing site or building projects
- The city will create and adopt design guidelines for commercial corridors that address issues of building size and massing, definition of open spaces, site character and quality as well as access and circulations

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## *Branding The City through Marketing*

Garden City takes seriously its responsibility towards building a positive image to support its vision both internally and externally and to provide a favorable experience.

The goal of branding Garden City is to define its culture and speak to its uniqueness. During the planning process, participants shared the need to positively change the perception and create a consistent context for marketing.

Producing a positive image promotes that the city embraces its vision for a safe, family-oriented and business friendly community.

### **Objectives:**

- Garden City will develop a brand that creates an image that represents Garden City's essential identity
- Garden City will create a consistent message for the city's economic development efforts
- Garden City will set forth approved usage of the city's brand for communications in print, web, and electronic form





## *Expand Passive & Active Recreation Opportunities*

Garden City desires to expand and manage passive and active recreation opportunities to provide additional outdoor and equitable access opportunities for its' citizens.

While the expansion of parks and open space is one opportunity, creating trails, bike lanes and multi-use paths for connectivity is a vital advancement for the community.

This goal ensures that the focused investments on a multimodal network is an equitable opportunity since it serves all users in Garden City.

### **Objectives:**

- The city shall provide parks, trails, bike lanes, and multi-use paths to meet the community's growing needs
- The city will ensure design allows access to each type of experience for people of all abilities to the maximum extent possible
- The city will develop parks, trails, and bike lanes, and multi-use paths in an environmentally sensitive manner
- The city shall create a trail network and where feasible, develop interconnected trails and multi-use paths with bike lanes

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# ECONOMIC DEVELOPMENT ELEMENT

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# 03



# ECONOMIC DEVELOPMENT

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## Introduction

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The Economic Development Element of Garden City 2040 is an inventory and assessment of the community's economic base, labor force characteristics, and economic development opportunities and resources. The goal of this element is to explain the foundation of the Garden City economy, and the city's relationship to the Savannah Metropolitan Statistical Area (MSA) in order to provide a complete picture of the area's employees, the largest industries, and the possible future direction of the economy. It attempts to determine the community's needs and goals in light of population trends, natural resources, housing, and land use in order to develop a strategy for the economic well-being of the community.

# REGIONAL ECONOMY

## Savannah MSA

According to the US Census Bureau, a metropolitan statistical area (MSA) refers to cities where adjacent communities are socially and economically interconnected. The city of Savannah acts as an anchor to other communities throughout Chatham, Effingham, and Bryan Counties. The jurisdictions, employees, and employers within the MSA all have an impact on each other. For example, many residents live in Garden and work in Savannah and vice versa. Being the third largest MSA in Georgia (behind the Atlanta MSA and Augusta MSA), the Savannah Metropolitan Statistical Area is home to a variety of industries and an estimated population of over 400,000 people.

*The economic development chapter will not only discuss the economy within Garden City, but also the impact of Garden City on the Savannah MSA*

Because Garden City is economically connected to jurisdictions throughout the MSA, a discussion of major industries, economic opportunities, and economic changes within the Savannah MSA as a whole will be discussed.



### METROPOLITAN STATISTICAL AREA (MSA)

A MSA is a geographical region with a relatively high population density at its core and close economic ties throughout the area. The city of Savannah acts as an anchor to other communities throughout Chatham, Effingham, and Bryan Counties.

—Census Bureau

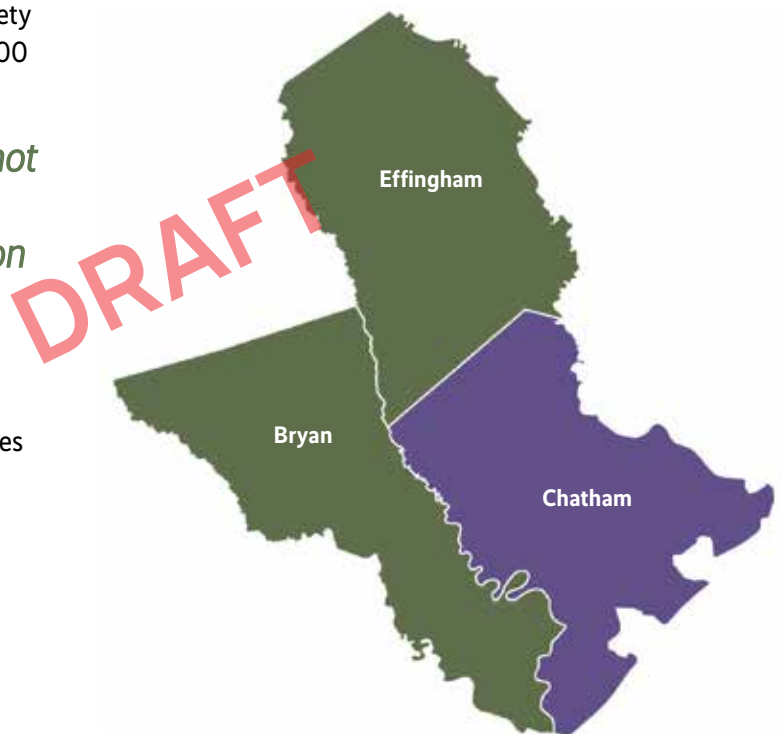


Figure 3.1–Savannah MSA

# LABOR FORCE CHARACTERISTICS



## Labor Force Characteristics

According to the Bureau of Labor Statistics, the labor force is defined as all people above the age of 16 who are working or actively looking for work. This section will specifically address the key characteristics of the labor force in Garden City and the Savannah MSA, ranging from the size of the labor force to their level of education.

## Employment

The Savannah MSA has a labor force of almost 189,000 people, with an unemployment rate that typically hovers around 3% according to a 2020 report from the Georgia Department of Labor. During the pandemic, the unemployment rate skyrocketed to over 15% in April of 2020 and had since settled to an unemployment rate of 5.6% in December of 2020. Before the pandemic, the unemployment rate had been consistently declining. In December of 2019, the unemployment rate shrunk to 2.7% according to the Georgia Department of Labor. Prior to the decline in the economy caused by the COVID-19 pandemic, Savannah's economy showed consistent improvement, with the number of employed residents in the area steadily increasing since 2009, while the unemployment rate consistently decreased during that same period. It is anticipated that the unemployment rate will again show a decrease once the economy begins to recover from the worldwide impacts of COVID-19.

### LABOR FORCE

The labor force is defined as all people above the age of 16 who are working or actively looking for work. This section will specifically address the key characteristics of the Savannah MSA's labor force.

—Bureau of Labor Statistics



In 2019, Garden City had a labor force of a little over 3,900 people, accounting for around 2% of the entire labor force in the MSA. With a 2019 unemployment rate of 3.9 that later jumped to 8.5 in 2020 (due to COVID-19), Garden City, on average, experienced slightly higher unemployment compared with the Savannah MSA during the same time frame. Similar to the MSA, the unemployment rate has also been decreasing for Garden City and will continue to decline as the pandemic continues to subside.

## Average Unemployment Rates

	GARDEN CITY	SAVANNAH MSA
Year	%	%
2013	10.0%	8.0%
2014	9.2%	7.1%
2015	7.1%	5.8%
2016	6.2%	5.2%
2017	5.0%	4.4%
2018	4.3%	3.7%
2019	3.9%	3.3%
2020	8.5%	7.0%

Figure 3.2—Average Unemployment Rates, Garden City & Savannah MSA  
Georgia Department of Labor



## Educational Attainment

Education is an important factor in the economy as it can provide insight into the skill base of the labor force. Understanding the skillset of the population can lead to creating better strategies for attracting industries or identifying a gap in skills that can be filled through educational programs. For example, if it is found that a large portion of the labor force has a degree in engineering, the area will be better able to attract engineering firms that can then hire that employment base. Conversely, if there is a lack of technology skills in the labor force, prioritizing tech programs and training can increase the labor base, and thereby contribute to attracting more technology-based businesses.

## High School

For the 2019–2020 school year, the Savannah Chatham County Public School System (SCCPSS) statistics show that

*In Garden City, around 83% of residents 25 or older has a high school diploma or GED equivalent. Another 13% of residents has a Bachelor's degree or higher according to the American Community Survey, 2018*

### Key Points: SY 2019–20 Graduation Rate

- SCCPSS achieved a graduation rate of 89.7%. This represents a gain of nearly two points compared with the previous year and establishes a new record high for the District
- The District has consistently improved the graduation rate since SY 2014–15 and exceeded the 2019–20 annual target rate of 85.7%

For the sixth consecutive year the district exceeded both the state and the comparison group graduation rates. In 2018–19 and 2019–20 school years, SCCPSS earned the highest graduation rate within the comparison group.

It should be noted that these statistics are only for the Chatham County public school system (SCCPSS), and do not reflect Effingham or Bryan County's schools, which are also within the Savannah MSA.

### LOOKING FOR MORE INFORMATION ON EDUCATION?

For more information see the  
Quality of Life Element under Education  
page (#)



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Four-Year Education Focus Areas

According to the 2019 American Community Survey 5-Year Estimates, around 35% of adults aged 18–64 in the Savannah MSA have a bachelor’s degree or higher. There are a variety of majors available at the many higher education institutions in the area, and the breakdown shown in Figure 3.3 of college majors students choose reflects that variety.

*The most common major for residents 25 or older is in Science and Engineering followed closely by Arts, Humanities, and Others, and Business.*

The majors that have the highest share of students also reflect some of the current businesses and institutions that make up the Savannah MSA economy. For example, there is a large presence in healthcare and aerospace businesses, which could explain why the Science, Engineering, and related fields have a higher share of students.

The presence of a world-renowned art institution, Savannah College of Art and Design, as well as the entertainment industry, could contribute to the Arts, Humanities, and Others field also having a high share of students.

First College Major for Residents 25 or Older

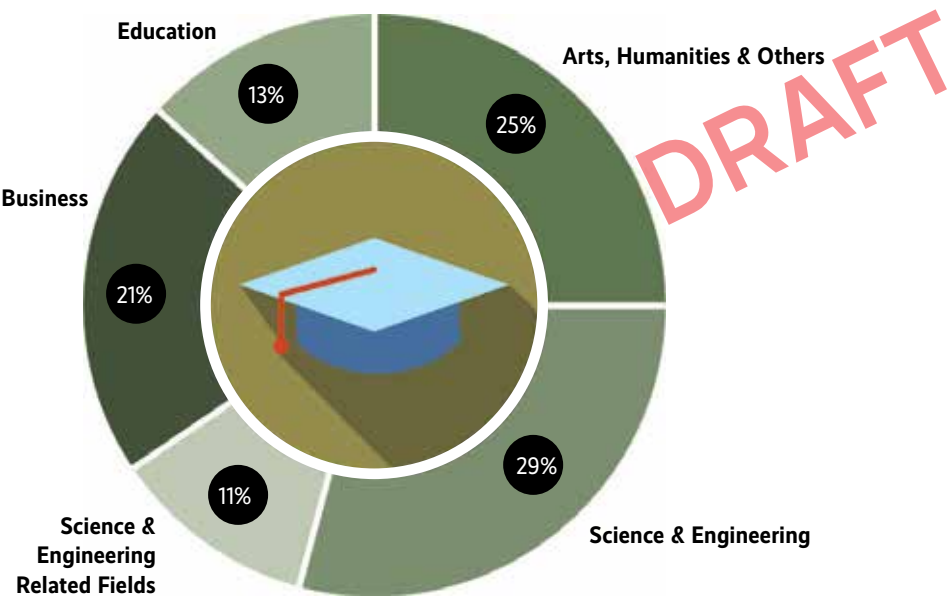


Figure 3.3–First College Major for Residents 25 or Older, Savannah MSA  
U.S. Census Bureau: 2019 American Community Survey 5-Year Estimates



## Two-Year Technical College Focus Areas

Technical school or college is a form of higher education that offers two-year degrees. This form of degree program is beneficial as it provides residents a more flexible and less expensive way to further their education compared to the four-year institution. Technical schools offer specialized occupational schooling so students can gain specific skills that apply directly to the workforce.

Savannah Technical College offers a diverse selection of technical degrees, with some degree fields growing more than others. Broadly speaking, the programs experiencing the most growth are manufacturing, drafting technician, or healthcare related programs. Similar to the four-year college majors discussed above, the largest programs also reflect the existing economy, in which healthcare, manufacturing, engineering, and construction have a large presence.

*This data is important to note for Garden City, especially since industries, such as aviation, trucking transportation, and construction, which align with some of the highest growing degree programs, also have a high presence in the area*

Some of the programs with the greatest decline, such as Mechanical CAD Drafters and Nursing Aides, are also a part of fields with major growth. This could suggest that there are changes in these job fields influencing students to pursue specific programs over others.

### Plan 2040 Survey

Forty-eight percent (48%) of the respondents felt that developing skilled work force through training programs, recruitment, and continuing education was very important.

A full copy of the survey and the results can be found in the Garden City 2040 Appendix.



One area that is declining but that may benefit the overall economy “Cinematography and Film/Video Production.” Not only is this field growing in the area, but it also has a large presence in the area, as Georgia is the number one state in the US in film production. Because more studios choose to film in Savannah, film production has also been identified as a potential economic driver by the Savannah Economic Development Authority. This field has the potential to bring more money into the economy and provide high paying, skilled jobs. According to the Savannah Area Chamber of Commerce, direct spending related to the film industry was \$2.9 billion in 2019. Trends suggest that surrounding schools with film related programs should consider promoting and expanding these programs.

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## Technical Programs with the Highest Growth in Graduates

Program	TOTAL GRADUATES		PERCENT CHANGE 2018–2019
	2018	2019	%
Airframe Mechanics and Aircraft Maintenance Technology/Technician	50	94	88.0
Barbering/Barber	5	13	160.0
CAD/CADD Drafting and/or Design Technology/Technician	8	18	200.0
Construction Management	22	43	95.5
Criminal Justice/Police Science	25	42	68.0
Drafting and Design Technology/Technician, General	8	12	50.0
Food Preparation/Professional Cooking/Kitchen Assistant	60	81	35.0
Licensed Practical/Vocational Nurse Training	14	23	64.3
Machine Shop Technology/Assistant	21	29	38.1
Medical Insurance Coding Specialist	32	48	50.0
Medical/Clinical Assistant	7	10	42.9
Solar Energy Technology/Technician	28	39	39.3
Truck and Bus Driver/Commercial Vehicle Operator and Instructor	167	227	37.1

Figure 3.4–Technical Program Growth Rates, Savannah MSA  
Georgia Department of Labor (GDOL), 2018–2019

## Technical Programs with the Highest Decline in Graduates

Program	TOTAL GRADUATES		PERCENT CHANGE 2018–2019
	2018	2019	%
Accounting Technology/Technician and Bookkeeping	34	22	-35.3
Autobody/Collision and Repair Technology/Technician	16	3	-81.3
Cinematography and Film/Video Production	49	22	-55.1
Electrical, Electronic and Communications Engineering/Technician	10	6	-40.0
Fire Science/Firefighting	16	11	-31.3
Fire Services Administration	5	1	-80.0
Hospitality Administration/Management/Personnel Administration	7	3	-57.2
Industrial Mechanics and Maintenance Technology	80	52	-35.0
Legal Assistant/Paralegal	10	6	-40.0
Mechanical Drafting and Mechanical Drafting CAD/CADD	5	2	-60.0
Nursing Assistant/Aide and Patient Care Assistant/Aide	319	158	-50.5
Teacher Assistant/Aide	3	2	-33.3

Figure 3.5–Technical Program Decline Rates, Savannah MSA  
Georgia Department of Labor (GDOL), 2018–2019



# EDUCATION & LOCAL JOB ENVIRONMENT

Education is a powerful tool for economic advancement. It is one of the most effective ways to reduce poverty and increase earnings. For example, according to the Bureau of Labor Statistics, people with more education tend have a higher weekly income and lower unemployment. While there are still economic issues related to education, such as student loans and a lack of access due to price for lower income residents, it demonstrates that having more education opens the door for more job opportunities. Because of this, investment in education programs, especially those that are relevant to the local job market, is a necessary strategy to reducing the ever-present state of high poverty in the area.

Savannah Tech is an example of an institution that is offering degree programs in industries that exist locally, including the newly created Logistics degree program.

## Earnings and Unemployment Rates by Educational Attainment in the U.S., 2020

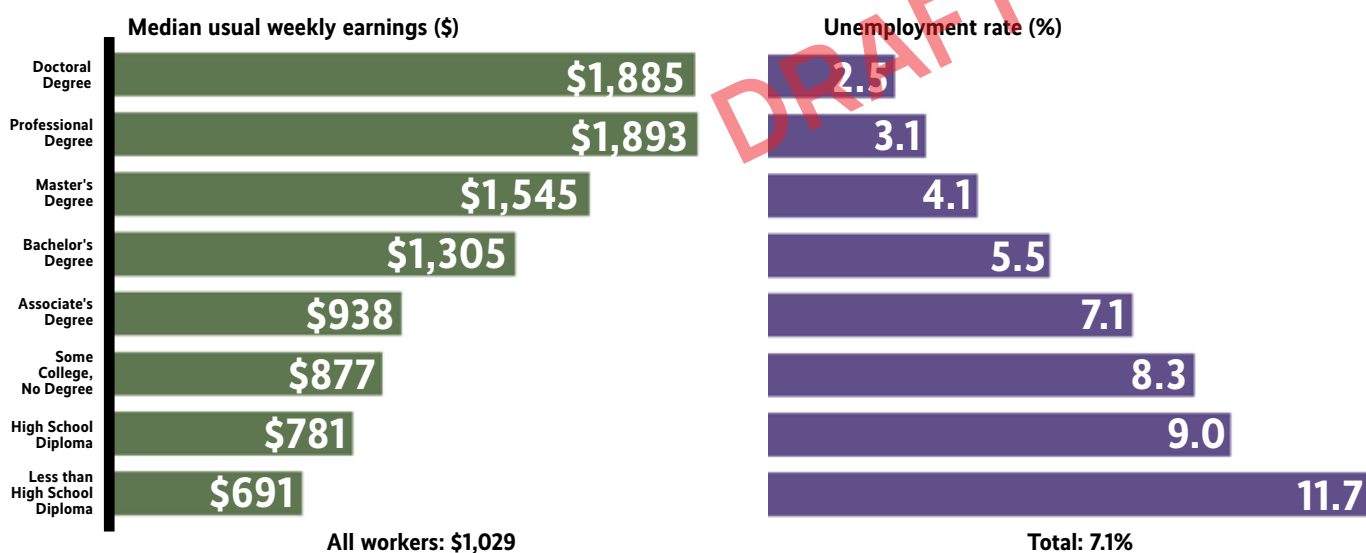


Figure 3.6–Earnings & Unemployment Rates by Educational Attainment, 2020  
U.S. Bureau of Labor Statistics, Current Population Survey

# ECONOMIC BASE

The Savannah MSA has a diverse economic base similar to that of many coastal areas. Employment is highest in the service, retail trade, and manufacturing sectors. The largest manufacturing facilities in the MSA produce textiles, paper products, chemicals, transportation equipment, and food products. Retail trade establishments are located throughout downtown Savannah and in pockets throughout the county, to provide for the daily needs of area residents. Regional shopping areas that attract customers from throughout the southeast can be found in West Chatham and Downtown Savannah.

Major employers in the service sector include the health care industry, the tourist industry, and educational institutions. St. Joseph's/Candler and Memorial Hospitals are the most visible component of the MSA's health care industry. Additional health care jobs are provided at clinics, nursing homes, laboratories, and the offices of doctors, dentists, and other health care practitioners. The healthcare field will continue to grow in the Chatham County region as the aging population count continues to rise. This is because elderly people are more likely to have a disability or weakened immune system.

Major educational institutions providing employment include the Savannah State University (SSU), South University, Georgia Southern University's Armstrong campus, Savannah Technical College, Savannah College of Art and Design, and the Chatham County Board of Education. Major businesses providing support for the tourist industry include hotels, restaurants, gift shops, and museums.

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# MAJOR ECONOMIC DRIVERS

## Major Industries

The major industries of the Savannah MSA impact the local economy in a variety of ways, either by employing a large portion of the workforce and/or contributing a significant amount of money back to the local economy. This section will discuss the major economic drivers of the Savannah MSA and Garden City, with respect to their overall impact on the area.

## Georgia Ports Authority & Logistics

Savannah's position geographically allows for a vibrant trading economy, in which imports can come directly to the port and be shipped to other nearby large metropolitan areas—which also contributes to the growing transportation industry. The Port of Savannah is the largest single container terminal in the United States, accounting for 21.6% of container trade on the east coast, and 12.2% of all container exports in the United States. The steady growth of the GPA has had a tremendous impact on the economy with no slowdowns predicted for the near future. This growth will also impact Garden City, as the Port has a large presence in the overall economy of the city. According to the Georgia Ports Authority, the Garden City Terminal is the largest and fastest growing container terminal in North America, as one of two deep water ports in the area. Port activity does not include ships alone, but also port supporting activities, such as transportation. Railways, such as the construction of the Mason Mega Rail project, will contribute to the economic and employment impact of the terminal. The rail project is currently under construction, and will increase reach to other major economic areas, such as Atlanta, Memphis, St. Louis, and Chicago.



### IMPACTS OF GEORGIA PORTS AUTHORITY

- Garden City Terminal is the third busiest and fastest growing container handling facility in the US
- The Port of Savannah handled 41.27 million tons of cargo in 2018
- In May 2021, the largest ship to ever dock on the east coast, the CMA GGM Marco Polo, docked at the Port of Savannah. The ship is 1,299 ft long
- Port of Savannah is the top US port for agriculture exports. In 2019, agriculture accounted for 60% of Savannah's exports



## Manufacturing

Garden City enjoy a diversified manufacturing base. Products range from paper and forest products to chemicals, from construction equipment to food processing, and from corporate jets to drill bits. The significance of the manufacturing segment of the local economy cannot be overstated. Some of the largest employers and highest wage-earning workers are within the manufacturing segment. According to the Savannah Area Chamber, manufacturing firms accounted for 19% of the area's GDP. This already significant industry within the economy is set to grow more in the future.

*Manufacturing expansion by companies like Medline Industries, Anatolia Tile+Stone, Plastics Express, Preci-Dip, A&R Logistics, and others will add at least 1,050 jobs over the coming years*

## Trucking & Transportation

The trucking industry is a major port support activity and is a significant part of the Garden City economy. With dozens of trucking companies in Garden City and the immediate Savannah area, not only can shipments from the nearby terminal be transported quickly on the nearby highways—which will ultimately help the overall port industry—it also provides a plethora of employment options for residents. Since this industry is growing, it will continue to benefit the entire area.





## Creative & Technical Businesses

A burgeoning group of small to large creative and technical firms have chosen Chatham County for their office locations. To support and encourage this growth, organizations such as the Creative Coast were formed through collaborative private and public partnerships to leverage the area's unique blend of bright talent, leading-edge technologies, and exceptionally high quality of life—all to stimulate the growth of entrepreneurial, creative, and technical businesses in the area.

Since the development of the Creative Coast in 1997, numerous organizations and efforts have come together to better meet the needs of the creative Savannah's community. By focusing on creative entrepreneurship, technology, new media, art, music, and food culture, these groups are helping to support and shape the future of Chatham. Additionally, the Creative Coast and others continue to market and bring in high tech and knowledge-based businesses to the area as highly technical jobs have been identified as a needed resource to improve economic growth in the region.

As mentioned earlier in the element, Georgia is the top state for film production. This is due to the state's diverse site locations, ranging from natural to architectural resources. With natural areas ranging from beaches to marshland to historic houses, squares, and parks, Chatham County and Garden City has multiple filming location possibilities.

There is a collaborative between many of the local jurisdictions and the Savannah Film Office to work together on promoting film because of the large number of dollars it brings to the local region.

## Military & Government

The Fort Stewart/Hunter Army Airfield (HAAF) military complex is a major sector in Chatham County's economy. Hunter Army Airfield is the sister Installation to Fort Stewart and located inside the city limits of Savannah. Its mission is to provide air transport to Fort Stewart, home of the 3rd Infantry Division, located on more than 285,000 acres in nearby Liberty County. Hunter Army Airfield's 5,400 acres centrally located in Savannah, plays a critical role in the Installation's deployment capabilities as a power projection platform with access to rail, port operations, and a major interstate road network. With the longest Army runway on the east coast, the largest military aircraft can land at Hunter, load the biggest equipment in the Army inventory, and then deploy both equipment and soldiers within an 18-hour wheels-up timeline anywhere in the world.

Just 40 miles from Garden City, Fort Stewart is located in Liberty, Bryan and portions of Evans, Long, and Tattnall Counties. Fort Stewart and HAAF together are one of Coastal Georgia's largest employers. The ratio of military to civilian employees is approximately five to one, with 20,850 officers and enlisted military and 4,153 civilians employed at both Installations. With a total 25,000 people employed, Fort Stewart and HAAF account for nearly three-fourths of the military employment in the area.

In 2015, there were 22,422 officers and enlisted military and 3,891 federal civilian employees totaling to 26,313 workers. Total payroll for both bases is estimated at well over one billion dollars and with an annual financial impact of \$4-\$5 billion dollars. While the number of employees has decreased since 2016, Fort Stewart and HAAF continue to play an important role in the regional economy pushing the demand for services such as retail, food service, real estate, and education.

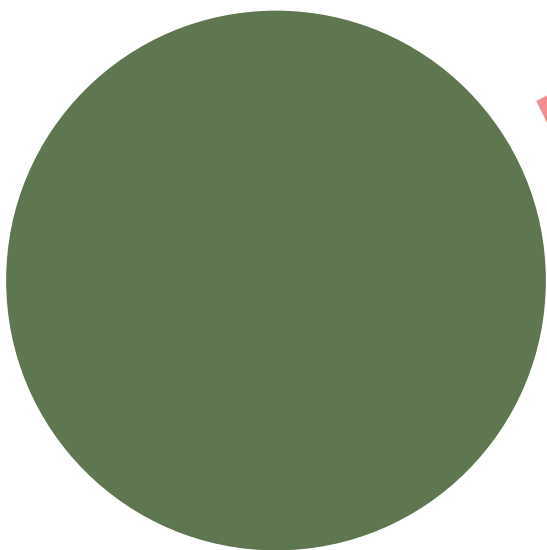
Within Garden City is the Georgia Air National Guard 165th Airlift Wing, which is a military installation that has existed since the 1940s.



## Aerospace

Aerospace manufacturing has been a key industry in the Savannah MSA since Gulfstream Aerospace Corporation planted roots in 1967. As the largest aerospace manufacturer in the Southeast, Gulfstream employs nearly 10,000 workers locally. In addition, more than 30 aerospace-related companies are located in the MSA, making the area a true aerospace supply cluster.

The aerospace industries enjoy the same benefits as other businesses in the area's advanced manufacturing sector, including state and local incentives, easy access to the Port of Savannah, the Savannah/Hilton Head International Airport and nationally recognized workforce training programs, among others. (Savannah Economic Development Authority). As with many of the larger economic drivers in the region, the trend for growth in the aerospace industry seems certain. Because Gulfstream is situated centrally between Garden City, Pooler, and Savannah, it has a direct economic impact on all three jurisdictions. This proximity gives the residents of Garden City access to one of the largest employers in the MSA.



## Healthcare

As the population of the area ages, access to healthcare will become increasingly more crucial. This industry already composes a large portion of the economy, as it is one of the top 10 employment sectors in the area. According to the Savannah Area Chamber of Commerce, the healthcare industry generated \$1.5 billion in the Savannah MSA in 2019. The two major hospitals within this industry are Memorial Health University Medical Center (MHUMC) and St. Joseph's/Candler Health System (SJ/C). Memorial Health University Medical Center has been investing in adding and updating its facilities, and expanding health care for children, people with disabilities, and mental health services. MHUMC includes the region's only Level 1 trauma center, the region's only children's hospital and the Savannah campus of Mercer University School of Medicine. The St. Joseph's/Candler Health System is also expanding its reach. In addition to constructing a new campus just 10 miles from Garden City to serve the western Chatham region in 2019, the health system will be building a new medical campus just minutes over the bridge in Bluffton, South Carolina.

Garden City is also home to a number of healthcare facilities that serve residents, including the Good Samaritan Clinic, which opened in 2007. St. Joseph's/Candler also has the Good Samaritan Clinic in Garden City that offers healthcare to those without health insurance in the community. Recognizing that everyone deserves quality healthcare St. Joseph's/Candler partnered with Georgia Department of Community Health and Our Lady of Lourdes Catholic Church in 2009 to open a volunteer based bilingual clinic to ensure West Chatham had access to healthcare.



## Tourism

Since the beginning of the preservation movement in the 1950s, the preservation of Savannah's historic and natural resources has helped to preserve the famed Oglethorpe Plan that helps give Savannah its distinctive qualities, attracting visitors from all over the world and creating a robust tourism industry. Aesthetically pleasing architecture, culture, activities, and the beautiful natural environment bring an increasing number of visitors each year. The impact of tourism in 2019 generated \$3.1 billion in direct spending and \$27.7 million in tax revenue with most being spent on lodging, followed by food and beverage. The majority of travel to Savannah is leisure while an ever-growing amount is for business travel.

While COVID-19 temporarily affected these numbers, tourism is beginning to recover and is expected to continue growing to meet and possibly exceed the figures that the industry had seen before the pandemic's disruption.

## Higher Education

Higher education institutions have a large presence in the community, with the Savannah College of Art and Design (SCAD) representing one of the top ten largest employers in the region. There are multiple other institutions in the area, such as Savannah State University, South University, Strayer University, and the Georgia Institute of Technology's local campus that all have an impact on the economy. These institutions allow for an ever-growing skilled workforce to attract a variety of businesses and industries to the Savannah MSA. Garden City's close proximity to these institutions provides the opportunity to get an education in a variety of subjects, including those that are most beneficial to the local economy.

## Total Overnight Spending by Sector

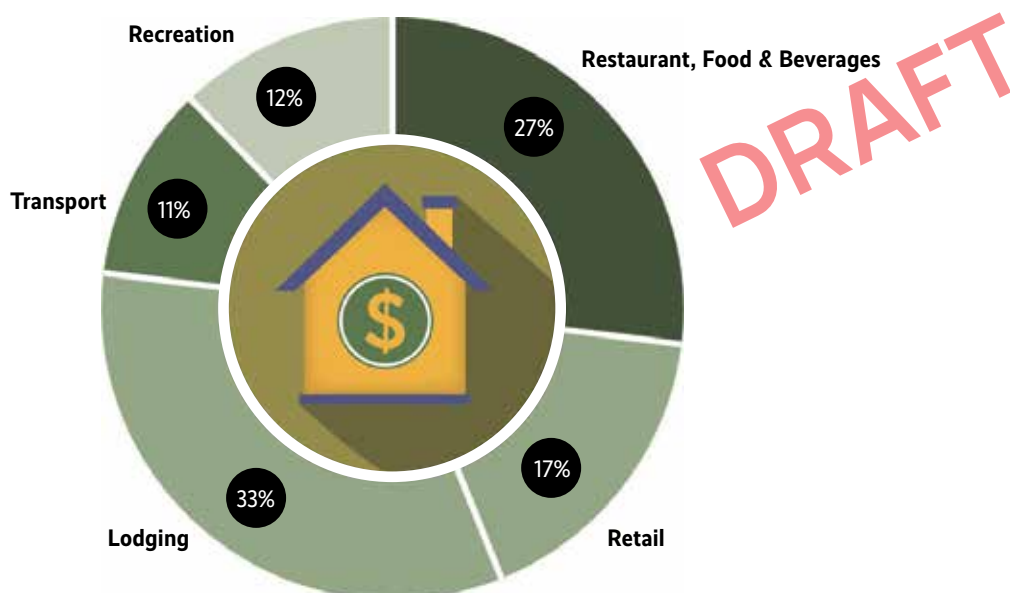
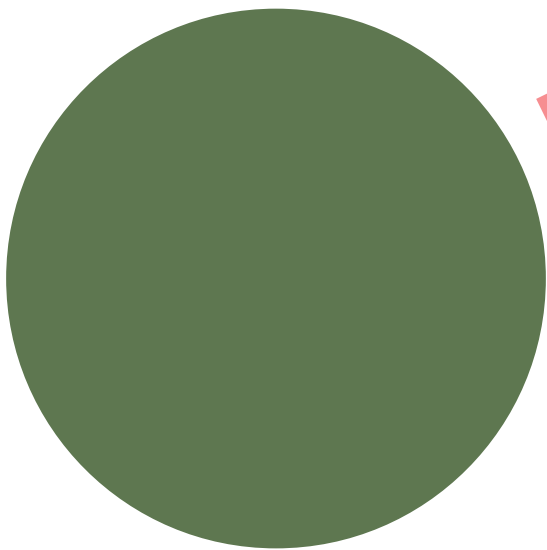


Figure 3.7–Total Overnight Spending by Sector, Savannah MSA  
Savannah Area Chamber of Commerce 2019

## Construction

Construction companies have a strong presence in the area, with many companies specializing in fields such as transportation construction and concrete. Construction and building supply/distribution activities have been increasing in the MSA, which is likely to have an economic impact on Garden City that could lead to more growth of an already large industry.



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# SAVANNAH MSA BUSINESS PROFILE

## MSA Profile

The community understands that businesses, most notably small businesses, are the backbone of what keeps the US economy thriving. Throughout Chatham County there are numerous resources and organizations specifically dedicated to assisting existing and prospective businesses both small and large by providing education, networking, and growth opportunities.

The majority of businesses in the Savannah MSA employ fewer than five people, but 21% of the workforce is employed by companies with fewer than 20 employees, suggesting that the Savannah MSA small business infrastructure and programs support a strong business environment.

Based on Georgia Department of Labor data, the largest employers in the Savannah MSA are listed below (in alphabetical order). Service industry employers, such as hospitals, retail, and grocery stores, represent the bulk of these major employment centers.

- Candler Hospital Inc.
- Gulfstream Aerospace Corporation
- Gulfstream Services Corporation
- Marine Terminals Corporation–East
- Savannah College of Art and Design
- Savannah Health Services, LLC
- Sitel Operation Corporation
- St. Joseph's Hospital, Inc
- The Kroger Company
- Walmart

*Of the documented 158,399 individuals working in Chatham County, 77% work for businesses and companies with 20+ employees while the remaining 23% work for companies with fewer than 20 employees*

## Business Employment, 2018

ESTABLISHMENT SIZE	ESTABLISHMENTS	PERCENT	EMPLOYEES	PERCENT
0–4	5,973	57.78%	8,301	5.24%
5–9	1,714	16.58%	11,319	7.15%
10–19	1,232	11.92%	16,855	10.64%
20–49	895	8.66%	26,517	16.74%
50–99	287	2.78%	19,358	12.22%
100–249	182	1.76%	27,128	17.13%
250–499	30	0.29%	10,322	6.52%
500–999	12	0.12%	8,630	5.45%
1000 and Over	12	0.12%	29,969	18.92%

Figure 3.8–Business Employment Based on Size, Savannah MSA  
Georgia Department of Labor 2018

## Per Capita Income

Per capita income refers to the average income earned per person in a given area over a specified year.

*The average income of employees per capita income in the Savannah MSA has increased almost \$6,000 since 2015, from \$42,357 to \$48,139 in 2019*

*—U.S. Bureau of Economic Analysis*

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## Average Yearly Residential Per Capita Income

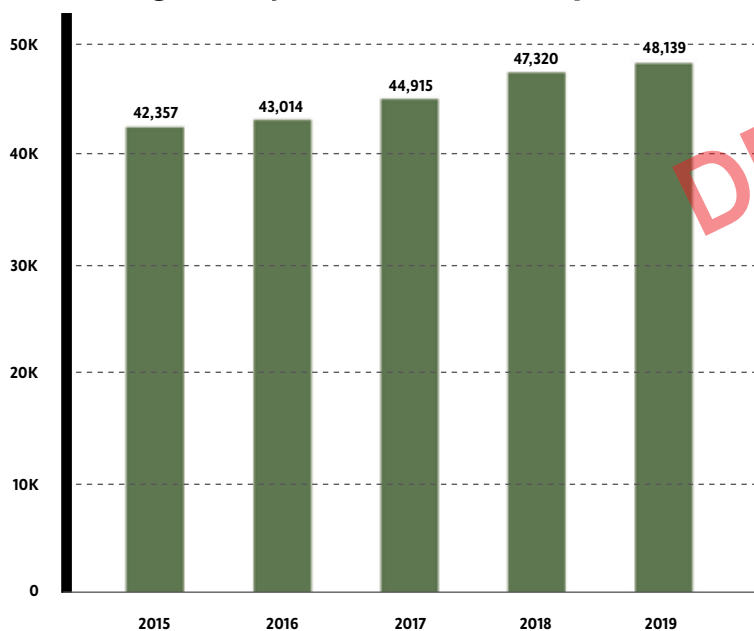


Figure 3.9—Average Yearly Income, Savannah MSA  
Georgia Department of Labor 2015–2018



## Wages and Employment

The overall average weekly wage in the Savannah MSA is \$921, which is a 3.1% increase from 2019 to 2020 according to the Georgia Department of Labor. The average hourly wage is \$21.92 according to the Bureau of Labor Statistics. These wages can vary by industry or job field, with some industries having a far higher average wage than others.

## Household Income

According to the US Census Bureau, household income refers to the combined earnings of all individuals in a household aged 15 or older. According to the 2018 American Community Survey 5-Year Estimates, the median household income in Garden City is \$43,194 which is \$14,000 lower than the median household income for the Savannah MSA of \$57,470.

*Almost 43% of Garden City's residents make \$50,000 or more a year*

## Income Distribution, 2018

GARDEN CITY	
Income	%
Less than \$10,000	7.7%
\$10,000 to \$14,999	5.1%
\$15,000 to \$24,999	13%
\$25,000 to \$34,999	12.7%
\$35,000 to \$49,999	18.6%
\$50,000 to \$74,999	25.8%
\$75,000 to \$99,999	6.2%
\$100,000 to \$149,999	8.1%
\$150,000 to \$199,999	1.6%
\$200,000 or more	1.2%

Figure 3.10—Income Distribution, Garden City  
Georgia Department of Labor

## Industry Breakdown

The majority of residents within the Savannah MSA work in the Service Industry (69.5%), followed by the Goods-Producing Industry (15.8%), and Government (14.5%). The Goods-Producing industry is defined as a field that produces a physical product, whereas the Service-Providing industry is a field in which the product is the service itself. As shown in Figure 3.12, Goods-Producing jobs have a higher average wage than both Service-Providing and Government jobs. Within the Service industry, food service has the lowest average weekly wage among all of the job fields as shown in Figure 3.13. It is important to note that these numbers are from 2020 and were impacted by COVID-19 and will likely change in the future as the pandemic subsides.

The majority of workers in Garden City work in the service industry; a larger proportion of the population, however, works in the Goods-Producing industry compared with the Savannah MSA. This could be due to the close proximity of manufacturing, port, and transportation businesses.

## Employees by Industry, 2020

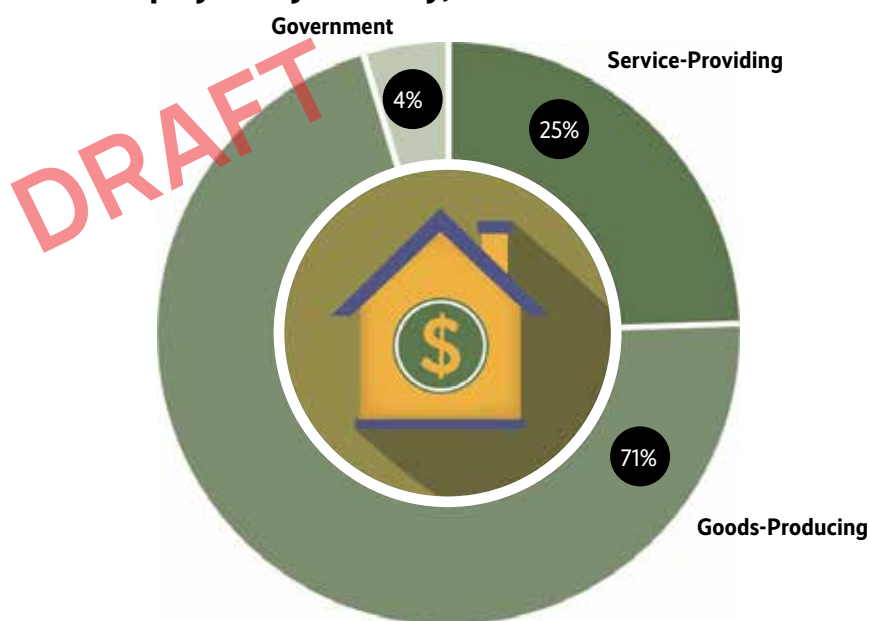


Figure 3.11—Percentage of Employees by Industry, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimate

## Goods-Producing Industry

The highest wages within the Goods-Producing field are in Transportation Equipment, with a weekly wage of \$1,892. The lowest paying Goods-Producing jobs are in Printing and Related Support Activities, with a weekly wage of \$634.

*The average wage within the Goods-Producing field is \$1,399*

### Savannah MSA Goods-Producing Wages, 2020

INDUSTRY	GOODS-PRODUCING SUB-CATEGORY	AVERAGE WEEKLY WAGE
Agriculture, Forestry, Fishing, and Hunting		\$797
Mining, Quarrying, and Oil and Gas Extraction		\$1,004
Manufacturing		\$1,569
	Beverage and Tobacco Product	\$837
	Chemical	\$1,364
	Fabricated Metal Product	\$1,244
	Food	\$1,298
	Furniture and related Product	\$878
	Machinery	\$1,063
	Misc.	\$927
	Nonmetallic	\$1,141
	Paper	\$1,419
	Petroleum and Coal Products	\$1,422
	Plastics and Rubber Products	\$869
	Printing and Related Support Activities	\$634
	Textile Mills	\$1,073
	Textile Product Mills	\$900
	Transportation Equipment	\$1,892
	Wood Product	\$960

Figure 3.12–Goods-Producing, Savannah MSA  
Georgia Department of Labor, 2020

## Service-Providing Industry

The highest paying jobs in the Service field are in Finance and Insurance, with a weekly wage of \$1,669, while the lowest wages are in food service and accommodations, with a weekly wage of \$346.

*The average wage within the Service-Providing field is \$808, while the average weekly wage in the Government sector is \$1,025*

### Savannah MSA Service-Providing Wages, 2020

INDUSTRY	AVERAGE WEEKLY WAGE
Utilities	\$1,369
Wholesale Trade	\$1,227
Retail Trade	\$641
Transportation and Warehousing	\$884
Information	\$1,069
Finance and insurance	\$1,669
Real Estate and Rental and Leasing	\$863
Professional, Scientific, and Technical Services	\$1,126
Management of Companies and Enterprises	\$1,287
Administrative and Support and Waste Management and Remediation Services	\$606
Educational Services	\$1,133
Health Care and Social Assistance	\$1,006
Arts, Entertainment, and Recreation	\$552
Accommodation and Food Services	\$346
Other Services (except Public Administration)	\$757

Figure 3.13–Service-Providing Wages, Savannah MSA  
Georgia Department of Labor, 2020

### Savannah MSA Government Jobs Wages, 2020

	AVERAGE WEEKLY WAGE
Federal Government	\$1,466
State Government	\$1,110
Local Government	\$918

Figure 3.14–Government Wages, Savannah MSA  
Georgia Department of Labor, 2020





# GROWING INDUSTRIES

## Which Industries are Growing?

Not only is the healthcare industry already one of the largest employment sectors in the Savannah MSA, but it is also forecasted to continue growing due to the increasing number of seniors living longer, healthier lives. Healthcare services such as ambulatory services, hospitals, and nursing homes are set to significantly increase over the next few years.

*Ambulatory services providing outpatient healthcare services will experience the largest growth in the number of employees between 2016–2026 with an almost 30% increase in the number of jobs*

The industry sector predicted to grow the most is the “Amusement, Gambling, and Recreation” sector, which is projected to grow by almost 35%, adding over 900 new jobs to the Savannah MSA region. “Construction of Buildings” will also experience large growth, with an increase of almost 30% or 800 new jobs being added to the region between 2016 and 2026.

Even though the almost 33,000 jobs within the Food Service category have some of the lowest weekly wages, this industry is still projected to grow over the next few years, highlighting the need to reassess the hourly wage for the sector with the most employees in the Savannah MSA.

## Targeted Growth Industries

According to SEDA, there are five major industries that are likely to increase economic growth if they are invested in at the local level:

- Manufacturing/Ports/Logistics
- Tourism
- Education
- Government/Military
- Healthcare
- Retail Logistics

## MANUFACTURING, PORTS, AND LOGISTICS

This industry has grown 24% between 2007 to 2017. With a growing logistics industry based around expanding port operations, investing in the manufacturing, ports, and logistics industry should continue bringing higher paying jobs to the Savannah MSA.

*The average yearly wage for Manufacturing, Ports, and Logistics jobs was \$55,115 in 2017*  
—SEDA

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## CREATIVE AND TECHNICAL SERVICES

While creative and technical services have decreased over the last decade, there is still opportunity to increase growth and retain the highly skilled graduates that often leave Chatham County after college. Additionally, creative, and technical jobs, such as software and video game design, often have higher wages.

By expanding partnerships between businesses and education facilities to include SCAD, GSU, and other universities, highly skilled workers can be more easily retained, and the industry will have a greater ability to expand.

## TECHNOLOGY

Regional initiatives such as the Savannah Logistics Technology Corridor (SLTC) have helped to expand the tech scene. Established in 2018 to help cement Chatham County's place in the technology industry as well as encourage and grow investment, SLTC is already having a positive impact on the local industry.

The SLTC is an initiative comprised of business, government, education, and community stakeholders committed to the advancement of Georgia and the Savannah area in particular through the development of a technology corridor that supports logistics technology development through innovation and investment. The corridor was approved in 2018 by the Georgia Legislature after looking for incentives for technology growth and locations for technology corridors.

The designation creates a geographically defined area where businesses can locate and be close enough to each other to encourage collaboration and innovation. The updated 2019 corridor boundaries cover a portion of Interstates 95 and 16, the Savannah River and U.S. Highway 17 and provide opportunities for Savannah and Chatham, as well as other areas such as Bryan and Effingham counties.

The following efforts are the current focus of the SLTC:

- Expand the corridor to include the Savannah Advanced Manufacturing Center, Georgia Southern Armstrong Campus, and Savannah Tech
- Fund the development of a "Logistics Tech Academy" following the model being used in other regions (Cyber Academy and FinTech Academy)
- Fund the development and operations of an innovation center/incubator, following the model being used in other areas of the state (TechSquare in Atlanta and Cyber Center in Augusta)
- Create Cluster Grants dedicated to the corridor to enable new ideas, better education, improved cooperation between entities all dedicated to Logistics Technology
- Create a student loan repayment program, similar to that used to attract doctors, to attract experienced technologists to the Corridor
- Create a program where Corridor-based companies can sell their R&D credits or financial losses to raise capital
- Increase funding for the Angel tax credit and dedicate that increase to Corridor-based companies



## ENTERTAINMENT PRODUCTION

*The entertainment industry experienced a significant amount of growth between 2007 and 2017, with a 275% 10-year growth rate as cited by SEDA*

The entertainment production industry has major potential to bring new opportunities to Garden City. Not only have numerous movies been filmed in the area, but there is also a potential talent base in SCAD and Savannah Tech graduates, who have majored in subjects such as film, sound design, on-set production, and visual effects.

## HEALTHCARE

The healthcare industry continues to be a major source for high paying jobs in Chatham County. With Georgia Southern University, South University, Savannah Tech, Mercer School of Medicine, and others offering health programs, continuing to emphasize the health care industry's impacts and needs in Garden City will help to attract and keep highly trained graduates in the area.

*The healthcare industry grew 20% between 2007 and 2017*  
—SEDA



## Projected Employment Growth, 2016–2026

Industry Title	2016 Base Year Employment Staff	2026 Projection Year Employment Staff	Total Change in Employees	Percent Change in Employment	Projected Annual Growth Rate (%)
Ambulatory Health Care Services	12,050	15,610	3,560	29.55%	2.62%
Educational Services	25,370	28,690	3,320	13.09%	1.24%
Administrative and Support Services	15,350	17,850	2,500	16.25%	1.52%
Food Services and Drinking Places	30,920	32,840	1,920	6.21%	0.60%
Hospitals	12,560	14,140	1,580	12.58%	1.19%
Support Activities for Transportation	5,800	7,130	1,330	23.05%	2.10%
Social Assistance	4,660	5,890	1,230	26.18%	2.35%
General Merchandise Stores	7,460	8,510	1,050	14.12%	1.33%
Professional, Scientific, and Technical Services	7,750	8,750	1,000	12.90%	1.22%
Nursing and Residential Care Facilities	4,020	4,980	960	23.94%	2.17%
Local Government, Excluding Education and Hospitals	10,940	11,890	950	8.67%	0.83%
Amusement, Gambling, and Recreation Industries	2,650	3,580	930	34.89%	3.04%
Federal Government, Excluding Post Office	10,120	11,000	880	8.77%	0.84%
Construction of Buildings	2,760	3,580	820	29.75%	2.64%
Motor Vehicle and Parts Dealers	4,370	5,140	770	17.54%	1.63%
Accommodation, including Hotels and Motels	7,890	8,630	740	9.40%	0.90%
Specialty Trade Contractors	6,260	6,970	710	11.31%	1.08%
Religious, Grantmaking, Civic, Professional, and Similar Organizations	5,660	6,320	660	11.79%	1.12%
Repair and Maintenance	3,250	3,840	590	17.99%	1.67%
Merchant Wholesalers, Durable Goods	3,840	4,400	560	14.70%	1.38%

Figure 3.14–Projected Employment Growth within the Savannah MSA by Sector

Georgia Department of Labor, 2016–2026



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# DECLINING INDUSTRIES

## Which Industries are Shrinking?

Paper Manufacturing is predicted to experience the highest decline in employees with an estimated 200 fewer jobs between 2016 and 2026. Publishing Industries are set to experience the biggest percentage decline in base employment, with a third of jobs expected to be lost in an ever-declining small industry.

## Projected Employment Decline, 2016–2026

Industry Title	2016 Base Year Employment Staff	2026 Projection Year Employment Staff	Total Change in Employees	Percent Change in Employment	Projected Annual Growth Rate (%)
Paper Manufacturing	3,100	2,900	-200	-6.55%	-0.67%
Publishing Industries (except Internet)	450	280	-170	-37.53%	-4.60%
Postal Service	1,060	950	-110	-10.33%	-1.08%
Health and Personal Care Stores	1,980	1,890	-90	-4.94%	-0.51%
Forestry and Logging	300	240	-60	-20.46%	-2.26%
Petroleum and Coal Products Manufacturing	210	170	-40	-17.22%	-1.87%
Textile Product Mills	100	80	-20	-16.00%	-1.73%
Printing and Related Support Activities	470	460	-10	-2.75%	-0.28%
Nonmetallic Mineral Product Manufacturing	1,450	1,460	10	0.28%	0.03%
Miscellaneous Manufacturing	180	190	10	6.21%	0.60%
Miscellaneous Store Retailers	1,590	1,600	10	0.63%	0.06%
Rail Transportation	800	810	10	1.63%	0.16%
Data Processing, Hosting and Related Services	50	60	10	28.00%	2.50%
Beverage and Tobacco Product Manufacturing	120	140	20	16.26%	1.52%
Water Transportation	230	250	20	7.73%	0.75%
Broadcasting (except Internet)	410	440	30	7.26%	0.70%
Furniture and Related Product Manufacturing	180	220	40	19.78%	1.82%
Telecommunications	860	910	50	4.98%	0.49%
Scenic and Sightseeing Transportation	330	390	60	17.74%	1.65%

Figure 3.15–Projected Employment Decline within Savannah MSA by Sector

Georgia Department of Labor, 2016–2026

# ECONOMIC GROWTH CHALLENGES

While Garden City has many assets with the potential to drive economic growth, there are some challenges that may prevent employers and employees alike from planting their roots in the area.

## QUALITY OF LIFE IMPACTS:

- According to a survey conducted by SEDA, many residents believe that the quality of education in the area is a problem. The existence and perception of these issues can negatively impact economic growth, as employers and skilled employees may steer clear of the Savannah MSA to avoid these issues.

## HOUSING AFFORDABILITY:

- A significant portion of residents in Garden City are cost burdened by housing. Far more people rent homes than own them. The lack of accessibility to home ownership can prevent possible new employees from moving to the region due to cost concerns.

## WORKFORCE SKILL SHORTAGE:

- Both at the national level and more specifically via a study conducted locally by SEDA, business owners have voiced that the pool of new, younger candidates are lacking the basic “soft skills” needed for long-term success in the job force.



### SOFT SKILLS

Soft skills are abilities that relate to how one works and interacts with others. Employers look for soft skills in candidates because these skills are hard to teach and are important for long-term success. Examples of Soft Skills are listed below:

—Indeed

- Dependability
- Effective Communication
- Open-Mindedness
- Teamwork
- Creativity
- Problem-Solving
- Critical Thinking
- Organization
- Willingness to Learn

In short, Garden City’s planning efforts have identified key initiatives that can advance the economic and physical success of Garden City in the next 20 years. The challenge becomes how best to grow denser, become more diverse, and yet maintain a sense of place that draws people to the region



# SWOT ANALYSIS

The Savannah Economic Development Authority's (SEDA) SWOT Analysis below identifies some of the Strengths, Weaknesses, Opportunities, and Threats (SWOT) associated with our local economy for the year 2020.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>– Logistics Infrastructure: Port of Savannah, rail, interstate</li> <li>– Diverse economic drivers (manufacturing, logistics, tourism, health-care, education, government, military)</li> <li>– Higher education</li> <li>– Military assets</li> <li>– Favorable cost of living compared to other national MSAs</li> <li>– Historical preservation and cultural richness</li> <li>– Ability to draw people back after years away</li> <li>– Quality of Life</li> </ul>	<ul style="list-style-type: none"> <li>– Persistently high poverty rates</li> <li>– Underperforming K-12 schools</li> <li>– Crime</li> <li>– Inadequate skilled workforce/lack of soft skills</li> <li>– Capital is limited for small business community/entrepreneurs</li> <li>– Small number of headquarters leading to few corporate leaders active in community and economic development</li> <li>– Limited opportunities for young professional's career advancement</li> <li>– Limited public owned land available to attract high wage projects</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>– Retain and attract more talent</li> <li>– Further diversify economic base</li> <li>– Continue efforts to attract affluent visitors, lengthen visitor stays and increase spending</li> <li>– Grow entrepreneurial resources and support entrepreneurship</li> <li>– Invest in GSU as the regional university with the greatest potential to achieve a high level of talent</li> <li>– Develop infrastructure and local and regional support for the entertainment production industry</li> <li>– Leverage World Trade Center Savannah and other assets to increase international trade and investment</li> <li>– Continue to partner with SCAD to advance technology industries and entrepreneurship</li> </ul>	<ul style="list-style-type: none"> <li>– Lack of coordination between governmental entities</li> <li>– Perception of crime and public education limits progress</li> <li>– Limited public transportation for workforce</li> <li>– Environmental threats</li> <li>– Status quo bias</li> <li>– Land assets not always developed for highest and best use from an employment perspective (i.e., high wage companies)</li> <li>– Shortage of teachers and principals</li> <li>– Trade wars and other temporary global economic challenges arise</li> </ul>

Figure 3.16–SEDA SWOT Analysis for the Local Economy, 2020  
Savannah Economic Development Authority



# WORKFORCE DEVELOPMENT

The goal of workforce development programs is to provide resources that residents can tap into to aid in their professional, educational, and/or career development. These programs offer an array of resources that include educational workshops, apprenticeships, internships, networking workshops, and job shadows. Efforts should be made to continue funding and expanding the reach and capabilities of similar organizations.

## **STEP UP SAVANNAH: CHATHAM APPRENTICE PROGRAM (CAP)**

- The goal of this program is to help unemployed and under-employed residents improve their economic health by offering sessions on business, budgeting, and networking. The program is open to all Chatham County residents 18 and older.

## **WORKSOURCE COASTAL**

- This economic development program serves multiple coastal counties, including Bulloch, Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Screven counties. The program has resources including training and workforce education for veterans, adult and dislocated workers, youth, and employers.

## **JUNIOR ACHIEVEMENT (JA) OF GEORGIA**

- This teacher and volunteer driven program provide activities for K-12 students focused on career readiness, entrepreneurship, and financial literacy. JA works to empower the next generation with the knowledge, capacity, and motivation to thrive and build a better future for themselves.

## **YOUTH APPRENTICESHIP**

- This program is designated for junior and senior high school students and aims to prepare them for the workforce by providing apprenticeships.

## **EMPLOYABILITY**

- This organization's goal is to empower those with intellectual and developmental disabilities (IDD). Some of the services offered include job placement, career development, resume development, and ongoing job support so those with IDD can find and keep employment.



# LAND USE ELEMENT

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# LAND USE

## Introduction

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The Land Use Element of Garden City 2040 defines Garden City's existing physical form and development patterns and presents a set of recommendations and strategies as a framework for responsible growth. The following land use information, recommendations, and strategies are intended to provide guidance for the location and intensity of land uses to support Garden City in future land use policy decisions.

The Regional Development and Existing Land Use components describe historical and contextual information relating to land use in Garden City. The Character Area Map (CAM) identifies the character vision for Garden City and the Future Land Use Map (FLUM) serves as a guide for future zoning and development policy decisions in the community. Together, the CAM and the FLUM are intended to guide future land use decisions in Garden City through the interconnected elements of community character, development patterns, existing and future infrastructure, equity, and natural resources.

# REGIONAL CONTEXT

## Physical Context

Garden City is located in the western portion of Chatham County and encompasses an area of 9,152 acres, or 14.3 square miles. The city is bounded to the southeast by the city of Savannah, the city of Pooler to the west, the Georgia Ports Authority/Savannah River to the northeast, and unincorporated Chatham County to the south. The major thoroughfares that run through Garden City are GA Highway 21 (Augusta Road), US Highway 80, I-16 (Jim Gillis Historic Savannah Parkway), and US Highway 17 (Ogeechee Road).

The city is primarily industrial, commercial, and residential in nature, with large concentrations of commercial/industrial activity near transportation corridors, such as US Highway 80, US Highway 17, and State Highway 21.

## Development Patterns

As the city of Savannah has become more built out, Garden City has emerged as an area of high industrial and commercial growth in Chatham County. In the 1930s, with the foundation of its first subdivision, Industrial City Gardens, Garden City was established as a bedroom community/suburb of the city of Savannah. It remained primarily residential in nature until the late 1940s, after World War II. During the war, the federal government built and operated a port facility on the Savannah River for military staging. In 1948, the newly founded Georgia Ports Authority (GPA) acquired the land and created the Garden City Terminal. The continued presence of the GPA and the terminal, which directly borders Garden City to the northeast, has a substantial impact on driving industrial development in the city.

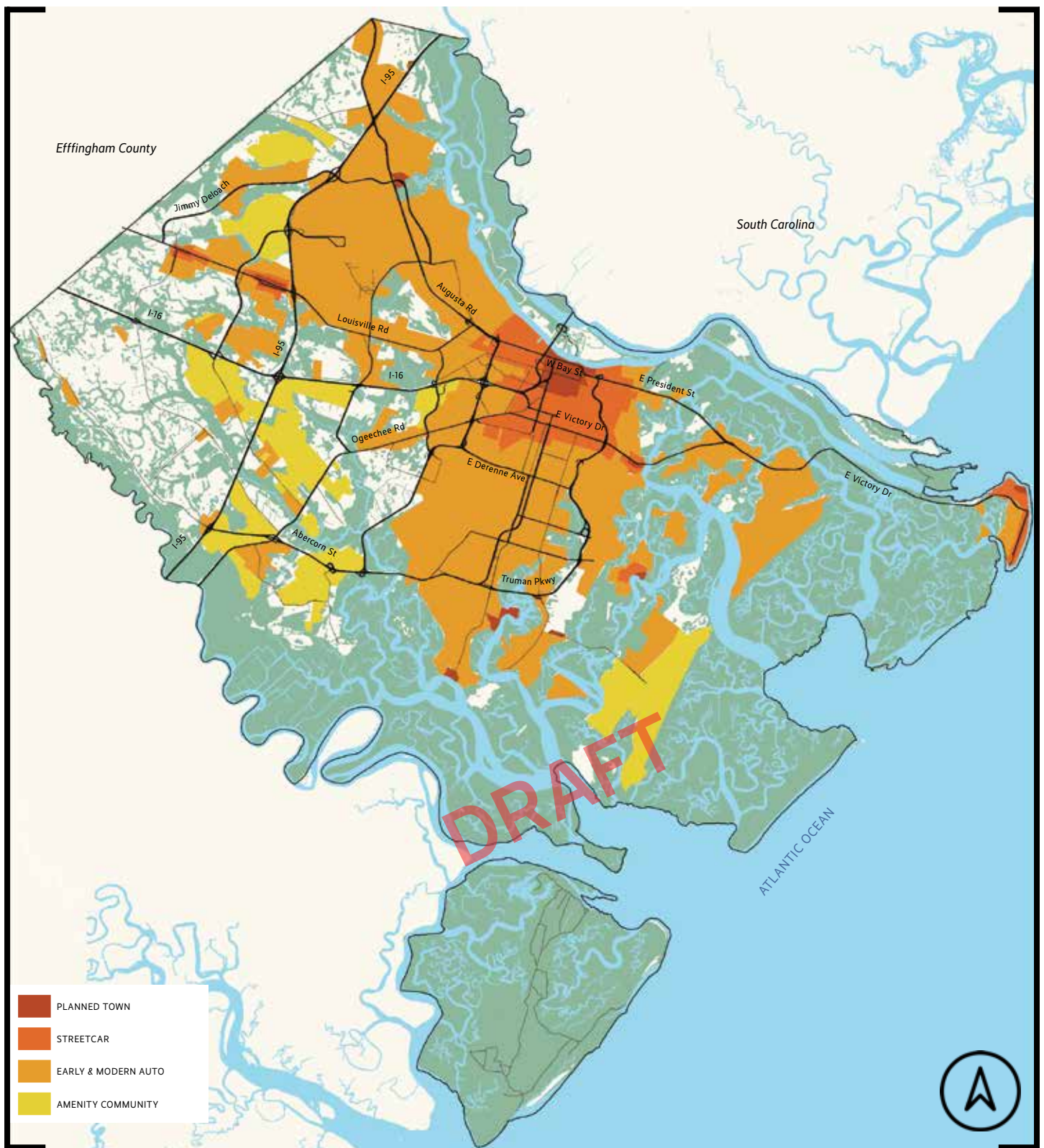
The establishment of the Garden City Terminal, as well as development pressures being pushed west from the city of Savannah caused development in Garden City to shift from residential to largely industrial. The city's adopted Urban Redevelopment Plan(2015) specifically cites development pressure as causing "disinvestment in some of the older neighborhoods, the encroachment of industrial uses, declining pockets of commercial, and deteriorating buildings." In partnership with others, the land use element looks to ensure that planning efforts are intentional and forward thinking, particularly with an eye for balancing the growth of commercial and industrial development with existing and future residential uses and needs.

### LOOKING FOR MORE INFORMATION?

You can find more statistics & information under the Community Profile Element (#)



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Map 4.2-Chatham County's Development Patterns Over Time



# EMPLOYMENT CENTERS

This component highlights some areas of Chatham County which influence land use patterns as places with existing and projected job growth. Employment centers have been identified based on a concentration of one or more of the following employment industries: hospitality, industrial/manufacturing, tourism, retail, health care, educational/public services, and other. Individual employers who have a large impact on land use have been identified as well.

The identification and analysis of employment centers is a useful tool in understanding which areas see high levels of daily commuters and could be suitable for reducing vehicle miles through a promotion of mixed-use development or strengthening access to public transportation and preventing sprawl into undeveloped areas.

## 1. West Chatham Aviation

- » The West Chatham Aviation is situated between Augusta Road and I-95 and comprises the Savannah/Hilton Head International Airport and the bulk of the operations of Gulfstream Aerospace Corporation in Chatham County. This area provides employment opportunities in operation and management of the airport, and the design, manufacturing, and market of aircraft. Commuters traveling to and from this area typically travel by automobile.

## 2. Georgia Port Authority

- » The Georgia Port Authority employment center consists of the Garden City and Ocean Terminal, operated by the GPA. This area provides employment opportunities in marine transportation and logistics.

## 3. Downtown Savannah

- » Downtown Savannah is a major employment hub that provides jobs in many sectors, including tourism, hospitality, retail, and educational/public services. This area sees a high number of commuters each day, many of which utilize modes of transportation other than a car, such as walking or public transit

## 4. South Savannah Medical

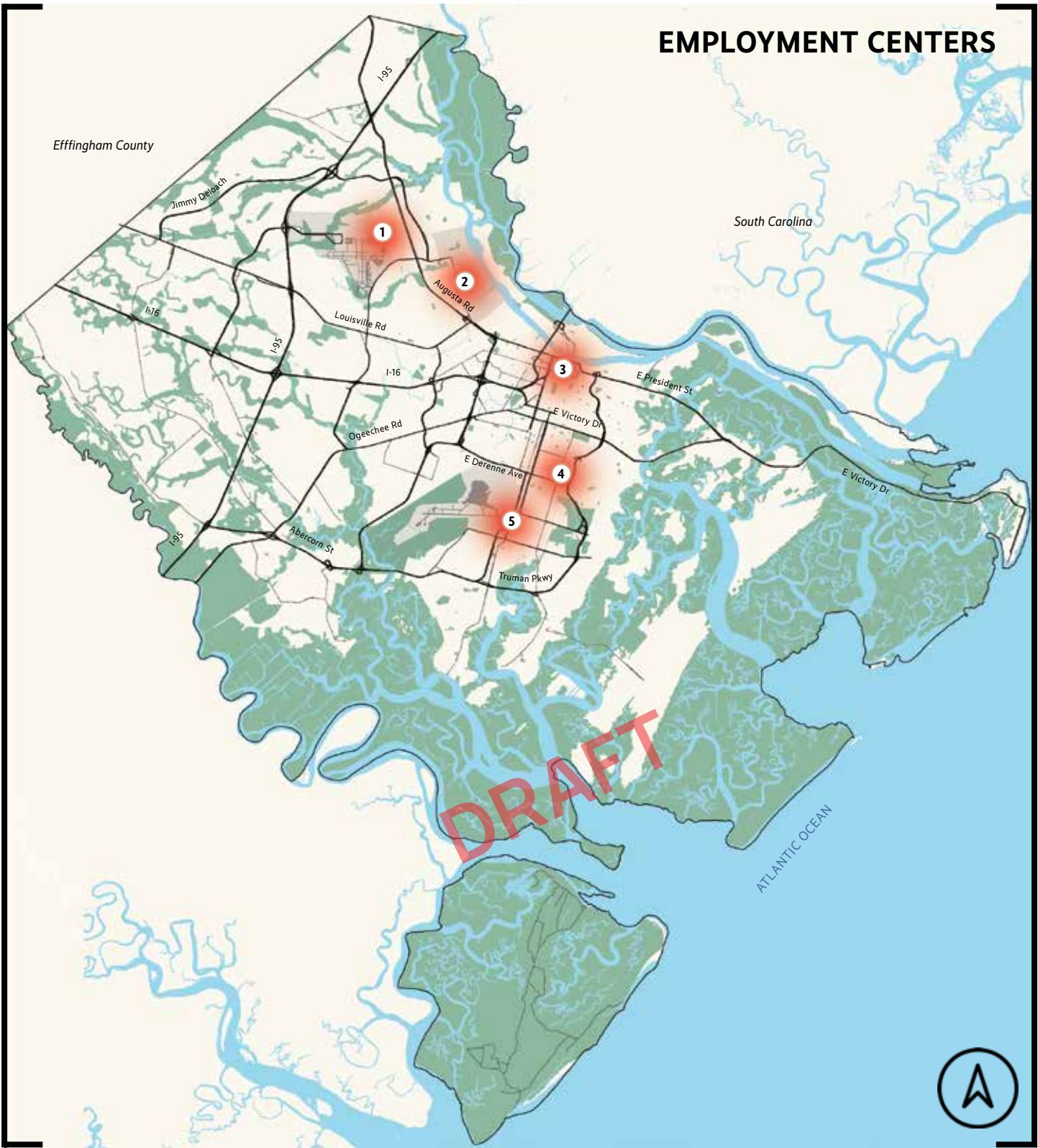
- » This employment area is located along DeRenne Avenue and Harry Truman Parkway, and consists of several large medical facilities and offices, including Memorial Health University Medical Center and Candler Hospital. Downtown residents can access this area by bus, however most employees and commuters arrive by automobile.

## 5. Abercorn Extension Commercial Corridor

- » This area is located along the Abercorn Street Extension, which serves as a centerline for areas of regional commercial activity on either side. This employment corridors contains many businesses, including some of the County's largest employers such as Walmart and Kroger. This is a high traffic area, with both commuters and shoppers traveling primarily by automobile, with some utilizing the public bus system.

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Map 4.4-Chatham County Employment Centers





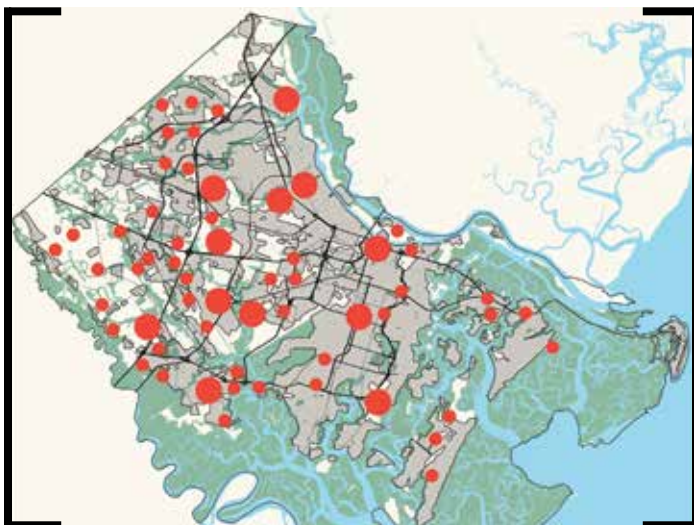
# FUTURE GROWTH STRATEGIES

## Option for the Future

Over the next 20 years, there are different ways and mechanisms that can be used to manage growth within the county. Three alternative approaches were presented to the public and stakeholders for feedback during the Comprehensive Plan's development in 2020.

As shown, the intent was to allow the public to visualize the different approaches growth could take over the next 20 years via a Business as Usual, Strong Corridor, or Compact Growth strategy.

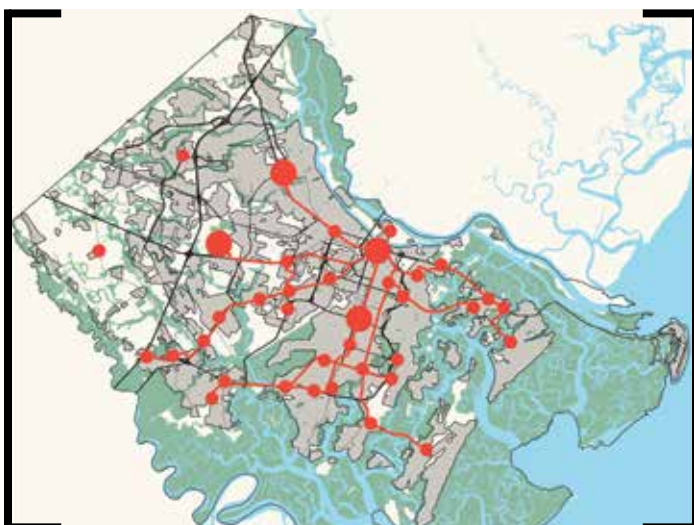
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## Business as Usual

The Business as Usual consists of continued outward development in Garden City between 2020 and 2040.

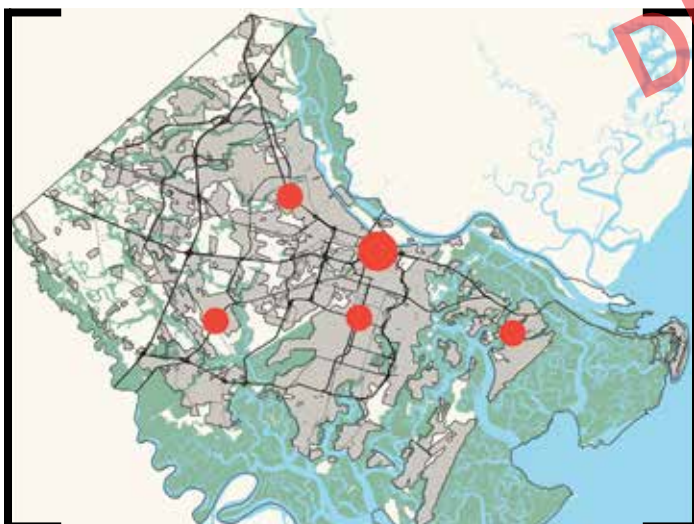
This strategy is based on existing development patterns, residential densities, future land uses, and infrastructure investments.



## Strong Corridors

The Strong Corridors strategy focuses on reinvestment strategies along existing multi-modal transportation nodes and corridors in Garden City.

The strategy incorporates efficient, mixed-use development and density around transit hubs.



## Compact Growth

The Compact Growth strategy is based on reinvestment strategies into our existing town centers, utilizing vacant lands and derelict properties.

The strategy primarily focuses on efficient development, infill, redevelopment, and adaptive reuse contained in our existing development boundaries.



## Preferred Growth Strategy: Strong Corridors

Given the choice of three scenarios during an online public survey, Garden City supported the "Strong Corridor" option with 41% preference. Under the Strong Corridor Scenario the following activities and concepts became the main focus for future decision making:

Under the Strong Corridor Scenario the following activities and concepts became the main focus for future decision making:

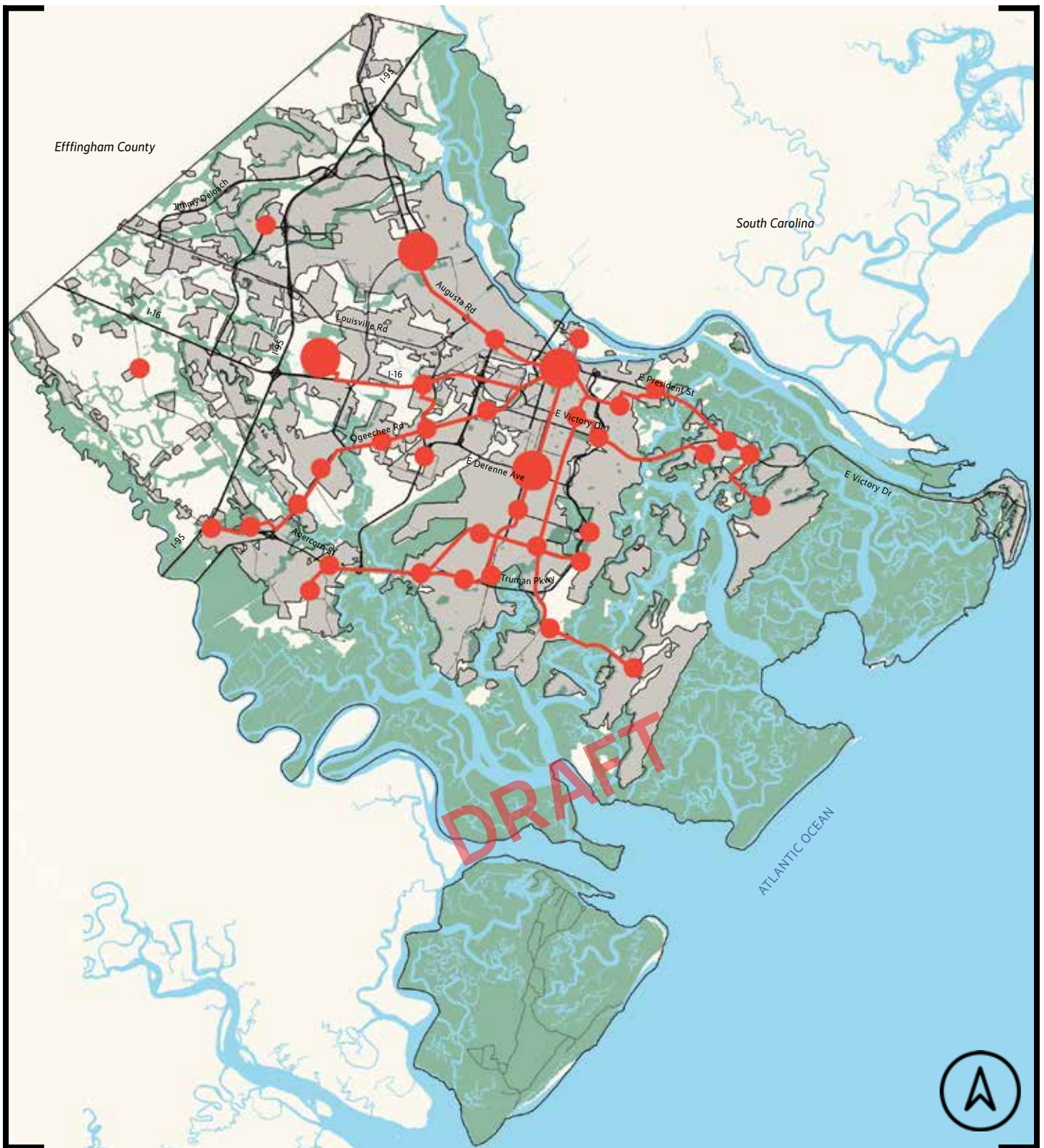
- More Managed Growth of Development
- Focus on Urban Rehab and Infill of Existing Developed Areas
- Priority for Mixed-use Zoning
- Interest in Diversity of Housing Choices
- Concentrate Development at Existing Transportation Nodes
- Prioritize Land for Parks, Trails & Natural Areas
- Manage Land for Conservation & Preservation
- Regional Cooperation between Jurisdictions
- Preserve Undeveloped Natural Resource Areas

With continued growth pressure in Chatham and Savannah, the county will require a coordinated growth strategy policy between the 9 jurisdictions. The successful coordination of a growth policy can mitigate the negative externalities of growth, such as traffic congestion, air pollution, deforestation and loss of tree canopy. The success of this regional approach to growth management will help to protect our county as a whole.

The Strong Corridor scenario became the basis for the Development of our Growth Centers Map, Identifying Character Areas, and Updating the Future Land Use Map that appears later in this plan.

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Map 4.5—Preferred Growth Strategy: Strong Corridors



# GROWTH CENTERS

## Purpose

The intention of this component is to highlight areas of Unincorporated Chatham and Savannah which may be suited to accommodate future development or redevelopment/infill efforts. These areas include suburban, commercial, or employment centers that should have future corridor studies to determine what type of redevelopment and/or infill development would be most appropriate. Due to their proximity to major road systems and potential sites of public transit expansion, transit-oriented (TOD), traditional neighborhood (TND) and mixed-use development should be a prioritized component of these future studies. More generally, the identification of areas which may support ongoing development has implications in guiding future land use decisions.

The Growth Center Map defines the prioritization of lands for development to maximize areas that already have public investment (Water, Sewer, Utilities, Roadways, and Services). Also taken into consideration is the historic development patterns, existing land use, employment centers, service areas, existing transportation nodes, and flood zones.

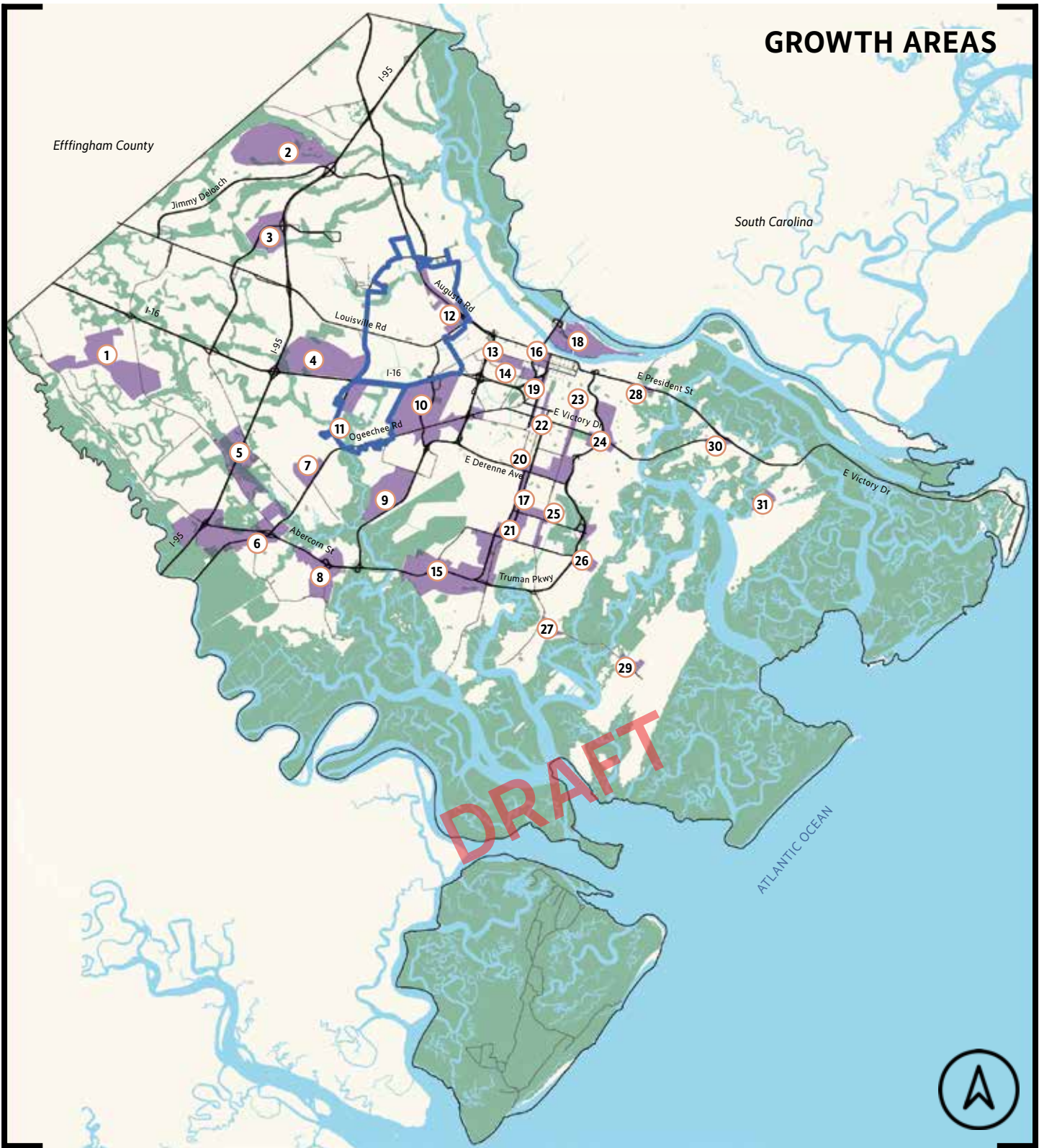
The Growth Center Map is not a zoning map and is primarily intended to guide local decision makers on locations that should receive further study.

## Areas of Further Study

Below is a list of potential Growth Areas identified by through our prioritized land analysis and preferred growth strategy. The order of the areas listed below is in no particular order and does not indicate more importance or priority over others. There are 3 identified growth centers identified in Garden City. Two of the identified growth areas align with the Urban Redevelopment Plan adopted by Garden City in 2016.

- |                              |                            |
|------------------------------|----------------------------|
| 1. New Hampstead             | 16. Yamacraw Village       |
| 2. Highlands                 | 17. Canal District         |
| 3. Godley Station            | 18. Hutchinson Island      |
| 4. Megasite                  | 19. Kayton-Frazier         |
| 5. Hopeton                   | 20. Derenne Ave Corridor   |
| 6. Fort Argyle               | 21. Oglethorpe Mall        |
| 7. Berwick                   | 22. Abercorn Corridor      |
| 8. Georgetown                | 23. Waters Ave Corridor    |
| 9. Rockingham Farms          | 24. Victory Square/Olympus |
| <b>10. CHATHAM PARKWAY</b>   | 25. Medical Arts           |
| <b>11. HIGHWAY 21</b>        | 26. Sandfly                |
| <b>12. GARDEN CITY SOUTH</b> | 27. Marshpoint             |
| 13. West Savannah            | 28. Beech & Capital        |
| 14. Tremont                  | 29. Skidaway               |
| 15. Savannah Mall            | 30. Whitemarsh Island      |
| GSU-Armstrong Vicinity       | 31. Wilmington Island      |





Map 4.6—Potential Growth Areas Throughout Chatham County



# WAYS TO ACCOMMODATE GROWTH

## Transit Oriented Development

Transit-oriented development (TOD) is defined as a moderate—to high-density mix of uses—such as residences, retail shops, offices, and civic and entertainment uses—located within one-half mile of a transit station and designed to support transit use. The typical “station area” is considered to be a half-mile radius, which is an acceptable 10-minute walking distance for most transit users if the area contains a destination, provides dedicated walking routes, and is safe and visually appealing. Within the U.S., TOD is typically associated with rail transit; however, TOD could occur with other fixed guideway transit service, such as bus rapid transit, if it provides facilities and service levels similar to rail transit.

- Implementation of a transit-oriented development ordinance help ensure that the investments made on the regional transit systems would be continually and related codes and process would be supported and utilized to their full extent.

Benefits of a TOD Ordinance include:

- » Reducing in greenhouse gas emissions
- » Increasing transit ridership
- » Increasing pedestrian access
- » Providing long-term return on investment for landowners
- » Providing easy access to goods and services for seniors, and people with disabilities
- » Creating vibrant centers and corridors for pedestrians

- Possible incentives for developers could include the following alternatives but not limited to:
  - » Fast Track Development Review (Expedited Review Process)
  - » Incentives for constructing multi-unit housing projects with 25 or more units
  - » Prohibiting uses within the ¼ mile of existing or proposed bus nodes to enable and promote more pedestrian oriented development.

## Cluster Development

Cluster development is a land development design tool that provides a means of both preserving open space and allowing development to be directed away from natural and agricultural resources considered important for protection by the municipality. It is often best applied in suburban landscapes with larger undeveloped parcels.

Cluster development regulations are implemented through municipal zoning ordinance, subdivision, and land development ordinance in order to provide applicants with the appropriate design standards in addition to providing municipalities with adequate information on development plans.

- Allow as a permitted use “By Right”
- Density incentive
- Possible Requirement for subdivisions with parcels larger than a certain amount of acres



## Traditional Neighborhood Development Ordinance (TND)

TNDs can involve development of a previously undeveloped area or construction on vacant or undeveloped parcels within an already developed community. Though this method is often driven by the private sector, TNDs are regulated by the zoning, subdivision, and land development ordinances of local governments for those planned growth areas.

## Town Center Overlay (TC)

The TC Overlay Districts are intended to be developed based on standards consistent with community character of the surrounding neighborhood. This type of center is to be low in scale not exceeding two stories in height (unless greater height is allowed on an incentive basis) and emphasizes landscaping and pedestrian access.

## PUD/PD Planned Development

Conventional ordinances are often to blame for the automobile oriented subdivisions that have taken claim to our many landscapes. However, a planned unit development (PUD) or Planned Development (PD) can provide the flexibility needed for a Transit Oriented Development. A PUD allows a local government to control the development of individual tracts of land by specifying the permissible form of development in accordance with the local ordinance.

However, care should be taken to protect and preserve natural resource areas during the design and planning process.

## Suburban Retrofit

While suburban locations will always exist in our city landscape, the principles of urbanism can be introduced to sprawling suburban communities. Retrofitting is simply a reconfiguration of uses and building types to create a more urban environment. The elements of suburban retrofit include:

- Creating Street Grid
- Rezoning Single use Commercial to Mixed-use
- Creation of Public Space
- Developing Missing Middle Housing
- Preservation of Wetlands & Marsh Lands

## Adaptive Reuse

While adaptive reuse is commonly associated with historic preservation and structures that are contributing to an architectural period, the term can be used to encompass any structure that is underused, abandoned, vacant, obsolete and/or dilapidated. While adaptive reuse is a tool to conserve energy and waste, it also supports economic development, and enhances community character.



### MISSING MIDDLE HOUSING

Missing middle housing describes a range of multi-family or clustered housing types that are compatible in scale with single-family or transitional neighborhoods.

—Optics Design

# URBAN REDEVELOPMENT PLAN

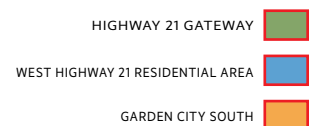
## The URP

Garden City adopted the Urban Redevelopment Plan (2016) as a tool to assist with development and redevelopment of the city due to the changing dynamics in its older neighborhoods, encroaching industrial uses, declining pockets of commercial, and deteriorating buildings.

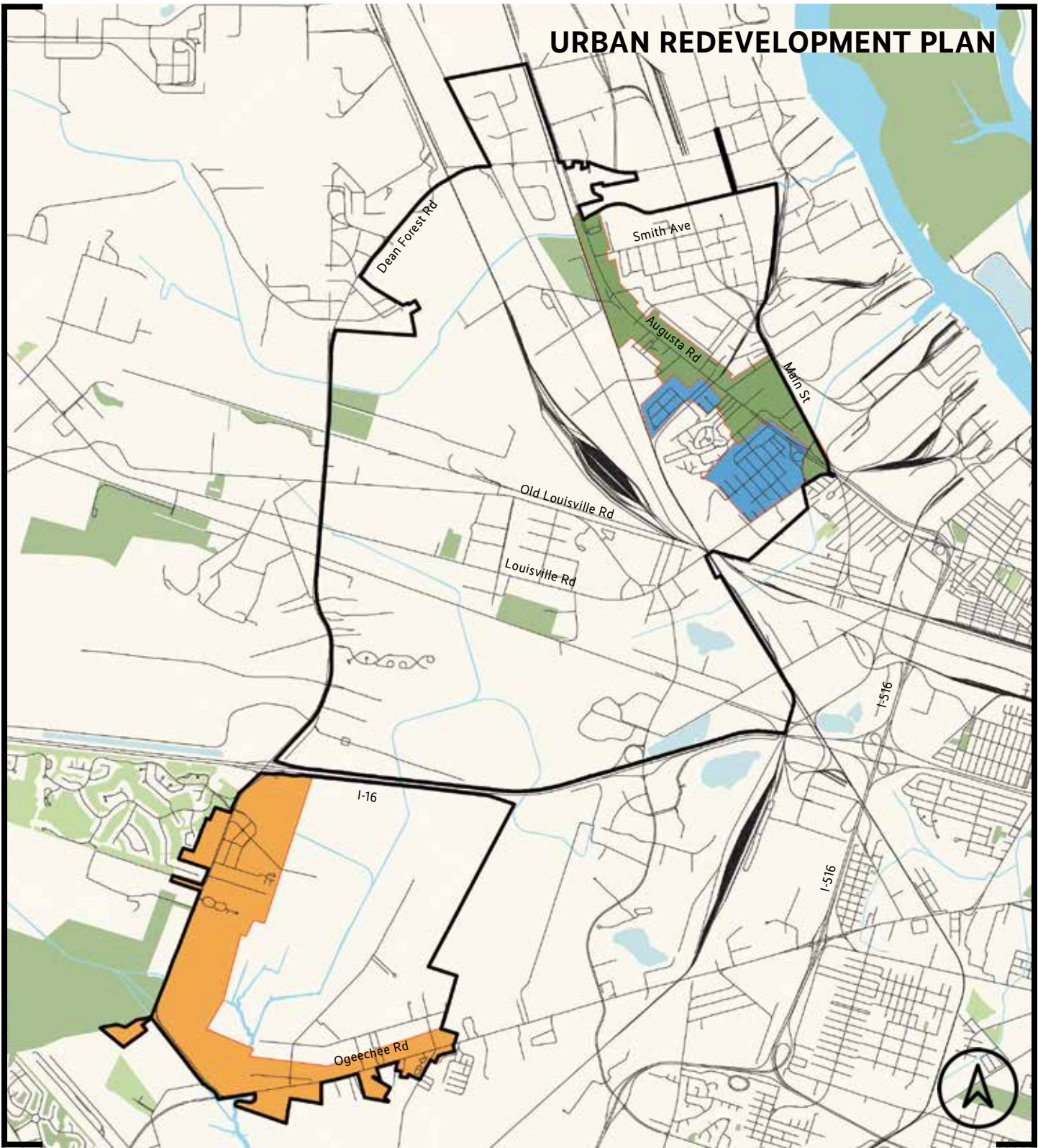
The URP and the Growth Centers Map work together to enforce a unified vision and strategy for urban growth that aligns with a countywide strategy for growth and development.

## Redevelopment Areas

According to the URP, Garden City has identified three Redevelopment Areas: Highway 21 Commercial Corridor, West Highway 21 Residential Area, and Garden City South. These identified areas are consistent with the Character Area classifications, with each area having a unique set of characteristics and intensity of redevelopment strategy.



# URBAN REDEVELOPMENT PLAN



Map 4.3—Urban Redevelopment Plan, Garden City



# EXISTING ZONING

Garden City's Existing Zoning Map is represented in order to classify, regulate and restrict the uses of land, buildings, structures, and other open spaces around buildings, Garden City is divided into districts as follows:

## Existing Zoning Classifications, 2018

ZONING CLASSIFICATION	DESCRIPTION
C-1	Light Commercial
C-2	Heavy Commercial
C-2A	Heavy Commercial with Alcoholic Sales
C-2A (BW)	Heavy Commercial with Alcoholic Sales
I-1	Light Industrial
I-2	Heavy Industrial
M	Mixed-Use
P-C-2A	Planned Commercial
P-C-2	Planned Commercial
P-I-1	Planned Industrial
P-I-2	Planned Industrial
P-R-1	Planned Residential
P-R-A	Planned Residential Agricultural
R-1	Residential
R-2	Residential
R-A	Residential Agriculture
R-I-N	Institutional


















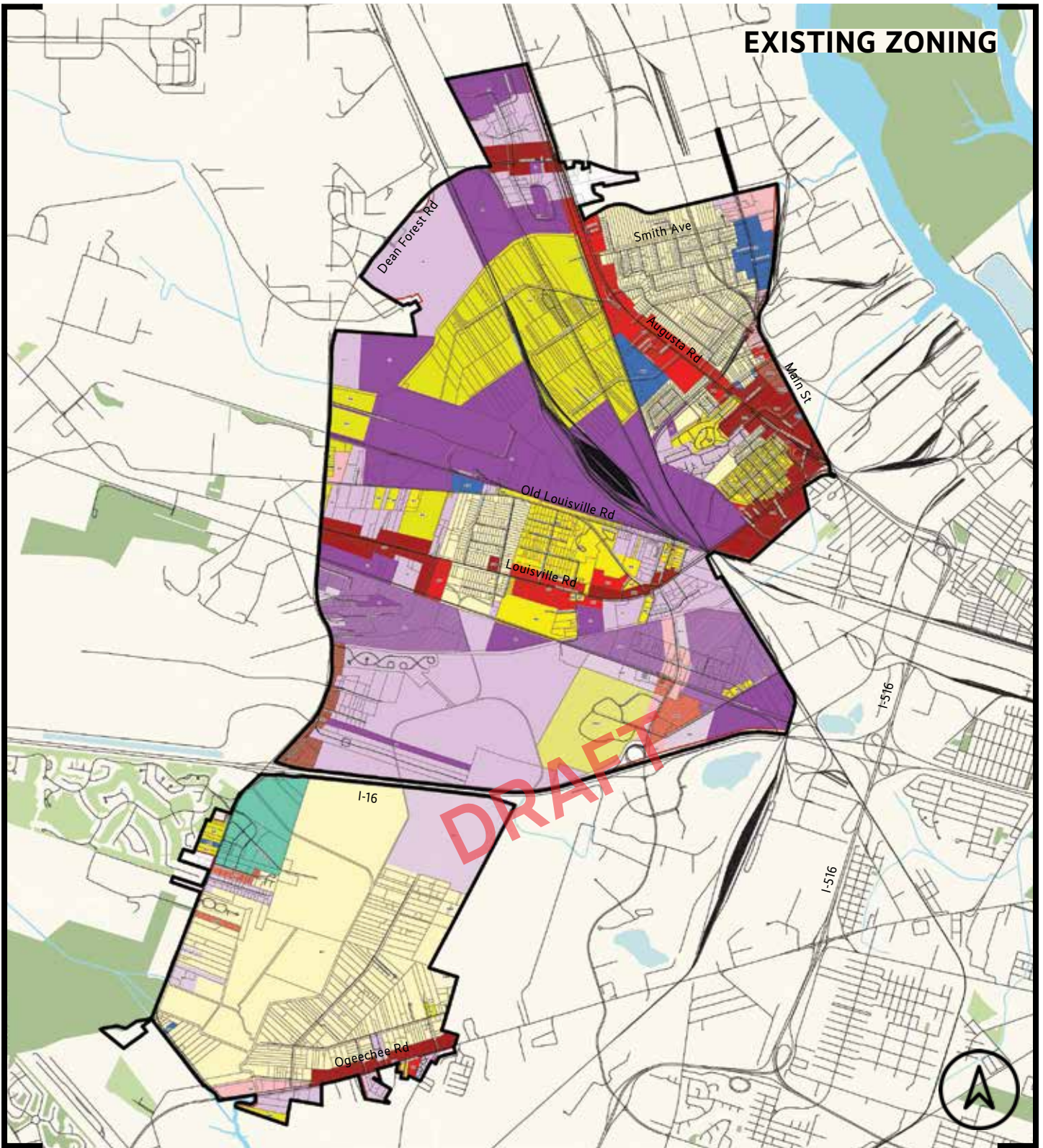
M (MIXED-USE)	
C-1 (LIGHT COMMERCIAL)	
P-C-1 (PLANNED COMMERCIAL)	
C-2 (HEAVY COMMERCIAL)	
P-C-2 (PLANNED COMMERCIAL)	
C-2A (HEAVY COMMERCIAL) (WITH ALCOHOL SALES)	
P-C-2A (PLANNED COMMERCIAL)	
I-1 (INDUSTRIAL)	
P-I-1 (PLANNED INDUSTRIAL)	
I-2 (INDUSTRIAL)	
P-I-2 (PLANNED INDUSTRIAL)	
R-1 (RESIDENTIAL)	
P-R-1 (PLANNED RESIDENTIAL)	
R-2 (RESIDENTIAL)	
R-A (RESIDENTIAL AGRICULTURAL)	
P-R-A (PLANNED RESIDENTIAL - AGRICULTURAL)	
R-I-N (INSTITUTIONAL)	

Figure 4.1–Existing Zoning Classification, Garden City





Map 4.3-Existing Zoning Classifications, Garden City



# CHARACTER AREAS

## Character Areas









Character areas are places that may contain a multitude of specific land uses, but share defining characteristics, such as development type and/or intensity. The character areas were developed utilizing the 2016 Comprehensive Plan character areas, existing community character, and future growth trends, in an effort to ensure compatible development and responsible future land use patterns.

Interpretation of the Character Area Map (CAM) is to be used in partnership with the Future Land Use Map (FLUM). The CAM is not intended to represent future zoning; however, it should be considered along with the FLUM, the city's zoning ordinances, and other local policies when decisionmakers consider land development questions or requests.

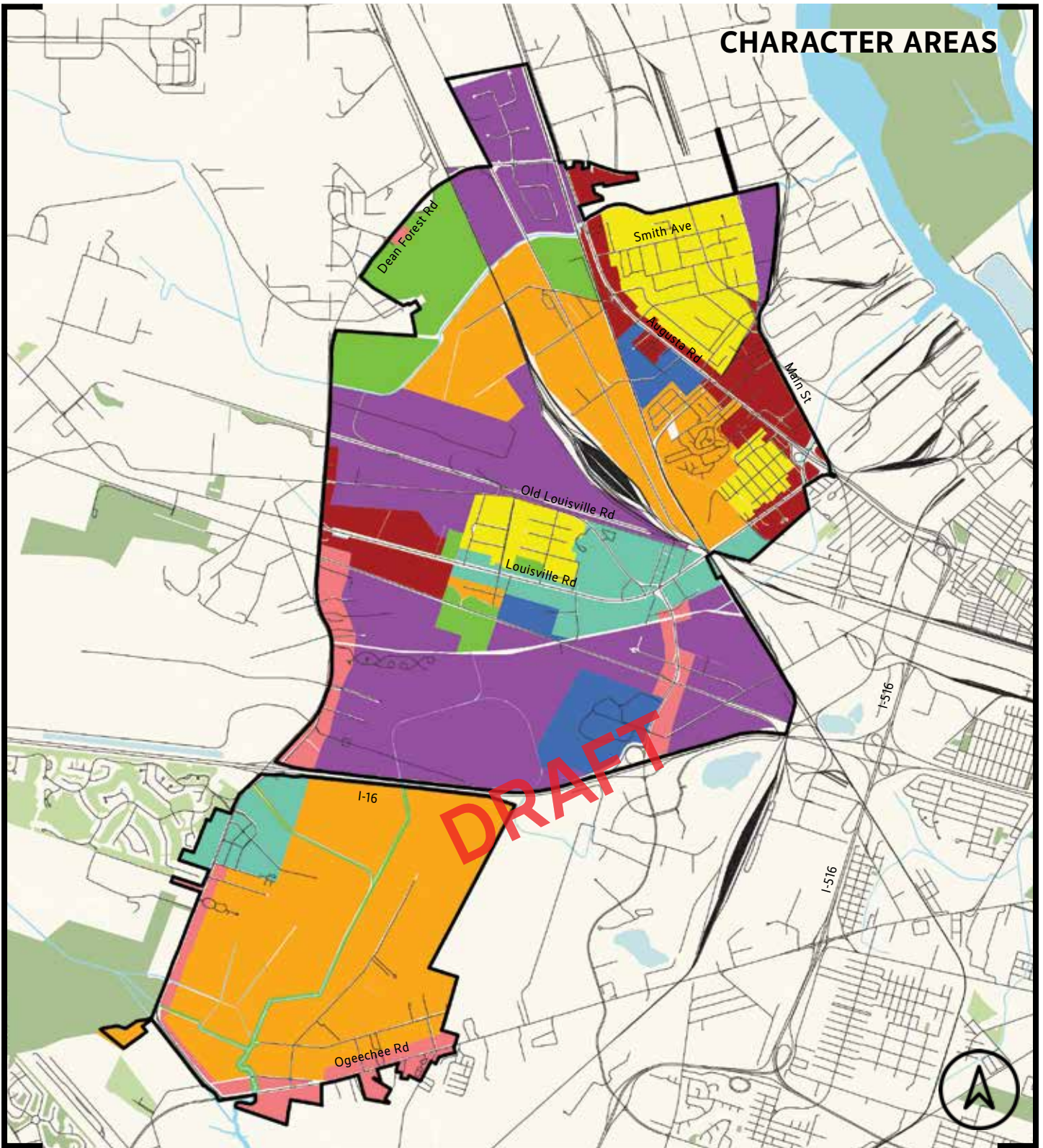
## Character Areas Identified

- Local Commercial Corridor
- Commercial Redevelopment Corridor
- Mixed-Use Urban Anchor
- Industrial
- Public/Institutional
- Traditional Neighborhood
- Suburban Neighborhood
- Greenspace

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LOCAL COMMERCIAL CORRIDOR	
COMMERCIAL REDEVELOPMENT CORRIDOR	
MIXED-USE URBAN ANCHOR	
INDUSTRIAL	
PUBLIC INSTITUTIONAL	
TRADITIONAL NEIGHBORHOOD	
SUBURBAN RESIDENTIAL	
GREENSPACE	





Map 4.7-Character Areas, Garden City





## LOCAL COMMERCIAL CORRIDOR

The Local Commercial Corridor character area was established to enhance the quality and compatibility of development, to encourage the most appropriate use of land, and to promote safe and efficient movement of traffic. Additionally, this specific character area allows for a higher intensity of neighborhood scale commercial development but does not allow for commercial development as intensive as the Commercial Redevelopment Corridor character area.

### Current Zoning:

C-1, C-2, C-2A, I-1, I-2, P-C-2, P-C-2A, P-I-1, P-I-2, R-1, R-A, R-I-N

### Future Zoning Classification:

More than 50 percent of land located within this character area is currently zoned for industrial or residential use. The city will need to evaluate current development trends and the demand for property to determine the best approach for steering future development and improving redevelopment along these corridors

### Implementation Measures:

- Apply strict procedures, standards, and guidelines to all development proposals within this district
- Ensure that permitted uses reflect the needs of the local market and are compatible with nearby residential neighborhoods
- Ensure that design and architectural standards are compatible with surrounding areas
- Ensure that road edges are clearly defined by locating buildings closer to the road frontage with parking in the rear or at the side
- Establish maximum parking requirements versus minimum parking requirements
- Develop access management standards for parking lots along main corridors to eliminate excessive curb cuts, etc

## COMMERCIAL REDEVELOPMENT CORRIDOR

These areas are highly trafficked and consist primarily of commercial/industrial uses adjacent to the highways; however, there is some residential development scattered along the highway and on local streets. The Commercial Redevelopment Corridor was established to enhance and reevaluate the quality and compatibility of development, promote safe and efficient movement of traffic, and to reduce impacts on nearby residential properties

### Current Zoning:

C-1, C-2, C-2A, I-1, I-2, R-1, R-2

### Future Zoning Classification:

While these character areas contain a mix of zoning categories, including residential, the majority of these areas are zoned for commercial and industrial. The focus of redevelopment in these areas is fairly consistent with the commercial zoning categories. However, the city should explore additional design standards or an overlay district for these areas to foster the desired type of redevelopment and future development in the area

### Implementation Measures:

- Allow uses that reflect the needs of the local and regional market
- Apply strict procedures, standards, and guidelines to all development proposals within this district
- Allow for varied housing types and higher density residential development most notably along main corridor frontage areas
- Create an overlay district along redevelopment corridors to encourage redevelopment design strategies, such as creating inviting corners and placing parking behind or beside buildings
- Explore and promote an infill development program to encourage new commercial development on vacant lots.

## MIXED-USE URBAN ANCHOR

The Mixed-Use Urban Anchor character area is established to promote projects that integrate different land uses such as retail stores, restaurants, residences, civic buildings, offices, and parks within a defined area. Mixed-use developments by definition have a minimum of three separate types of uses included in the development

### Current Zoning:

C-1, C-2, C-2A, I-1, I-2, M, P-C-2, R-1, R-2, R-A, R-I-N

### Future Zoning Classification:

Some of the areas identified for future mixed-use already contain a balanced combination of residential, commercial, and public uses. However, the current zoning code for the traditional categories does not necessarily lead to the desired vision for development within this character area. The city should consider re-zoning areas to mixed use or creating an overlay district along Highway 80 to help facilitate a form of development more consistent with the intent of this category

### Implementation Measures:

- Residential development and commercial uses should be designed to complement each other and create a live/work environment
- Varied residential densities and housing types should be allowed, including residential uses on upper floors
- Commercial uses should include a mix of retail, services, and offices to serve neighborhood residents' day-to-day needs and should match the character of the neighborhood
- Mixed-use area design should be pedestrian oriented with strong walkable connections between different uses
- Re-zone some or all of the Mixed-Use Urban Anchor character area to M, Mixed-use, or create an overlay district to facilitate consistent form of development

## INDUSTRIAL

Garden City has long occupied the superior strategic location that attracts a wide range of industrial and commercial businesses. Both commercial and industrial businesses will continue to be attracted to the city because of its proximity to the Port and downtown Savannah, as well as its vast transportation network

### Current Zoning:

C-1, C-2, C-2A, I-1, I-2, P-C-2, P-C-2A, P-I-1, P-I-2, R-1, R-2, R-A, R-I-N

### Future Zoning Classification:

The biggest challenge the city will face with regards to industrial use is the increasing demand for industrial property and buffering these uses from neighboring residential uses.

### Implementation Measures:

- Increase existing industry retention and expansion rates
- Promote revitalization efforts to enhance job creation and location of business and offices within Garden City
- Incorporate current and future needs for housing, infrastructure, and natural resources protection into economic development initiatives
- Expand international economic development within the city to support strategic industry sectors
- Integrate commercial and office infill as a transitional buffer between residential and industrial uses



## PUBLIC/INSTITUTIONAL

Prioritizing where to build or maintain infrastructure affects the economic health, the environmental quality, and social equity of Garden City. Services and infrastructure should be provided equitably throughout the city, and it is critical to evaluate where current infrastructure needs are not being met. Additionally, the city should explore impact fees as a method of funding improvements and the construction of new infrastructure.

### Current Zoning:

C-1, C-2, P-R-A, R-1, R-2, R-A, R-I-N

### Future Zoning Classification:

The majority of land within this character area is appropriately zoned.

### Implementation Measures:

- Identify where adequate facilities exist and where facilities should be added to allow for appropriate growth
- Create a plan for staging infrastructure growth to accommodate growth tied to specific “level of service” measurements
- Set a threshold level of service for each type of infrastructure
- Determine if the current public/institutional services are meeting the city’s potential needs

## TRADITIONAL NEIGHBORHOOD

Traditional communities are characterized by mixed land uses, grid street patterns, pedestrian circulation, intensively used open spaces, architectural character, and a sense of community. Homes in this character area are primarily early and mid-twentieth century single-family homes. Existing housing stock, older homes in particular, should be preserved and improved. Underutilized or vacant sites could be candidates for infill or redevelopment, which should be of a compatible scale and character with the surrounding neighborhood.

### Current Zoning:

C-1, C-2, C-2A, I-1, I-2, R-1, R-2, R-A, R-I-N

### Future Zoning Classification:

This activity will continue to occur in appropriate land use areas.

### Implementation Measures:

- Encourage the continuation of the street grid pattern
- Ensure that infill development and redevelopment are consistent with the traditional architectural and design style
- Identify and protect historic structures
- Continue to enforce residential property maintenance standards
- Require the continuation of existing sidewalk networks in new development as well as connectivity to sidewalk networks outside of the new developments
- Identify and seek funding for streetscape improvements to improve the pedestrian environment
- Evaluate the city’s tree protection ordinance to ensure the canopy is preserved citywide

## SUBURBAN NEIGHBORHOOD

The suburban neighborhood character area is identified generally by either single-family structures on large lots or in subdivision developments with relatively uniform housing types and densities. Additionally, multi-family apartments and attached single-family subdivisions are also prevalent. New developments should have sidewalks, street trees, as well as access to adequate educational facilities, and active and passive recreation. Suburban neighborhoods have adequate capacity of infrastructure and can have mixed-uses to serve the daily need of residents.

### Current Zoning:

I-1, I-2, P-C-2, P-I-1, P-R-1, R-1, R-2, R-A

### Future Zoning Classification:

This activity will continue to occur in appropriate land use areas.

### Implementation Measures:

- Promote developments that have strong walkable connections within and between neighborhoods
- Identify and protect historic structures
- Allow for smaller local roads and associated rights-of-ways
- Require appropriate neighborhood mixed-uses within planned developments to provide a destination for pedestrians and to minimize the need for long trips

## GREENSPACE

The availability of natural, open, and green spaces in conjunction with well-planned, well-promoted cultural and historic resources and well-placed urban centers speaks to quality of life. Properly planned greenways provide efficient pedestrian linkages that can serve as alternative transportation to and from work, to services, and other daily destinations.

### Current Zoning:

C-1, C-2, I-1, I-2, M, P-I-1, P-1-2, R-1, R-2, R-A

### Future Zoning Classification:

Wetland and flood plain constraints will assist with the preservation of land within this area, but amendments to the existing zoning ordinance would be required to ensure the preservation of these areas.

### Implementation Measures:

- Preserve scenic vistas and natural ecological features
- Promote conservation easements and other incentives for natural space preservation
- Require the establishment of greenspace as the first step in the land use planning and design process
- Identify key physical, natural, ecological, landscape, historical, access and recreational assets
- Coordinate greenspace planning with planning for gray infrastructure-roads, drainage canals, bike trails, water, electric, telecommunications and other essential community support systems
- Provide a strategic framework for the implementation of a connected and multi-functional network of wildlife sites, public open spaces, and green links with mapping and analysis









# FUTURE LAND USE

Garden City 2040 seeks to set a vision for the community, and its future land use decisions. This element includes a Future Land Use Map (FLUM) and a Character Areas Map (CAM) to present information, strategies, and recommendations to guide future land use policy and decisions. The FLUM and the CAM envision future land uses with an attention to the interconnected elements of community character, development patterns, transportation infrastructure, equity, and natural resources.

The FLUM serves to give direction for zoning decisions through specific land use categories for Garden City. In partnership with one another, the FLUM and the CAM are intended to guide the character and direction of land use decisions in the city.

Garden City's future land use patterns are shown on the Future Land Use Map (FLUM). The FLUM contains color-coded categories, which visually represent the land use categories that serve as a guide for future zoning and development policy decisions in the community. Interpretation of the FLUM should be considered along with all zoning requests, local policy reviews, and conclusions when policymakers consider land development questions or requests.

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COMMERCIAL	
INDUSTRIAL	
RESIDENTIAL	
PUBLIC	
MIXED-USE	
GREENSPACE	







# LAND USE CATEGORIES

CHARACTER ZONE		
MAP COLOR		
LAND-USE	Commercial	Industrial
DEFINITION	This category is for land dedicated to non-industrial business uses, including retail sales, office, service, and entertainment facilities, organized into general categories of intensities. Commercial uses may be located as a single use into one building or grouped together in a shopping center or office building. Communities may elect to separate office uses from other commercial uses, such as retail, service, or entertainment facilities	This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing, and wholesale trade facilities, mining or mineral extraction activities, or other similar uses
USES	Commercial Retail, Commercial Office	Light Industry, Heavy Industrial
CHARACTER ZONE		
MAP COLOR		
LAND-USE	Residential	Public/Institutional
DEFINITION	The predominant use of land within the residential category is for single-family and multi-family dwelling units organized into general categories of net densities.	This category includes certain state, federal, or local government uses. Government uses include government building complexes, police and fire stations, libraries, prisons, post offices, schools, military installations, etc. Examples of institutional land uses include colleges, churches, cemeteries, hospitals, etc.
USES	Single-Family, Multi-Family	Public/Institutional

<b>CHARACTER ZONE</b>	
<b>MAP COLOR</b>	
<b>LAND-USE</b>	<b>Mixed-Use</b>
<b>DEFINITION</b>	For a detailed, fine-grained mixed land use, or one in which land uses are more evenly balanced, mixed land use categories may be created and applied at the discretion of the community. Mixed land use categories must be clearly defined, including the type of land uses allowed and percentage distribution among the mix of uses (or other objective measurement of the combination), and the allowable density of each use.
<b>USES</b>	
<b>CHARACTER ZONE</b>	
<b>MAP COLOR</b>	
<b>LAND-USE</b>	<b>Green Space</b>
<b>DEFINITION</b>	This category is for land dedicated to farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.), agriculture, or commercial timber or pulpwood harvesting. This category is also for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers or similar uses
<b>USES</b>	



# TRANSPORTATION ELEMENT

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# 05



# TRANSPORTATION

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## Introduction

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Garden City is a member of the Coastal Region MPO (CORE); and CORE is the entity responsible for transportation planning in the region. Transportation investments in Garden City offer an opportunity for catalyst to spur new growth in terms of population and employment, and development.

While investments into our roadway infrastructure are necessary to increase capacity for vehicular users, other forms of infrastructure investment should be considered, this type of infrastructure includes; bike lanes, walking paths and sidewalks, and bus service to create additional opportunities for connectivity to our region.

# TRANSPORTATION CONDITIONS & TRENDS

Chatham County have long served as the regional center for Coastal Georgia and the Lowcountry of South Carolina for employment, shopping and recreation. In addition to serving as the regional center for residents, Savannah, with its Historic Landmark District, is host to over 14.8 million visitors each year spending \$3.1 billion and has become one of the top tourist destinations, both nationally and internationally, according to Longwoods Travel USA Study Via Visit Savannah.

Chatham County is also home to the Port of Savannah, which is the largest and fastest growing single-operator container terminal in North America and the fourth largest in total volume, according to Georgia Ports.

The port is a major economic engine for the region, as well as the State of Georgia. The CORE MPO region is also home to a number of other regional employment centers, including medical, military and educational institutions, port-related industries and manufacturing centers.

An efficient transportation system that effectively provides for the movement of people and goods is critical to the continued economic vitality of the region and the State.

## METROPOLITAN TRANSPORTATION PLAN

A Metropolitan Transportation Plan (MTP), is a long-range planning document that sets future goals and identifies transportation deficiencies, strategies, and projects over the next two decades.

—CORE MPO

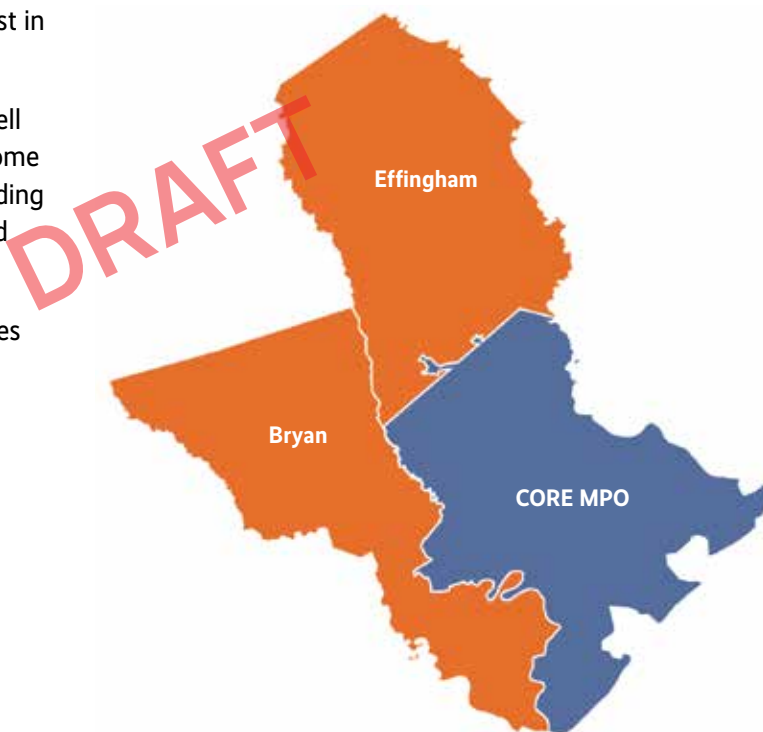


Figure 5.1—CORE MPO Boundary

## Coastal Region MPO

The boundaries of the CORE MPO are smaller and fall within the larger Savannah MSA. The CORE MPO is a transportation policy-making and planning body with representatives of elected and transportation authorities from Chatham County and its municipalities, Bryan County, Effingham County and executives from local, state and federal agencies.

The CORE MPO is comprised of a policy board known as the Executive Board and four advisory committees including the Technical Coordinating committee (TCC), the Citizens Advisory Committee (CAC), the Advisory Committee on Accessible Transportation (ACAT) and the Economic Development and Freight Advisory Committee (EDFAC).

### METROPOLITAN PLANNING ORGANIZATION

A Metropolitan Planning Organization (MPO), is responsible for developing a regional transportation vision, direct planning and implementation of projects, allocated federal funds, and gather input from the public and stakeholders.

—Federal Transit Administration (FTA)

The CORE MPO follows the 3-C planning process of transportation, comprehensive, continuing, and cooperative. Through this planning process the MPO coordinates policies, corridor studies, and plans such as the Metropolitan Transportation Plan.

## CORE MPO Statistics

Total Population in MPO\*

**276,406**

Land Area (Square Miles)\*

**651**

Year Established\*

**1983**

\*Metropolitan Planning Organization (MPO) Database





# TRAVEL CHARACTERISTICS

## Regional Commuting Patterns

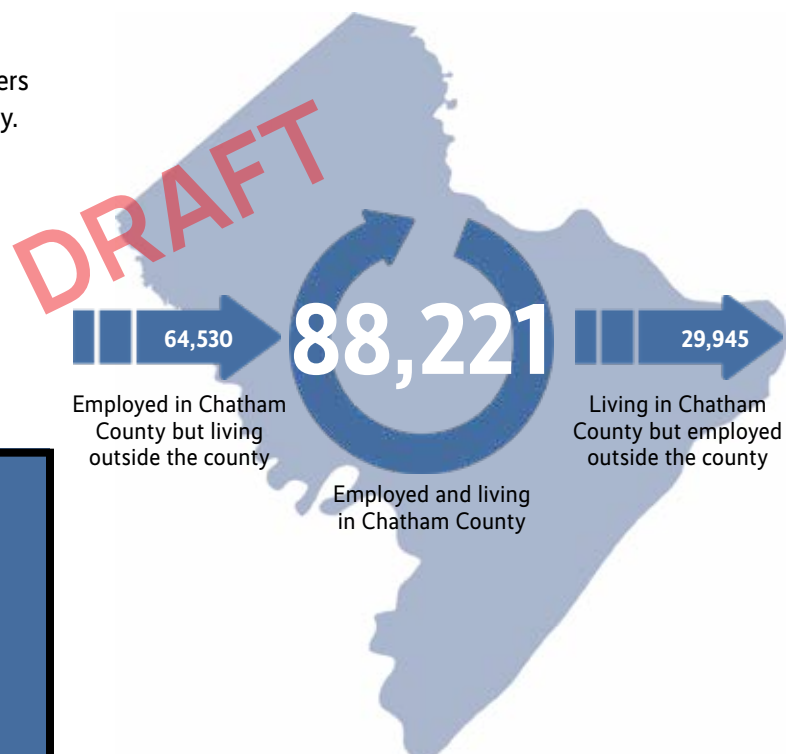
Chatham County and the Garden City are regional hubs for employment, and other economic generators. Many residents of neighboring counties commute into Chatham County for work each day, greatly impacting the traffic patterns and overall efficiency of the transportation network.

The neighboring counties of Bryan and Effingham both have over 64% of their residents commuting outside the County for work each day and 72% of Richmond Hill residents travel outside Bryan County for work. Other nearby counties also experience a significant out-commuting pattern. Liberty County has 18.6% and Bulloch County has 24% of their population working outside their county and those workers have a typical commute time of about one hour each way.

## Commuting Patterns

	Work in County of Residence	Work Outside County of Residence
Chatham County	92.2%	4.9%
Savannah	94.1%	3.6%
Richmond Hill	26.2%	72.1%
Bryan County	27.5%	69.7%
Effingham County	31.1%	64.4%

Figure 5.1—Regional Commuting Characteristics  
U.S. Census Bureau: 2017 American Community Survey 5-Year Estimates



Map 5.1—Regional Commuting Pattern Flow  
U.S. Census Bureau: 2018 American Community Survey

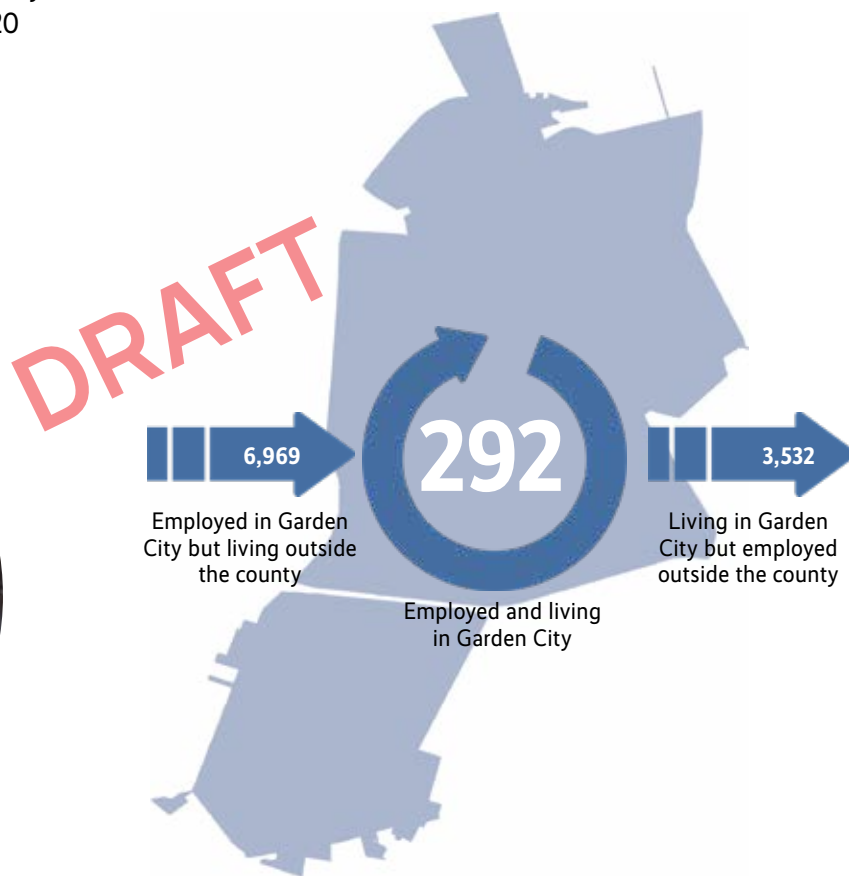
### COMMUTING PATTERN

A commuting pattern is made up of journey to work and refers to groups of workers in a region, and the distances and directions they travel from home to work.

—Census Bureau

## Local Commuting Patterns

Garden City is a hub of employment, which is suggested by the local commuting pattern flow into the city. Nearly 96% of people employed in the Garden City are living outside of the city, while nearly 93% of people that live in Garden City are commuting outside for employment. The high amount of commuting in and out of the city is evident with the high volume traffic that congests Garden City's roadways. Roughly, a typical commute time to work is almost 20 minutes each way.



Map 5.2–Local Commuting Pattern Flow  
U.S. Census Bureau: 2018 American Community Survey



## Commute Mode Share

The proportion of travelers using a given method of transportation is called the "mode share" or the "mode split". Mode share is influenced by the types of facilities or services that have been emphasized in the past (i.e. provision of more and wider roadways and "free" parking, rather than transit service, bikeways, or sidewalks).

Data that is available from the U.S. Census Bureau regarding the various ways that people choose to travel (e.g. driving, taking transit, walking, etc.) focuses on the trips to and from work, as this is one of the most predictable trip purposes. The picture of travel activity implied by this data is also limited by the fact that trips involving multiple modes are counted under whichever mode was used for most of the trip distance (e.g. a commute involving a short bicycle trip to and from the bus stop and longer ride on the bus is counted only as a bus commute).

As captured in Figure 5.2, most work trips in Garden City are by automobile, as is the case for the State and Country overall. Workers living within Garden are likely to use alternatives to driving alone, such as carpooling and walking. While there is transit service coverage available in the city, it only makes up 1.2% of the commuting type.

According to the American Community Survey estimates shown in Figure 5.2 for 2018, the Garden City is estimated to have had 73% of its workers driving to work alone, as compared to 79.5% in the state and 76.4% in the US, Effingham and Richmond Hill have about 85% of their workers driving alone. Percentages of people who drove to work alone in Garden City were lower compared to both the State and US percentages. Garden City also exhibits a low percentage of walking (4.4%) and other means (1.7%).

It is important to note that today's observed travel behavior does not necessarily reflect the choices people would make if different transportation options were available and at a level to make them safe and feasible.

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### MODE SHARE

Mode Share (also called mode split, modes-share, or modal split) is the percentage of travelers using a particular type of transportation or number of trips using said trip.

—CORE MPO

Transportation policy, funding, and design decisions in support of automobile travel initially created great gains in mobility most notably (for the middle and upper classes), but have also resulted in some unintended, negative consequences for individuals and society, such as pollution, contributions to the atmospheric greenhouse effect, contributions to obesity, damage to the natural environment and to community social fabric, as well as a high cost for individuals to enter fully into the normal activities of society (i.e. the need to buy a car to reliably get to a job).

In other words, although most people in the region today go everywhere by private automobile, there are good reasons to encourage interest in other modes within the community.

*27% of people in Garden City choose carpooling, walking, biking, or telecommuting for their commute to work.*

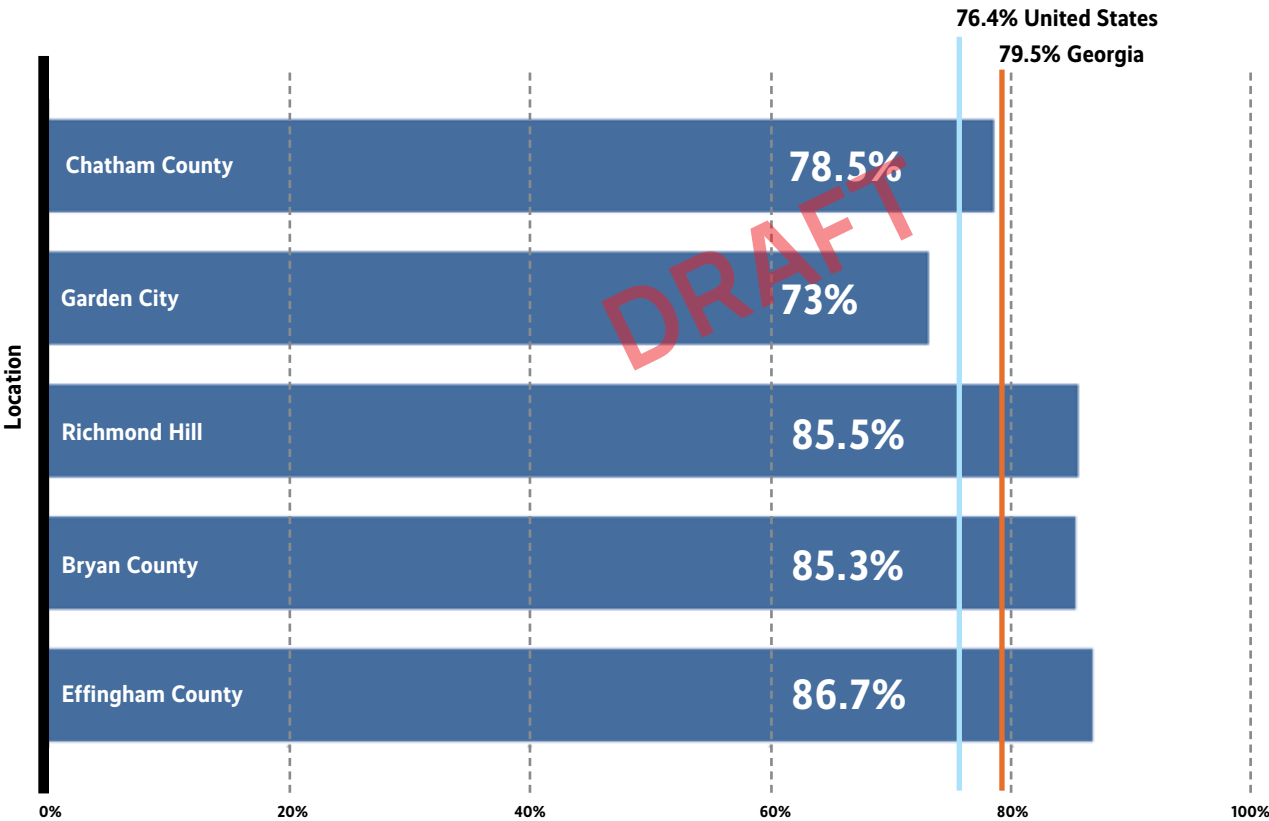


Figure 5.2–Percent of Commuters Who Drive Alone to Work  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



# METROPOLITAN TRANSPORTATION PLAN

The MTP is a multi-modal plan that is based on the socio-economic development of the Savannah region and is intended to provide efficient transportation services to all the residents in this area. Its multi-modal approach incorporates highway development, transit service, bike/pedestrian improvements, and other related transportation investments.

The MTP identifies the vision, goals and objectives, strategies and projects that promote mobility for both people and goods. The MTP is updated every five years, at which time the MPO reviews, revises, and recalibrates the travel demand model with updated demographic and socioeconomic characteristics. Updating the plan also allows for the MPO to incorporate results of any new or ongoing studies and any changes to federal regulations and guidance. The CORE MPO has recently prepared an update of its MTP called Mobility 2045.

## Mobility 2045

The CORE MPO has recently prepared an update of its MTP called Mobility 2045. The Mobility 2045 Plan emphasizes a multi-modal performance-based approach to transportation planning to meet the travel demands over the next 26 years, while taking into consideration the regions goals and financial capacity. Traditional transportation planning has focused on how quickly and efficiently vehicles can move from point to point. This approach typically has not considered the impacts on and relationships to land use, community character, and the quality of life.

The CORE MPO is committed to wisely investing in the transportation network to address the growth of the area while enhancing mobility for people and goods and ensuring a sustainable future. This commitment is incorporated in Mobility 2045 through a diverse and wide-ranging process, including an assessment of transportation needs in coordination with the future regional growth and anticipated future trends.

## Mobility 2045 Goals

The overall goal of the Mobility 2045 Plan is to continue moving the planning process beyond a singular focus on moving motor vehicles and consider transportation issues from a comprehensive perspective that incorporates community values, needs, land use and modal alternatives.

*The Mobility 2045 Plan considers transportation issues from a comprehensive perspective that incorporates community values, needs, land use and modal alternatives.*

Mobility 2045 goals and objectives are targeted to ensure that the transportation system helps the region attain its overall vision for the future. Through public involvement, stakeholders and citizens helped identify these goals and objectives, which provide the framework for the provision of a safe, secure, and efficient, multi-modal transportation network that meets the mobility needs of both people and freight (Figure 5.3).



Figure 5.3–Mobility 2045 Goals



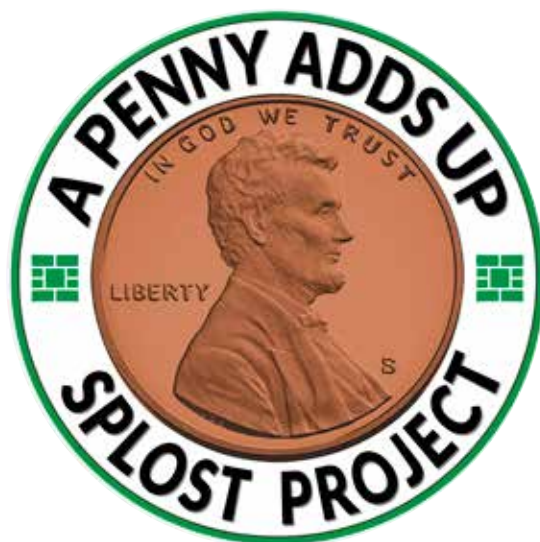
# TRANSPORTATION INVESTMENT

Mobility 2045 provides a financially balanced list of projects where project costs must not exceed the \$1.8 Billion anticipated funding for the 25+ year planning period.

Federal funds provide the largest share of funding for transportation improvements in the CORE MPO Metropolitan Planning Area followed by State funds. State funds mostly come from Georgia's motor fuel tax and House Bill 170 funds. Transportation funds are also generated by local sources. The local revenues come from local governments' general funds, Special Purpose Local Option Sales Tax (SPLOST), transit sales tax, transit fare box receipts, and transit district tax.

It is estimated there will be approximately \$1.8 billion available in highway funds and \$221 million in transit funds over the life of the plan. Projects totaling over \$670 million are currently under development and will continue to move forward with Mobility 2045, leaving approximately \$1.1 billion (of the \$1.8 billion) to fund new projects.

Projects identified as "needs" but not included in Mobility 2045 are incorporated into the Vision Project List, an unfunded project list. Subsequent plan updates will utilize the Vision Plan for projects to include when funds become available.



## Total Funding Based on Project Type

### Highway (\$1.1 B)

- Roadway Widening (\$470)
- Interchanges (\$417.5)
- New Roadway (\$155.3)

### Preservation, Maintenance & Opt (\$553 M)

- Maintenance (\$232)
- Operations & Road Improvements (\$161)
- Bridges (\$160)

### Non-Highway (\$262 M)

- Transit Priority Projects (FHWA & FTA Funds) (\$240)
- Non-Motorized (\$22.4)

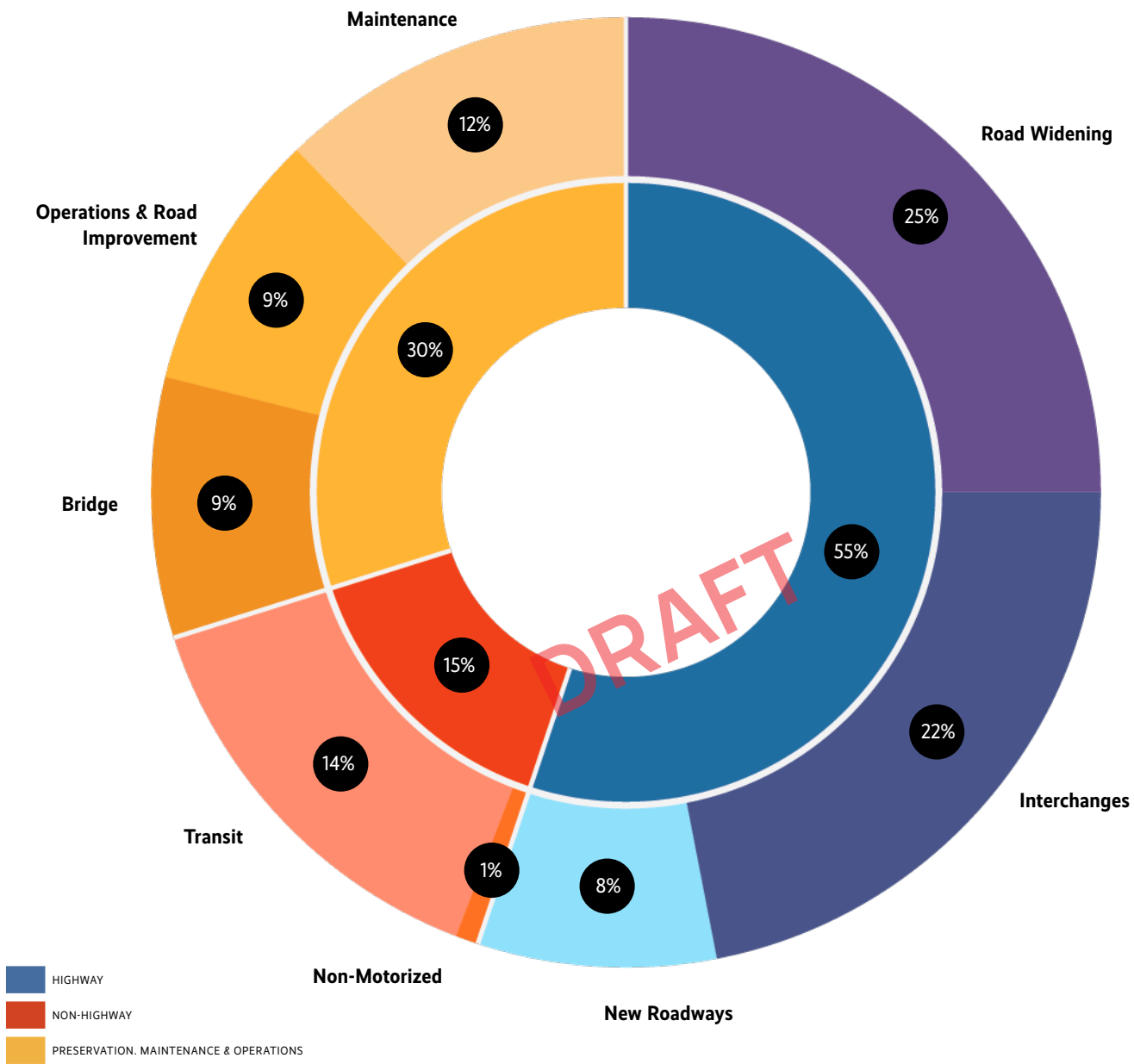


Figure 5.4–Funding for Transportation Projects  
Coastal Region Metropolitan Planning Organization (CORE MPO)



# ROAD NETWORKS

The Savannah Metropolitan Statistical Area (MSA) is comprised of Bryan, Chatham and Effingham Counties and has a total of more than 2,490 miles of roadways. These roadways are categorized by their use and the amount of traffic carried. These categories, as defined by the Federal Highway Administration (FHWA), are described to the right.

Roadways in the region serve multiple purposes and accommodate different types of travel. Roadways range from local streets that are designed for direct access to homes and businesses to interstate highways that are primarily for mobility and long distance travel.

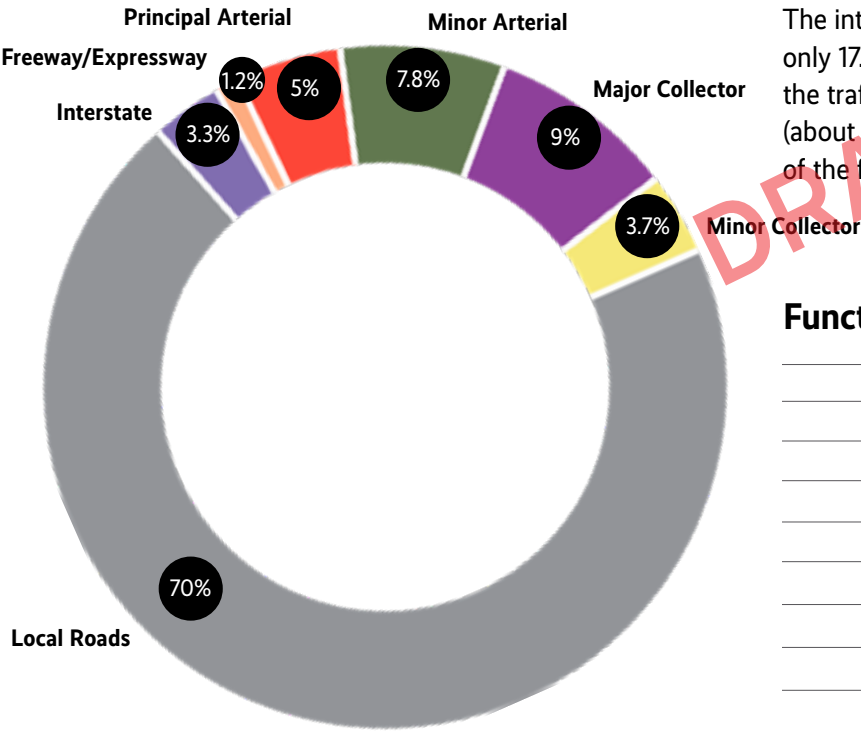


Figure 5.5–Percentage of Roadway in Region by Functional Classification  
Coastal Region Metropolitan Planning Organization (CORE MPO)

The Savannah Metropolitan Statistical Area (MSA) is comprised of Bryan, Chatham and Effingham Counties and has a total of more than 2,490 miles of roadways. These roadways are categorized by their use and the amount of traffic carried. These categories, as defined by the Federal Highway Administration (FHWA), are described to the right.

Map 5.3 depicts the functional classification of the roadway network in the Savannah MSA while Figure 5.6 shows the roadway miles by functional class. Local roads make up almost 70% of the total miles in the area. Collectors make up about 12.7% of the total roadway miles.

The interstates, freeway and arterials, though comprising only 17.28% of the total roadway mileage, carry most of the traffic. The interstates, freeways and principal arterials (about 9.49% of the total roadway mileage) also carry most of the freight traffic in the area.

## Functional Classification

	Miles
Interstate	97.52
Freeway/Expressway	34.06
Principal Arterial	147.27
Minor Arterial	229.14
Major Collector	263.29
Minor Collector	108.83
Local Roads	2060.44
Total	2940.55

Figure 5.6–Miles of Roadway in Region, by Functional Classification  
Coastal Region Metropolitan Planning Organization (CORE MPO)

## DEFINING OUR ROADWAY NETWORK



### Interstate/Freeway

Roads that are fully accessed controlled and are designed to carry large amount of traffic at a high rate of speed; Examples include roadways such as I-16 and Harry Truman Parkway.

### Arterials

Roads that are designed to carry large amounts of traffic at a relatively high speed, often over longer distances. Often some degree of access management is incorporated; Examples of arterials include Islands Expressway, SR 204 and US 80.

### Collectors

Roads that are designed to carry less traffic at lower levels of speed for shorter distances. These roadways typically “collect” traffic from the local roadways and provide the access to arterials. Examples of collectors include Habersham Street, LaRoche Avenue; and Old Louisville Road.

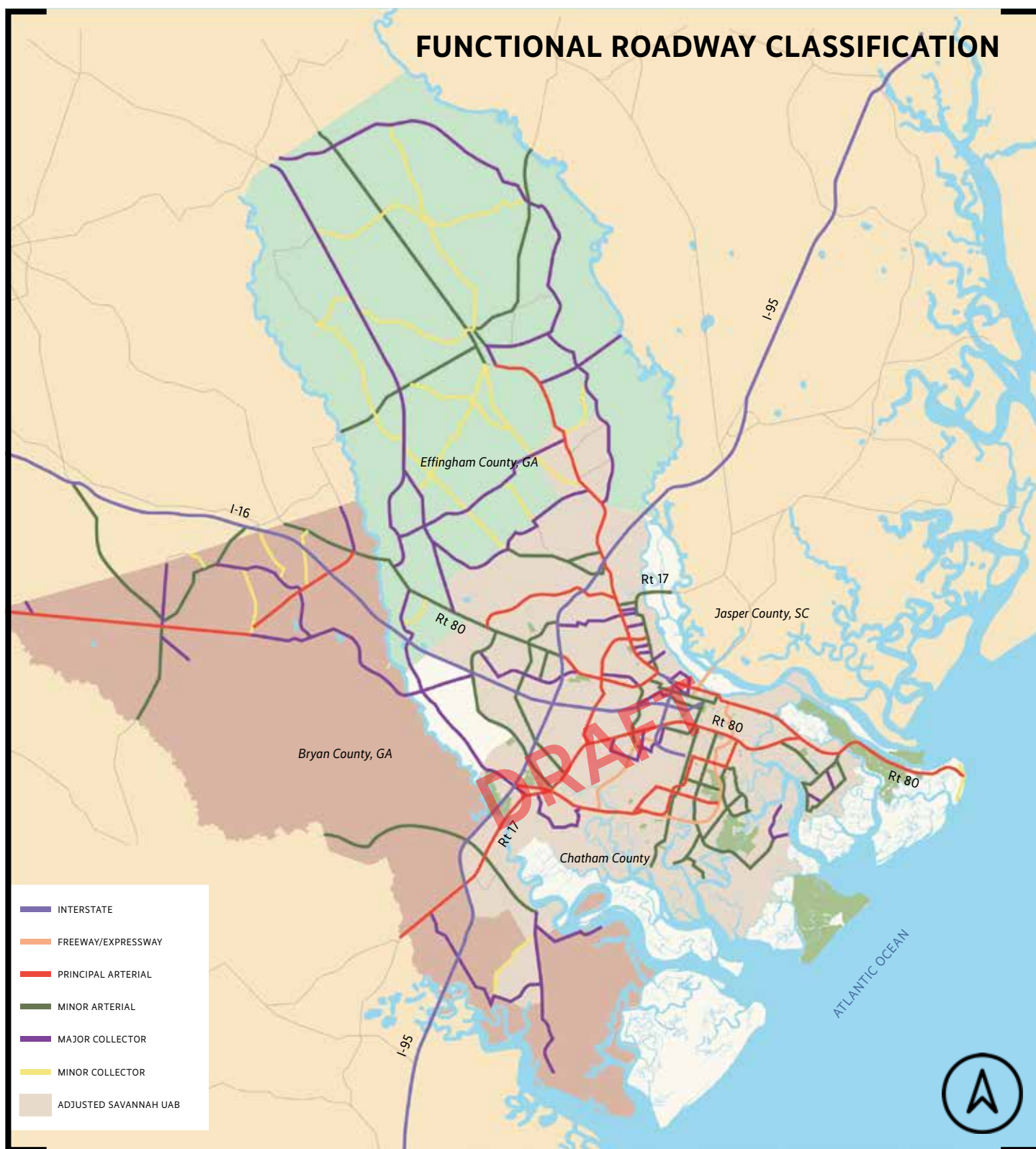
### Local Roadways

Local roadways are those not otherwise classified and tend to serve short, local trips or connect with the collectors to access the broader roadway network.

—CORE MPO

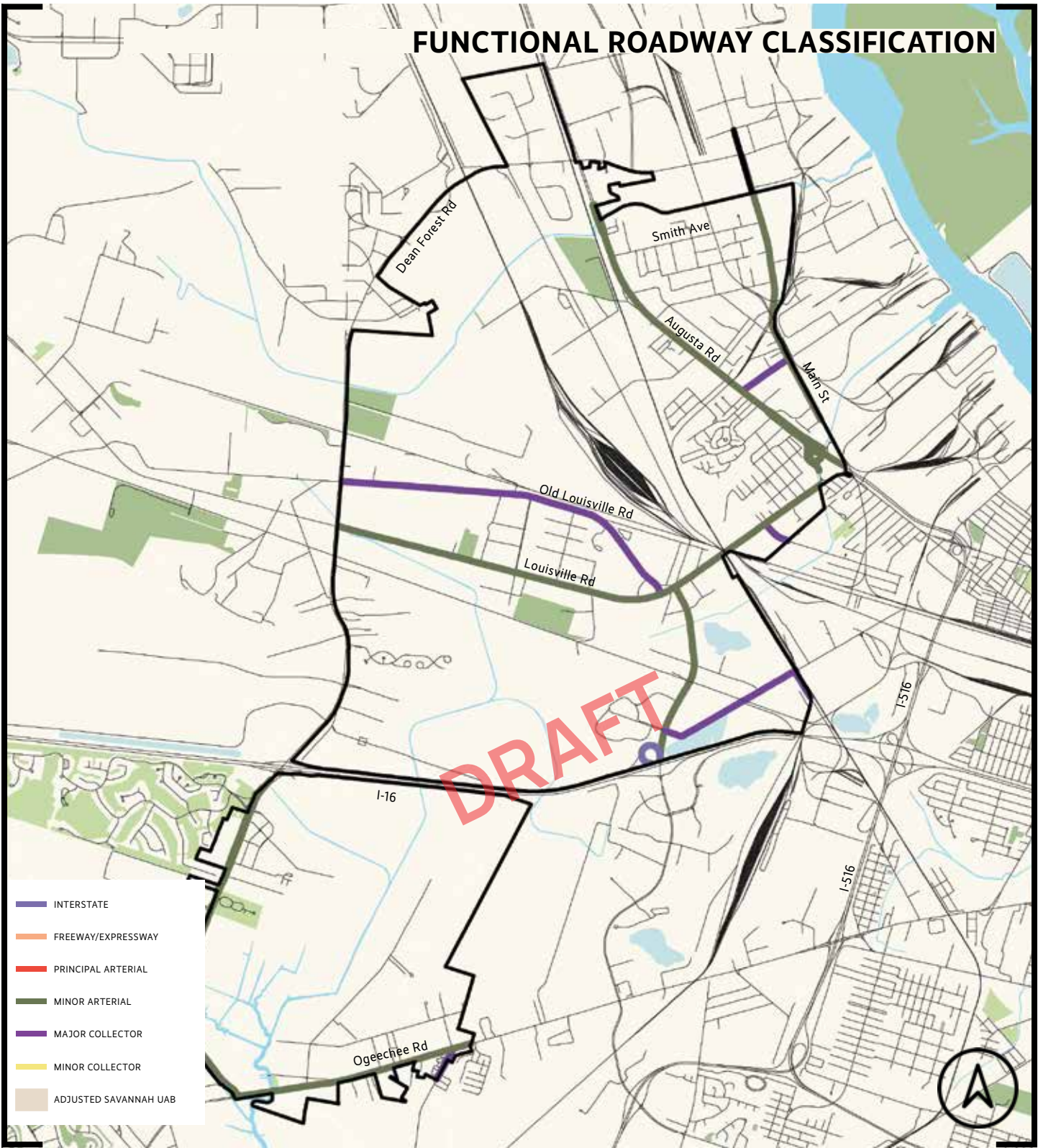
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Map 5.3-Savannah MSA Functional Roadway Classification, Savannah MSA  
Georgia Department of Transportation, 2015





Map 5.4–Functional Roadway Classification, Garden City  
Georgia Department of Transportation, 2015



## Bridges

Due to the geography of the Savannah region, it is important to have a good understanding of bridge conditions. This consideration will be necessary for safety, congestion and freight movements performance measures. Map 5.6 shows an inventory and conditions of the bridges in the area.

A bridge with fatigue damage may restrict what vehicle types and weights may cross it safely. A bridge with a “posted for load” posting has a weight limit capacity. All (SD) bridges are posted, but not all posted structures are (SD). A bridge is “load posted” when its capacity to carry heavy loads is diminished. The status of these bridges are described as acceptable or structurally deficient (SD).

As shown by Map 5.6, there are currently no bridges in Garden City labeled structurally deficient.

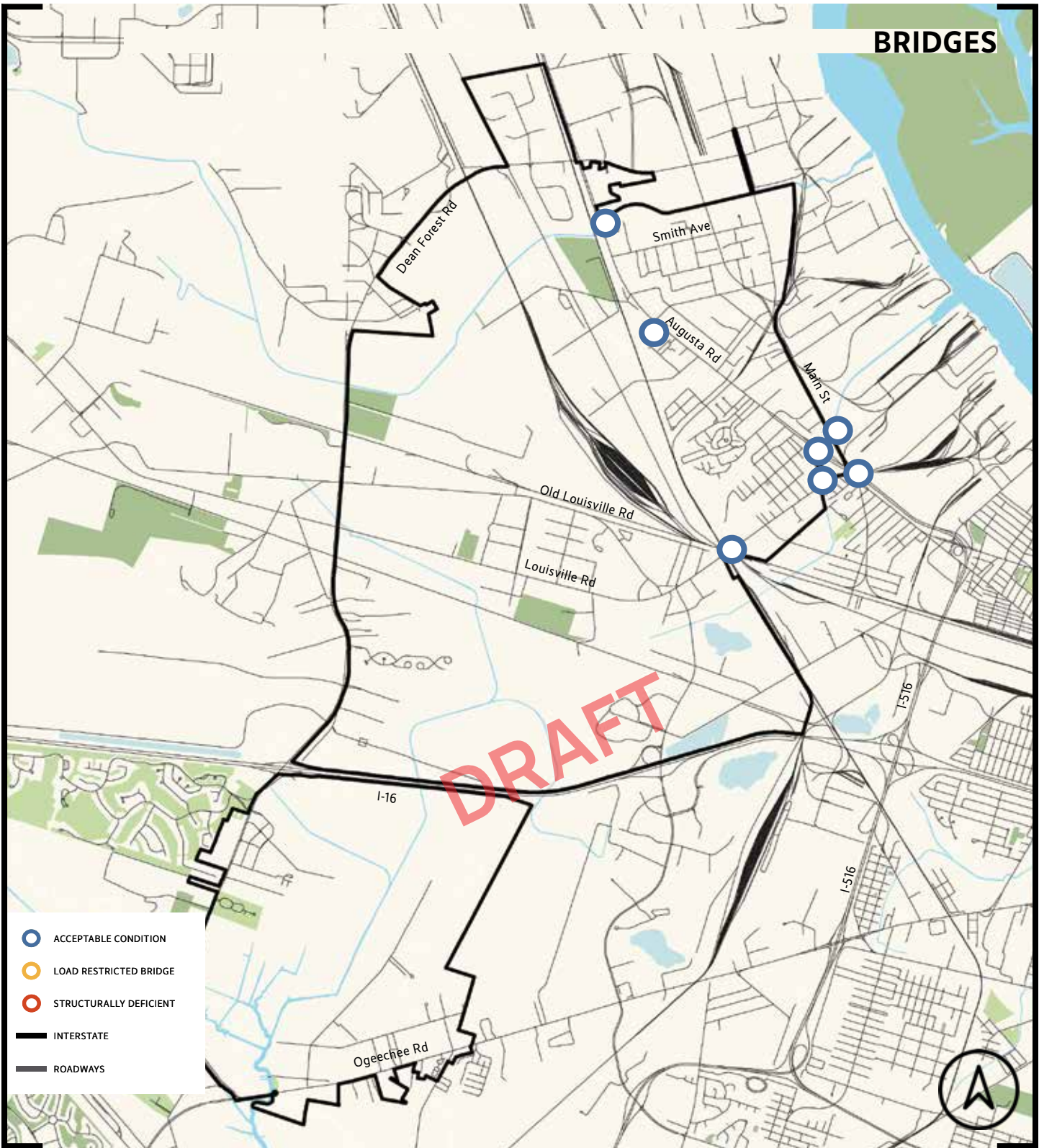
### LOOKING FOR MORE INFORMATION?

For more information on Bridges can be found on US 80 Bridges Study.

You can find more at...

<https://www.thempc.org/Core/Studies#gsc.tab=0>

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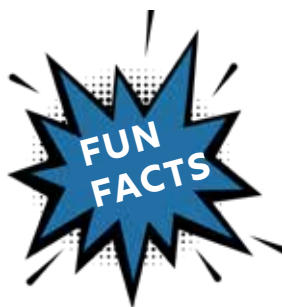
Map 5.6—Bridge Locations and Conditions, Garden City  
 Coastal Region Metropolitan Planning Organization (CORE MPO)

# INTERMODAL TRANSPORTATION

## Port of Savannah

Chatham County has two modern, deepwater terminals on the Savannah River that are collectively known as the Port of Savannah: Garden City Terminal and Ocean Terminal. Both facilities are run by the Georgia Ports Authority (GPA), which is a state-level quasi-governmental organization. The Port of Savannah is the largest single container terminal in North America and the fourth busiest container exporter in the United States, moving 4.5 million twenty foot container units in FY 2019.

As of, 2017 Garden City Terminal is the fourth-busiest container handling facility in the United States, encompassing more than 1,200 acres and moves millions of tons of containerized cargo annually. Ocean Terminal, Savannah's dedicated breakbulk and Roll-on / Roll-off facility, covers 200.4 acres and handles forest and solid wood products, steel, automobiles, farm equipment, and heavy-lift cargoes. The Port is a major economic engine for the region, as well as the State of Georgia.



## 4th

Busiest Container Gateway in the Nation

### INTERMODAL TRANSPORTATION

The term "Intermodal" is used to describe the mass transportation of freight or human passengers, usually over long distances, and via more than one mode of transportation. There are three types of intermodal facilities are discussed in this section: ports, railroads, and airports.

—CORE MPO

In effect for the Port of Savannah is the Savannah Harbor Expansion Project. This project supports jobs and commerce throughout the nation, and allows newer, larger freighters to navigate the river with greater flexibility.

The Georgia Ports Authority, which also operates port facilities in Brunswick, has a huge impact on economics and trade in Georgia. As one of the state's largest public employers, the GPA directly employs almost 1,000 trained logistics professionals. The GPA, however, is responsible for generating far more employment throughout the State.

The total economic impact of Georgia's deep water ports on Georgia's economy is \$84 billion. The Georgia Ports Authority supports more than 369,000 jobs and approximately \$20.4 billion in personal income annually.

As port operations grow and intensify, the surrounding transportation infrastructure will need to support that growth. Mobility 2045 includes numerous projects that will help support port operations.

## Savannah/Hilton Head International Airport

Savannah/Hilton Head International Airport is a commercial and military-use airport in Savannah, Georgia, United States. Owned by the city of Savannah and managed by the Savannah Airport Commission, the airport is located about eight miles northwest of the Savannah Historic District.

The airport's passenger terminal is directly accessible to Interstate 95 between Savannah and the suburban city of Pooler. Savannah/Hilton Head International is the chief commercial airport for Savannah, the Coastal Empire region of southeast Georgia and the Lowcountry of South Carolina, where the resort town of Hilton Head accounts for some 40 percent of total airport passenger traffic.

It is second only to Hartsfield–Jackson Atlanta International Airport as Georgia's busiest commercial airport. The airport is currently served by Delta (and Delta Connection carrier Shuttle America), JetBlue, United Airlines, American Airlines, Air Canada, Allegiant Air, Frontier, Southwest, Silver Airways and Sun Country Airlines.

In 2017, was the first regularly scheduled international flight by a major air carrier when Air Canada began service to Toronto. The airport also serves as world headquarters for Gulfstream Aerospace. The Georgia Air National Guard's 165th Airlift Wing is also based at Savannah/Hilton Head International.

In 2018, Savannah/Hilton Head International handled a record 2,799,526 commercial airline passengers (1,395,040 enplanements and 1,404,486 deplanements), a 13.4% increase over 2017. The airport began a comprehensive capital expansion program with the construction of a new Federal Inspection Station, a terminal apron expansion and the southeast quadrant redevelopment project and began design on a new air cargo complex.





# NON-MOTORIZED TRANSPORTATION

While the automobile is the primary mode of transportation in the area, bicycling and walking are also important modes. The CORE MPO and the other local jurisdictions have a strong commitment to the provision of safe, connected facilities for pedestrians and bicyclists. There are some major gaps in sidewalk, trail, and bike connections in the Garden City.

The Non-motorized Transportation Plan, as part of Mobility 2045, is a plan that addresses the needs of pedestrians, and other self-powered travelers. The Plan:

- Identifies needed improvements for the non-motorized modes
- Identifies areas for amenities to help create a human-scaled environment that encourages use of physically active modes
- Prioritizes improvements and identifying funding opportunities

## Pedestrian Network

CORE MPO adopted the Non-motorized Transportation Plan in 2014 and later updated it in 2020. CORE MPO's Non-Motorized Transportation Plan contains extensive lists of recommended pedestrian and bicycle projects, which may be implemented with or without federal funds. The plan was developed with several methods of public participation: public mapping exercises, public online surveys, and periodic presentations of draft networks and lists.

Map 5.9, from that MPO-adopted plan, shows existing and recommended improvements throughout the MPO's planning area (which is more extensive than the area covered by the MPC's Comprehensive Plan).

### NON-MOTORIZED TRANSPORTATION

Non-motorized transportation includes walking or using a wheelchair, bicycling, skating, and using pedicabs.

—CORE MPO



## Priority National & Regional Non-Motorized Projects

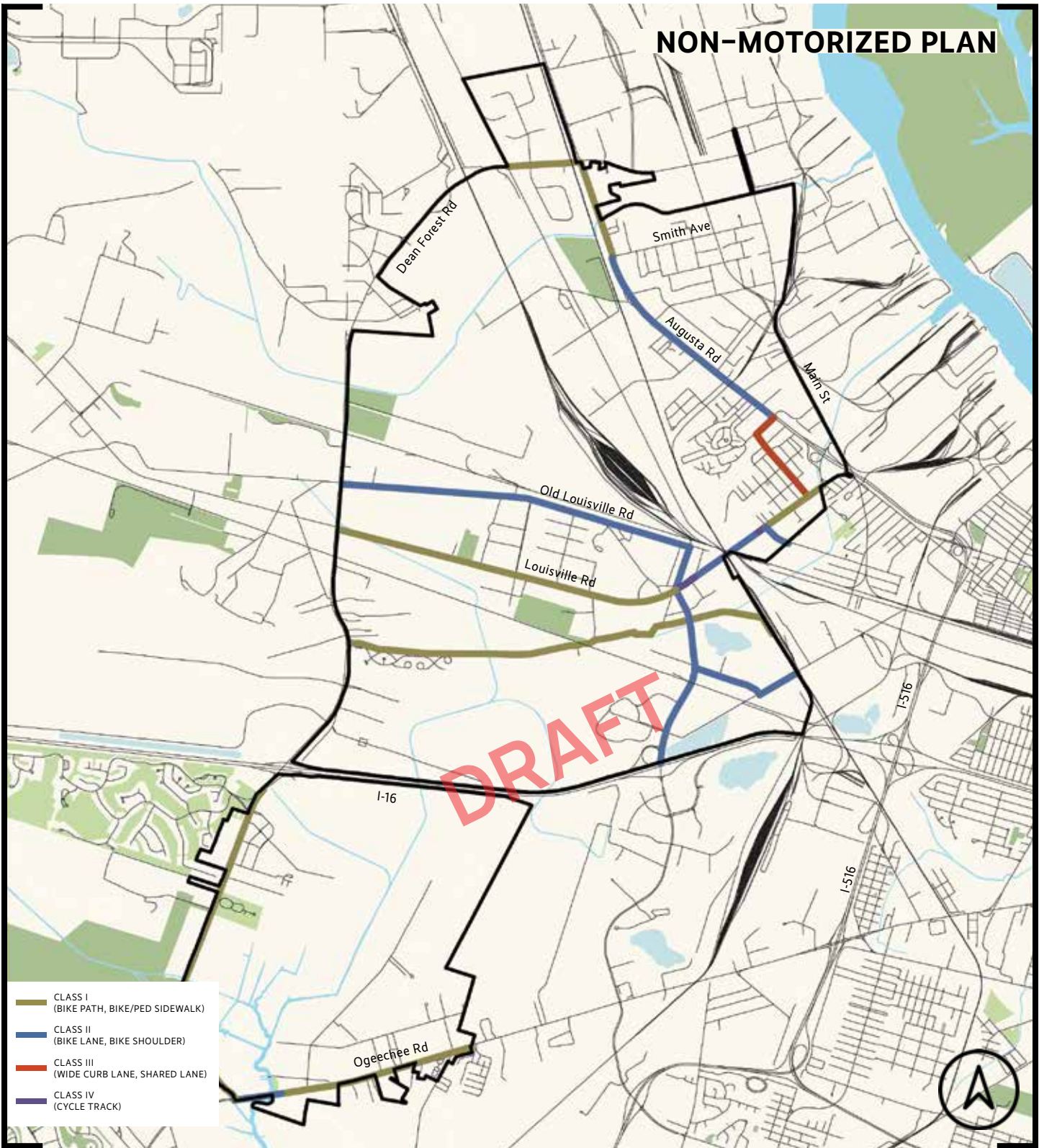
Various studies or plans developed by CORE MPO, partner agencies, or informal groups since 2014 have included proposals that affect bicycle and pedestrian networks (e.g. Chatham County Greenways Implementation Plan, Parking Matters, streetscape plans; Downtown Master Plan update). In addition, there are three new routing concepts in the region, Tide to Town, East Coast Greenway and US1.

### CHECK OUT CORE MPO'S INTERACTIVE MAP

For more details about individual projects on the Non-Motorized Transportation Plan follow this link...

[www.thempc.org/Core/Bpp#gsc.tab=0](http://www.thempc.org/Core/Bpp#gsc.tab=0)

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Map 5.9-2020 Non-Motorized Transportation Plan , Garden City  
 Coastal Region Metropolitan Planning Organization (CORE MPO)



## Tide to Town

Following the lead of many communities across Georgia, Friends of Tide to Town, a coalition of citizens in Savannah, is coordinating an effort to create a branded urban trails system, Tide to Town. Tide to Town, like Atlanta's Beltline and Carrollton's Greenbelt, will be a network of protected walking and bicycling facilities connecting all of Savannah's neighborhoods.

Tide to Town will link together existing and planned projects, including the Truman Linear Trail and the Springfield Canal Trail. The core of the system is a 30-mile route that encircles the City. Additional miles of connector paths will connect to priority neighborhoods as the system grows. Spur trails to popular destinations will also be added as the system expands outside of the City of Savannah potentially through Garden City.

The system maximizes existing public rights-of-way along streets and canals, which significantly reduces the cost of implementation. The coalition formed in 2017 to lead the development of Tide to Town. The Tide to Town trail system has quickly become a regional priority and has garnered additional support through the special-purpose local-option sales tax (SPLOST) passed in 2019.



## East Coast Greenway

The 2014 Non-Motorized Plan includes the Coastal Georgia Greenway. The Coastal Georgia Greenway co-locates in many areas with the East Coast Greenway, an envisioned 3,000 mile network of trails spanning from Key West, Florida to Calais, Maine. The East Coast Greenway is designed to transform the 15 states and 450 communities it connects through active and healthy lifestyles, sustainable transportation, community engagement, climate resilience, tourism, and more.

The Greenway offers a safe place for bicyclists, walkers, and runners of all ages and abilities to commute, exercise, and visit new destinations.

The nonprofit East Coast Greenway Alliance leads the development of the trail network working in collaboration with hundreds of volunteers, partner organizations, and officials at the local, state, regional and national level to continue moving more of the route onto protected paths. The trail system connects people to nature and communities via a safe, accessible Greenway.

The network links towns, attractions, recreational sites, historic and cultural sites, waterways, and natural habitats of the coast. The route consists of 165 miles, 14 of which are protected greenway. The Greenway will follow various north-south routes, including the U.S. Highway 17 corridor, abandoned rail lines, and historic canal corridors, from which visitors can sample coastal imagery.

Most of the Georgia route is still on road, but a growing number of volunteers and municipal officials are working diligently to make an off-road trail a reality.

## United State Bicycle Route System -US 1

The United States Bicycle Route System (USBRS) is the national cycling route network of the United States. It consists of interstate long-distance cycling routes that use multiple types of bicycling infrastructure, including off-road paths, bicycle lanes, and low-traffic roads. The USBRS is intended to eventually traverse the entire country.

Communities in Chatham County committed to the US1 cycling route by passing a resolution in support of the national cycling route's development in 2019. The route generally follows along Highway 17, leading through Savannah's historic downtown district, then along Louisville Road before heading out Highway 25.

### GREENWAYS

A greenway is a linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road or other route.



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# TRANSIT SYSTEMS

## Chatham Area Transit Authority

Chatham Area Transit (CAT) is the agency responsible for the provision of transit services to the Savannah area, including fixed route and paratransit. CAT currently operates a fleet of 65 fixed route buses 6 of which are electric and 42 paratransit vehicles. The CAT service area includes unincorporated Chatham County, the city of Savannah and portions of Garden City.

The CAT bus network has served the region since 1987. While individual transit routes have been added or changed over the years, the overall design of the network has not been revisited. To provide more efficient and accommodating services, CAT launched a full system redesign starting with a “blank slate” plan, to see what would be possible if the network were re-imagined for the people and places of today.

Some of CAT's near term priorities include:

- Vehicle Replacement/Expansion—Fixed Route
- Vehicle Replacement/Expansion—Paratransit
- Intelligent Transit System (ITS)
- Upgrade Farebox and Payment Systems
- Electric Vehicle Infrastructure
- Passenger Amenities
- Facility Improvements at Downtown Intermodal Facilities
- Facility Improvements at Gwinnett Street Location
- Initiate Vanpool/Carpool Program
- Initiate Park and & Ride
- Facility Construction for Ferry Maintenance and Ferry Docks

To meet the future needs of the growing community, CAT must look beyond the 5-year planning horizon to identify projects and innovations that will provide access and opportunity for all. Some of these long-term projects include:

- Establish region-wide park and ride network
- Work with local partners on projects that incorporate Transit Oriented Development (TOD) principles
- Explore partnerships with fixed route cost benefits while serving private industry needs for transportation
- Coordinate with state and local government agencies to implement commuter services through dedicated or limited public access lanes for transit vehicles
- Work with surrounding county agencies to streamline passenger experience across multiple service alternatives
- Complete fleet conversion to low-no emissions vehicles
- Funding for bus replacements secured and incorporated into planning process
- Work with housing and other community partners to develop joint FTA/HUD grant funded projects
- Leverage improved cash position by becoming stronger financial partner for public/private ventures with focus on long term revenue producing opportunities
- Identify and develop satellite facilities to accommodate system growth
- Work with the agency partners to implement fixed guideway services

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### TRANSIT-ORIENTED DEVELOPMENT (TOD)

A transit-oriented development is a type of urban development that maximizes the amount of residential, business and leisure space within walking distance of public transportation.

It promotes a symbiotic relationship between dense, compact urban form and public transport use.

—Transit Oriented Development Institute



### Plan 2040 Survey

Thirty-four percent (34%) of the respondents strongly disagree or somewhat disagree that they have convenient access to public transportation.

A full copy of the survey and the results can be found in the Garden City 2040 Appendix.



## Routes and Facilities

CAT currently operates 16 routes, which includes one express route as shown in Figure 5.10. The express route provides service from the Savannah Hilton Head International Airport to the transit center in downtown Savannah and one ferry service, also free for passengers.

CAT also operates three free shuttles services. The Downtown Loop and the Forsyth Loop are funded by the City of Savannah, The Senior Circulator, and the Savannah Belles Ferry, a ferry service across the Savannah River between the Savannah Convention and Trade Center to downtown Savannah see Map 5.11.

The Joe Murray Rivers, Jr. Intermodal Transit Center, a downtown intermodal facility, was completed in 2013 and accommodates both CAT and Greyhound buses.

## Garden City CAT Service

CAT has three routes that service Garden City, route 3 West Chatham, route 3B Augusta Avenue, and route 17 Silk Hope. Popular destinations served by these routes include:

- City Market (3, 3B, 17)
- MLK Visitor Center (3, 3B, 17)
- Ralph Mark Gilbert Civil Rights Museum (17)
- Savannah Civic Center (3, 3B, 17)
- Telfair Museums (3, 3B, 17)

### CHECK OUT CAT'S INTERACTIVE MAP

For more details about CAT's Bus System and Routes...  
<https://www.catchacat.org/current-schedules/>

## Average Annual Passenger per Hour by Route

Route/Year	2013	2014	2015	2017	2018
100X Airport Express	3.8	3.0	3.0	2.7	2.7
<b>3X W. Chatham</b>	18.1	18.3	16.4	16.1	15.1
<b>3BX Augusta</b>	22.6	24.6	25.6	24.3	24.1
4X Barnard	13.2	13.5	12.2	12.1	11.6
6X Town	11.5	12.5	11.6	11.2	10.2
10X E. Savannah	20.2	19.4	19.7	17.9	10.2
11X Candler	10.6	11.8	9.2	7.0	7.0
12X Henry	13.8	12.9	11.6	10.4	11.0
14X Abercorn	27.1	28.8	27.4	25.0	25.0
<b>17X Silk Hope</b>	18.0	19.2	17.6	17.1	17.2
20X Skidaway/Coffee Bluff	3.9	4.7	5.2	4.1	3.9
25X Westlake	19.3	19.6	18.6	17.6	17.1
27X Waters	21.2	22.4	21.8	20.6	20.0
28X Waters	22.5	23.1	22.8	22.2	21.4
29X W. Gwinnett	16.4	16.7	15.0	14.4	14.4
31X Skidaway/Sandfly	26.1	24.6	24.0	22.6	21.4

Figure 5.10–Average Annual Passenger Per Hour by Route  
 Chatham Area Transit 2013–2018









# TRANSPORTATION TECHNOLOGY

Today, transportation agencies are facing trends, such as increased urbanization, that create a growing demand for travel with less funding and space to work with. As a result, we can no longer build our way out of congestion. Trends we see today include:

- Limited funds—The primary source of federal funding for the U.S. highway system is the federal gas tax, which has not changed since 1993. Since that time, the financial constraints for public agencies have increased.
- Inflation—The cost to build roads and bridges has increased
- Fuel efficiency—Vehicles today can travel farther with less trips to the gas pump, decreasing revenue. The growing use of electric and plug-in hybrid cars has also reduced the purchase of fuel.
- Advances in Technology—Transportation agencies can leverage technology to develop solutions to address congestion issues. However, given the advancement in consumer technologies (smart phones, apps, GPS, etc.), privately owned mobility services (Uber, Lyft, etc.), and the availability of more information, the traveling public expects that the products they use and the technologies they encounter will be "smart" and will ultimately improve their travel experience. They also expect that the information received will be accurate and reliable. This creates an added responsibility for the transportation community to provide the best customer service. Technology will likely have an even greater impact on the transportation network in the future with automation, connectivity, and big data.

## Automated Vehicle Technology

Automated Vehicle Technology has made changes to intelligent transportation systems (ITS) and will likely continue to do so in the future. ITS helps advance safety and mobility by integrating communications technology into transportation infrastructure and vehicles. Automated vehicles communicate to other vehicles and infrastructure through ITS. This emerging technology has prompted the USDOT to release a policy statement providing guidance on implementation. The USDOT promotes research and has made recommendations on achieving safe operations during testing. However, predicting any unintended consequences of this emerging technology on the transportation

The automated nature and vehicle-to-vehicle communications could increase capacity of a given number of lanes by reducing average following distance between vehicles (currently needed for human reaction time), while still improving safety. The increased capacity also has negative impacts as it requires more maintenance, installation, and redesign of infrastructure to accommodate the increase and technology required.

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## Traffic Operations

Transportation improvements that focus operations and technology can maintain and even restore the performance of the existing transportation system before extra capacity is needed. The goal here is to get the most performance out of the transportation facilities we already have. Operations projects may enable transportation agencies to “stretch” their funding to benefit more areas and customers.

The benefits of operations projects can include:

- Improved quality of life
- Smoother and more reliable traffic flow
- Improved safety
- Reduced congestion
- Less wasted fuel
- Cleaner air
- Increased economic vitality
- More efficient use of resources (facilities, funding)

Traditionally, congestion issues were primarily addressed by funding major capital projects, such as adding lanes or building new interchanges and roads, to address physical constraints, such as bottlenecks.

## Regional Traffic Operations Programming

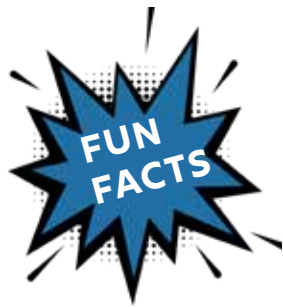
Operational projects provide agencies with the tools to manage and operate what they already own more efficiently and effectively before making additional infrastructure investments.

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## Automated Vehicles/Self-Driving Cars

Automated vehicle, also known as self-driving cars, are still an emerging technology but it is still difficult to determine how they will affect the transportation system and when. There are six levels of automation, with level zero being no automation and level five being full automation (autonomous). The State of Georgia has passed legislation allowing the testing, operation, and deployment of automated vehicles (AV) and is the third US state to allow autonomous (level five) cars to operate on roadways. While fully autonomous cars are allowed to operate in the State of Georgia there currently are no vehicles available to the public past level three automation.



### 3rd

As of 2017, Georgia is the third state to allow for the operation of AVs without human operators present in the vehicle

At this time there are only programs testing AV technology in the Atlanta Georgia area. The highest application and advancement of automated vehicles is in the trucking/freight industry. The Savannah metropolitan area is a large trucking region and this could provide Garden City with the opportunity to serve as a testing ground for the advancement of this technology.

## Transportation Network Companies (TNCs) Ride-Hailing/Ride Share

Ridesharing may reduce parking but may increase air pollution from rideshare drivers driving around, because in practice the drivers are driving as full-time or part-time jobs and may be frequently circulating (similar to taxi operations) in hopes of grabbing a trip assignment via the mobile application. The use of ride sharing may also require infrastructure and streetscape redesign since there will be a higher demand for pick-up and drop-off areas.

Ride-hailing services use apps and websites to connect passengers with drivers to provide rides in their personal vehicles. These types of services offer the potential to expand transportation choices, increase carpooling and reduce vehicle miles traveled as well as car ownership.

Companies such as Uber and Lyft currently service Savannah and the surrounding area. In smaller populated areas such as Garden City, ride-hailing services may be limited due to driver availability.

Ride-hailing trips are more likely to be made by segments of the population who are comfortable with smart phones, new mobile applications, and who have credit cards. Thus, it does not necessarily fill a gap for the traditionally underserved populations (low income, disabled, elderly).

Like the trucking/freight industry, TNCs are exploring opportunities and the applications of self-driving cars in their ride-hailing/ride share services.



## Shared Vehicles

Car-sharing is an emerging trend that can help curtail CO<sup>2</sup> output because, according to research, a single shared on-demand driven car can replace about eight private cars. Companies are allowing users to reserve a vehicle or other means of transportation when they need it, by the hour or day, and only pay for the time the vehicle is used. Plans for expansion could include aspects to include:

- A community storage/corral
- Charging stations
- Preferred parking for shared vehicles, etc.
- Drivers frequently park more than 650 feet from the desired destination

Considerations for public transportation grants and public/private partnerships to quickly implement and manage the programs should be promoted.

## Bike & Scooter Share

Bike and scooter share systems offer fleets of bicycles and scooters for short term rental within a defined service area. Micromobility programs offer both benefits and challenges for cities. The benefits of shared bikes and scooters includes first mile/last mile connections, flexible mode of travel, reduction in vehicle emissions and fuel consumption, health benefits, and positive economic impacts for businesses near docking stations and within the service area.

While there are benefits to shared micromobility, cities have encountered challenges such as maintenance and safety concerns. Some cities have found that without docking stations, scooters and other shared-use electric devices are often abandoned by users. These abandoned scooters can become hazards for motorists and pedestrians when left on sidewalks and in roadways. Maintenance costs for running shared micromobility is high and create a long backlog of needed repairs for some programs. Another challenge for cities of shared micromobility programs is equitable use; many programs require mobile phone apps and credits cards.

Garden City has not participated in any shared micromobility programs. The city should consider a feasibility study or pilot program to determine if the application of shared micromobility can benefit the community.

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## Parking

Most drivers prefer to park as close to their destination as possible which create parking challenges for downtowns and dense areas. These areas have high concentrations of activity resulting in increased parking demand often when parking availability is low.

To identify the demand for parking and identify potential parking solutions, cities should consider completing parking studies. The study area for parking studies can be based on specific attractor, such as a mall, or could include an entire region such as a central business district.

Situations that may indicate parking issues include:

- Excessive illegal and overtime parking
- Excessive cruising to find parking
- Congestion in traffic flow due to cars attempting to find parking
- Drivers frequently park more than 650 feet from the desired destination

Garden City should survey community members and stakeholders to identify potential issues and evaluate the need for a parking study.

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# ADDITIONAL CONSIDERATIONS

## Public Health & Mobility

The approach to community and public health spans several disciplines including transportation planning especially as it relates to policy and infrastructure.

The considerations for public health in transportation planning should include

- The promotion of active transportation and ensuring that the necessary facilities are in place
- Developing strategies and projects to enhance the safety of pedestrians and bicyclists
- Reducing the negative impacts on the environment by increasing the number of active transportation users

Garden City's transportation agency, the CORE MPO, recognizes and has implemented strategies and plans to promote a healthy community and equitably. The development of the non-motorized and thoroughfare plans, the long-standing commitment to complete streets and context sensitive design principles, and the focus on accessible transportation for all populations provides the policy framework for the promotion of health considerations in transportation planning.

The region is cognizant of the interconnectedness between land use and public health. As such, programs and policy changes have been implemented to improve public health and show commitment to continuing these efforts into the future.

## Climate Change, Sea Level Rise, & Resiliency

A highly discussed topic at the national and local level is climate change and its effects, which include sea level rise and nuisance flooding, and how to become more resilient to these events. There has been an increased focus at the federal level, with the FHWA completing research and providing best practices for MPOs to develop policies and strategies that address impacts from the changing climate.

With its coastal location, the CORE MPO recognizes the need for understanding any potential impacts on the existing and future transportation infrastructure and for developing an approach to address and/or mitigate these impacts. An example of impacts the CORE MPO is addressing is nuisance flooding, which is now being seen more frequently during heavy rainfall events.

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### Plan 2040 Survey

Forty-nine percent (49%) of the respondents strongly agree or somewhat agree that if destinations were more clustered together, they would make fewer trips.

A full copy of the survey and the results can be found in the Garden City 2040 Appendix.

## Stormwater Management

Stormwater has long been a concern in the region due to its negative impacts on water quality in Garden City. Efforts to deal with stormwater impacts as they relate to the transportation system are focused mainly on protecting water quality and road or roadway runoff. Roadways move goods, people, and services but also can carry stormwater runoff and the pollutants from the vehicles traveling on them and adjacent land. This includes heavy metals from tires, brakes, and engine wear, and hydrocarbons from lubricating fluids.

If pollutants are not properly controlled they can cause water to no longer support its designated uses and biotic communities.

In roadway construction, stormwater management can occur using temporary sediment control devices. These devices prevent sediment from leaving the construction site via stormwater runoff.

In recent years stormwater management efforts have expanded due to increased frequencies of extreme weather events, resulting in impassible roadways. Efforts are underway to protect transportation systems from the negative impacts of stormwater runoff and to improve its resiliency and reliability during these extreme events.

## Accommodating Growth Around Transit

Transit-oriented development (TOD) is defined as a moderate-to high-density mix of uses—such as residences, retail shops, offices, and civic and entertainment uses—located within one-half mile of a transit station and designed to support transit use. The typical “station area” is considered to be a half-mile radius, which is an acceptable 10-minute walking distance for most transit users if the area contains a destination, provides dedicated walking routes, and is safe and visually appealing. Within the U.S., TOD is typically associated with rail transit; however, TOD could occur with other fixed guideway transit services, such as bus rapid transit, if they provide facilities and service levels similar to rail transit.

– Implementation of a transit-oriented development ordinance can help ensure that the investments made in regional transit systems would be continual and that related codes and processes would be supported and utilized to their full extent. Benefits of a TOD Ordinance include:

- » Reducing greenhouse gas emissions
- » Increasing transit ridership
- » Increasing pedestrian access
- » Providing long-term return on investment for landowners
- » Providing easy access to goods and services for families, seniors, and people with disabilities
- » Creating vibrant centers and corridors for pedestrians

# HOUSING ELEMENT

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# HOUSING

## Introduction

The Housing Element of Garden City 2040 is an inventory and assessment of the community's housing stock, as well as a discussion of the housing issues and needs associated within Garden City. This element attempts to identify major housing problems, determine future housing needs, and develop a plan for managing housing development in the future.

In order to achieve the goal of ensuring that every resident has a safe and decent place to live within a satisfactory environment, the housing strategies presented promote coordination of housing policies and programs at the local, state, and federal levels.

Based upon these strategies, we find that a variety of housing opportunities must be available throughout Garden City, at prices that are affordable to achieve a socio-economically diverse community. Population projections can be used not only to estimate the total future housing demand, but they can also be used to estimate the future demand for specific types of housing. There are three types of housing needs addressed in the following sections: multi-family, affordable housing, and special needs housing.

# THE STATE OF HOUSING

## Housing Occupancy

According to 2018 5-Year American Community Survey (ACS) data, there are an estimated 3,500 housing units in Garden City, with an occupancy rate of 89.2%. Generally, vacant housing is at an increased risk of dilapidation, which can have a negative impact not only on home values and property taxes, but also on the quality of life of residents.

Overall, the number of available housing units has decreased in Garden City over time; however, with more people moving into Chatham County, this may change in the near future due to the consistent demand for housing.



## Number of Housing Units, 2010–2018

	2010	2014	2018
Garden City	3,790	3,922	3,552

Figure 6.1–Housing Units, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Housing Occupancy, 2018

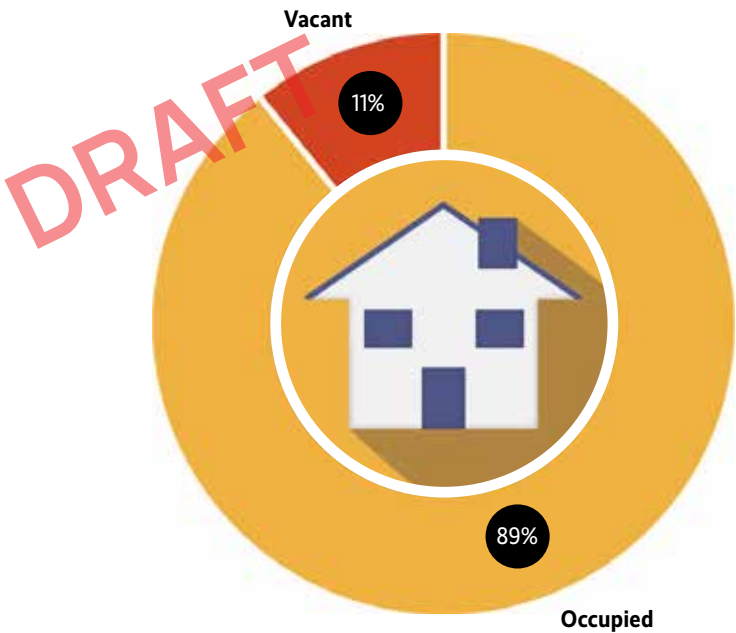


Figure 6.2–Housing Occupancy, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Housing Types

The most common housing type in Garden City is the single-family detached house, accounting for around 50% of the total housing stock. The second most common housing type is the mobile home, making up 20% of housing units in the area. The remaining 30% of housing is contain multi-family units of various sizes. As multi-family units tend to be smaller and require less land to build a large quantity of housing, it continues to be an effective way to increase affordable housing stock.

There are two primary that influence the different housing types in Garden City: zoning, which specifies the types and density of units developers are permitted to build, and market demand, which refers to the types of housing units that people want to buy.

Currently, the vast majority of housing areas are allocated for single-family, detached housing, but there is a rising among of apartments being constructed in the area as well.

Additionally, speculation is a housing market driver, as real-estate investors can create fluctuations in home prices and demands by guessing on the future value of certain homes based on their investments.

*In Garden City, nearly 50% of all housing is single-family detached*  
—American Community Survey, 2018

## Housing Types, 2018

GARDEN CITY		
Housing Type	Number of Units	%
1-unit, detached	1,764	49.7
1-unit, attached	79	2.2
2 units	51	1.4
3 or 4 units	470	13.2
5 to 9 units	199	5.6
10 to 19 units	191	5.4
20 or more units	39	1.1
Mobile home	759	21.4
Boat, RV, Van, etc.	0	0
Total	3,552	100%

Figure 6.3—Housing Types, Garden City

U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates





## Age of Housing

Housing units in Garden City vary in age; however, the majority were built between 1980 to 1989. With 72% of housing being 30 years old or older, the vast majority of housing is at risk of becoming dilapidated if not properly maintained. The City works with local non-profit groups that assist community members, most notably seniors on a fixed income, with the maintenance of their homes if needed. However, because the majority of homes are older than 30 years, efforts to help residents maintain housing—and reduce vacant housing—must continue to be implemented to prevent a large amount of the housing stock fall into a state of disrepair.

During the years since 2013, Garden City had the most development it had seen in many years, with the construction of 18 new homes from 2016-2018. Again, as the demand for housing continues to be an issue in Garden City, a continued proactive approach to residential development must be taken to foster this growth.

*Around 72% of housing in Garden City is 30 years or older  
—American Community Survey, 2018*

”

## Year Housing Structure Built, 2018

GARDEN CITY		
Year Built	Number	%
Built 2014 or later	0	0
Built 2010 to 2013	43	1.2
Built 2000 to 2009	440	12.4
Built 1990 to 1999	515	14.5
Built 1980 to 1989	657	18.5
Built 1970 to 1979	380	10.7
Built 1960 to 1969	433	12.2
Built 1950 to 1959	583	16.4
Built 1940 to 1949	419	11.8
Built 1939 or Earlier	82	2.3
Total	3,552	100%



Figure 6.4—Age of Housing Structure, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Housing Tenure

Although numerous factors have come into play, theories can be posited as to why Garden City has seen a continual decrease in the number of owner-occupied homes versus renter-occupied homes since 2010. Many feel that in addition to older residents aging out of their homes, investors might have purchased homes for rental purposes during the 2000s, thereby increasing the market share of home rentals.

Research shows that about two-thirds of renters (65%) say they are currently renting more as a result of circumstances, such as not being able to afford to accumulate funds for a down-payment to purchase a home right now, while 32% say renting is a matter of choice—they could buy a home, but they choose to rent instead. More than half of renters (52%) say not being able to afford a down payment is a major reason, and an additional 19% say this is a minor reason. Some 42% of renters say not being able to afford the kind of house or neighborhood they would want is a major reason for currently renting their homes, the same share that says the desire to pay down debts is a major reason. About four-in-ten (38%) say a major reason for renting rather than owning is that they do not think they would qualify for a loan. In addition, African-Americans, Hispanics, and lower-income applicants previously relied heavily on subprime loans, which have largely dissolved.

Again, there are various reasons as to why residents choose to rent or own. For example, many people who rent find renting more flexible, as they may be students or have a job that requires them to move more frequently. It also has lower upfront costs compared with buying a house. With nearly one-quarter of residents living below the poverty line, and a median income of only \$43,000, people may find significant barriers when trying to purchase a home. Many municipalities find it beneficial to have more homeowners than renters, as this typically leads to higher property values with more stable population numbers. To improve this stability, increasing the number of affordable housing units for purchase is necessary to keep interested residents from being priced out of owning a home in the community where they reside.

### Housing Tenure, 2018

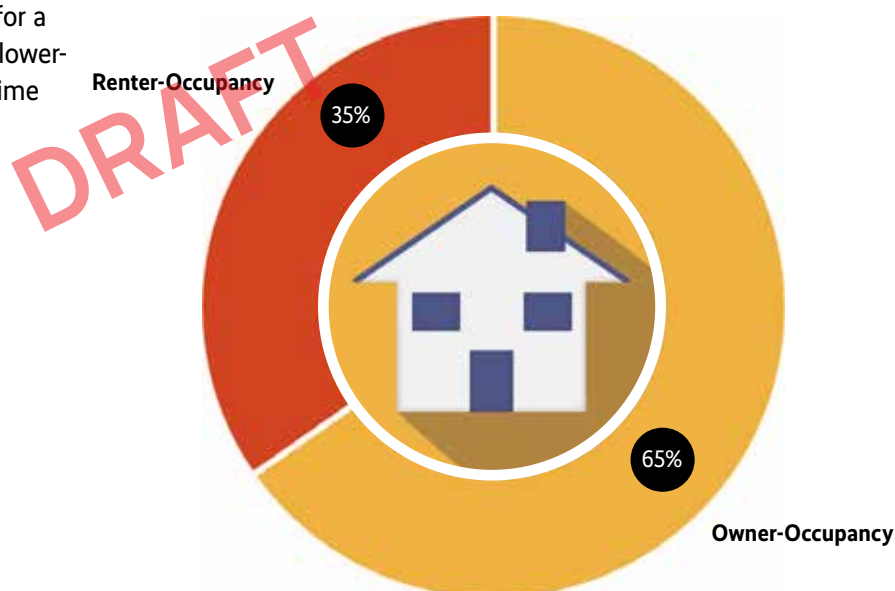


Figure 6.5—Housing Tenure, Garden City

U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



## Housing Values

According to the 2018 American Community Survey 5-year estimates, the majority of owner-occupied homes in Garden City are valued between \$100,000 to \$149,999. With a current median home value of \$124,600, home values steadily increased over the years, before spiking between 2014 and 2018. In fact, home values in 2018 were currently 60% higher than in 2000. The largest jump in home values fell between the 2014 and 2018 timeframe as the economy continued to recover after the 2007–2009 recession.

*The Median home value in Garden City is \$124,600 and has increased 60% since the year 2000*  
—American Community Survey, 2018

## Home Values, 2018

	2000	2010	2014	2018
Garden City	77,700	93,500	99,200	124,600

Figure 6.6—Housing Values, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Year Moved In, 2018

Year	GARDEN CITY	
	Number	%
2017 or Later	211	6.7
2015 to 2016	581	18.3
2010 to 2014	1,126	35.5
2000 to 2009	623	19.7
1990 to 1999	136	4.3
1989 and Earlier	492	15.5
Total	8,985	100%

Figure 6.7—Year Moved In, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Year Moved In

More than 33% of Garden City residents moved in between 2010 to 2014. Another 25% of residents are newer, moving in during 2015 or later, according to the 2018 5-Year ACS. As shown in the chart below, there is a diverse mix of recent and long-time residents, but these numbers will change as Garden City continues to attract newcomers to the community.



### Monthly Mortgage

Around 44% of Garden City residents pay between \$1,000 to \$1,400 in monthly mortgage, followed by 38% of residents who pay \$500 to \$999. The median monthly mortgage is \$1,119, which has followed the national upward trend and has seen an increase of over 33% since the year 2000.

### Monthly Rent

The majority of residents pay \$500 to \$999 in monthly rent. Another third of residents pay \$1000 to \$1499 in rent. This is in contrast to other municipalities, namely Savannah and Pooler, in which people are paying higher rent and many residents are paying \$2000 or higher in monthly contract rent. Overall, residents pay less in rent in Garden City than in neighboring jurisdictions. Median rent, in general, has risen since 2000, with a slight dip in the mid-2010s.

*Median gross rent is \$855 in Garden City, representing a 72% increase since 2000 —American Community Survey, 2018*



Monthly Mortgage Costs, 2000–2018

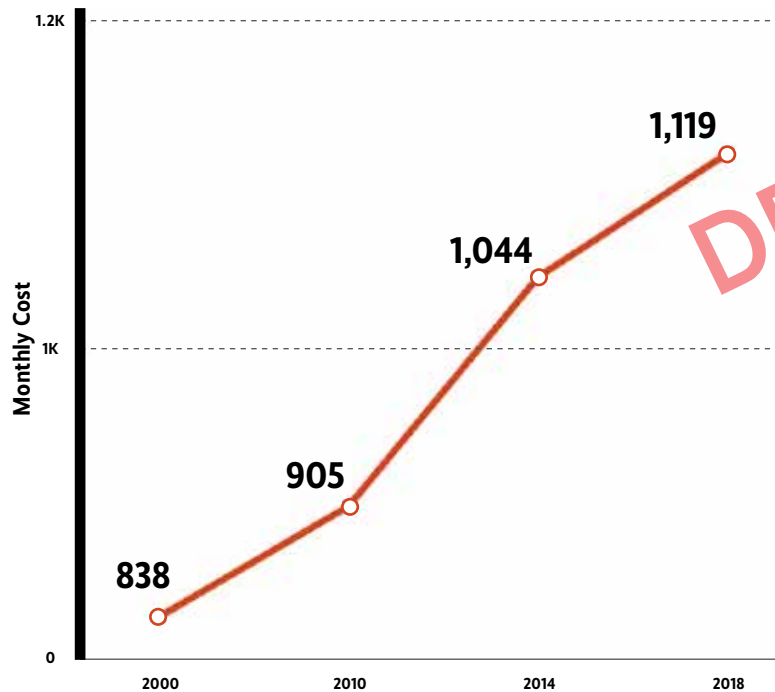


Figure 6.8—Monthly Mortgage Costs, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

Monthly Rent Costs, 2000–2018

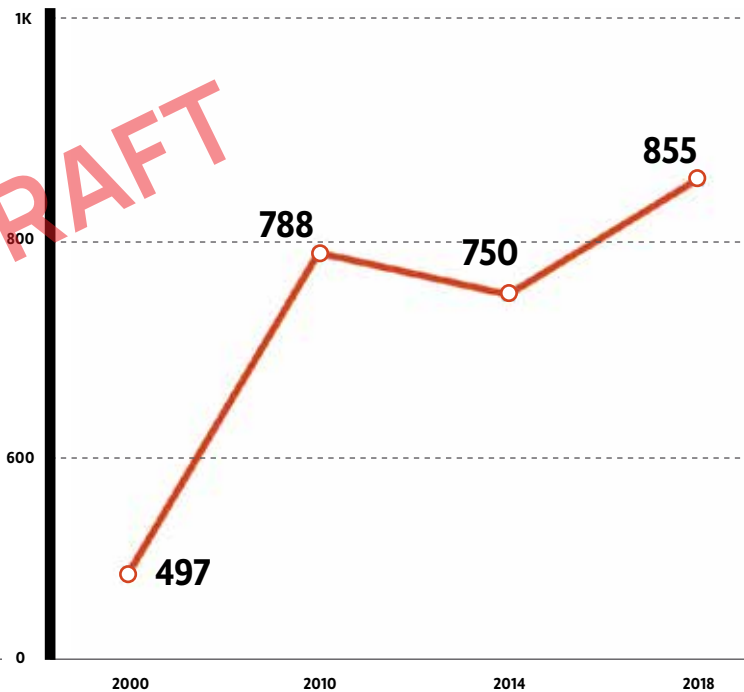


Figure 6.9—Monthly Rent Costs, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



# AGE & HOUSING DEMAND

## Aging & Multi-Family

The median age of Garden City residents is 31.1, which is slightly younger than the rest of the county. As the aging populations rises, housing needs will change.

A major factor in determining the need for various housing quantities and types is the age distribution of the projected population. Age is a major determinant in housing choice because populations within a given age group tend to share various characteristics and needs. Individuals in their early twenties are more likely to rent an apartment than buy a house, as younger residents tend to move more often and have more limited financial resources than an older population. Individuals and families in their working years are likely to choose to live in single-family homes since they are likely to be raising children and need more space. People who are retired may opt for a simpler lifestyle, which often involves selling their single-family home and moving into a townhouse, garden apartment, or other type of smaller multi-family unit. An area's age distribution—along with its wealth and cultural characteristics—is therefore an important factor in determining the demand for various types of housing units.

Trends indicate that the U.S. median age is getting higher due to the “Generation Xers” or “baby bust” generation not having as many children, leading to a drop in the birth rate, and as the nation’s “Baby Boomer” generation approaches retirement. This nationwide aging trend is even more pronounced in the South, which continues to be a retirement destination. The local effect in Chatham County will likely be more noticeable because of its desirable coastal location, warmer climate, and the close proximity to health care, resorts, and retirement communities.





As shown in Figure 6.10, Chatham County’s population is projected to grow significantly over the next 10 years, with the largest population gain being seen in the older age groups. The effect will be increasingly pronounced among 45 to 54-year-olds, with a projected increase of 5.8 % from the 2010 counts, 55 to 64-year-olds increasing 18.1 %, and individuals over 65 increasing by over 70 %. Younger age groups, by contrast, are projected to experience either a very modest growth or a slight reduction from current and previous levels. This is directly related to the population living longer than previous generations.

As the population grows older, many find it advantageous to relocate from single-family homes to multi-family dwellings, making it likely that an increase in demand for multi-family units will accompany the larger aging population. Although Chatham County’s total year-round population of young adults living within the county is projected to decrease slightly, it is expected that the population of college students residing in Chatham County part of the year will increase as the area’s major institutions of higher learning continue to expand and attract students from outside the county. This trend also supports the finding that the local market could support more multi-family units within the county.

**Projected Age Distribution, 2000–2018**

Age	2010	2020	2030	%Chge. 2010-2030
Under 5	17,219	17,442	17,514	1.7%
5 to 14	34,008	34,911	35,141	3.3%
15 to 24	33,666	35,056	35,221	0.5%
25 to 34	35,959	34,690	35,354	-1.7%
35 to 44	35,318	35,370	34,949	-1.0%
45 to 54	35,318	35,370	37,340	5.8%
55 to 64	29,466	35,494	34,789	18.1%
Over 65	33,772	48,040	57,696	70.8%

**Figure 6.10–Chatham County Population Projections by Age Cohort**  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates





# COST-BURDEN

## Housing Costs

According to the US Department of Housing and Urban Development, cost-burdened families as those “who pay more than 30% of their income for housing” and “may have difficulty affording necessities such as food, clothing, transportation, and medical care.” Severe rent burden is defined as paying more than 50 percent of one’s income on rent.

Currently, 1 out of 4 homeowners and over 1/3 of renters are cost burdened by housing payments. While cost burden is currently lower than it was in the past, a significant portion of the population still pay a large amount of income toward housing. As shown in the Figure 6.11 and 6.12, cost burden was at it’s highest around 2010 for homeowners, and 2014 for renters.

### COST-BURDENED

Cost-burdened families as those “who pay more than 30 percent of their income for housing” and “may have difficulty affording necessities such as food, clothing, transportation, and medical care.” Severe rent burden is defined as paying more than 50% of one’s income on rent.

—HUD

*Cost-burden for renters has been consistently higher than cost burden for homeowners  
—American Community Survey, 2018*

## Mortgage Cost Burden, 2000–2018

Year	Garden City	City of Pooler	City of Savannah
2000	17.3%	18.4%	26.57%
2010	38.2%	32.1%	42.76%
2014	29.8%	34%	41.24%
2018	24.6%	26.4%	33.53%

Figure 6.11–Mortgage Cost Burden

U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

## Rent Cost Burden, 2000–2018

Year	Garden City	City of Pooler	City of Savannah
2000	30.3%	27.5%	52.93%
2010	46.3%	26.6%	61.13%
2014	60.4%	36.2%	59.80%
2018	37.7%	44.4%	55.39%

Figure 6.12–Rent Cost Burden

U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

# AFFORDABLE HOUSING

## Affordable Housing

Projecting the future demand for affordable housing is challenging for the reason that the affordable housing market is dependent upon economic conditions, which are difficult to forecast. Affordable housing is also a relative issue; all housing is “affordable” to somebody. There is no one solution to making housing affordable to everyone; a possible tool, however, from a regulatory standpoint, would be to require new housing developments to provide a range of housing types and sizes, in various locations, to help ensure a diverse housing stock and maximize housing choices for every individual.

With Garden City having such high poverty and cost burden rates, affordable housing initiatives and programs could help reduce housing costs, thereby contributing to an overall reduction in poverty. This could be implemented in a variety of ways through policy and zoning. For example, requiring developers to provide housing within an affordable to most cost range could help prevent pushing low-income residents out of the community in search of more affordable options. Additionally, updating zoning laws to allow for more multi-family housing would be beneficial, as this type of development requires less land and produces smaller units, thus maximizing the quantity of affordable housing that can be provided.

## "Missing Middle" Housing

Missing Middle Housing describes a range of housing types between single-detached homes and lower density apartment buildings that have gone “missing” from many of our cities. The referenced housing types are compatible in scale with single-family homes yet are denser and yet still fit seamlessly into existing residential neighborhoods. These housing types can include duplexes, triplexes, fourplexes, rowhouses, and townhouses.

While the “missing middle” refers to a range of housing types, the popularity of the term has grown alongside the housing challenges facing middle-income households. Increasingly, middle income households throughout Chatham County are experiencing difficulty finding housing that suits their needs and budgets. Accordingly, the term “missing middle” is used to describe the lack of available and affordable housing options for middle-income households, both in the ownership and private rental markets. In fact, much housing that falls under the category of “missing middle” is unaffordable to households across the income spectrum.

As discussed earlier, providing a wider range of housing types can be used as a tool to provide affordable housing for residents and build vibrantly unique communities



# SPECIAL NEEDS HOUSING

## Special Needs Housing

A disability is defined as one of six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty.

According to the 2018 American Community Survey 5-year estimates, 15% of residents in Garden City are living with a disability. Noting that individuals 75 years and older tend to have higher rates of disabilities, it can be expected that as the senior population in Chatham County and Garden City continues to rise, the need for more housing that disabled individuals can comfortably live in will also increase. This requires housing with wider hallways and doors, handrails, and ramps for wheelchair access while other disabled residents, such as individuals with cognitive difficulties, may require long-term residential care. As this sector of the population grows, Garden City must ensure that the appropriate number and types of homes are available for residents with specific needs.



### WHAT IS DISABILITY?

A disability is defined as one of six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty.

—CDC

## Disabled by Age Group 2018

	Chatham	Garden City
Age		%
Under 5 Years	2.9	0.8
5 to 17 Years	6.6	5.2
18 to 34 Years	8.7	6.0
35 to 64 Years	16.9	13.3
65 to 74 Years	22.2	27.4
75 Years and Over	58.3	50.6

Figure 6.13–Percent Disability by Age, Chatham County & Garden City  
U.S. Census Bureau: 2018 American Community Survey 5–Year Estimates

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Chatham County has an array of housing services to help its residents within the county. For example, domestic violence shelters offer safe and private housing for victims of intimate partner violence and their families. Additionally, rehabilitation centers for individuals recovering from drug addiction and mental illness, residential facilities for people with developmental disabilities, and transitional housing for homeless families and individuals are also available. In addition, a number of agencies provide subsidized or affordable housing for older adults as well as hospice residences for patients with terminal illness.

Although not all-inclusive, Figure 6.14 below displays the percentage of residents within Chatham County and Garden City with a disability as defined by the American Community Survey (2018) that may have special housing needs.

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Disability Type 2018

	Chatham	Garden City
Disability Type		%
Hearing Difficulty	4	3.9
Vision Difficulty	2.6	2.9
Cognitive Difficulty	6.5	7.4
Ambulatory Difficulty	8.6	6.3
Self-Care Difficulty	2.4	1.8
Independent Living Difficulty	6.2	4.8

Figure 6.14–Percent Disability Type, Chatham County & Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



# RESILIENCE & HOUSING

## Resiliency Planning

Resiliency planning is a way to reduce indirect vulnerabilities by improving the long-term conditions that can leave communities exposed to hazards. There are six core sectors around which communities can plan for resiliency.

These are:

- Community
- Economic
- Health and Social
- Housing
- Infrastructure
- Watersheds and Natural Resources

These six sectors are broad lenses through which a community can examine the impacts, identify stresses, or weaken their ability to respond, and strategically plan to address these upsets. Integration of activities across each sector is key to developing a resilient community. These sectors are interdependent, yet many strategies are likely to have a cross-sector impact. With the rise in extreme weather events, many communities are looking for ways to prepare for disasters that accompany the changing climate. New studies, regulations, and design practices are helping to address current and future needs.

Additionally, low-income communities are often disproportionately affected by weather- and climate-related disasters, such as built-up in areas that are vulnerable to flooding. Resilient design can offer solutions to dangerous disruptions while alleviating long-term costs.

Emergency preparedness also builds pathways to make a difference not only for the built environment but also for residents within these communities.

Much of Garden City is a flat coastal plain, making it susceptible to flooding, especially during the springtime and hurricane season. As the impact of climate changes compounds and grows, not only will flooding issues worsen but higher temperatures will most likely continue threatening residents and vulnerable populations during Garden City's hot summer months. To alleviate this threat, it is recommended that any new housing developments, most notably affordable housing developments, be built outside of flood zones and with a higher, more sustainable design in mind. It is essential that residents living in high-impact flood zones understand how to protect themselves and their homes during rainy and hurricane seasons. Information on how to prepare for flooding can be found on the Garden City Floodplain Management webpage:

Lastly, the further people live from their jobs, schools, and services, the longer they spend commuting in cars, which creates more greenhouse gas emissions. When people have affordable options for housing close to where they work, they can spend less time commuting and reduce their greenhouse gas emissions. Additionally, building affordable places to live in close proximity to public transit options is an effective way to reduce greenhouse gas emissions.



### Plan 2040 Survey

The MPC's Plan 2040 survey asked in your opinion, "Do we need more, less or about the same of the following housing types?"

- Single-family
- Townhouses
- Apartments
- Duplexes
- Accessory dwelling units
- Mobile homes
- Transitional housing
- Nursing or retirement homes

Sixty-seven percent (67%) of the respondents felt that there needed to be more single-family housing, with 26% selecting townhouses and 21% selecting duplexes.

Garden City 2040 Appendix.

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# NATURAL RESOURCE ELEMENT

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# 07



# NATURAL RESOURCES

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## Introduction

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Garden City's natural resources are vitally important to the quality of life, resilience, health, and economy of the region. The city therefore has an interest in promoting, developing, sustaining, and protecting its natural resources for current residents and future generations.

This element of Garden City 2040 includes an existing conditions assessment of specific natural resources and natural resource issues found in Garden City as well as specific goals and objectives for the management and protection of these resources for the next 20 years.

# NATURAL RESOURCES

Not many landscapes can match the beauty and romance of the coastal Georgia environment. Since the earliest times of Georgia's founder, General James Oglethorpe, people have wanted to live near the coast. Our streams, rivers and marshes are now more attractive than ever as a place to live and visit. Tide, climate, and geology all shape the unique relationship between land and water along the nation's coastline. Coastal Georgia continues to grow as people leave colder climates and higher taxes to live near its beautiful oak trees and marshes. People and homes are only part of the growth the region is experiencing. With population, come many other elements of development.

The vision of a community that is a healthy place to live, work, and raise a family—where the protection of natural resources is considered an integral part of its social and economic values—can be accomplished when forethought and reverence for the environment is considered. To effectively manage the development of Georgia's coastal areas, residents and local governments must continue in their efforts to protect and be good stewards of the community's natural resources. With proper planning, Garden City will continue to be a place of beauty for centuries to come.

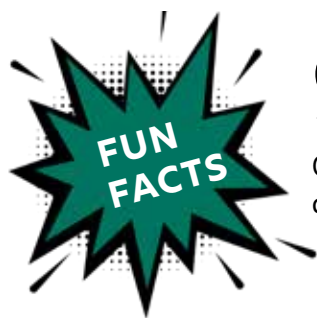
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## Coastal Resources

Georgia's coastal marshlands and beaches are seen as one of the State's greatest resources and a defining characteristic feature of Chatham County. The beaches draw new residents and tourists to the area, while the marshlands are an essential ecosystem for many plant and animal species and also protect coastal residents from the impacts of storms and higher than normal tides. The landscape along the Georgia coast is also dotted with marsh hammocks—back barrier islands or small upland areas surrounded by tidal waters and marshes that provide a haven for wildlife.

As the state's coastal population grows and development pressures threaten Georgia's coastal resources, public policies protecting and conserving coastal lands need to be implemented. The preservation of the region's coastal resources through land use regulations and land acquisition programs is essential to the resiliency of the community, the local economy, and the quality of life for its residents.



# 9%

Of land in Garden City is classified as Marsh



# WATER RESOURCES

## Water Supply

Garden City is located within the Atlantic Coast Flatwoods area of Georgia within both the Savannah and Ogeechee River Basins and more specifically within the boundaries of the Lower Savannah, Lower Ogeechee, and Ogeechee Coastal Watersheds.

The Ogeechee River Basin headwaters are located in mid to southeastern Georgia and is flanked by the Altamaha and Oconee River Basins to the west and the Savannah River Basin to the east. The headwaters are located in the southeastern edge of the Piedmont province and the basin continues southeastward to the Atlantic Ocean, draining approximately 5,540 square miles. The river basin is located entirely within the state of Georgia and plays a significant role in forming Wassaw, Ossabaw, Saint Catherine's, Black Beard and Sapelo islands off the coast of Chatham County.

The Savannah River Basin is a 10,577 square mile watershed whose headwaters originate in the Blue Ridge Province of North Carolina, South Carolina, and Georgia. The Savannah River forms the boundary between South Carolina and Georgia as it flows southeast to the Atlantic Ocean at Savannah. The Savannah River is the most extensively used surface water source in the Savannah River Basin.

### WATERSHEDS

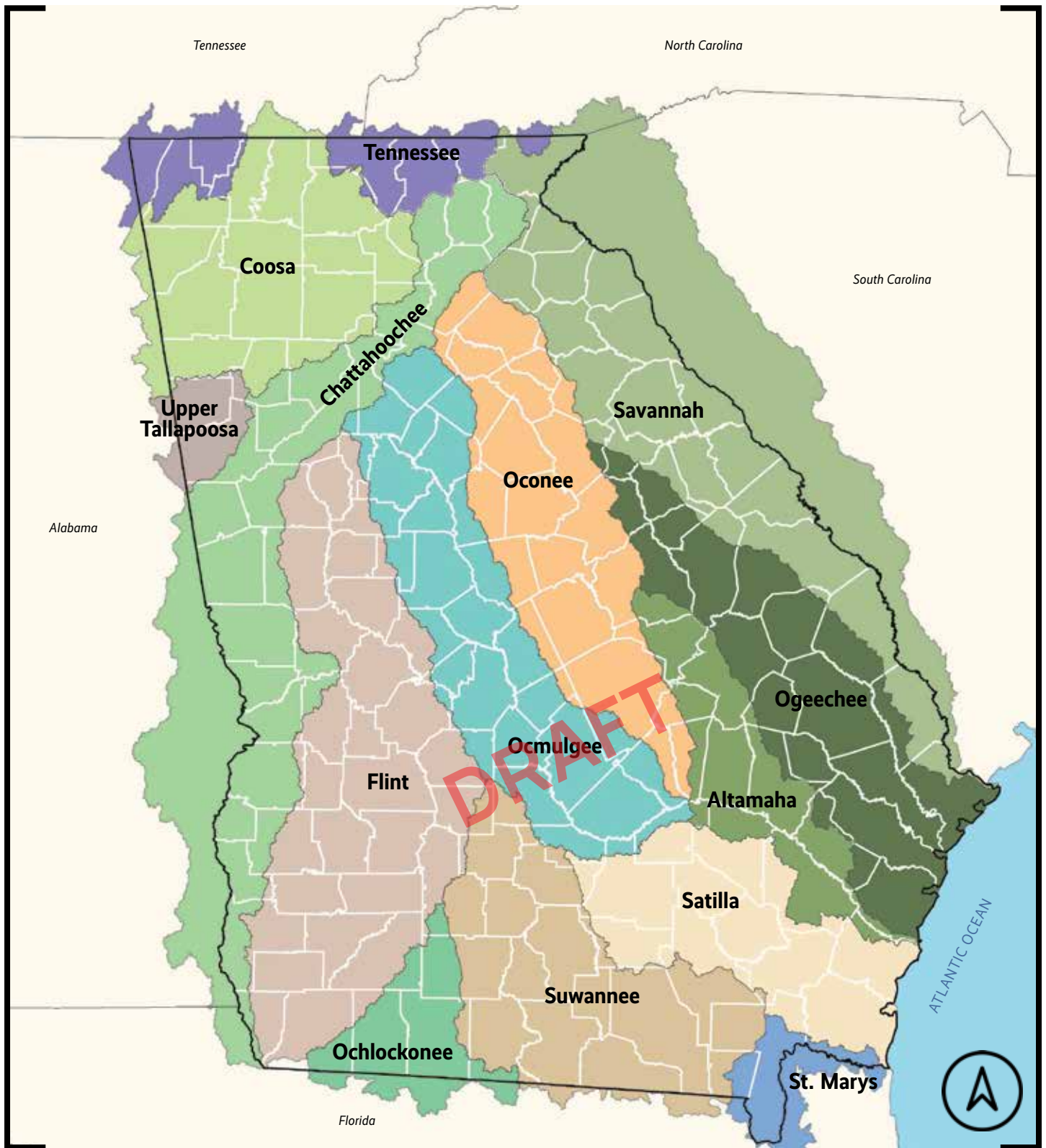
A watershed is a land area that channels rainfall and snowmelt to creeks, streams, and rivers, and eventually to outflow points such as reservoirs, bays, and the ocean.

—USGS



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Map 7.1—Georgia's River Basins





## Public Water Supply Sources

The groundwater resources of Coastal Georgia—and the Floridan Aquifer system in particular—are recognized as some of the most productive in North America. This particular system including an area of about 100,000 square miles in southern Alabama, southeastern Georgia, southern South Carolina, and all of Florida. The depth below the ground surface to reach the top of the Floridan Aquifer increases from less than 150 feet in coastal South Carolina to more than 1,400 feet in Glynn and Camden counties, Georgia.

Approximately 95% of the population of Chatham County is served by municipal or community water systems (Chatham County Comprehensive Water Supply Management Plan (2000 Update). Ninety-eight percent of the water provided by these systems, including Garden City's, is pumped from the Floridan Aquifer and meets or exceeds drinking water standards. Water is pumped directly into the distribution system with chlorine and fluoride being the only treatment necessary.

## Public Water Supply Issues

As a result of extensive pumping in much of the developed areas of Savannah and in the adjacent coastal areas in Georgia and South Carolina, the aquifer has experienced changes in the groundwater levels, rates and distribution of recharge and discharge, rates and direction of groundwater flow, and overall water quality. As population growth increases the demand for drinking water a reduction in groundwater usage becomes necessary to prevent saltwater intrusion into these critical water supplies.

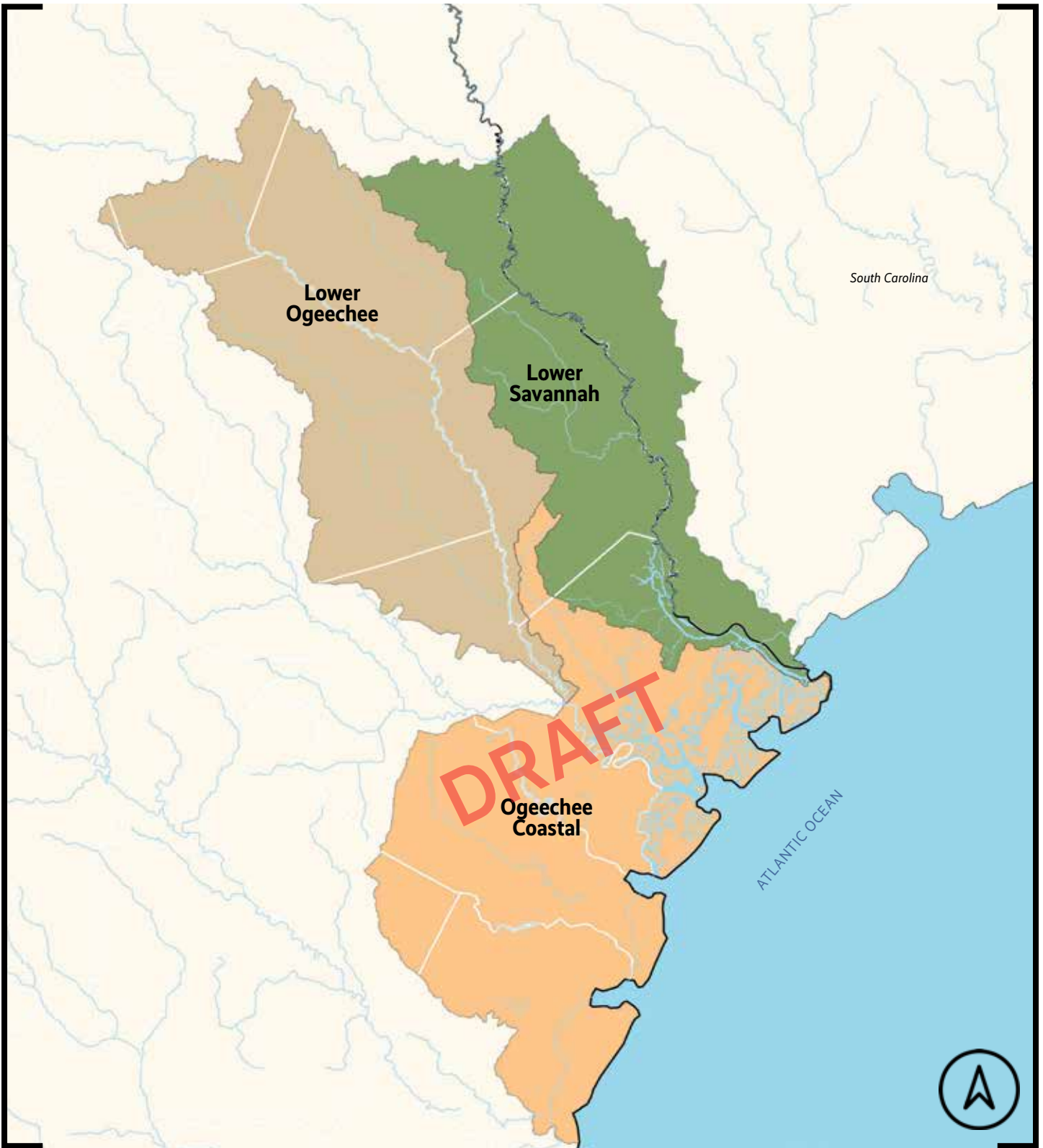
Measures to reduce the amount of groundwater pumped from the Floridan Aquifer were instituted in 1995 when the Comprehensive Water Supply Management Plan for Chatham County was adopted. The Plan was the result of a cooperative effort by the municipalities, major domestic water companies, and major industrial water users to reduce groundwater pumping.

Saltwater intrusion into the Floridan aquifer in the Chatham County region threatens the continued viability of the region's primary drinking water supply source. In 1997, the State of Georgia Environmental Protection Division (EPD) limited the amount of groundwater that could be withdrawn from the Floridan Aquifer.

The GA EPD previously capped the amount of groundwater that could be withdrawn from the Aquifer and mandated a 10-million-gallon reduction in pumping by 2005. The moratorium on additional groundwater withdrawal was viewed as a temporary measure pending a study to measure saltwater intrusion into the groundwater supply. This study, called the Sound Science Initiative was completed in May 2010, leading this led to a multi-step approach to managing groundwater withdrawals along the coast.



Map 7.2—Floridan Aquifer System



Map 7.3-Chatham's Large Watersheds

## Red Zones

The Chatham and Effingham County region, classified as the “Red Zone,” has experienced significant reductions to each county's groundwater withdrawal permit limits to help prevent impacts to the Floridan Aquifer system. Analysis of pumping indicated that the permit restrictions, conservation measures, and additional management strategies were proving effective. Again, in October of 2015 EPD mandated a reduction in pumping from all groundwater withdrawal permittees within the Red Zone with reduction milestones for 2020 and 2025 included. In general, most of the 2015 permit limits for Red Zone users were reduced by 22% for 2025.

In light of the new directives from EPD, the municipal water providers within Chatham County and southern Effingham County, continue to explore opportunities to coordinate water supply management and conservation efforts for the long-term.

The issues affecting groundwater quality (domestic, industrial, and agricultural pumpage and vertical and horizontal migration of saltwater into the aquifer) must continue to be addressed on a regional basis because groundwater withdrawal in one area affects the piezometric pressure throughout the aquifer, and saltwater intrusion in one part of the aquifer may eventually contaminate the entire aquifer system.

### SALTWATER INTRUSION

Saltwater intrusion, the technical name for the problem, occurs when too much groundwater is pumped from coastal aquifers, thereby upsetting the subterranean balance between inland freshwater.

—USGS

### MANAGING SALTWATER INTRUSION

Chatham County and the southern portion of Effingham County (south of GA Hwy 119) were identified in the 2006 Coastal Georgia Water and Wastewater Permitting Plan for Managing Saltwater Intrusion as having the highest vulnerability for the groundwater cone of depression that extends into South Carolina, where saltwater intrusion has already occurred.

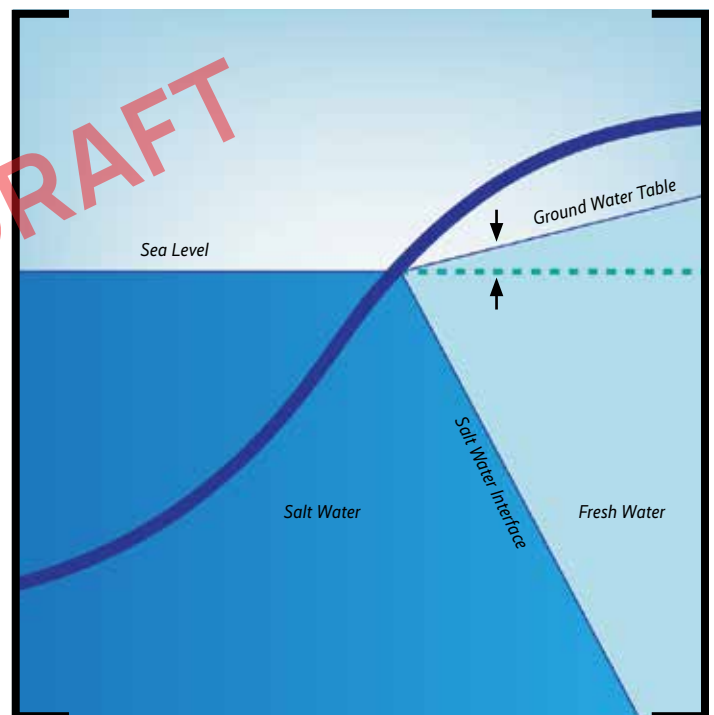
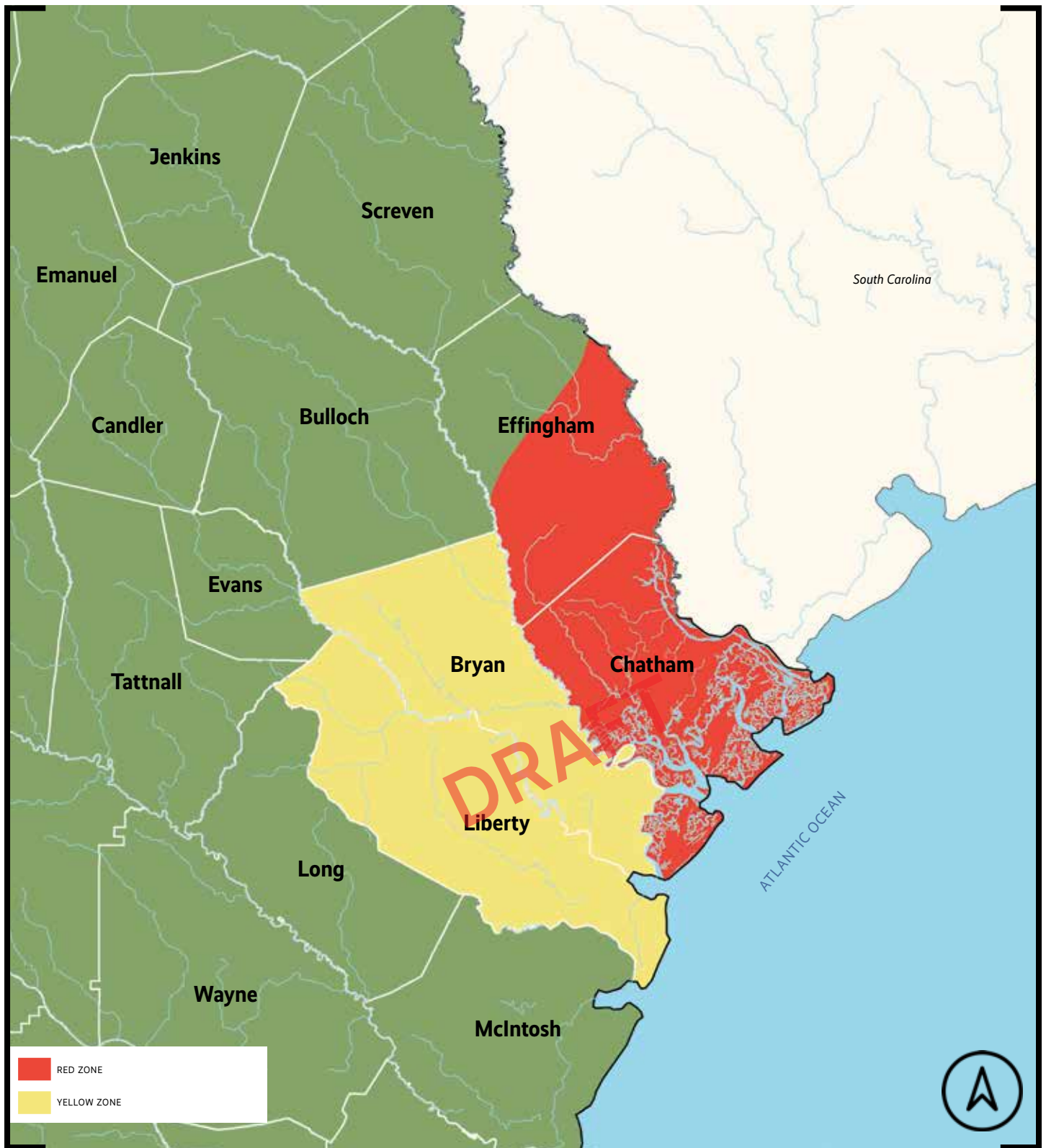


Figure 7.1–Aquifer Impact Diagram



Map 7.4—Chatham's "Red Zone" Water Management Area





## Groundwater Recharge Areas

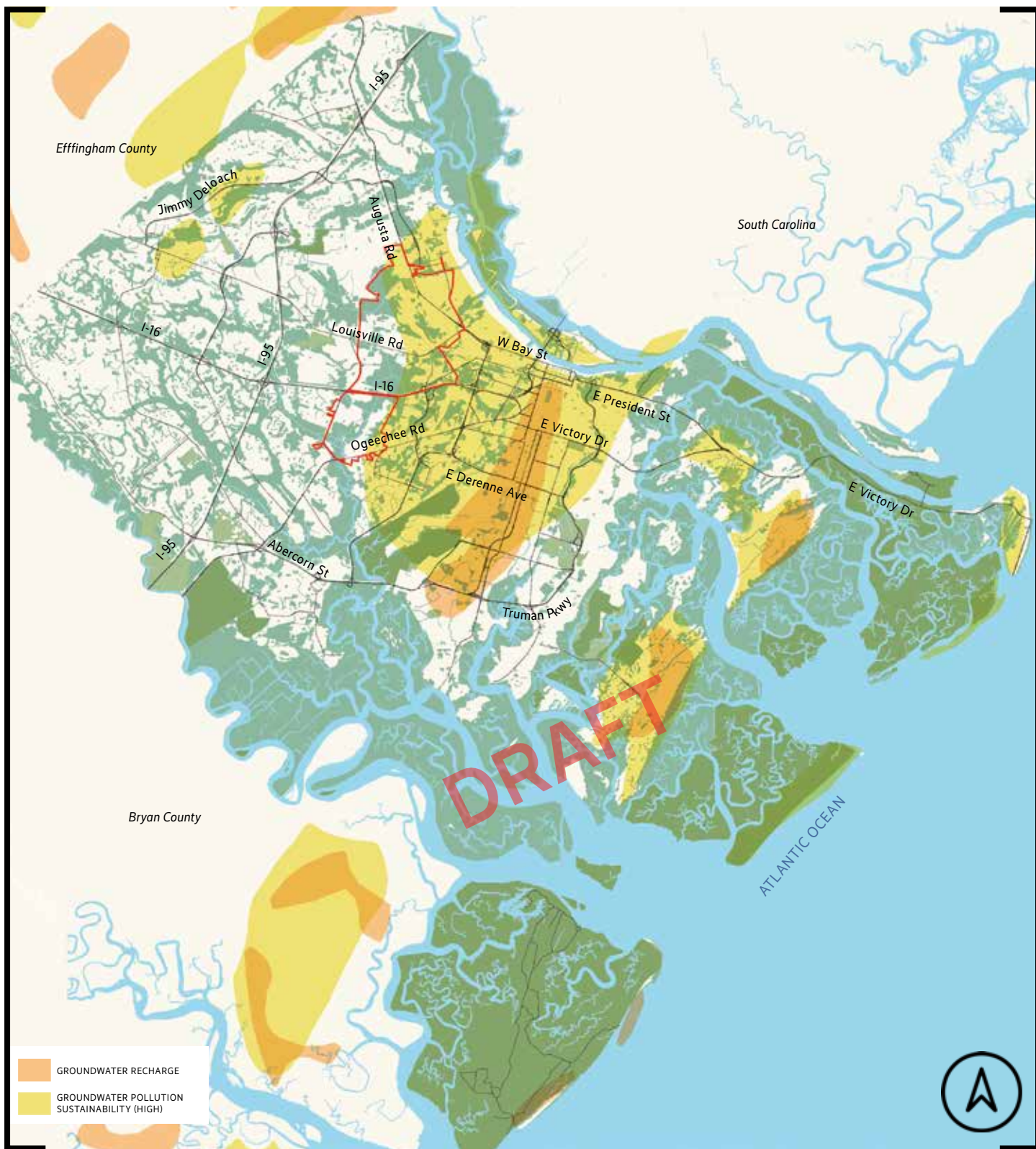
A groundwater recharge area is the land where the water that eventually seeps down into an aquifer first enters the ground. Groundwater can move readily through soils and rocks that have large pore spaces (porous), such as sand, gravel, sandstone, or limestone. However, soils and rocks having small pore spaces (non-porous), such as clay, shale, or granite, will hinder water movements. The principal aquifer recharge zone for the Floridan Aquifer system is located approximately 100 miles northwest of the city of Savannah where the upper boundary of the aquifer's confining layer outcrops at the surface near the Fall Line separating the Piedmont province from the Coastal Plain. Smaller areas of groundwater recharge are specifically located in the Miocene/Pliocene-Recent unconfined aquifer system within Chatham County. These local recharge areas are generally located outside of Garden City on Wilmington Island, Skidaway Island and along the Abercorn Street corridor in Savannah.

## Groundwater Pollution Susceptibility

If hazardous or toxic substances pollute the water that seeps into the ground in a recharge area, these pollutants are likely to be carried into the aquifer and contaminate the groundwater, ultimately effecting a community's drinking water source. Once polluted, it is almost impossible for a groundwater source to be cleaned up. For this reason, a local wellhead protection ordinance was passed, and the City routinely performs inspections of community wells to prevent wellhead contamination and to address any stormwater pollutants that have the potential to impact groundwater quality through the wellhead.

In Garden City, the protection of groundwater recharge areas is also overseen by restricting land uses that generate, use, or store pollutants within groundwater recharge areas and by establishing minimum sizes for lots within groundwater recharge areas that are served by on-site sewage management systems. Prior to the issuance of a building permit or a demolition permit, the City's review process assesses whether the proposed activity is located within a groundwater recharge area as identified by the Georgia Department of Natural Resources (GA DNR). All lands identified as groundwater recharge areas are subject to restrictive development standards. In Garden City, there are no groundwater recharge areas.

Specific areas within Garden City have also been deemed to have a higher pollution susceptibility. Careful consideration should be taken within these areas when deciding on land uses and new development to protect the area's groundwater system.



Map 7.5—Chatham County's Groundwater Recharge and Groundwater Pollution Areas





## Impaired Water Bodies

Under related environmental protection measures, section 303(d) of the 1972 Clean Water Act mandates that all states develop lists of impaired waters within their jurisdiction. The Georgia EPD has a complete “303(d) list” for the State of Georgia and Chatham County. Currently, there are two impaired waterways within Garden City that are being periodically monitored as required by the Georgia EPD for measures to improve the water quality.

### LOOKING FOR MORE INFORMATION?

The most current 303(d)list can be found for the state of Georgia and Garden City in the link below...

<https://epd.georgia.gov/watershed-protection-branch/watershed-planning-and-monitoring-program/water-quality-georgia>

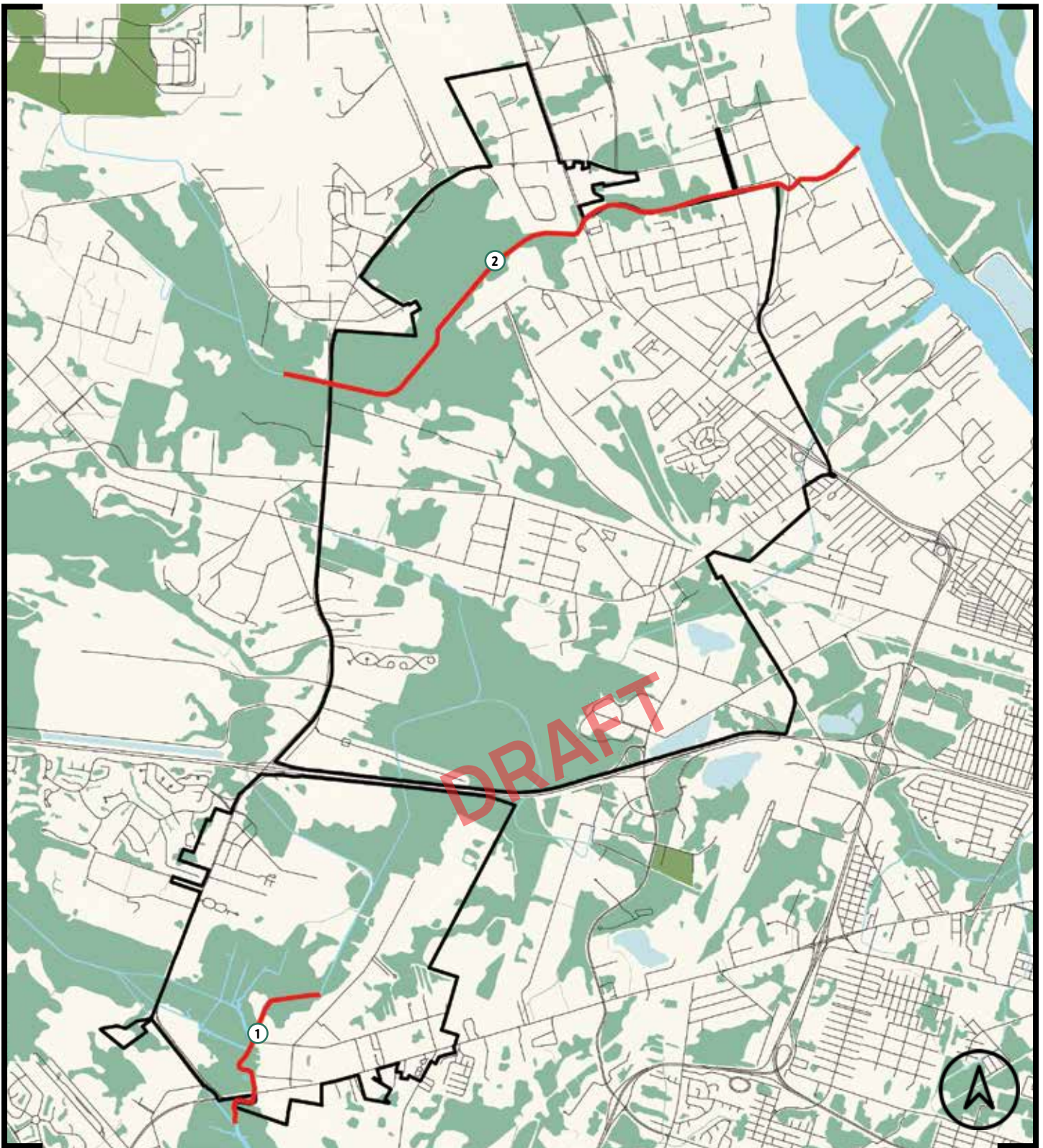
## Impaired Waters 305(b)/303(d) List 2020

Name	
1	Salt Creek
2	Pipe Makers Canal

Figure 7.2–Impaired Water Bodies

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Map 7.6—Impaired Water Bodies, Garden City

# STORMWATER MANAGEMENT

Stormwater runoff is generated from rain that flows over land or impervious surfaces, such as paved streets, parking lots, and building rooftops, and does not soak into the ground. The runoff picks up pollutants like trash, chemicals, oils, dirt, and sediment that can harm our rivers, streams, lakes, and coastal waters. To protect these resources, communities, construction companies, industries, and others, use stormwater controls, known as best management practices (BMPs). These BMPs filter out pollutants and/or prevent pollution by controlling pollutants at their source.

The State and Local National Pollutant Discharge Elimination System (NPDES) stormwater programs regulate stormwater discharges through municipal separate storm sewer systems (MS4s). Depending on population size, operators of the MS4s are required to obtain an NPDES permit before they can discharge stormwater. This permitting mechanism is designed to prevent stormwater runoff from washing harmful pollutants into local surface waters.

Stormwater Management Programs (SWMP) have been adopted by each municipality in Chatham County as a requirement of the National Pollutant Discharge Elimination System (NPDES) administered by the State of Georgia Department of Natural Resources (GA DNR). Garden City is considered a Medium Phase I MS4 Permittee. The City's management plan includes routine water quality sampling and testing; identification and elimination of illicit discharges; training, preparation of annual reports to the Georgia EPD; and education and public awareness programs.

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## Municipal Stormwater Programs & Permits

	MS4 Permit Number	Location
1	GAS000205	Savannah
2	GAS000206	Chatham County
3	GAS000207	Bloomington
4	<b>GAS000208</b>	<b>Garden City</b>
5	GAS000209	Pooler
6	GAS000210	Port Wentworth
7	GAS000211	Thunderbolt
8	GAS000212	Tybee Island



Figure 7.3–Phase I–MS4s in Chatham County



## Coastal Stormwater Supplement

Garden City adopted the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual (CSS). The CSS is a tool intended to provide Georgia's coastal communities with comprehensive guidance on an integrated, green infrastructure-based approach to natural resources protection, stormwater management, and site design.

As water flows across municipal boundaries and stormwater management efforts, or lack thereof, impact neighboring jurisdictions, Chatham and all the municipalities within the county should work towards addressing stormwater issues in a regional manner. The creation of a Regional Stormwater Committee or Commission should be considered to ensure that efforts being made are as efficient and effective as possible.

Statistically, most stream quality indicators decline when watershed impervious cover exceeds 10%, with severe degradation expected beyond 25%. In Chatham County, the majority of growth is targeted to western areas of the county. It is likely that future stream health indicators (e.g., biological health, streambank stability) will be impacted in watersheds that have a substantial amount of land development. Several of these watersheds may transition over to an Impacted category. As a result, these impacted watersheds are excellent target areas for advanced stormwater management, riparian buffer management, and development principles that protect water quality, such as low-impact development.

### STORMWATER RUNOFF

Stormwater runoff is rainfall that flows over the ground surface. It is created when rain falls on roads, driveways, parking lots, rooftops and other paved surfaces that do not allow water to soak into the ground.

—Center for Watershed Protection



# #1

Stormwater runoff is the number 1 cause of stream impairment in urban areas\*

\*Center of Watershed Protection, 2006



## Coastal Stormwater Supplement to the Georgia Stormwater Management Manual

First Edition  
April 2009



# GEOLOGY & SOIL TYPE

All of Chatham County, Georgia, is labeled as the Atlantic Coast Flatwoods area of Georgia. The Atlantic Coast Flatwoods area occurs along the seaward portion of Georgia and is characterized by nearly level topography and poorly drained soils that are underlain by marine sands, loams, and/or clays. A series of marine terraces, roughly paralleling the coast, extends inward from sea level to an elevation of approximately 100 feet. The lower lying flat terraces do not have well-defined drainage systems, and runoff moves slowly into slow-moving canals, streams, rivers, and finally into the ocean. The overall elevation in this region ranges from sea level to about 80 feet.

Garden City's soils tend to predominantly fall into the D-type category of soils, with shallow water tables, thus, making infiltration difficult. Group D soils are clay loam, silty clay loam, sandy clay, silty clay, or clay. This Hydrologic Soil Group has the highest runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high-water table, soils with a claypan or clay layer at or near the surface and shallow soils over nearly impervious material. The average soil rating, as measured by the National Commodity Crop Productivity (NCCPI) is 47.



## NATIONAL COMMODITY CROP PRODUCTIVITY

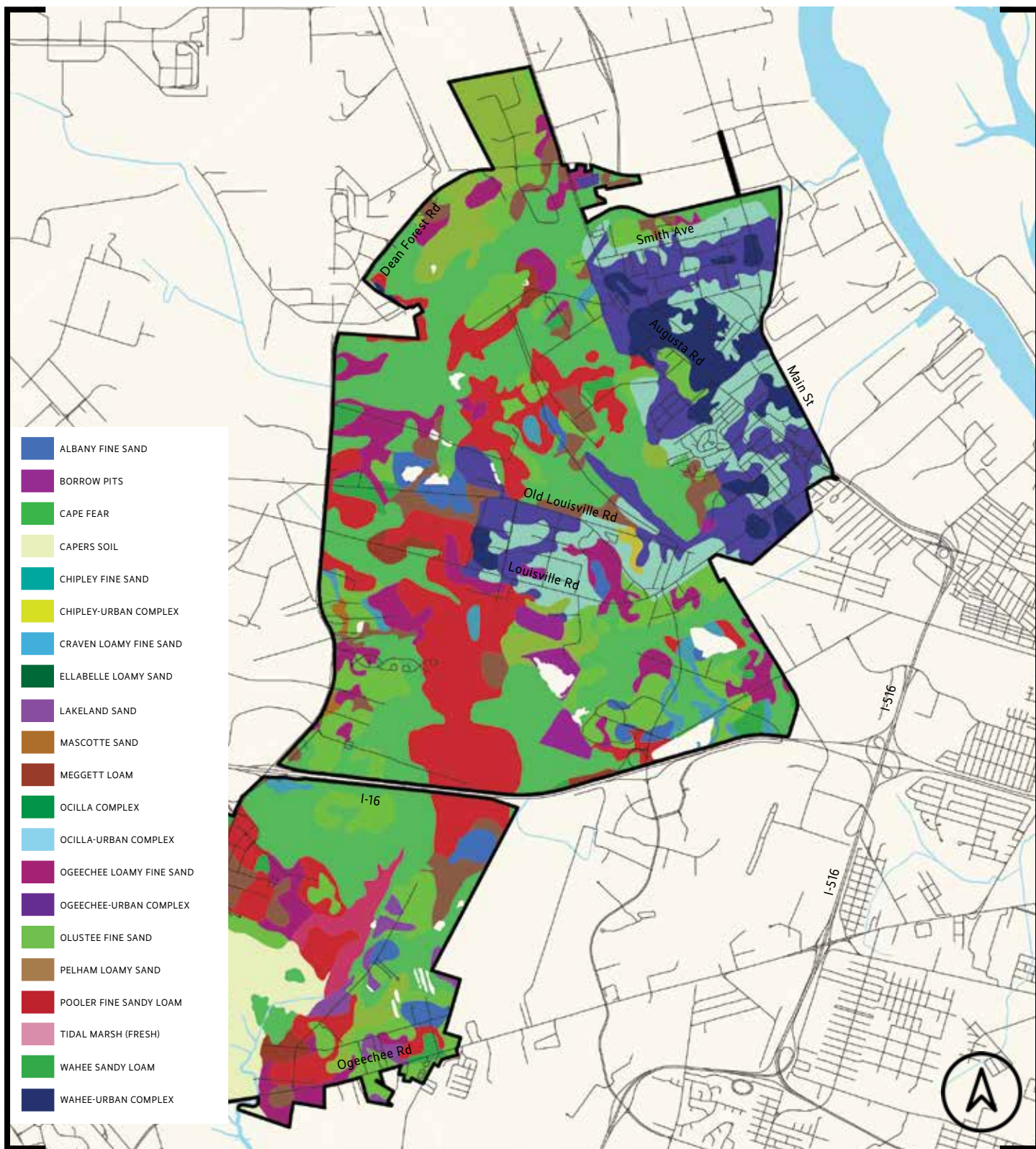
The National Commodity Crop Productivity Index (NCCPI) is a model that uses inherent soil properties, landscape features and climatic characteristics to assign ratings for dry-land commodity crops such as wheat, cotton, sorghum, corn, soybeans and barley.

The value of ranges is from 0 to 100, 100 being the best

—USDA

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Map 7.7—Soil Types, Garden City





# WETLANDS

Wetlands are vital features in the region's landscape that provide benefits for people and wildlife. Wetlands are able to improve our water quality, provide natural habitat, and store floodwaters. A wide variety of amphibians, animals, plants, and microbes inhabit wetlands, making them some of the most productive ecosystems in the world.

Over the past 60 years, many wetlands in Georgia have been altered and converted to other uses due to development; many of these conversions were of freshwater wetlands on the coastal plain. Conversion rates in Georgia have accelerated due to changing demands for agricultural and forest products, population growth and urban expansion in the Piedmont, mountains, and along the coast. This has had a distressing effect on not only the natural environment, but also on the human environment as flooding increases in frequency and magnitude with nowhere for floodwaters to go.

*Over the past 60 years, many wetlands in Georgia have been altered and converted to other uses due to development; many of these conversions were of freshwater wetlands on the coastal plain.*

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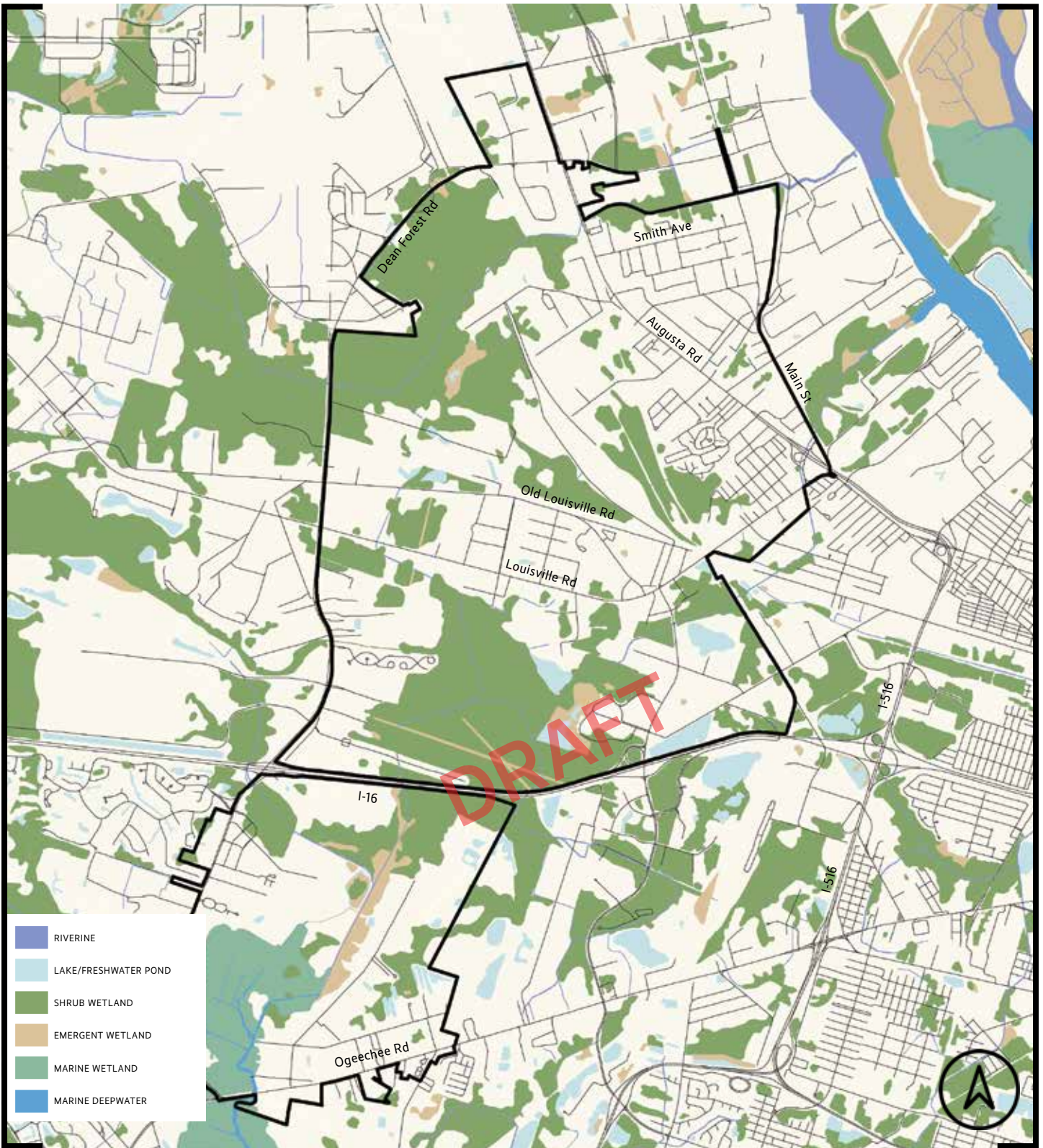
## BENEFITS OF WETLANDS

Among the numerous functions of wetlands, the following items are the most critical:

- » Flood control
- » Water quality and availability
- » Erosion control
- » Fish and wildlife habitat
- » Recreation and aesthetics

—US EPA



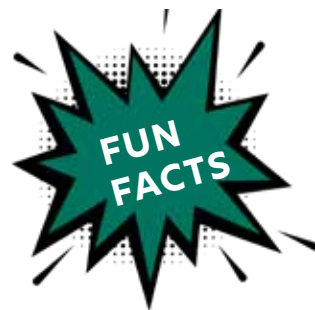


Map 7.8—Wetland Classification, Garden City



Directly related to the need for wetland conservation, under the Part V Environmental Planning Criteria requirements, Garden City has an adopted Wetland Protection Ordinance that provide a procedure for local governments to coordinate federal wetlands permitting with local permitting. This ordinance provides a regulatory framework by which potential wetland impacts are evaluated before local permits for land disturbance and building are issued.

The future of wetlands is closely linked to land use decisions made not only by local governments but by private landowners as well, since regulations are inexpensive relative to acquisition and can provide substantial protection for wetlands. Incentive-based programs, including non-conventional development standards such as subdivision regulations, stormwater management ordinances, and floodplain ordinances are other means of protecting wetlands that have been implemented.



# 5.7

Square miles of wetlands exist in Garden City



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Stormwater management ordinances such as Garden City's can be used to protect wetlands as a means of reducing non-point source pollutants and to create artificial wetlands for the treatment of surface runoff. In addition, pollution controls may be used to prohibit discharges into area wetlands.

As shown, according to NOAA's Office of Coastal Management (NOAA OCM) from 1996 to 2016, a total of 8.54% or 54 square miles of the county's land coverage has changed, including a loss of approximately 10 square miles of loss of Woody Wetlands (-9.54%) and approximately five square miles of Emergent Wetland gain (+1.23%) over the last 20 years.

#### PLANNING CRITERIA

To ensure continuous protection of water supply watersheds, groundwater recharge areas, wetlands, and river corridors, specific environmental planning criteria have been developed and discussed throughout this section of Garden City 2040 as required. These include:

- » Criteria for Water Supply Watersheds
- » Criteria for Protection of Groundwater Recharge Areas
- » Criteria for Wetlands Protection
- » Criteria for River Corridor Protection

## Chatham County Land Coverage Changes Over Time

Land Cover Categories	1996 Area	Area Lost	Area Gained	2016 Area	Percent Change	Net Change
Developed (High Intensity)	19.15	0.00	8.95	28.10	46.73%	8.95
Developed (Low Intensity)	38.14	-0.34	10.00	47.80	25.32%	9.66
Developed (Open Space)	22.31	-1.02	6.35	27.63	23.87%	5.32
Grassland	8.36	-4.90	1.99	5.45	-34.74%	-2.90
Agriculture	3.54	-0.67	0.74	3.61	1.98%	0.07
Forested	89.97	-19.36	3.46	74.07	-17.67%	-15.90
Scrub/Shrub	8.76	-5.30	4.15	7.61	-13.10%	-1.15
Woody Wetland	78.04	-9.07	1.63	70.60	-9.54%	-7.44
Emergent Wetland	155.91	-2.13	4.06	157.84	1.23%	1.93
Barren Land	9.09	-1.06	2.59	10.62	16.76%	1.52
Open Water	199.03	-2.25	2.19	198.97	-0.03%	-0.05

Figure 7.4–Chatham County Land Coverage Changes 1996–2016



# FLOODPLAINS & FLOOD ZONES

Floodplains are flat or lowland tracts of land adjacent to lakes, wetlands, and rivers that are typically covered by water during a flood. The ability of the floodplain to carry and store floodwaters should be preserved in order to protect human life and property from flood damage. Moreover, undeveloped floodplains provide many other natural and economic resource benefits.

Floodplains often contain wetlands and other areas vital to a diverse and healthy ecosystem. By making wise land use decisions in the development and management of floodplains, beneficial functions are protected and negative impacts to the quality of the environment are reduced. Garden City has updated its Floodplain Protection Ordinance to begin addressing sea level rise and the natural migration of waters along the coast; however, more attention must be given, and measures must be enacted in the near future to allow for further protection of the coastal community from rising waters due to changes in the environment.

## Flood Zones

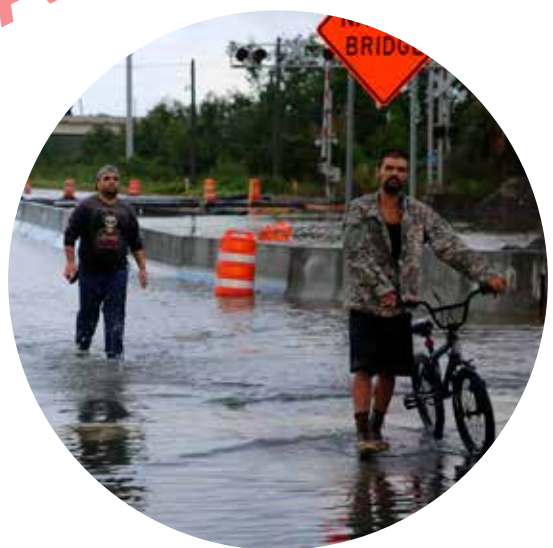
The Federal Emergency Management Agency (FEMA) is tasked with creating Flood Insurance Rate Maps (FIRM) that determine flood zone designations for properties. Flood maps offer useful information and represent the official depiction of flood hazards for a community. Flood zone designations, coupled with local policies and the efforts of municipal floodplain managers, impact the flood insurance rates of individual properties.

It is important for property owners to know what their property's flood zone designation is in order to fully understand the potential risks their area faces. This information can aid in making decisions regarding investments or alterations to property that will minimize possible risks, in making preparations for potential flooding events, and in determining if flood insurance is necessary.

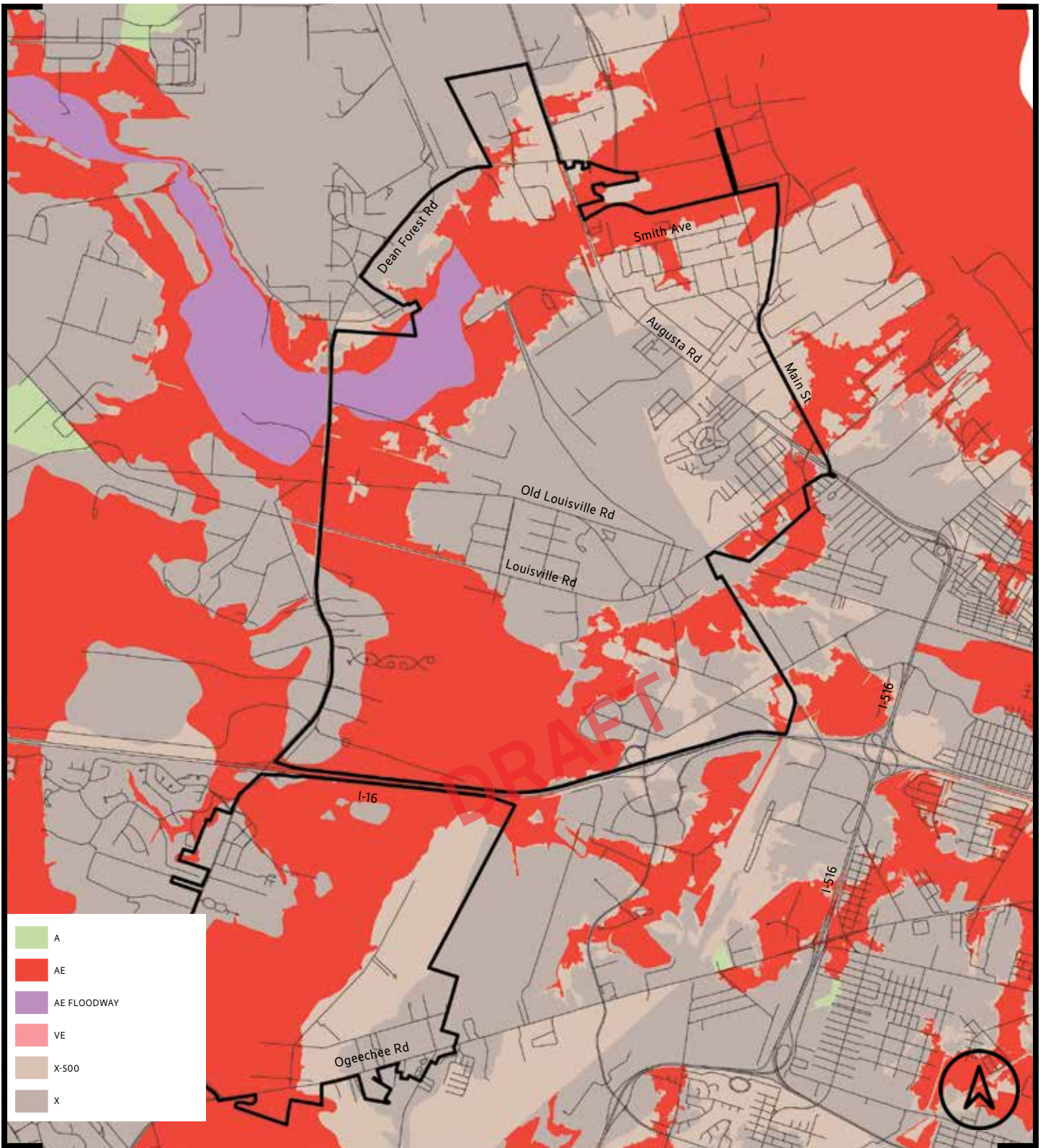
### FLOOD ZONES

Flood zones are a geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

—FEMA







Map 7.8—Flood Zones 2018, Garden City



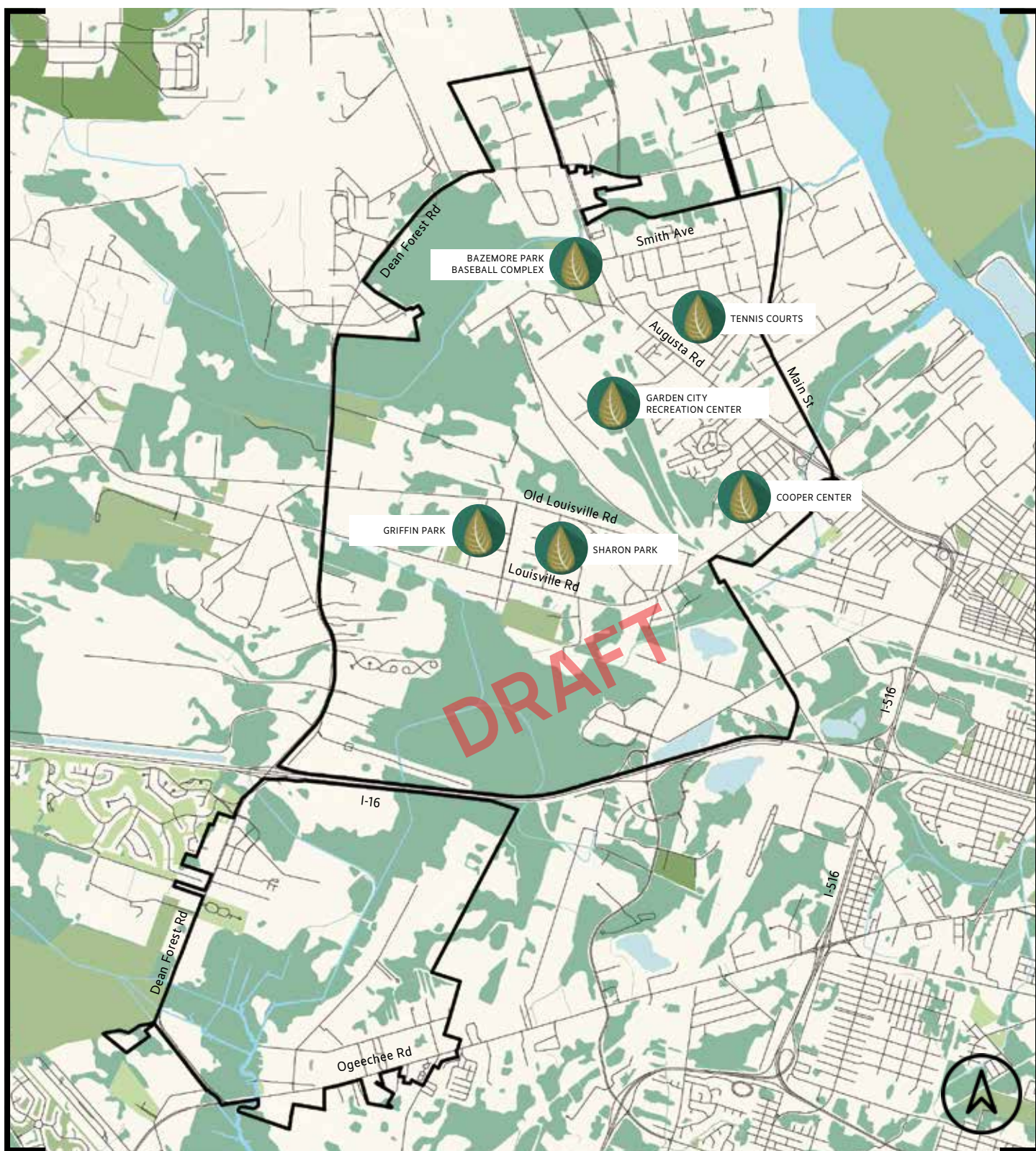
# PARKS, RECREATION & CONSERVATION AREAS

The natural and scenic amenities of Garden City offer many recreational and cultural opportunities, open space in the city continues to be lost as development increases, it is imperative to explore all available means for land conservation before it is too late. Land acquisition programs such as the Chatham County Resource Protection Commission should be funded and utilized in conjunction with land use regulations to ensure the open space needs of the region will continue to be met.

In addition to providing an adequate quantity (acres) and type (ballfields, wildlife habitat) of open space, it is important to work to ensure equity to all residents. All residents should have access to a variety of parks, recreation, and open space within close proximity to their residence. Trails, bikeways, pedestrian paths as well as other non-vehicular paths should be incorporated to and into such areas to provide access for those without personal transportation.

“Open space” is an area that is valued for active and passive recreation and protection of the natural resources (including natural processes and wildlife), provides public benefit, and is part of one or more of the following categories: developmentally difficult lands, natural resource areas, commercially used natural resources areas, natural amenity areas, recreational areas and urban form areas”. Under this definition, there are five areas under Federal jurisdiction and five areas under State jurisdiction within Chatham County that fall within this title of conservation/recreation areas.





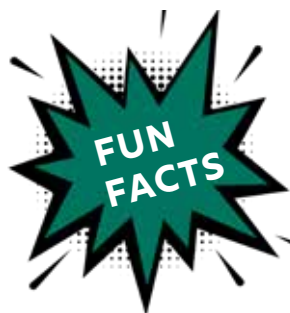


# PRIME AGRICULTURAL & FOREST LAND

The loss of agricultural and forest land is not only a local issue but is taking place across the country. More and more land that was once in farmland or forest is being developed for subdivisions or commercial uses. The loss of these lands negatively impacts the environment by increasing impervious surfaces resulting in flooding and nonpoint source pollution, reducing air quality through the elimination of trees, which filter pollutant gases, and increasing energy consumption due to the additional miles traveled for crops and livestock for consumption, as well as making residents reliant on other states or countries for their food supplies.

According to the National Agricultural Statistics Service, USDA, between 2012 and 2017 there was a 91% increase in the number of farms from 35 farms to 67 farms, with a total area of 4,677 acres. Chatham County's average farm size in 2017 was 70 acres. The number of farms in this county has been trending upward for the first time in almost 20 years most likely due to the increasing movement of growing and sourcing local foods such as berries, honey, meat, and eggs from nearby nurseries and small farms.

More now than ever, the implementation of land use regulations and incentive-based programs to prevent the further loss of agricultural and forest lands is pertinent.



## 66%

Of land in Garden City is classified as Vegetation\*

\*Savannah Tree Foundation, Tree Canopy Assessment 2020

## Tree Canopy

The Savannah Tree Foundation's 2020 Tree Canopy Assessment provided a bird's eye view of all of Chatham County, illustrating general trends in tree loss and gain countywide.

## Major Takeaways

- While Chatham County has gained tree quantity, it has lost quality trees
- The impacts of not having or not enforcing tree ordinances are evident
- Large-scale clear cutting associated with industrial construction is having the most noticeable impact on the county's tree canopy

## Tree Canopy Change Overtime

Municipality	2014 Percent Vegetation	2020 Percent Vegetation	Percent Change	Acreage Change
Unincorporated	25%	32%	7%	14,655
Savannah	39%	49%	10%	7,137
<b>Garden City</b>	<b>53%</b>	<b>66%</b>	<b>13%</b>	<b>1,207</b>
Pooler	62%	63%	1%	204
Bloomingtondale	83%	83%	0%	-5
Tybee Island	7%	15%	8%	168
Thunderbolt	17%	31%	14%	146
Port Wentworth	66%	73%	8%	812
Vernonburg	73%	83%	10%	26
Overall	34%	41%	7%	23,757

Figure 7.6–Chatham County Tree Canopy Percent Change

## Challenges Ahead

### GROWTH AND DEVELOPMENT:

Although the County's population as a whole has seen a growth rate of about 9% since 2010, Garden City's population has remained constant at only an approximate 0.3%. However, sustained regional growth and industrial expansion in the city will continue to drive the reduction in the tree canopy with fewer trees being replanted versus what is being removed during construction

### AGING TREE CANOPY:

Garden City is dealing with an aging tree canopy, especially in older sections of the city. For example, most urban live oaks will live to be about 150 years old, aging out around 2040. To ensure that a consistent tree cover remains intact at all times, the City will need to make certain that dollars are programmed, trees are systematically replanted, and strict protection and planting ordinances are strengthened.

### INCREASED OCCURRENCES OF PESTS AND DISEASE:

Increased globalization means that pests and disease travel more quickly and further. For example, the adjacent city of Savannah has already lost 1000+ Sugarberry trees to an unknown disease, and the Asian Longhorned Beetle, whose larvae feed on hardwoods and infestations in the US have led to large-scale destruction of trees, was recently found in nearby South Carolina.

## Impacts of Changing Climate

The coastal area has begun to see scattered "ghost forests" that represent the extent of coastal trees lost to sea level rise and saltwater intrusion over the last several decades.

Trees are a powerful tool by naturally absorbing large amounts of stormwater, helping to mitigate any flood impacts from increased sea levels. However, a negative consequence of this same saltwater storm surge and infiltration can often later be seen after storms and recurrent flooding. The rising waters lead to saltwater intrusion into freshwater habitat, often gradually killing or severely damaging coastal trees from the roots up leading to their expensive removal later.

Additionally, tree canopies can greatly assist in lowering the temperatures and overall "heat stress" in communities dealing with known heat island effects.



# PROTECTED MOUNTAINS, RIVERS & CORRIDORS

The State of Georgia requires every community to identify and put mechanisms in place to protect specific critical resources such as mountains, rivers, and river corridors that flank major rivers. The coastal region does not contain any protected statewide mountain areas; however, the coast's beautiful rivers and corridors are not only critical ecosystems, but they are paramount to the community's future growth and sustainability.

These river corridors are of vital importance since they help preserve those qualities that make a river suitable as a habitat for wildlife, a site for recreation, and a source for clean drinking water. River corridors also allow the free movement of wildlife from area to area within the state, help control erosion and river sedimentation, and help absorb floodwaters during natural events, and allow the natural migration of floodwaters due to sea level rise.

Riparian buffers are of particular importance to the overall protection of water quality and habitat within the Lowcountry and coastal areas of Georgia. Scientific research has found many reasons for riparian buffers, including:

- to reduce the volume and velocity of stormwater runoff in order to protect the hydrological profiles of surrounding waterways;
- to reduce sediment and pollutants going into open water;
- to provide upland wildlife habitat areas;
- to help maintain in-stream temperatures provided by shade within the tree canopy of the buffer system;
- buffering adjacent neighborhoods, and
- enhancing community appearance

## RIVER CORRIDOR

Corridors include an expanded channel width to help preserve the qualities that make a river or stream suitable as a habitat for wildlife, a site for recreation, and a source for domestic and other water uses.

—FEMA

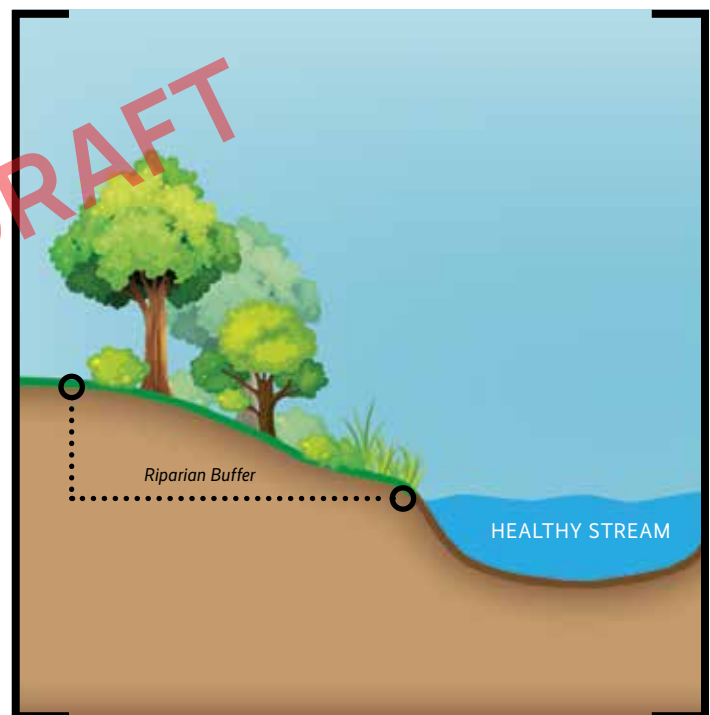


Figure 7.7–Riparian Buffer





### RIPARIAN BUFFER

A riparian buffer or stream buffer is a vegetated area (a buffer strip) near a stream, usually forested, which helps shade and partially protect the stream from the impact of adjacent land uses.

—EPA



# RENEWABLE ENERGY

A community's dependence on non-local fossil fuels as an energy source has many far-reaching consequences, from the negative impacts on the environment caused by extracting the resources to the poor air quality created from burning fossil fuels, resulting in respiratory disease and other ailments, and the depletion of the atmosphere that exacerbates climate change.

Facing the challenge to accelerate the development of clean, renewable energy sources to respond to the negative impacts of burning fossil fuels, while also protecting the natural resources and unique community character is a daunting endeavor. But it is one that must be made a priority in order to protect the environment and the quality of life of residents.

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# SOLID WASTE MANAGEMENT

Historically, the method for handling solid waste in Chatham County has been primarily through the disposal of solid waste in area landfills. This arrangement has been satisfactory from the standpoint of the landfill operators and their customers who enjoy the benefits of the profits generated (operators) and the relatively inexpensive disposal fees (customers). However, because of the high land costs in Chatham County, it is unlikely that land will be available to construct new landfills in the county when existing landfills reach capacity, at which time county residents may be required to pay additional transportation costs to new landfills in other counties. In addition, it is likely that surrounding counties would demand a premium to accept waste generated outside of their area.

Garden City has a curbside single-stream recycling program. The City’s recycling program is popular with residents and has proven to be successful in removing materials from the waste stream prior to disposal in area landfills. The cheap cost of certain raw materials in comparison to the cost incurred to recycle that material continues to be a challenge in making recycling even more successful. In addition, recent years have seen adjustments in the recycling industry due

to global market changes, leaving some materials unable to be recycled at all. Education campaigns should be adjusted to emphasize the need to reduce consumption and reuse materials where possible.

*Chatham County's two landfills will reach capacity between the next 3–9 years.*  
—Georgia EPD



Preserving the capacity of the landfills through reduction of the waste stream by reduction of waste generated, recycling, composting, and mulching of yard waste should be a priority of the county. The City of Savannah is currently planning for expansion of its Dean Forest Landfill, however, as shown by the number of operating years remaining for each of the two area landfills, and because the management of solid waste requires a long-term perspective, a regional outlook and discussion on solid waste management is warranted.

## Solid Waste Facilities

Facility	Facility Description	Average Daily Tons	Net Volume per Year	Rate of Fill (yd3/day)	Years Remaining	Estimated Fill Date	Operating Days per Year
Savannah - Dean Forest Rd (SL)	Municipal Solid Waste Landfill	276.00	109,415.00	329.00	3	06.01.2024	333
Superior Landfill & Recycling Center 2 MSWL	Municipal Solid Waste Landfill	2,463.00	766,270.00	2,737.00	9	10.09.2030	280

Figure 7.8–Chatham County Permitted Landfills



# CLIMATE CHANGE

Climate change does not simply mean warmer temperatures. Negative impacts of climate change that are seen locally include extreme heat, changes in the amount of annual rainfall, warmer ocean waters that feed and strengthen hurricanes, beach erosion, saltwater encroachment upon drinking water sources and natural habitats, infrastructure damage, loss of property and flooding in the region due to sea level rise and “sunny day” flooding. The effects of climate change negatively impact the quality of life of residents, in addition to causing irreparable damage to the natural and built environment.

*Up to 178,787 people in Georgia could be at risk of sea level rise impacts by 2100 and, if sea levels rise 3 feet by 2100, Georgia will lose 36 square miles of salt marsh —Georgia Climate Project*

Changes occurring on Georgia’s coast due to climate change are expected to redistribute species and greatly modify ecosystems. Local ecosystems provide animal habitat, recreational opportunities, improve water quality, provide seafood, reduce erosion, minimize flooding impacts, and aid in the carbon sequestration process. These potential changes will come at a great cost financially, in the form of tax dollars spent to mitigate impacts and the loss of revenue by small, local businesses that make their livelihood fishing or working the land, in addition to the cost to the natural environment of such a loss of habitat (US Global Change Research Program Fourth National Climate Assessment).

## CLIMATE CHANGE

Climate change includes both global warming driven by human emissions of greenhouse gases and the resulting large-scale shifts in weather patterns.

Climate change efforts can be in the form of mitigation, reducing activities that add to climate change, and adaptation, adapting to the changes in the climate that are currently occurring. Both mitigation and adaptation efforts will need to be implemented to protect the region from the impending negative impacts of climate change.

The way communities develop has significant impacts on greenhouse gas emissions. Fundamental to this is for the City to support and require Smart Growth measures to manage the impacts of climate change as it relates to land use and development. This can be done through both mitigation and adaptation measures to help reduce greenhouse gas emissions from development and redevelopment projects.

Some mitigation efforts include the preservation of greenspace (particularly ecologically valuable land), preservation of existing trees and/or requiring the planting of new trees, limiting the amount of impervious surfaces permitted, transitioning from fossil fuels to renewable, clean energy sources, and implementing land use regulations and capital improvement plans that limit development and infrastructure in areas at risk of sea level rise impacts. All new infrastructure should be designed with climate change in mind.



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The city is already seeing the effects of climate change, and these effects are projected to become more pronounced in the coming decades. Impacts will include more and stronger storms, more drought, more frequent extreme-heat events, rising sea levels, and more localized flooding. Recognizing what specific changes might be projected for the city is essential to planning the community's future land use.

Adaptation efforts include elevating roads, lift stations, drinking water and other facilities where feasible, building flood defenses, preparing for reduced water availability, and planning for heatwaves. Adaptation efforts are oftentimes costly, will eventually become ineffectual, and shift impacts to the poorest of people who cannot afford to adapt, as well as to future generations. It is a delicate balancing act to attempt to protect natural resources, public safety, and the economic stability of the community while implementing efforts to address climate change. Successful outcomes will depend on multi-jurisdictional cooperation in the development and implementation of policies that incorporate mitigation and adaptation measures.

The implementation of smart strategies can help the community adapt to these changes as well as other challenges that could arise regardless of climate change. Four main challenges facing Garden City include:

#### URBAN INFRASTRUCTURE AND HEALTH RISKS:

Garden City is particularly vulnerable to climate change compared to cities in other regions, with expected impacts to infrastructure and human health. The vibrancy and viability of this area, including the people and critical regional resources located within it, are increasingly at risk due to heat, flooding, and vector-borne disease brought about by a changing climate. Garden City is rapidly growing and offers opportunities to adopt effective adaptation efforts to prevent future negative impacts of climate change.





#### **FLOOD RISKS IN COASTAL AND LOW-LYING REGIONS:**

Garden City's inland low-lying area supports a rapidly growing population, a tourism economy, critical industries, and important cultural and natural resources that are highly vulnerable to climate change impacts. The combined effects of changing extreme rainfall events and sea level rise are already increasing flood frequencies, which impacts property values and infrastructure viability. Without the implementation of significant adaptation measures, the area is projected to experience daily high tide flooding by the end of the century.

#### **NATURAL ECOSYSTEMS WILL BE TRANSFORMED:**

Garden City's diverse natural systems, which provide many benefits to the community, will be transformed by climate change. Changing winter temperature extremes, wildfire patterns, sea levels, hurricanes, floods, droughts, and warming ocean temperatures are expected to redistribute species and modify ecosystems. As a result, the ecological resources that our community depend on for livelihood, protection, and well-being are increasingly at risk, and future generations can expect to experience and interact with natural systems that are much different than those that we see today.

#### **ECONOMIC AND HEALTH RISKS FOR MORE RURAL AND LOW-INCOME COMMUNITIES:**

More frequent extreme heat episodes and changing seasonal climates are projected to increase exposure-linked health impacts and economic vulnerabilities in our manufacturing, fishing, and shrimping sectors. Projected warming ocean temperatures, sea level rise, and ocean and coastal acidification are raising concern over future harvests. By the end of the century, over one-half billion labor hours nationally could be lost from extreme heat-related impacts. Such changes would negatively impact the region's labor-intensive occupations and compound existing social stresses in the community's low-income areas.

While adaptation and resilience can help to moderate climate change impacts, areas of the city facing other stressors, such as poverty and limited access to healthcare, will be less resilient and will have a harder time coping with these climate-related challenges. Heat-related stresses are presently a major concern with future temperature increases projected to pose challenges for human health. While recent regional temperature trends for Chatham have not shown the same consistent rate of daytime maximum temperature increase as observed in other parts of the United States, climate model simulations strongly suggest that daytime maximum temperatures are likely to increase as greenhouse gases continue to be emitted into the atmosphere.

The resulting temperature increases are expected to add to the heat health burden in both Garden City's more rural and urbanized areas. Additionally, drought has been a recurrent issue affecting the community's water resources. With rapid growth in population and overall demand, drought is increasingly a concern for the local jurisdictions' water resource managers, as well as our ecosystems, and energy producers.



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# HEAT ISLANDS & CLIMATE CHANGE

While Garden City's population has remained steady, potential new developments, the built environment will be altered in a way that significantly affects the natural environment surrounding it. The replacement of open, vegetated land with the dark, impervious surfaces that characterize cities modifies the local temperature and moisture characteristics, contributing to a climatological phenomenon known as the urban heat island effect.

*The urban heat island effect can cause cities to have temperatures up to 10°F hotter than their more rural surroundings*  
—UCAR Center for Science Education

Generally, heat islands are grouped into two distinct categories: surface heat islands and atmospheric heat islands. Surface heat islands are simply the elevation in temperature of surfaces in urban areas over surfaces in the surrounding rural areas, while atmospheric heat islands directly impact the thermal comfort and health of people and animals in an area. Surface heat islands are present at all times, but are often most intense during the day when urban materials receive the most solar radiation.

Additionally, surface heat islands are not heavily influenced by the anthropogenic heat sources that affect the air temperature of a city, such as transportation vehicles or heating and cooling units.

## URBAN HEAT ISLAND EFFECT

Heat islands are urbanized areas that experience higher temperatures than outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies.

—EPA

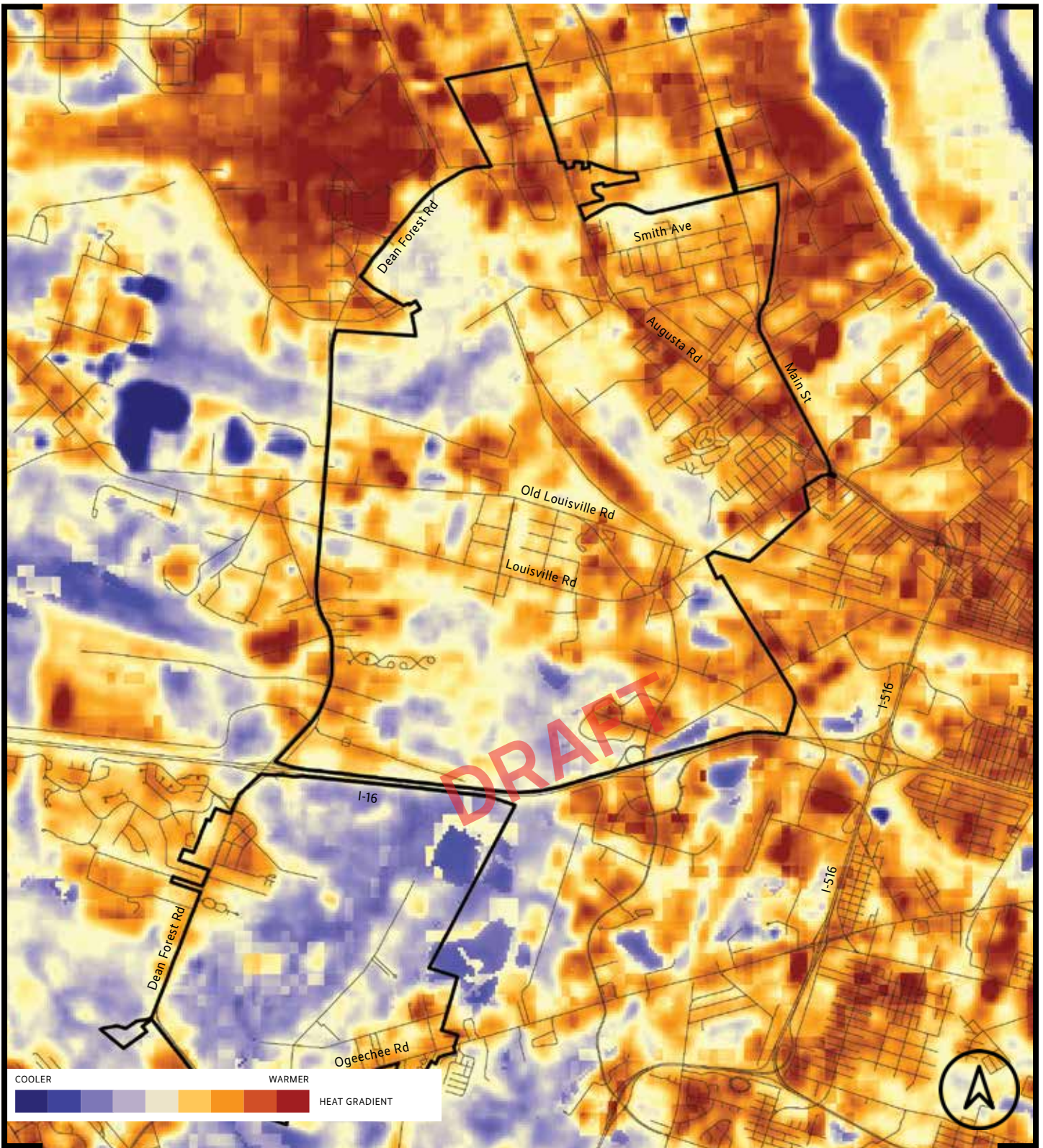
Temperatures vary within cities, too. Areas that are well-shaded or have ample green space are cooler than areas covered with asphalt or concrete. Historically, neighborhoods with little or no vegetation have been inhabited by minority communities and those with low socioeconomic status, exposing them to increased heat and the negative consequences associated with it. Land surface temperatures for a portion of Chatham County are shown in Map 7.11.

It is important to understand and consider these environmental inequalities when working to improve our community for all residents.



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Map 7.11–Land Surface Temperatures, Garden City

# SMART GROWTH & CLIMATE CHANGE

Smart growth policies contribute to both mitigating and adapting to climate change. Mitigation strategies reduce greenhouse gas emissions from development, and adaptation strategies make communities more resilient to the effects of a changing climate

Smart growth strategies also bring environmental benefits and provide economic advantages to local governments and the private sector. In addition, they can save people money on energy and transportation, which is particularly important for low-income residents, and help protect human health.



## Mitigation

The way communities are developed has significant impacts on greenhouse gas emissions. Garden City can reduce greenhouse gas emissions from development and redevelopment if they:

- Build compactly and use energy-efficient, green building techniques, which reduce emissions from both electricity generation and transportation.
- Reuse existing infrastructure and buildings to take advantage of previous investments and the energy already used to build them.
- Put homes, jobs, stores, parks, schools, and other destinations close to each other so that people can easily walk, bike, use public transit, or drive shorter distances.
- Preserve green space, which can sequester CO<sub>2</sub>, by conserving ecologically valuable land and promoting development in previously developed areas, which helps reduce pressure to build on undeveloped land.

### LOOKING FOR MORE INFORMATION?

The most current information about smart growth strategies and their environmental benefits can be found at the link below...

<https://www.epa.gov>



## Adaptation

As noted earlier, the effects of climate change are already being seen, and these effects are projected to become more pronounced in the coming decades. Impacts could include more and stronger storms, more drought, more frequent extreme-heat events, continual rising sea levels, and more flooding.

Smart growth strategies could help the community adapt to these changes, as well as natural disasters, economic changes, and other challenges that could arise regardless of climate change. Some strategies we should consider include:

- Determine which areas are both well-connected to existing development and less vulnerable to current and projected climate change impacts such as sea level rise and higher storm surges, and riverine flooding, and encourage growth in these areas
- Discourage building in areas that are currently or are projected to be more vulnerable to climate change-related impacts. Making it easier to build in safer areas can help relieve pressure to develop in more vulnerable areas
- Preserve large, contiguous areas of open space to better protect ecosystems that might be under pressure from the changing climate. Open space preserved along water bodies can also absorb flood waters and reduce flooding in developed areas
- Coordinate land use and transportation infrastructure decisions, and incorporate climate change projections into these decisions

- Encourage water-and energy-efficient buildings and land use patterns so that communities can continue to thrive if energy prices rise. This strategy can also help communities and their residents better cope with drought and extreme heat
- Upgrade stormwater systems to better manage heavier storm flows and use green infrastructure to reduce the amount of runoff from paved surfaces
- Encourage green roofs, parks, street trees, and other elements that can reduce ambient air temperatures and filter pollutants from stormwater runoff and the air
- Design buildings with adaptation and resilience in mind.

Recognizing the long-term challenges associated with climate change and taking proactive steps to adapt will allow the city to be much more prepared to retain population while moving residents away from danger.



Photo Credit: Cody Thomas



# SEA LEVEL RISE

Concerns of sea level rise and the negative impacts associated with it are resulting in many coastal communities considering implementing measures to reduce risks to private property owners and public investments. It is important to identify what areas are at risk and gauge the level of risk, or severity of impacts, for each area in order to determine the most appropriate means to protect it.

Land use regulations, land purchase/buyout programs and policies that do not allow for the investment of public funds for infrastructure or other development in areas at risk for flooding due to sea level rise reduce the number of vulnerable structures and infrastructure, while efforts such as the elevation of existing roads or lift stations mitigate the impacts on existing investments. It is more costly to mitigate than to prevent development in areas that are at a higher risk. All future capital improvement projects should include an assessment of potential sea level rise impacts through the expected life cycle design of the projects.

In an effort to have the information necessary for making decisions about future needs and infrastructure investments, Garden City completed a “Safe Growth Audit” to assess the vulnerability of the city to future changes and hazards. The Safe Growth Audit was completed in 2013 and provides actionable information for the city to use in developing plans and implementing appropriate capital improvement projects that can increase the resilience of the regional stormwater, transportation, and other related systems to future conditions.

Sea level data recorded at the tide gauge at Fort Pulaski, just 20 miles from Garden City, begins in 1935 and indicates a historic sea level rise trend of approximately one foot over 100 years. More recent global data and local data from Fort Pulaski suggest that this rate is accelerating, although there remains a high degree of uncertainty within the future projections.

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FORT PULASKI



### PLAN 2040 SURVEY

The MPC's Plan 2040 survey asked how important was "Promoting sustainability energy sources, including solar and other sources of clean and renewable energy?"

Ninety-two percent (92%) of the respondents felt that this objective was either very important, important, or mildly important for the city to work on.

A full copy of the survey and the results can be found in Garden City 2040 Appendix.

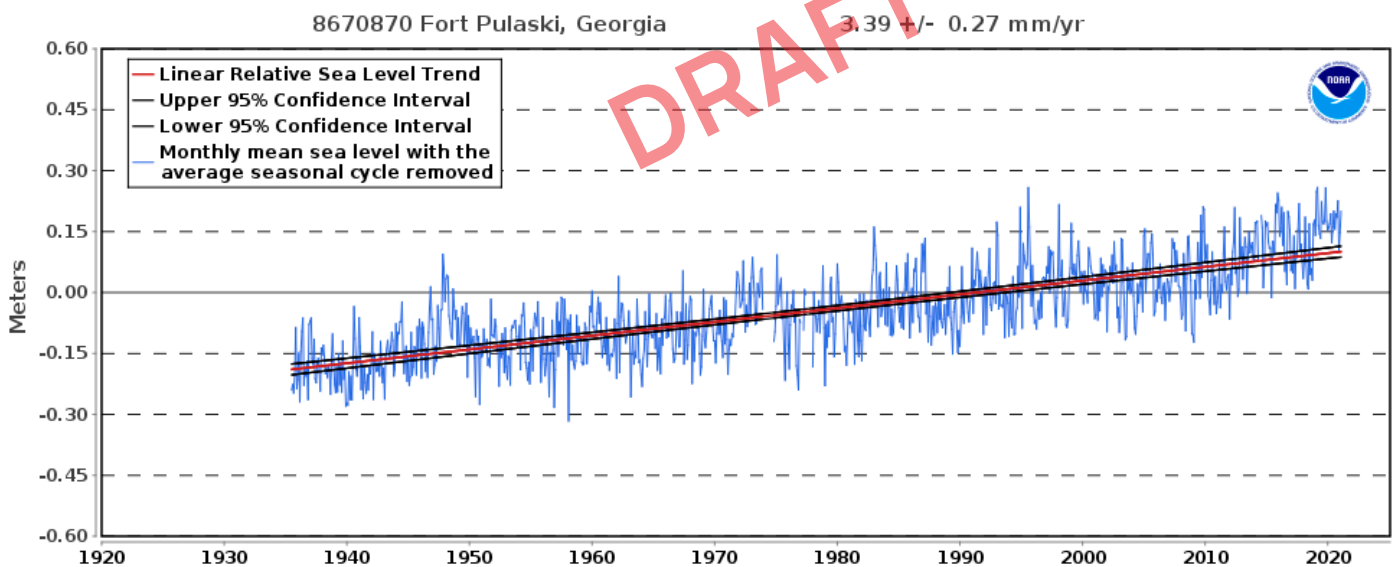


Figure 7.9–Local Increasing Sea Level Trends

# RESILIENCY & LOCAL PREPAREDNESS

All communities are vulnerable to the potential impacts of an event, such as a hurricane, pandemic, or infrastructure failure, that can cripple the routine of residents, business, industry, infrastructure, and government services.

Community resiliency includes implementing safeguards so that all members of the community are better prepared for such events, ensuring that all of the community will bounce back and flourish as quickly as possible following the event.

Community resiliency also protects against more common occurrences such as sea level rise, sunny day flooding, and severe economic inequities. Building a strong network focused on addressing equity gaps and elevating vulnerable populations is necessary in creating a truly resilient community.

## Community Resiliency Stats

Increase in Extremely Hot Days\*

82%



Within 25 Years

Increase in Days with Heavy Precipitation \*

2%



Within 25 Years

\*Headwaters Economics



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## Coastal Empire Resilience Network

The Metropolitan Planning Commission began work in 2020 to expand previous work done around sea level rise impacts along Chatham County's coast. The MPC began partnering with the City of Savannah, University of Georgia, Georgia Sea Grant, Georgia Department of Natural Resources Coastal Resources Division, and others to develop a Coastal Empire Resilience Network (CERN).

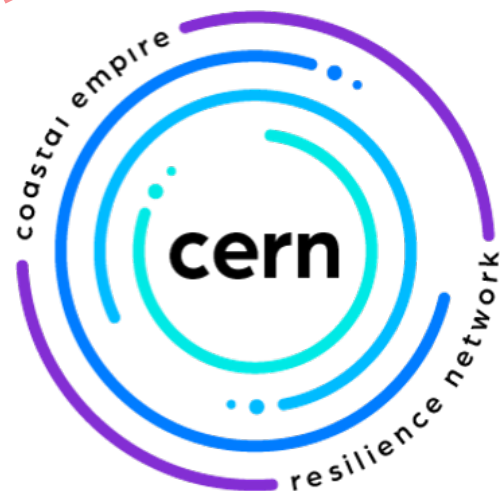
The CERN will engage regional community partners, municipal staff, and policymakers to coordinate strategies to address the physical, economic, and social challenges that the region faces due to climate change and other hazards. Also included will be an effort to ensure all local level policy makers have adequate education on climate change and sea level rise. CERN will work to align regional strategies, share resources, and advocate for collective action to improve the resilience of the coastal region.

### CLIMATE RESILIENCE

Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate. Improving climate resilience involves assessing how climate change will create new, or alter current, climate-related risks, and taking steps to better cope with these risks.

—Center for Climate and Energy Solutions

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## Hurricanes

Hurricane season officially runs from June 1 through November 30, with the peak period for hurricane development in early to mid-September. Over the last decade there has been an increase in both frequency and intensity of storms during hurricane season due to increasing water temperatures. In addition, the rising sea level has resulted in higher storm surges in these storm events, most recently in 2016 with Hurricane Matthew (Category 2 off Chatham coast), Hurricane Michael in 2018 (Category 1–Tropical Storm in Georgia), and Dorian in 2019 (Category 3 off Chatham coast).

The six coastal counties at highest risk of evacuation because of storm surge are Bryan, Camden, Chatham, Glynn, Liberty and McIntosh. The hurricane threat in Chatham County is high since Georgia’s coastline is impacted from tropical systems from both the Atlantic Ocean and the Gulf of Mexico.


Population growth along the coast has complicated the evacuation and sheltering process. Millions of residents and tourists from Georgia and its neighboring states of Florida, North Carolina, and South Carolina jam highways in search of safety and shelter when evacuation orders are issued. And often, just the threat of a hurricane is enough to put voluntary and mandatory evacuation orders into effect.

Improved forecasting and warning capabilities have diminished hurricane-related deaths in the 20th century; however, damage to property has increased with the rapid growth along coastal regions. For this reason, population growth, flood plain management, and housing development issues are carefully monitored by government and municipal agencies to ensure that all of the coastal communities and their inhabitants are safe for years to come.

## COVID-19 Impacts

COVID-19s impact on the environment has been mixed. Although the pandemic resulted in improved environmental conditions, there have been other negative effects, some of which are obvious, others less so.

In short, the positive effects have been reduced greenhouse gas (GHG) emissions, improved water quality, reduced noise pollution, improved air quality and in some cases, wildlife restoration. However, some negative effects have also increased such as the amount of medical waste, haphazard disposal of PPEs (i.e., face masks), increased municipal waste and reduced recycling efforts. Building back with sustainability in mind will be critical for our future success.



### HURRICANES

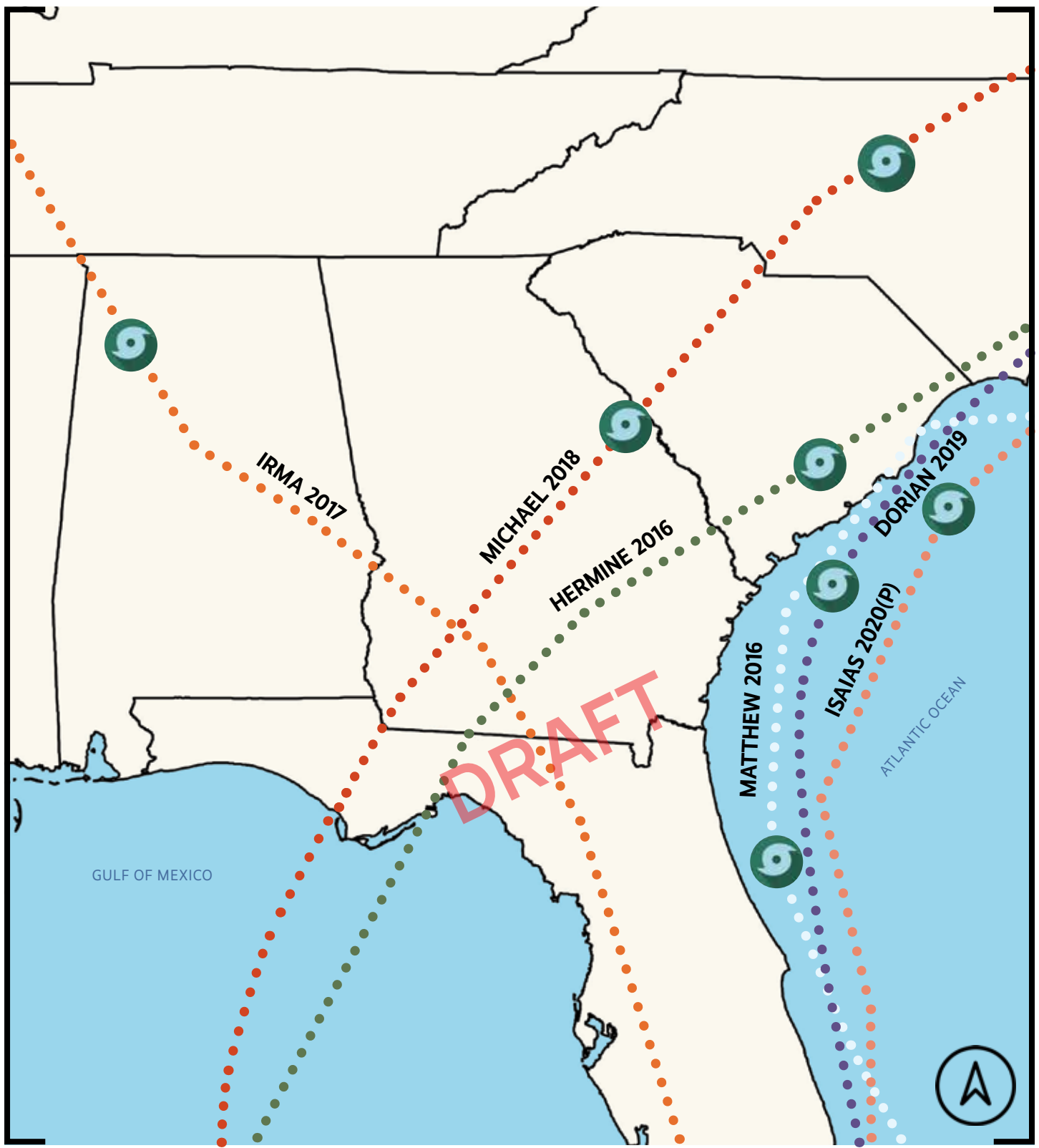
A hurricane is a type of storm called a tropical cyclone, which forms over tropical or subtropical waters... When a storm's maximum sustained winds reach 74 mph, it is called a hurricane. The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating, or category, based on a hurricane's maximum sustained wind.

—NOAA

## Hurricane List 2016–2020

Storm Name	Date Range	Max Wind Speed	Min Pressure	Max Category
Hermine 2016	8.28.16–9.08.16	70	981	H1
Matthew 2016	9.28.16–10.10.16	145	934	H5
Irma 2017	8.30.17–9.13.17	155	914	H5
Michael 2018	10.06.18–10.15.18	140	919	H5
Dorian 2019	08.24.19–09.09.19	160	910	H5
Isaias 2020	7.23.20–7.05.20	75	987	H1

Figure 7.14–Hurricane Categorization



Map 7.12-Hurricane Paths



# PLANNING ISSUES & OPPORTUNITIES

In order to determine the adequacy of existing policies and programs, a thorough assessment of both is needed. This will ensure that resources are utilized, developed, managed, and preserved

After careful review, the following list was created to highlight the points that will need careful attention in the future.

## COASTAL RESOURCES:

More intense local programs and development standards for marsh, wetland, and island protection need to be established, implemented, and maintained. There is also a strong need for those natural resource sites in need of protection to be identified and ultimately “protected” through a number of means: possible acquisition using SPLOST funds, zoning, conservation easements, donation, etc. Also in need of continued protection are those coastal species of flora and fauna in danger of population decline and extinction. The previously active Chatham County Resources Protection Commission (CCRPC) was a viable mechanism for this type of protection effort; however, due to discontinued funding, the program has stalled as of 2021.



## LOCAL IMPACT OF COVID-19

COVID-19's impact on the environment has been mixed. Although the pandemic resulted in improved environmental conditions, there have been other negative effects, some of which are obvious, others less so.

In short, the positive effects have been reduced greenhouse gas (GHG) emissions, improved water quality, reduced noise pollution, improved air quality and in some cases, wildlife restoration. However, some negative effects have also increased such as the amount of medical waste, haphazard disposal of PPEs (i.e., face masks), increased municipal waste and reduced recycling efforts. Building back with sustainability in mind will be critical for our future success.

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### **EFFICIENT LAND USE:**

Maximizing the use of existing infrastructure and minimizing the costly conversion of undeveloped land at the periphery of the community should continue. This is achieved by encouraging development or redevelopment of sites closer to the traditional core of the community and focused around transportation; designing new development to minimize the amount of land consumed; carefully planning investment in public infrastructure; and maintaining open space and conservation uses.

Enhancements to the existing regulations to require and/or incentivize open space preservation are needed. Both data and public feedback have shown that the community is calling for development that minimizes the amount of land consumed and allows for more open space to be set aside from development for public use as parks, greenways, and wildlife corridors.

### **PARK, RECREATION, AND CONSERVATION AREAS:**

Too often laws are not sufficient to protect conservation sites from adjacent development impact. More restrictive zoning regulations and buffer requirements may be needed in the future to limit or prohibit future uses in these areas. In addition, the CCRPC program cited above could be a possible viable mechanism for increasing the number of permanently protected areas within the city should funding again become available.

### **WEST CHATHAM COUNTY GROWTH:**

Rapid growth in western Chatham County has led to separate, unique challenges for Garden City. A strong program for natural resource protection is needed to ensure that the area's isolated wetlands, tree canopies, and greenspace are not lost due to development.

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## **BROWNFIELDS:**

A brownfield is an abandoned or underused industrial or commercial property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

While traditionally seen as an urban issue, brownfields exist in suburban and more rural areas as well. Consider the former gas station, dry cleaners, landfill, an old rail yard or abandoned junk yard. Soil, water, and air contamination can be caused by many different land use activities.

Cleaning up and reinvesting in these properties can increase the local tax base, facilitate job growth through job creation, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, both improves and protects the environment, and by removing blighted property, builds ties among residents, businesses, and all parties involved.

There are programs at both the Federal and State level that may be able to support revitalization efforts by funding environmental assessment, cleanup, and job training activities for the community to encourage redevelopment of these underutilized properties.

To date, there has not been a comprehensive effort to survey, assess, and inventory properties that may qualify as brownfields. However, the city of Savannah has begun a brownfield program within the city's Sustainability Office and is currently targeting sites for initial assessments along the Martin Luther King, Jr/Montgomery Street corridor from Bay Street to 52nd Street. The importance of using these properties throughout the county as a strong redevelopment tool cannot be understated and similar efforts should be expanded countywide.

## **STORMWATER:**

Garden City's stormwater utility allows for comprehensive maintenance, management, and treatment of the City's stormwater systems. Stormwater Best Management Practices (BMPs) such as Low Impact Development (LID) strategies that reduce stormwater runoff must continue to be implemented elsewhere throughout the county to lessen the impacts of runoff on the entire coastal environment. Additionally, all of the jurisdictions within Chatham County need to collectively discuss stronger, more unified options for handling stormwater and flood waters related to growth on a countywide scale.

## **SALTWATER INTRUSION:**

Saltwater intrusion into the Floridan Aquifer system needs to continue being addressed regionally to ensure the protection of the coastal area's groundwater source of drinking water. An update of the Red Zone Water Management Plan needs to be completed to determine the city's capacity for growth.

## **SOLID WASTE:**

Solid waste control and disposal need to be evaluated and addressed on a regional basis to allow for a more thorough approach to management, reduction, and continued capacity for the coastal areas. This effort should include the reduction of waste streams through recycling, composting, and mulching of yard waste.

## **SEA LEVEL RISE:**

The city needs to continue to evaluate and update current building standards, zoning code, and related regulations to ensure the adequate protection of the existing built environment, the design of future construction, and the resiliency of the natural environment to periodic permanent inundation over time due to sea level rise.



## LOCAL PREPAREDNESS:

Chatham County's Disaster Recovery Plan (DRP) overseen by the Chatham Emergency Management Agency (CEMA) is a multi-phase effort to help the County address the complications that can arise following a disaster as the community attempts to rebuild and recover. The DRP is the tool that can identify and put in place the prerequisites for the type of future the community seeks to achieve. Additionally, the Countywide Hazard Mitigation Plan outlines specific hazards and highlights areas being focused on to become a more resilient community. Continued efforts are needed around planning for infrastructure (roads, water, sewer, hospitals, housing) to pinpoint where to direct new growth.

## DEMOGRAPHIC DISPARITIES:

COVID-19 has highlighted the social inequities within the community. Additionally, some residents most at risk to the more intense heat over the past number of years include the elderly, people with schizophrenia and other diseases that make it difficult to regulate body temperature, and those living in low-income neighborhoods linked to ongoing inequities. Summertime temperatures in neighborhoods with fewer trees that were also once discriminated against under redlining policies roughly a century ago are often 5-plus degrees hotter than in a tree-heavy neighborhood.

Many low-income neighborhoods are also located in low-lying areas where recurring flooding occurs. Stronger policies and requirements to ensure the tree canopy is expanded, open/green space is added, and flooding is prevented in the area's low-income communities is crucial to break the cycle of disinvestment in these deserving areas.

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# QUALITY OF LIFE ELEMENT

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## QUALITY OF LIFE

### Introduction

The Historic and Cultural element of Garden City 2040 seeks to present goals and recommendations for establishing historic preservation activities within Garden City in order to preserve and recognize its historic, cultural, and archaeological resources.

This element includes an inventory and assessment of the following quality of life aspects: Historic and Cultural Resources, Education, Health, Public Safety, and Broadband.



**Historic Resources**



**Public Safety**



**Education**



**Broadband**



**Community Health**

# HISTORIC & CULTURAL RESOURCES

## Introduction

Historic preservation, synonymous for many with quality of life, is a valuable planning tool that can be used to protect buildings, objects, landscapes, and other artifacts of historical, cultural, and archaeological significance. Historic preservation work can take many forms; however, the main two ways to preserve buildings locally are through federal registration as a National Landmark or District on the National Register of Historic Places and local protection through establishing historic districts and/or preservation ordinances.

The National Register of Historic Places is a federal program which allows for individual or a group of structures/sites to be officially recognized as historically significant. This provides opportunities for preservation tax incentives, but otherwise may not offer protection of the resource when it comes to demolition or significant alterations. Local historic districts are comprised of a group of historic structures/sites deemed significant to a municipality's cultural fabric and are often protected through a public review process as outlined in a preservation zoning ordinance.



### NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places (NRHP) is the United States federal government's official list of districts, sites, buildings, structures, and objects deemed worth of preservation for their historical significance.

Preservation efforts in Garden City have been limited; the last known historic resources survey was conducted in 1993 by Metropolitan Planning Commission (MPC) staff. The Dotson House was identified as potentially eligible for listing in the National Register of Historic Places. However, the house was moved from its original location to the town center and then later demolished in 2020. No major local historic preservation efforts have been pursued.



## 1993

Since the last known historic resource survey was conducted by the MPC

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# GARDEN CITY HISTORY

## The Irene Mounds

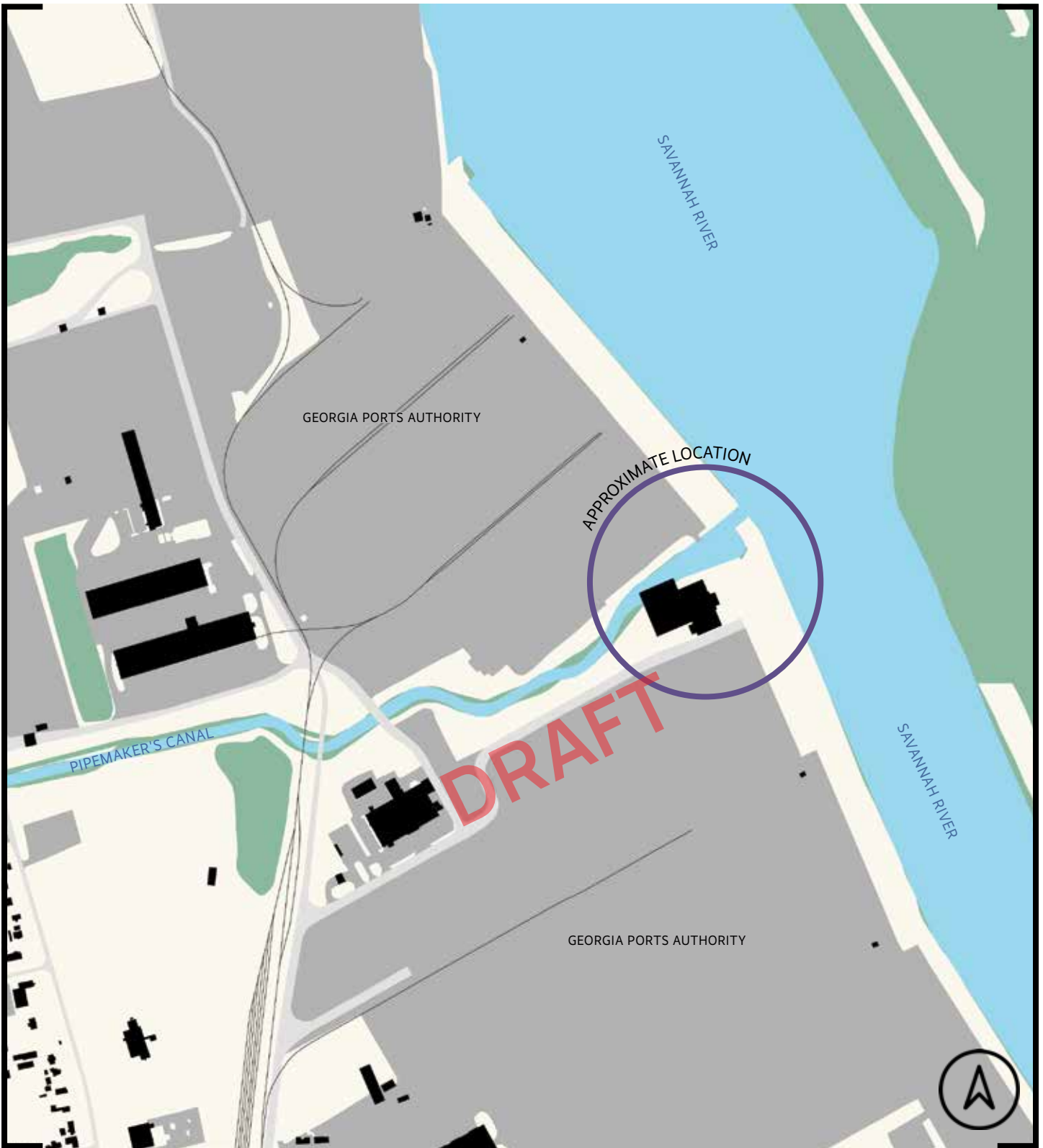
The area now known as Garden City began with Indigenous peoples, whose presence is indicated by the Irene Mounds. The site was occupied during the Middle and Late Mississippian period (A.D. 1100–1600) and likely abandoned before the Europeans began to visit the Georgian coast. The Irene Mounds were located on the Savannah River; Pipemaker's Creek served as one boundary and a small ditch served as the other.

The name Irene comes from the missionary school which was established by the Morovians (immigrants from modern day Czech-Republic) in the 1700s; remnants of the building remained on the Temple Mound when archaeological excavation began in the 1930s. This archaeological excavation is notable as the most completely excavated mound site in Georgia and as an excavation which was completed almost entirely by women. While the project was run and passed between four men, women made up the majority of the workforce. Between the years of 1937 and 1940, 32 white women and up to 87 Black women were involved in the excavation of the Irene Mounds.

The women were poorly paid, and the Black women were paid even less than their white counterparts. Almost all of the identities of the Black women who worked the site are unknown, though several photographs of the women exist (*Rashid and Grieve, TrowelBlazers*). The major features of the Irene Mounds included “a large rectangular, flat-topped mound called the Temple Mound; a small conical mound with much shell and several burials called the Burial Mound; and a square building and surrounding wall at ground level in the village with many burials named the Mortuary” (*Williams, New Georgia Encyclopedia*).

The site is now interpreted as a Chiefly Compound, meaning that the full-time resident population was around thirty to forty people, consisting of the chief, and his family, wives, and children. The compound also served as a social site for all other families which lived nearby and as a place for meetings. Residents grew corn and beans, and likely relied on coastal resources such as fish and shellfish. The Irene Mounds are now completely destroyed and lie under the ship docks of the Georgia Ports Authority, as can be seen on the map below.





Map 8.1—Approximate Location of The Irene Mounds

## Garden City Plantations & Pipemaker's Canal

Later in the 18th Century, as the European colonists came to the Savannah area, three major plantations were established, encompassing what is now Garden City: Brampton, the Givens (or Whitehall), and Telfair. The Brampton Plantation was situated on the banks of the Savannah River and Jonathan Bryan, a Revolutionary soldier, named and directed the plantation for over two decades. The Givens, or Whitehall, plantation was originally the estate of lawyer and statesman Thomas Gibbons. The estate consisted of land along the Savannah River and the north side of Pipemaker's Creek, which was used for rice and cotton cultivation.

Pipemaker's Creek was converted into Pipemaker's Canal gradually over the span of about 100 years. The creek originally formed the boundary between the Whitehall plantation and Rae's Hall, which encompassed 450 acres of land that included the Irene Mounds. The first conversion of the creek to a canal was completed by enslaved Africans at the Whitehall plantation in 1834. Conversion did not occur again until between 1896 and 1906, when a significant expansion occurred, likely through City and County drainage projects. By the 1920s, the canal was expanded again to its approximate finished length. When suburban development came to West Chatham County, the canal was utilized to drain wet areas to accommodate new development.

## Industrial City Gardens to Garden City

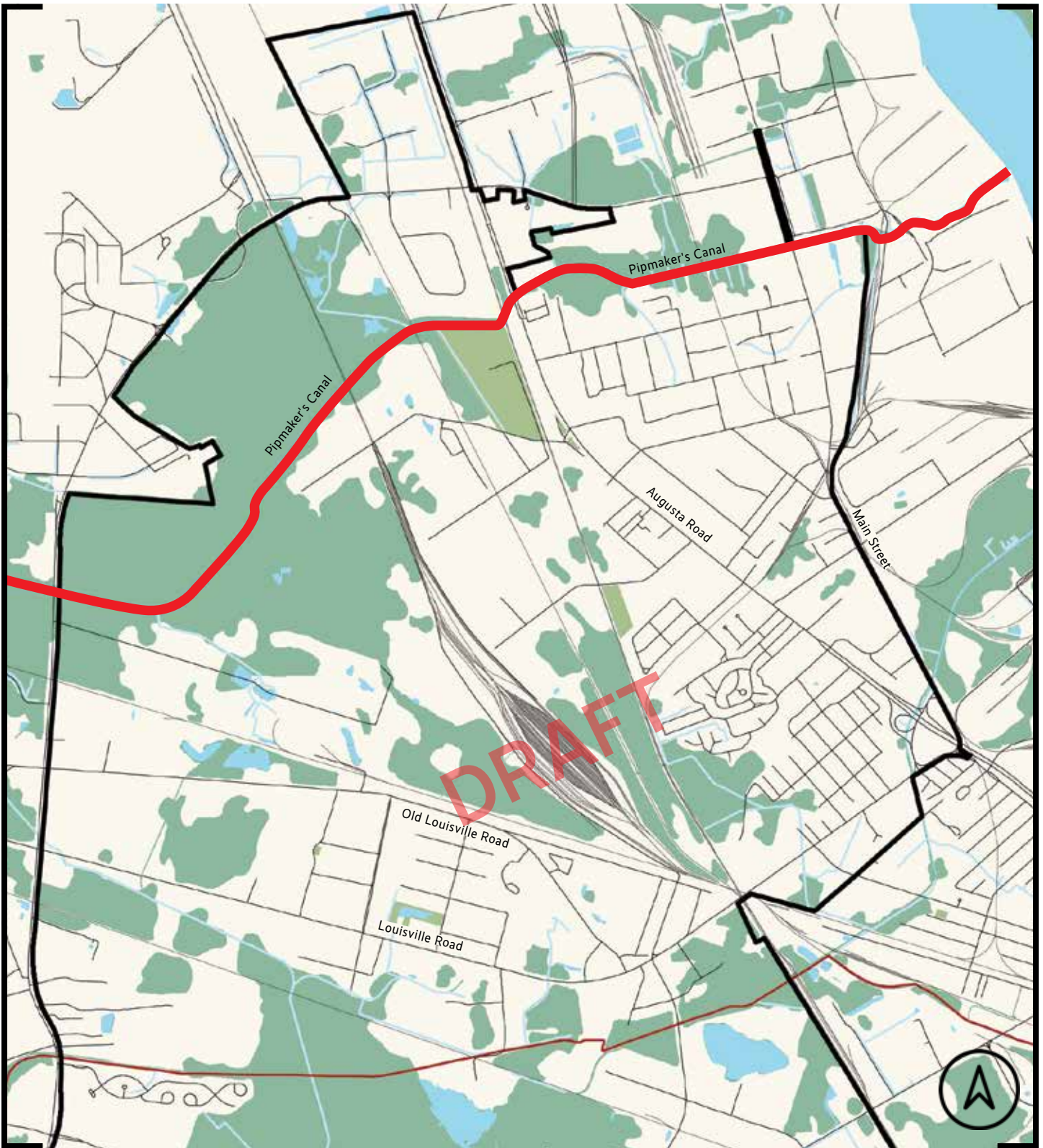
In 1863, freed enslaved families relocated from the plantations and established settlements in the land along what is now Augusta Road from Rossignol Hill to Pipemaker's Canal. The major trades in the area at the time were farming and milling.

The descendants of these first families were there to witness the new residential development spurred by Lewis Hampton Smith in the 1930s. During this time, Smith began to develop Industrial City Gardens, as it was first called, in a triangular wooded area bounded by what is now Smith Avenue, Georgia Highway 21 and U.S. 17. His intention was to provide affordable lots that were large enough for a vegetable garden and livestock. In the beginning, many residents kept cows, chickens, and goats on their property. The gates which welcomed residents into Industrial City Gardens were identified in a 1992 historic resources survey as being located at 30 Main Street.

On February 8, 1939, the residents of Industrial City Gardens were granted a charter of municipal incorporation by the Superior Court of Chatham County. Two years later, a new charter was enacted which changed the name to Garden City, as many residents felt that the name was too long and implied a mill town.

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Map 8.2-Pipemaker's Canal

# EXISTING HISTORIC RESOURCE SURVEY

A historic resources survey collects and records information about historic buildings, structures, sites, landscapes, and objects, collectively known as resources, within a given area and provides detailed information through photographs and field notes. Historic resource surveys are vital to the planning and preservation process and promotes awareness of a community's historic and cultural resources.

The last known historic resources survey was conducted in 1992/1993, in which 36 resources were surveyed and considered for National Register eligibility. Only one building, which has been since demolished, was identified as being potentially eligible for registration in the National Register of Historic Places. The following chart lists the 36 resources which were surveyed in Garden City:

## Historic Places: National Register Eligibility—Garden City

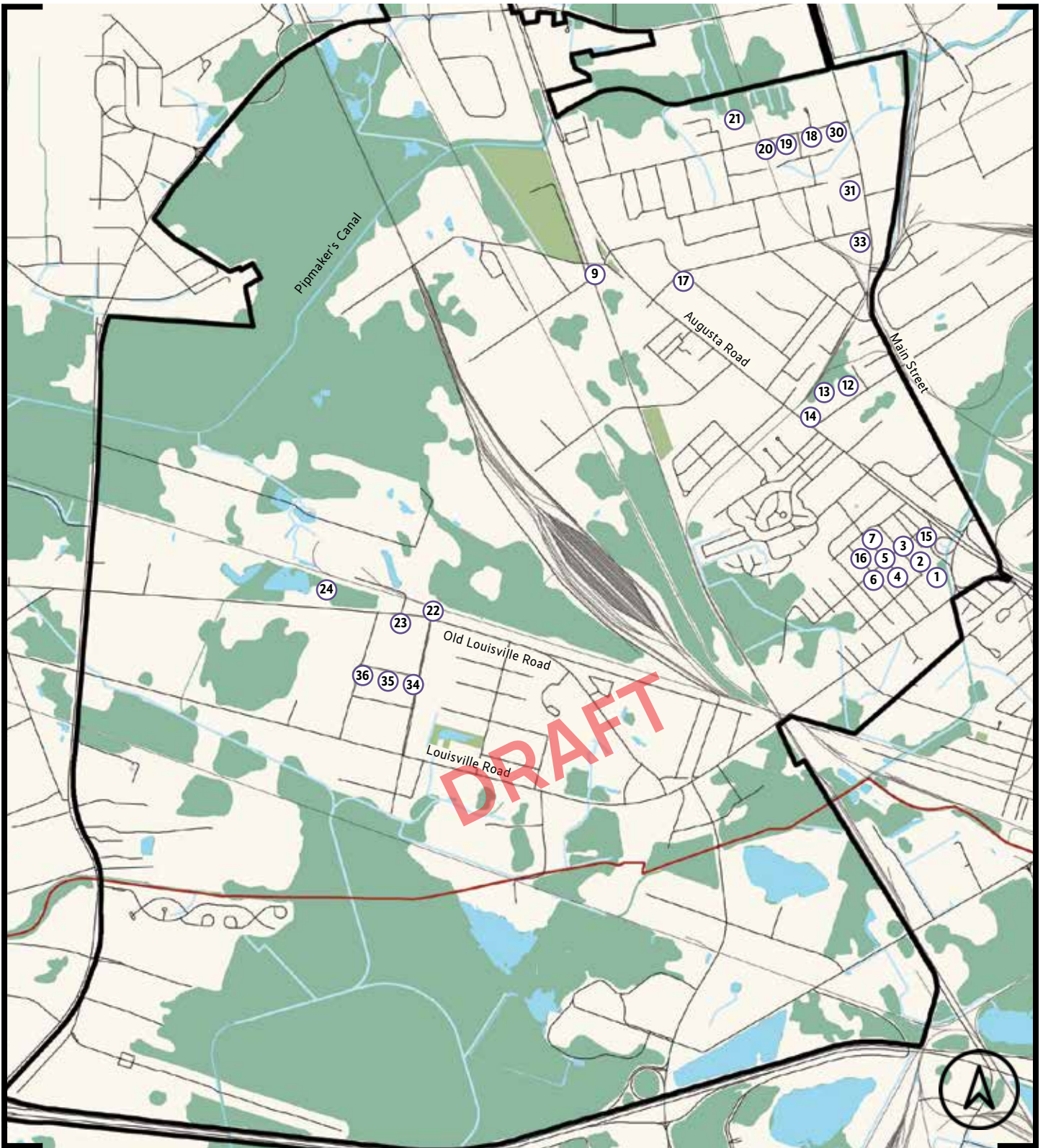
	Address	Year Built
1	4016–18 1st Street	1920
2	4022 1st Street	1910
3	4024 1st Street	1910
4	4019 3rd Street	1910
5	4025 3rd Street	1900
6	Rossignol–Minis House—4026 3rd Street	1890
7	4106 3rd Street	1910
8	George Dotson House—4912 Augusta Road	1850
9	Clifton Baptist Church—100 Big Hill Road	1914
10	Oak Grove Brampton Road	1840
11	Brampton Cemetery—2 Brampton Road	1783
12	52 Brampton Road	1930
13	64 Brampton Road	1929
14	68 Brampton Road	1928
15	216 Davis Avenue	1930
16	413 Davis Avenue	1940
17	Frank F. Baker Masonic Lodge—131 Rommel Avenue	1941
18	11 Smith Avenue	1920

	Address	Year Built
19	39 Smith Avenue	1935
20	51 Smith Avenue	1935
21	80 Smith Avenue	1939
22	4602 Old Louisville Road	1860
23	Oak Grove Baptist Church—4617 Old Louisville Road	1915
24	4806 Old Louisville Road	1870
25	4906 Old Louisville Road	1900
26	Thompsons' Tourist Home—28 Main Street	1937
27	Industrial City Garden Subdivision Gate—30 Main Street	1932
28	33 Main Street	1925
29	35 Main Street	1935
30	Good Shepherd Lutheran Church—41 Main Street	1937
31	Chapel in the Gardens Presbyterian—93 Main Street	1941
32	120 Main Street	1910
33	125 Main Street	1930
34	2607 13th Street	1915
35	Live Oak Grove—2613 13th Street	1800
36	2617 13th Street	1920

Figure 8.1—Historic Places—Garden City

DEMOLISHED OR UNDER REVIEW; THIS IDENTIFICATION IS NOT EXHAUSTIVE





Map 8.3-Historic Places



# RECOMMENDED HISTORIC RESOURCE SURVEY

Updating and expanding the historic resources survey ensures that those resources which are vital to the history of Garden City are known and potentially protected. Without this knowledge, further preservation efforts cannot be pursued. Moving forward, areas of Garden City which would be appropriate for a new or updated historic resources survey must be identified. Neighborhoods and other areas over 50 years old, which maintain a high level of integrity, should be evaluated based on interest from the community, threat of loss, and size of area to identify places that may benefit from historic resources surveys.



## RECOMMENDED HISTORIC SURVEY AREA

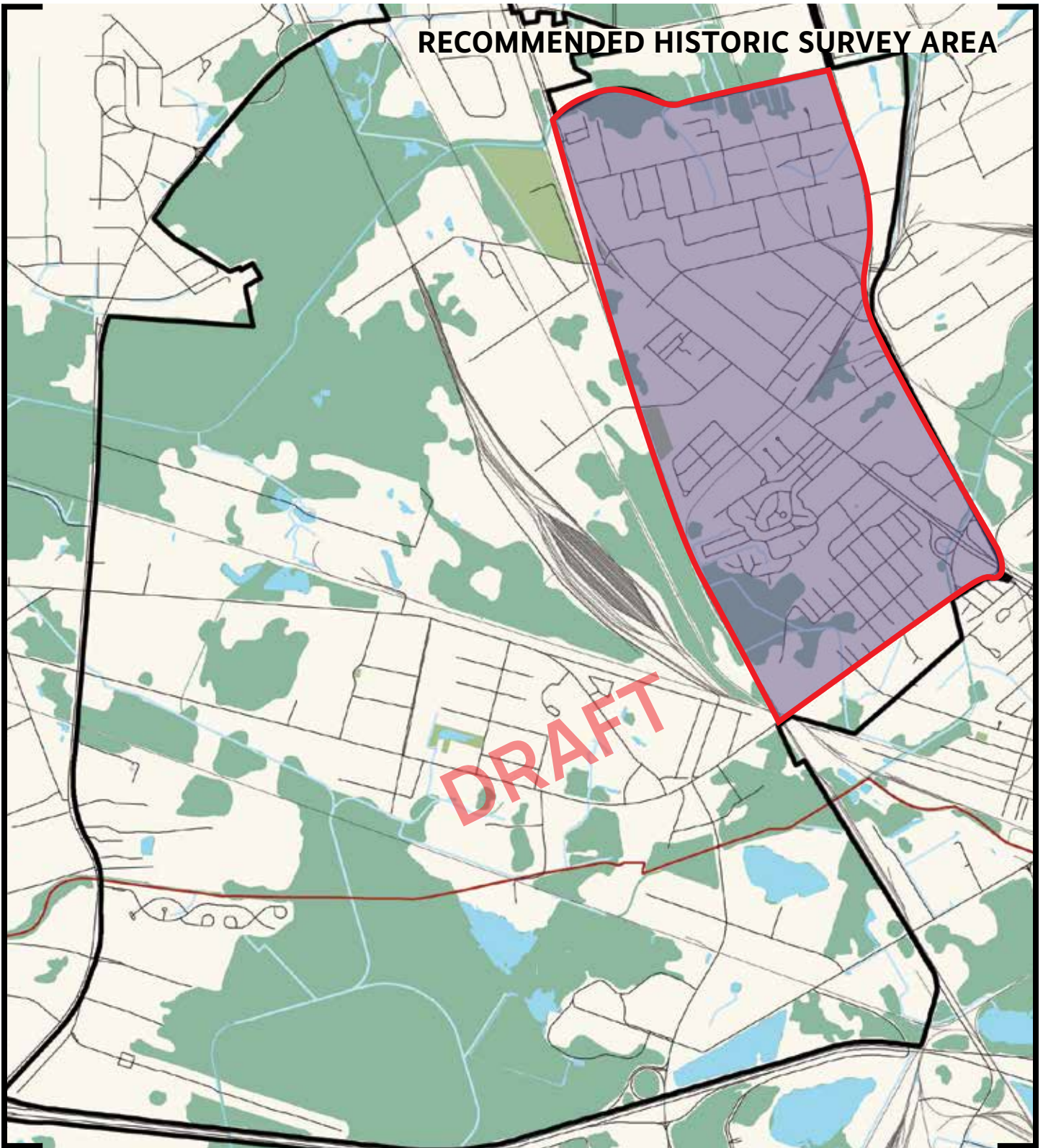
The 1992/1993 survey area, roughly bounded by U.S. Highway 80 to the east and south, Pipemaker's Canal to the west, and Main Street to the north, should be utilized to create updated boundaries for new and renewed historic resources survey efforts.

The following map is a recommendation for the boundaries for a historic resources survey area based on the previous 1992/1993 survey.



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Map 8.4—Recommended Historic Survey Area

# EDUCATION

Education is the key to attracting residents to a community to live; education is key in building and sustaining an advancing workforce; and education is key in ushering in future generations of well informed, respectful, and engaging residents.

Public schools throughout the entire County are managed and operated by the Savannah—Chatham County Public School System (SCCPSS). As of 2020, the school system consists of 24 elementary schools, 7 K-8 schools, 8 middle schools, 11 high schools, and 5 charter schools. In 2018 the school district had 37,576 students enrolled with a 14:1 student to teacher ratio. In Garden City there are 3 schools, Garden City Elementary, Gould Elementary, and Groves High School. The College and Career Ready Performance Index scores have been provided below for each school in Garden for the 2018–2019 school year.

- Garden City Elementary received a CCRPI score of 78.1, or C grading for the 2018–2019 school year.
- Gould Elementary received a CCRPI score of 70.8, or C grading for the 2018–2019 school year.
- Groves High received a CCRPI score of 64.4, or D grading for the 2018–2019 school year.

GARDEN CITY ELEMENTARY  
GOULD ELEMENTARY  
GROVES HIGH

GEORGIA  
CHATHAM COUNTY

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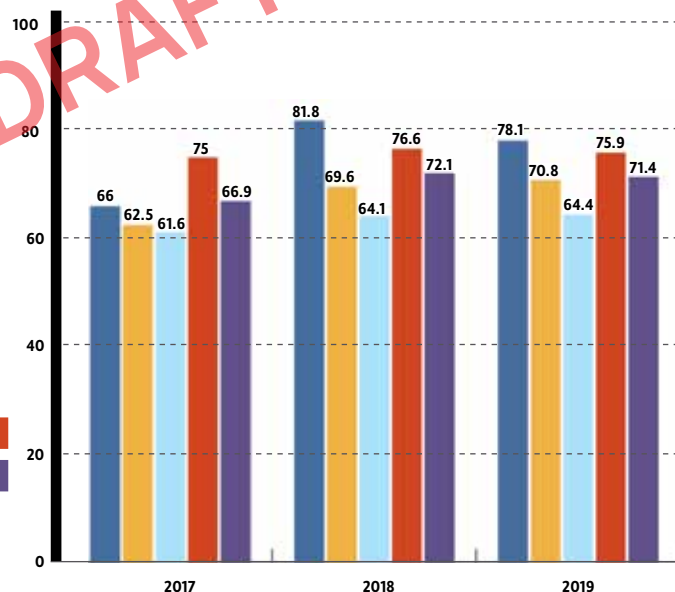


Figure 8.9–CCRPI Single Score Average 2017–2019  
Georgia Department of Education

## CCRPI

The College and Career Ready Performance Index is a comprehensive school improvement, accountability, and communication platform for all education stakeholders that helps to promote college and career readiness for all Georgia public school students.

—CCRPI



The SCCPSS reports that 40% of students who attend the SCCPSS are economically disadvantaged, meaning that they either live in a family unit receiving Supplemental Nutrition Assistance Program (SNAP) benefits, Temporary Assistance for Needy Families (TANF) benefits, or have been identified as homeless, unaccompanied youth, foster, or migrant. Thirty-three (33) of the SCCPSS's schools are defined as Title 1 Schools in which children from low-income families make up 40% of enrollment. Being economically disadvantaged can prove to be a large obstacle for students on the academic, mental, and social.

A current trend which is aiding in the development of focus and improved behavior in students is mindfulness. Across the nation, many school boards have been introducing mindfulness to students. Mindfulness is a state of being that teaches one to live in the present and how to experience enjoyment with what is going on in the current moment. This can be taught through different measures such as: conscious breathing, sensory stimulation, guided imagery/meditation, and mindfulness through body movement. Schools in SCCPSS (Woodville Tompkins) have introduced yoga and mindfulness courses into their curriculums.

With the challenges and stressors many SCCPSS students may be facing stemming from their family lives at home, mindfulness can serve as a remedy teaching students to handle their lives in a healthy, constructive manner which can ultimately improve school performance. In addition to mindfulness, there are a number of things that can be taught to students to help them better navigate through life now and moving forward into the future.



#### TITLE 1 SCHOOLS

Schools in which children from low-income families make up at least 40% of enrollment are eligible to use Title 1 funds to operate schoolwide programs that serve all children in the school in order to raise the achievement of the lowest-achieving students.

—Department of Education

*Teaching mindfulness to grade school children is a new trend that has shown to improve behavior and self-esteem*





## Education Beyond K-12

Life after high school presents many avenues to opportunity. Some may choose college or the military, many choose trade and tech schools, and some go straight into the work world. Whatever route a new graduate, or any adult wants to take, Chatham County—Savannah has several options to choose from in preparing one for their career moves. Keeping an eye on growing industries in the area, such as manufacturing, logistics, and film production may prove to be a safe way in fostering a local workforce to support such industries in the near future.

Regarding countywide public high school graduation rates and educational attainment for students in Garden City, there has been a gradual improvement in performance. Figure 8.10 shows that the high school graduation rate in the county has increased over 6% in the past 5 years; this calculation only reflects the students who graduated within 4 years.

### Graduation Rate Trends, 2015–2019

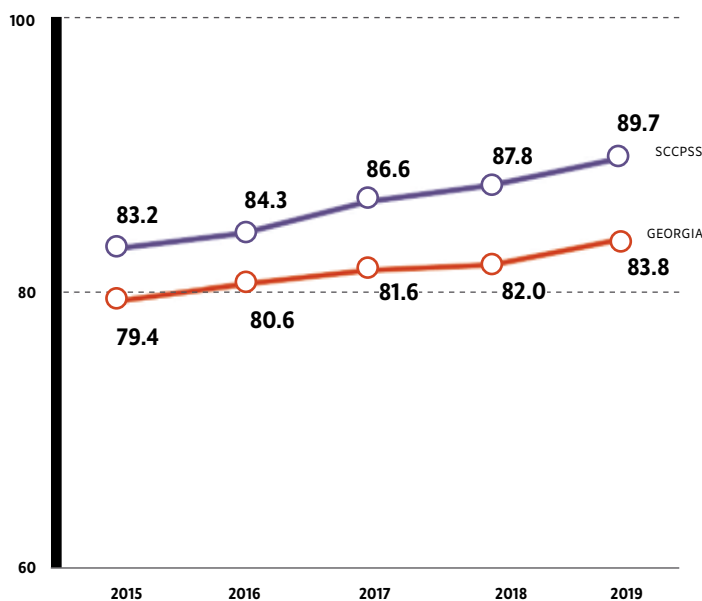


Figure 8.10—Graduation Rate Trend Chart 2015–2019  
Savannah—Chatham County Public School System

In Garden City, most residents over age 25 held a high school diploma (including high school equivalency degree) or higher in 2018 (82.7%), while 12.7% held a bachelor's, graduate, or professional degree. These are roughly the same proportions as 2009–2013. Of note, however, is the increase in the share of residents who had some college experience but did not obtain a degree, which rose from 19.4 percent in 2013 to 26.6% in 2018. Figure 8.11 illustrates the breakdown of educational attainment in Garden City.

### Educational Attainment, 2014–2018

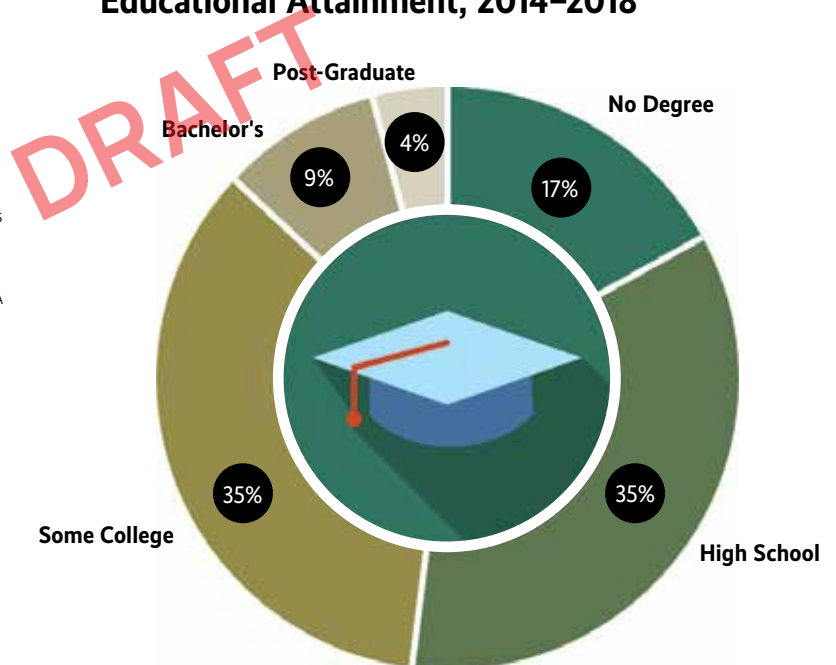
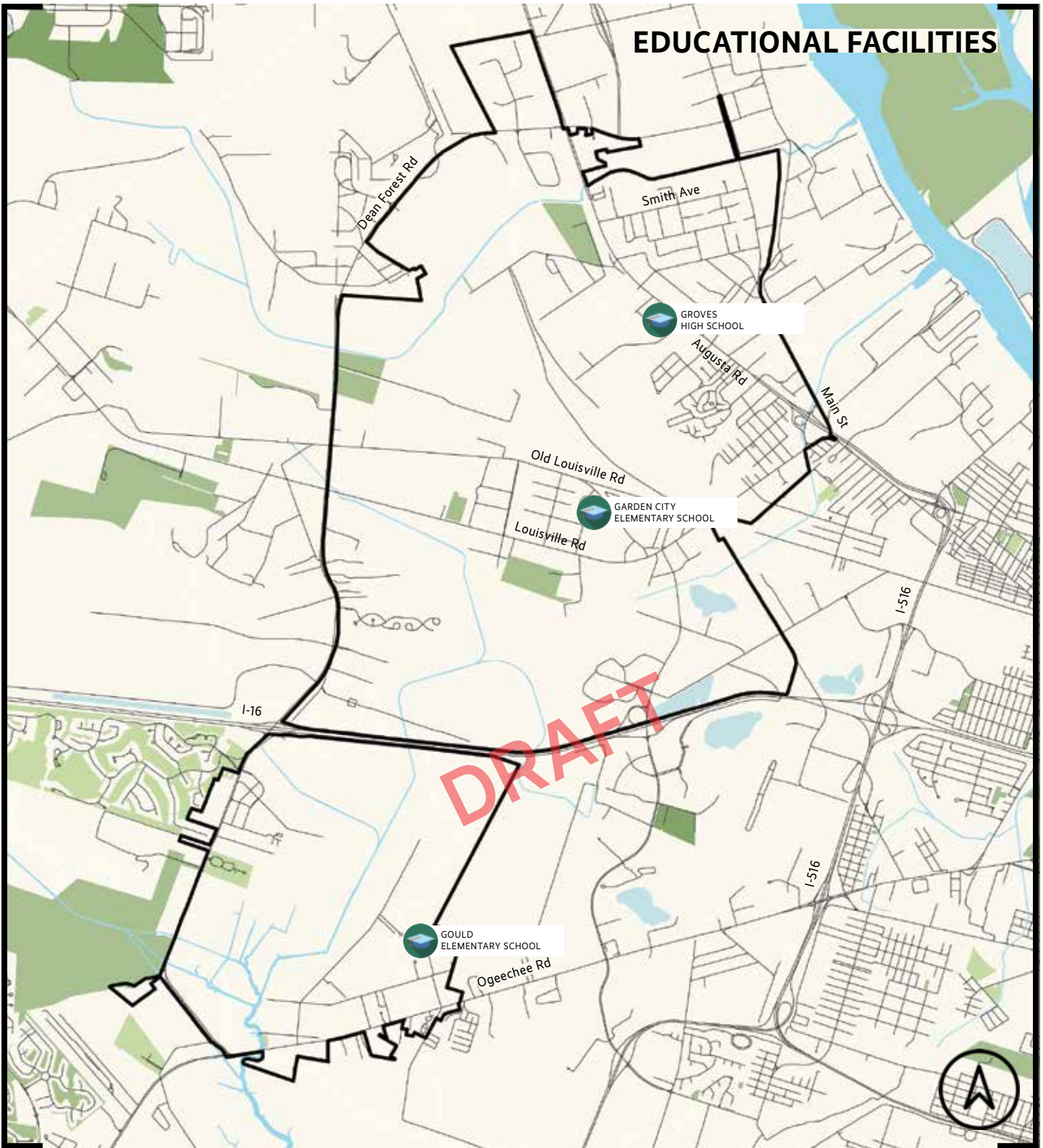


Figure 8.11—Educational Attainment, Garden City  
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



Map 8.5-Educational Facilities, Garden City

## Savannah College of Art and Design (SCAD)

SCAD is a private, nonprofit institution founded in 1978 in the City of Savannah. Currently the school has numerous buildings and facilities located in different areas throughout the City serving its 15,000 students. SCAD has more than 40 majors and 75 minors, more than any other art and design university in the country. Degrees offered are: Bachelor of Arts, Bachelor of Fine Arts, Master of Architecture, Master of Arts, Master of Fine Arts, and a Master of Urban Design. The most highly enrolled majors in Fall 2017 were animation, fashion, film and television, illustration and interior design.



### SCAD

SCAD celebrates cinematic creativity from both award-winning professionals and emerging student filmmakers. Each year, more than 63,000 people attend the eight-day SCAD Savannah Film Festival. The festival is host to a wide variety of competition film screenings, special screenings, workshops, panels, and lectures.



## Savannah State University (SSU)

Known as the State's oldest historically black college or university (HBCU), Savannah State was founded in 1890. This public university is located in Savannah on a 201-acre campus, and offers 30 baccalaureate majors and degrees and 5 graduate degrees to its approximate 4,500 students. These majors are housed within four colleges: College of Business Administration, College of Liberal Arts and Social Sciences, College of Science and Technology, and the College of Education. Their Marine Science Program is the number 1 producer of both Master's of Science and Bachelor's of Science African American recipients in Marine Science. Also, SSU is home to the nation's first Homeland Security and Emergency Management program at an HBCU. The program is the only bachelor's degree program for homeland security/emergency management offered in the state of Georgia and in the region. Additionally, SSU boasts a broad athletic program which is part of SIAC, Southern Intercollegiate Athletic Conference.

## Georgia Southern University (GSU)

This public university, once known as Armstrong State University, recently consolidated with Georgia Southern University based in Statesboro, to become the Armstrong Campus of Georgia Southern University. The campus is located in the southside of Savannah, is attended by nearly 6,500 students, and offers over 50 majors at undergrad and graduate levels. The university's Waters College of Health Professional is one of the school's premier programs, having long been the largest producer of undergraduate health professionals in Georgia.



## Georgia Tech-Savannah

In 2003, the Georgia Institute of Technology opened its satellite branch in the City of Savannah. The campus offers courses tailored to furthering the education and skills of established professionals. Programs consist of the Georgia Film Academy, K-12 programs, Leadership Training, and Military programs. In addition to providing opportunities for career advancement and education for professionals, Georgia Tech-Savannah has numerous partnerships within the region providing assistance to budding tech-entrepreneurs and manufacturing and logistics guidance for large corporations to name a few.

## South University

South University was founded in Savannah in 1899 originally as Draughan's Practical Business College. Throughout the years the school has transformed into a larger university developing satellite locations spanning across several states as well as offering online courses to over 3,500 students. South University offers 9 programs which awards degrees at the associate, undergraduate, and graduate levels in areas such as nursing, pharmacy, public health, and more.

## Savannah Technical College

Founded in 1929, this Savannah-based public technical college serves more than 5,700 students and is a unit of the Technical College System of Georgia. The college offers both credit and non-credit programs designed to provide a skilled workforce to area employers. It awards certificate, diploma, and associate degrees in five academic divisions: Aviation Technology, Business and Professional Services, General Studies, Health Sciences, and Industrial Technology. The college's Economic Development division provides non-credit programs such as high school equivalency preparation, English as a Second Language (ESL), various workforce development programs for individuals, and corporate contract training. Savannah Tech has been ranked as the best community/technical college for active-duty military, their spouses, and veterans for many years.



## Live Oak Public Libraries

Live Oak Public Libraries provides programs and services in Chatham, Effingham, and Liberty Counties through 16 library locations and community outreach. There are 12 libraries in Chatham County, with two of those located in Garden City.

The Library's mission is to provide excellent, responsive service to enrich people's lives, support lifelong learning and build and enhance communities. Live Oak is creating tomorrow's library today to educate, inform, entertain and enrich the community. The Library is always open online at [www.liveoakpl.org](http://www.liveoakpl.org).

Live Oak Public Libraries is focused on increasing access, increasing community engagement and increasing organizational excellence and sustainability. The network believes that libraries are at the heart of every community, and strong libraries help create and sustain strong communities. Library services support early learning/literacy, educational success, economic opportunity and quality of life.

Live Oak Public Libraries is a member of PINES, the statewide network of public library systems serving Georgia. PINES (Public Information Network for Electronic Services), connects more than 300 public libraries in 54 partner library systems across 146 counties and gives library card holders access to more than 11 million books and materials plus online resources such as the GALILEO system, Georgia's virtual library. The portal gives users access to thousands of resources such as periodicals, scholarly journals, government publications, and encyclopedias amongst several other resources.

*The aim of GALILEO is to provide equal access to information for all Georgia's residents —Live Oak Public Libraries*



### COVID-19 PANDEMIC EFFECTS

In calendar year 2020, with complications due to the COVID-19 pandemic, the library system saw reduced statistics compared to normal times but libraries still saw active use and patron engagement both in-person and online.

Libraries were closed briefly but then reopened to the public with safety measures in place to protect visitors and staff. Customers were able to browse and borrow items, use computers and internet, and enjoy virtual programs. The year 2020 saw an increase in the use of digital resources, such as e-books, and an increase in library card sign-ups.



### Benefits of the Library System

- Libraries are open to everyone
- Libraries support lifelong learning
- Libraries offer access to technology
- Libraries are community spaces
- Libraries are wherever you are
- Libraries are community partners



## Public Library Visits

Locations	2018	2019	2020
Bull Street Library	222,799	210,171	144,833
Carnegie Library	40,470	22,319	17,125
Forest City Library	17,486	16,654	10,521
<b>Garden City Library</b>	<b>54,676</b>	<b>48,420</b>	<b>30,507</b>
Islands Library	124,863	111,133	42,993
Oglethorpe Mall Library	134,877	110,791	74,207
Pooler Library	68,422	73,835	55,970
<b>Port City Library</b>	<b>37,649</b>	<b>35,983</b>	<b>22,607</b>
Southwest Chatham Library	183,372	133,178	93,165
Tybee Library	18,521	19,529	16,972
W.W. Law Library	52,143	42,666	23,729
West Broad Library	22,225	15,484	14,642
<b>Total</b>	<b>977,503</b>	<b>840,163</b>	<b>547,271</b>

Figure 8.12—Library Visit Trends

Live Oak Public Library

## Public Library Wireless Internet Use

Locations	2018	2019	2020
Bull Street Library	14,166	85,440	78,884
Carnegie Library	3,557	14,300	13,077
Forest City Library	1,680	2,628	4,482
<b>Garden City Library</b>	<b>5,833</b>	<b>12,940</b>	<b>10,963</b>
Islands Library	7,742	23,380	5,521
Oglethorpe Mall Library	11,309	9,032	22,093
Pooler Library	4,979	14,312	9,281
<b>Port City Library</b>	<b>2,352</b>	<b>2,832</b>	<b>8,767</b>
Southwest Chatham Library	22,632	39,684	28,618
Tybee Library	1,376	956	2,708
W.W. Law Library	1	1,708	1,796
West Broad Library	249	336	2,448
<b>Total</b>	<b>75,876</b>	<b>207,548</b>	<b>188,638</b>

Figure 8.13—Wireless Internet Usage Trends

Live Oak Public Library

*Impacts of COVID-19 were seen in 2020 within the libraries' visitors and internet usage*

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# COMMUNITY HEALTH

## Health

Health is a term that is often associated with an individual and their lack of sickness or disease; the same thought concept can be carried over to a large grouping or area of people within their neighborhoods.

Community health is determined by the wellness of the residents of a particular area along with the aptitude of the environment to promote health and necessary resources. Most urban areas consist of a diverse population of residents which result in a stratified spectrum of community health. The following sections are all factors that make up or determine community health.

## Obesity Rate

Obesity is the condition when an individual has excessive body fat which presents itself as a risk to their health. This condition has been shown to lead to more chronic ailments such as heart disease and stroke, the leading causes of death in Garden City and worldwide (Plan4healthus).

The prevalence of obesity has continued to rise due to an increasing sedentary lifestyle, lack of nutritional health understanding, and oversaturating of fast-foods and processed foods which numerous studies have shown are related to numerous health issues including obesity.

To help reduce the risk of being obese and developing diabetes, stroke, heart disease, and various other diseases associated with a sedentary lifestyle, investments into our transportation infrastructure, parks & recreation and healthy food retail can positively impact our ability to increase physical activity through the built environment.



### HEALTHY SAVANNAH

In November of 2018, Healthy Savannah, and the YMCA of Coastal Georgia, was awarded a five year, \$3.4 million grant to undertake a REACH project from the CDC. REACH (Racial and Ethnic Approaches to Community Health).

The primary goal of the Project HOPE grant is to reduce health disparities among African American and Hispanic/Latino Americans in low-income Chatham County neighborhoods.



Overlaying areas with a lack of pedestrian mobility (such as sidewalks), access to parks and recreation, and locating food deserts can begin the process to creating more equitable and healthier communities.



## Mental Wellness

Although a controversial topic, mental illness is a common reality many people live with. Mental illness can simply be defined as a wide range of conditions that affect mood, thinking, and behavior.

Numerous factors contribute to mental illness such as genetics, societal influences, and physical environment. A SAMHSA (Substance Abuse Mental Health Services Administration) survey conducted between 2009 and 2013 revealed that nearly 40% of adults in the State of Georgia were living with some form of mental illness. In response to this figure and other health related matters, Chatham County partnered with the Coastal Georgia Indicators Coalition (CGIC) and developed strategic pathways to address community health issues, mental health being included, further ensuring that communities in Chatham County foster wellness.

It is a common occurrence for an individual suffering with a mental health condition to be confronted by law enforcement when their condition presents a challenge.

Instead of mental health workers addressing the matter, law enforcement, many of whom are not properly trained for mental health situations, often intervene in these scenes. In events like this, it is common for law enforcement officers to arrest the individual and bring them to an emergency room (ER). This creates a strain not only on the individual suffering through their mental health crisis, but also on the system of law enforcement and emergency medical service workers. The number of officers dispatched and number of ER rooms available to those in need are greatly impacted by the lack of structure and guidance regarding the process to assisting those in need of mental health services.

This continuum of care (CoC) process is in need of improvement to ensure patients are being tracked and provided the services needed. This secures better outcomes for the patients over time while adapting to their changing needs.

*According to a SAMHSA survey, conducted between 2009 and 2013, nearly 40% of adults in the State of Georgia were living with some form of mental illness*



## Food Access & Nutritional Education

The foods available to a community have a dire impact on its overall health. When an area is devoid of fresh and healthy foods it is considered a “food desert.” Contrarily, the term “food swamp” is used to describe areas that are over saturated with options of fast foods, processed foods, and junk foods. We live in the time where the majority of people reside in urban areas and do not grow their own food; this leads many to depend on external sources for their food.

*Given the County's widespread development pattern, it becomes clear that there are not enough grocery stores and markets to accommodate each community. This is a strain particularly for the elderly and those with limited access to personal vehicles and public transit.*

According to Federal Reserve Economic Data, 40,098 residents in Chatham County received SNAP benefits in 2018, a number that has notably dropped from previous years. Although this figure has decreased, it shows that a significant number of residents, nearly 14% of residents in Chatham County, still need assistance in providing foods for their households, 5% higher than the national average. In alignment with food access, food nutrition is just as important. If someone is gifted the option to choose between a monthly supply of sweets and potato chips or a monthly supply of dry beans, rice, and vegetables; their knowledge of food nutrition, or lack of, will usually be the driving force behind their decision. Having access to affordable healthy food is paramount; however, so is the ability to recognize the value in it as well.

### FARM TRUCK 912

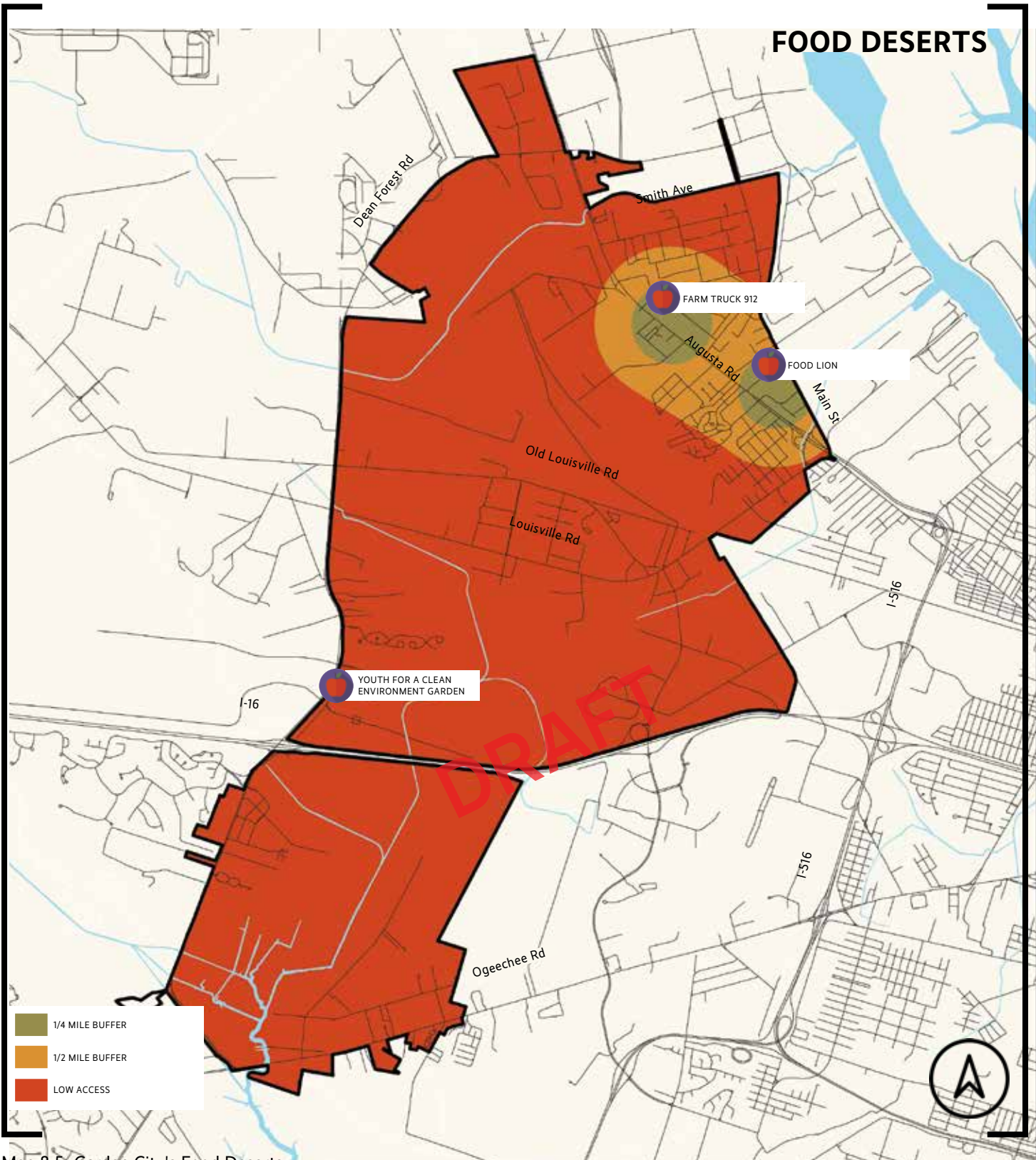
In an effort to increase the access to healthy and affordable foods, Farm Truck 912 is stationed at Sheppard's Gas & Food Mart on Thursdays in the City offering local and fresh produce for to the public most in need of healthy foods.



An evaluation of areas in Garden City not having a grocery store within 1/2 mile radius reveals that, for the most part, Garden City is a food desert with an extremely limited range of healthy food options. While Farm Truck 912 has expanded its operations along Augusta Road on a temporary basis in the north section of Garden City, there is still a gap in coverage.

These areas allow for an opportunity for a farmer's market or additional Farm Truck 912 service to help provide healthy food options to residents.







## Dilapidated Housing

Dilapidation occurs in a neighborhood when homes or empty lots are abandoned and begin to show signs of disrepair and neglect. This is not only a visual effect on the neighborhood, but often times an unspoken invitation for unlawful activities.

Dilapidated properties are known to bring down the property value in their neighborhoods, discourage the desire to invest, and decreases the perceived safety of the area. Neighborhoods that are well lit, have well-kept properties, and functional communal amenities such as parks, walking paths, and benches encourage physical activity and social connections amongst residents.

A 2016 Housing Survey indicated that the Rossignol Hill Community had a larger number of homes in need of repair as shown in Map 8.5. While these homes are in need of repair and rehabilitation, it is important to note that this community also has a greater concentration of homes that are National Register Eligible.

### LAND BANK

The Chatham County Land Bank Authority was created to acquire vacant, abandoned, tax delinquent properties in the County to assist in the return of the properties to a productive use.



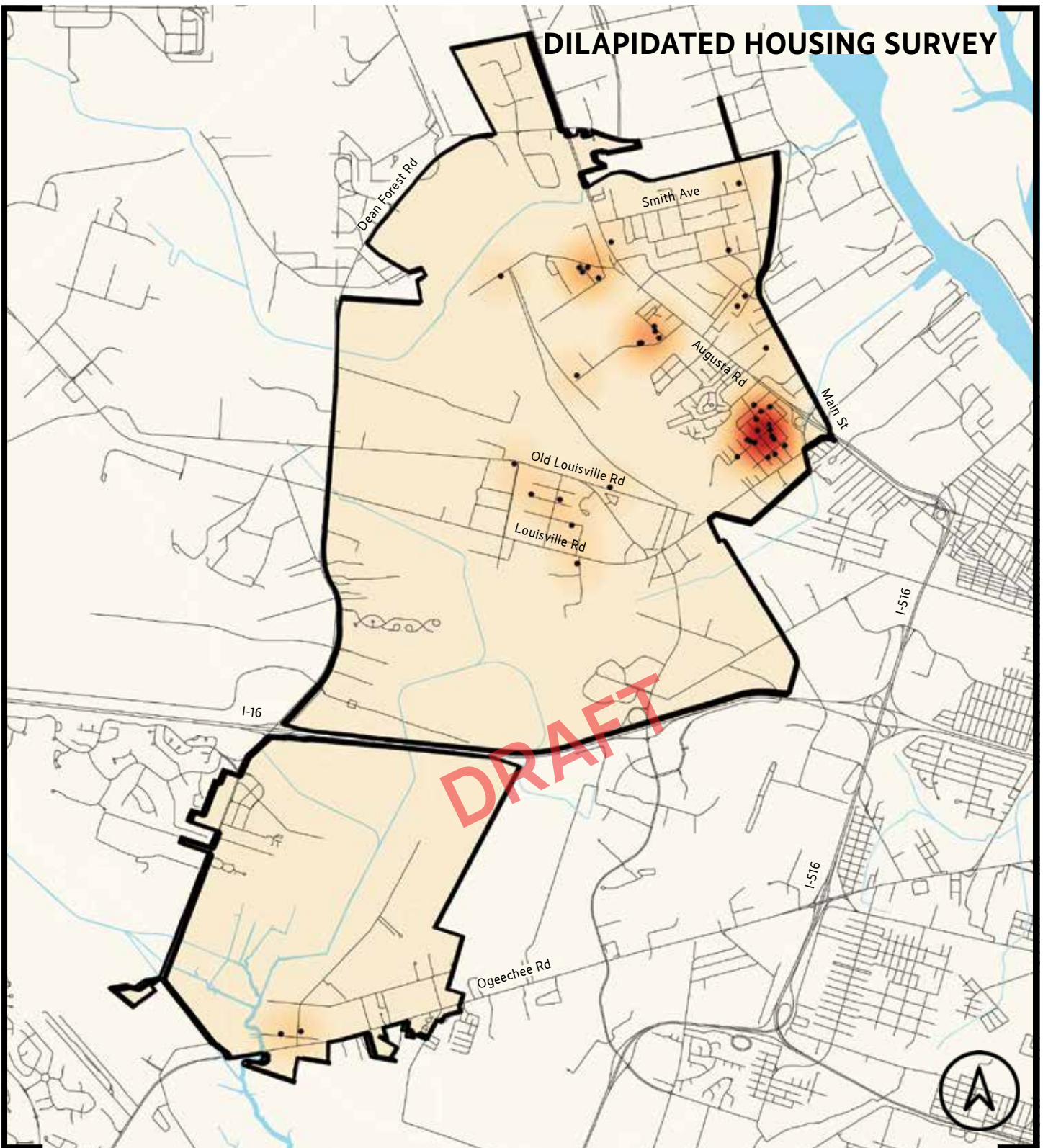
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### LOOKING FOR MORE INFORMATION?

In the Housing Element of Garden City 2040, you can find more information about blighted homes. **Check it out on page XX!**



## DILAPIDATED HOUSING SURVEY



## Unemployment & Poverty

Unemployment does not merely mean ‘one without a job’. According to the Bureau of Labor Statistics, unemployed citizens are individuals who are jobless and actively seeking work. Those who are not working and not seeking work are not considered to be in the labor force. When individuals struggle to find work, it puts a strain on a myriad of areas in life including finances, mental wellness, safety, and food security.

Data from the Bureau of Labor Statistics show that the unemployment rate for Garden City was on a gradual decline until 2020 when the pandemic occurred.

### Unemployment Rates 2016–2020

Year	2016	2017	2018	2019	2020
Chatham County	5.3	4.5	3.8	3.4	7.6
<b>Garden City</b>	<b>6.2</b>	<b>5.0</b>	<b>4.3</b>	<b>3.9</b>	<b>8.5</b>

Figure 8.14–County & City Unemployment Rates  
U.S. Bureau of Labor Statistics, Current Population Survey

### Unemployment Stats for 2020 (Annual Average)

Year	Labor Force	Employment	Unemployment	Rate (%)
2010	4,028	3,479	549	13.6
2011	4,027	3,494	533	13.2
2012	4,027	3,537	490	12.2
2013	3,917	3,524	393	10.0
2014	3,897	3,540	357	9.2
2015	3,826	3,556	270	7.1
2016	3,871	3,631	240	6.2
2017	3,982	3,781	201	5.0
2018	3,947	3,777	170	4.3
2019	3,911	3,759	152	3.9
2020	3,910	3,579	331	8.5

Figure 8.15–Unemployment Stats, Garden City  
U.S. Bureau of Labor Statistics, Current Population Survey

## Climate Change

As the nation continues to experience drastic changes in weather patterns, the affects have been severe on the general population in many areas. Excessive heat has increased the number of emergency room visits for strokes and dehydration.

There are studies that have revealed the correlation between excessive heat and violent crimes, even more so in low income areas (*The Urban Crime and Heat Gradient in High and Low Poverty Areas | NBER*). Extreme cold can decrease the amount of time spent outside which can in return lower levels of Vitamin D resulting in weaker immune systems and depression. Recent weather patterns have exposed severe cold temperatures to areas of the Country that normally do not experience hard freezes. These shifts left many states and local governments ill prepared in early spring of 2020 as the effects of the weather disengaged power sources and destroyed infrastructure. Additionally, the COVID-19 pandemic has highlighted the parallel between these changes in climate and weather, and public health threats with the need to assist and protect our most vulnerable populations and communities.

It is known that building wind and solar farms helps to reduce the human impact on climate change by displacing noxious emissions from coal-fired power plants. However, Harvard researched also shows that improved public health is an added benefit to the local implementing of Renewable development.

Renewable and energy efficiency measures help displace coal power plants and other fossil fuels, and helps reduce harmful emissions of nitrous oxide, sulphur dioxide, and carbon dioxide. A concentrated local effort must be taken to help reduce that impacts of noxious emissions and other pollutants on Chatham County and Garden City's population.



## COVID-19

As a nation, we were unaware of the dire impacts that COVID-19 would have on us all. As cases and fatalities continued to increase in 2020, many went into a state of paranoia and panic. Questions such as- “what exactly is this virus”, “how can I properly protect myself and family from it” and “how long will it last” came across the minds of virtually every person in this Country. As of April 2021, Chatham County has had more than 20,000 cases and 417 deaths due to COVID-19. In response to the pandemic, virtually every public and private space had to alter how human activity existed within their vicinities and the need for more accessible open and open outdoor spaces became evident. The virus has proven to be an incident that will have lasting effects moving well into the future.

Unemployment began to see an increase from COVID-19 starting in March of 2020 as it reached its peak at rate of 15.3% in April. It tapered down slowly until it reached a rate of 5.6% by the end of 2020. Concerns with facing grave fears of death, eviction/foreclosure due to loss of income, drastic changes to household dynamics, and shortages of food, heightened the mental health challenges many were already suffering with and created a large splinter of anxiety for others.

### OPERATION FEED THE CITY

Organized by Savannah Feed the Hungry, a nonprofit dedicated to assisting the area's homeless and low-income communities, planned a food giveaway to help locals who are experiencing financial difficulties during the coronavirus crisis. Garden City Council members participated in "Operation Feed the City", and distributed over 600 meals to people and families in need.



### LOOKING FOR MORE INFORMATION?

For more information about unemployment please check our Economic Development Element.

**Check it out on page XX!**



# PUBLIC SAFETY

## Public Safety

When a critical issue or danger arises, we know to call 911. It is the responsibility of the local government to serve and protect the health, safety and welfare of its citizens and businesses. The safety of a community is fundamental to the wellbeing of its residents, economy, and longevity.

In today's world there are critical threats we must keep an eye out for: domestic and international terrorism, drastic shifts in weather patterns, rising sea levels, and more recently- pandemics such as COVID-19. In response to these, a successful government employs departments and passes ordinances in effort to sustain the safety and health of its community. Even in less intense moments of day-to-day life, it is the responsibility of the local government to aid in incidents such as criminal activity, car accidents, house fires, and downed power lines. Generally, for municipalities and local governments public safety includes fire protection, emergency management services, and law enforcement.

### HAZARD MITIGATION PLANNING

Hazard mitigation planning reduces loss of life and property by minimizing the impact of disasters. Mitigation plans are key to breaking the cycle of disaster damage and reconstruction

—FEMA



## Emergency Management

Chatham County Emergency Management Agency (CEMA) services all of Chatham County and its municipalities and is responsible for the welfare of the County in the midst and aftermath of major disasters and emergencies.

The agency has developed a Disaster Recovery Plan, Emergency Operations Plan, and Hazard Mitigation Plan to proactively provide protection and courses of action in response to a number of different hazards/emergencies. In the Hazard Mitigation Plan, CEMA has listed severe weather, extreme heat, and flooding as the most likely hazards to impact the county.

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## Law Enforcement

Law Enforcement in Garden City provides full service public safety and law enforcement services to its citizens and visitors. Garden City's Police Department employs 35 sworn officers supported by 7 civilian staff.

The Garden City Police Department is Nationally Accredited by the Commission on Accreditation for Law Enforcement Agencies, Inc (CALEA). Garden City is one of only twenty city police departments in the State of Georgia to possess this prestigious award. Since the initial accreditation in 2003, the Garden City Police Department has maintained reaccreditation status confirmed by on-site assessments in 2006, 2009, 2012, 2015, and 2019. The Garden City Police Department is only one of 43 police departments Nationally accredited in Georgia.

The Garden City Police Department is State Certified by the Georgia Association of Chiefs of Police (GACP). The State Certification is a program designed to improve the administrative practices of the department and strengthen the service delivery to the community. Currently there are only 140 law enforcement agencies that are state certified.

*Garden City Police Department is one of only 43 law enforcement agencies that are both Nationally (CALEA) accredited and State certified in Georgia.*



### CHAT WITH A COP INITIATIVE

To help connect better with the community and to build transparency with its Public Safety Officers, the Garden City Police Department had scheduled a series of informal events throughout the City to assist in curbing criminal activity.

## Police Stats and Trends

### Crime Records

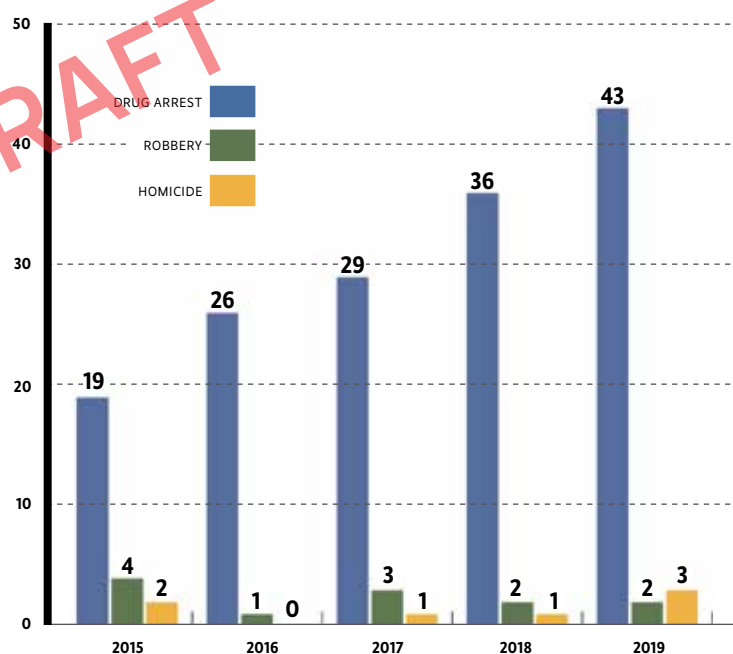


Figure 8.16--Reported Crime Records, Garden City



## Fire

The Garden City Fire Department and Emergency Service Department provides fire protection and emergency response services to the businesses and residences within Garden City's limits.

Through a fire fee, Garden City's Fire Department collects revenue which can only be used for fire response and protection services to customers. The fire fee is a financing option that provides an equitable, stable and dedicated revenue source to support a portion of fire services. The fire fee helps the City to accomplish the following goals:

- Ensure that Garden City residents and business owners receive fire fighting services at the desired service level
- Continue to fund full time fire fighter positions
- Ensure that there is adequate funding for operational and training expenditures
- Enable the City to work to maintain or exceed the ISO rating of 3
- Protect the lives and property of all citizens through emergency response, education and fire prevention



## Fire Stats and Trends 2015–2019

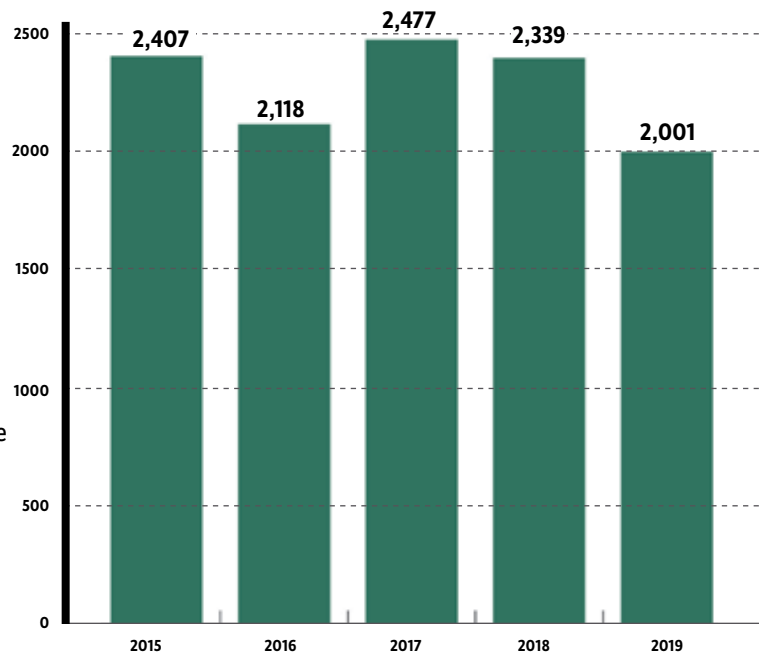


Figure 8.17–Total Fire Calls, Garden City

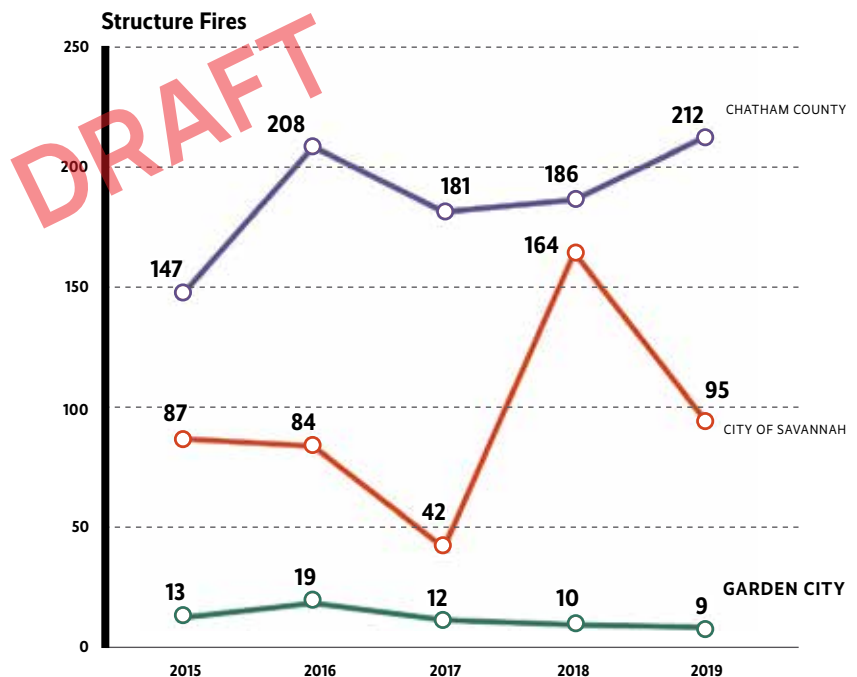


Figure 8.18–Structure Fires, Garden City



### FIRE ENGINE DONATION

To continue efforts to establish partnerships and communication between our fire safety officers and the community, Garden City donated a retired Fire Engine to help the education of Fire Science Students. Savannah Technical College's Fire Science students will have the equipment for hands-on training opportunities that will enhance their learning experience for years to come.



# BROADBAND & FIBER OPTICS

The citizens of Chatham County understand the value of future planning as evident by the County's numerous tree-lined squares, parks, and boulevards. Chatham County concurrent fiber optic feasibility studies completed in 2017 were another contribution to the community's tradition of forethought.

In the past, housing, public spaces, transportation, and water were critical for community viability. Today, competitiveness, prosperity, and quality of life are determined by bits and bytes, code and data, networks, "smart" systems, and software applications. Indeed, digital technology has become the key to effectively managing and using conventional resources. It is creating new possibilities for business, commerce, education, healthcare, governance, public safety, and recreation. All of this depends on bandwidth and connectivity—the ability to move information quickly and flexibly from and to most anywhere.

The vast array of devices that permeates Chatham County is only going to increase. Those devices enable people to greatly improve and transform how they live, work, and play by connecting them to each other and giving them access to valuable information. Citizens can and will continue to use digital technology to interact with each other in unprecedented, highly informed, easier, and more dynamic ways.

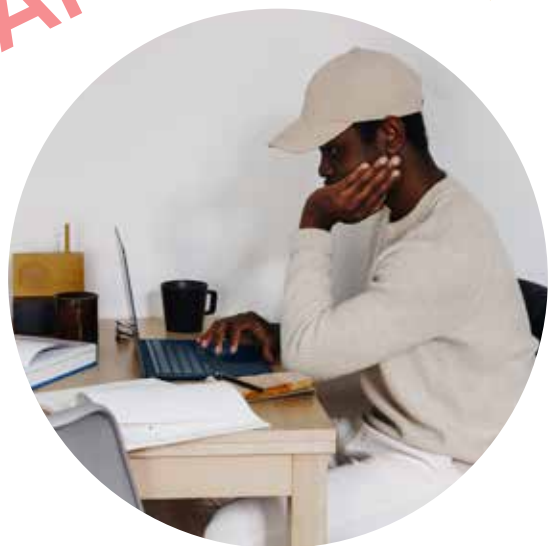
Broadband has become essential to business, education, healthcare, and overall quality of life. Unfortunately, high-speed internet access remains out of reach for Georgians in many communities. Local governments are responding with new investments in technology. Building, running, and even using fiber-optic infrastructure is not a short-term endeavor.

These activities demand a clear vision for current and future citizens' expectations and requirements, require substantial input from local business and civic leaders, and benefit from principled thinking about the role of local government.

In summary, digital infrastructure can be used to deliver essential community services, enable a modern, connected economy, and support a higher quality of life.

*Broadband has become essential to business, education, healthcare, and overall quality of life. Unfortunately, high-speed internet access remains out of reach for Georgians in many communities.*

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## Network Technology

Broadband refers to high-speed internet services, which provide online content—websites, television shows, video conferencing, cloud services, or voice conversations—to be accessed and shared via computers, smartphones, and other devices. The Federal Communications Commission defines broadband to be at least 25 Mbps downstream to the device, and 3 Mbps upstream, though demands are increasing. There are multiple broadband delivery systems, though mainly cable, DSL, fiber, and wireless connect devices to the internet.

Fiber is considered the gold standard for supporting broadband, essential for fast, reliable connections. Fiber-optic cables—or just “fiber”—is a strand of glass the diameter of a human hair that carries waves of light. Using photons across glass, as opposed to traditional electrons across copper wire, fiber has the capacity to carry nearly unlimited amounts of data across long distances, literally at the speed of light. The term, “broadband” refers to the high-speed service, which enables devices to access online services.

Broadband is deployed throughout communities as wires that carry digital signals to and from users. The content comes into the local community from around the world via global, national, and regional networks. The local infrastructure is built, connected, and operated by internet and telecommunications companies that own the physical wires to each household.

Infrastructure that is aging and built on the older technologies result in slower, less reliable access to content. Due to capacity limits of this infrastructure, companies

### INTERNET ACCESS

Reliable internet access is even more important now that many adults and children are working and learning from home.

—Georgia Fiber-Optic Feasibility Study (2017)

cannot reliably provide high speeds, and often limit the amount of data consumers can use. Fiber provides the robust infrastructure that connect telephone and cable infrastructure between communities and around the world. It was originally used by telecommunications for their core infrastructure, to connect their major switching centers, and was only available to their biggest corporate and institutional customers. Today, fiber-optic is in homes and businesses throughout the world providing telephone and television as well as internet access services.

In summary, digital infrastructure can be used to deliver essential community services, enable a modern, connected economy, and support a higher quality of life. The end goal is for all of Chatham County to help its citizens get better connectivity and more bandwidth, while meeting its internal technology needs. Every jurisdiction in Chatham County should invest in fiber-optic infrastructure and related facilities to better serve its citizens, enhance quality of life and quality of place, and spur sustainable economic growth all while ensuring it is economically feasible, fiscally responsible, and practical.





## Barriers to Household Internet Subscribership

First, it is important to understand the reasons why households do not subscribe to internet services. Remarkably, across all surveyed households, there were no households that reported they chose not to subscribe because they do not need the internet.

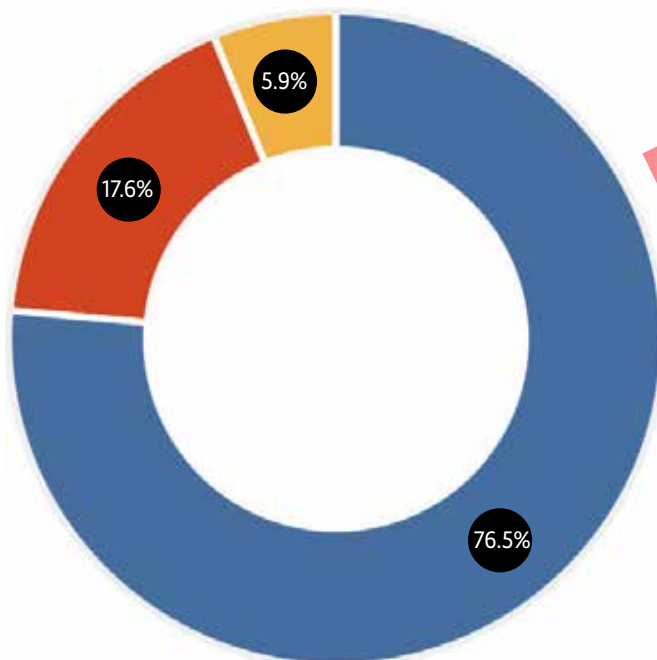
Results from the Chatham County Fiber Optic Feasibility Study shows in Figure 8.16 that of the non-subscribing Chatham County households, an overwhelming 76.5% say they choose not to subscribe to service because residential internet access is too expensive. This data allows us to understand whether non-subscribership is the choice of the household, or if their decision reflects local broadband market conditions, such as a lack of service availability near the home, or if the high cost of service discourages service adoption.

Nearly 1 out of 5 Chatham County households (17.6%) that do not subscribe to broadband say that broadband is not available at their home. From a quality of service perspective, 5.9% of non-subscribing households say that available services are too slow or unreliable, perhaps dropping service from poor previous experience. However, every household responding to a 2016 survey recognized a need for the internet.



Nearly 1 out of 5 Households say  
Broadband is not available at their homes

## Top Reasons for Non-Subscribership



While these percentages are very telling of local broadband market conditions, Chatham County's findings conflict with national household averages. In fact, both Chatham County and Savannah households do not align with the most recent U.S. Department of Commerce research that identifies non-subscribing U.S. households with "no internet availability" at 48%, with "too expensive" the reason of 28% of U.S. households. These findings shine a light on issues beyond access to the internet and reveal a digital divide in Chatham County that is based more on cost of services.

This could be an indication of current service providers charging too much for service but could also reveal the economic conditions of some households in the county. Indeed, the notion of being "too expensive" is a relative term, as what could be out of financial reach for some households and income levels could be considered discretionary spending for other households.

Figure 8.16–Most Important Reason for Non-Subscribing to Internet



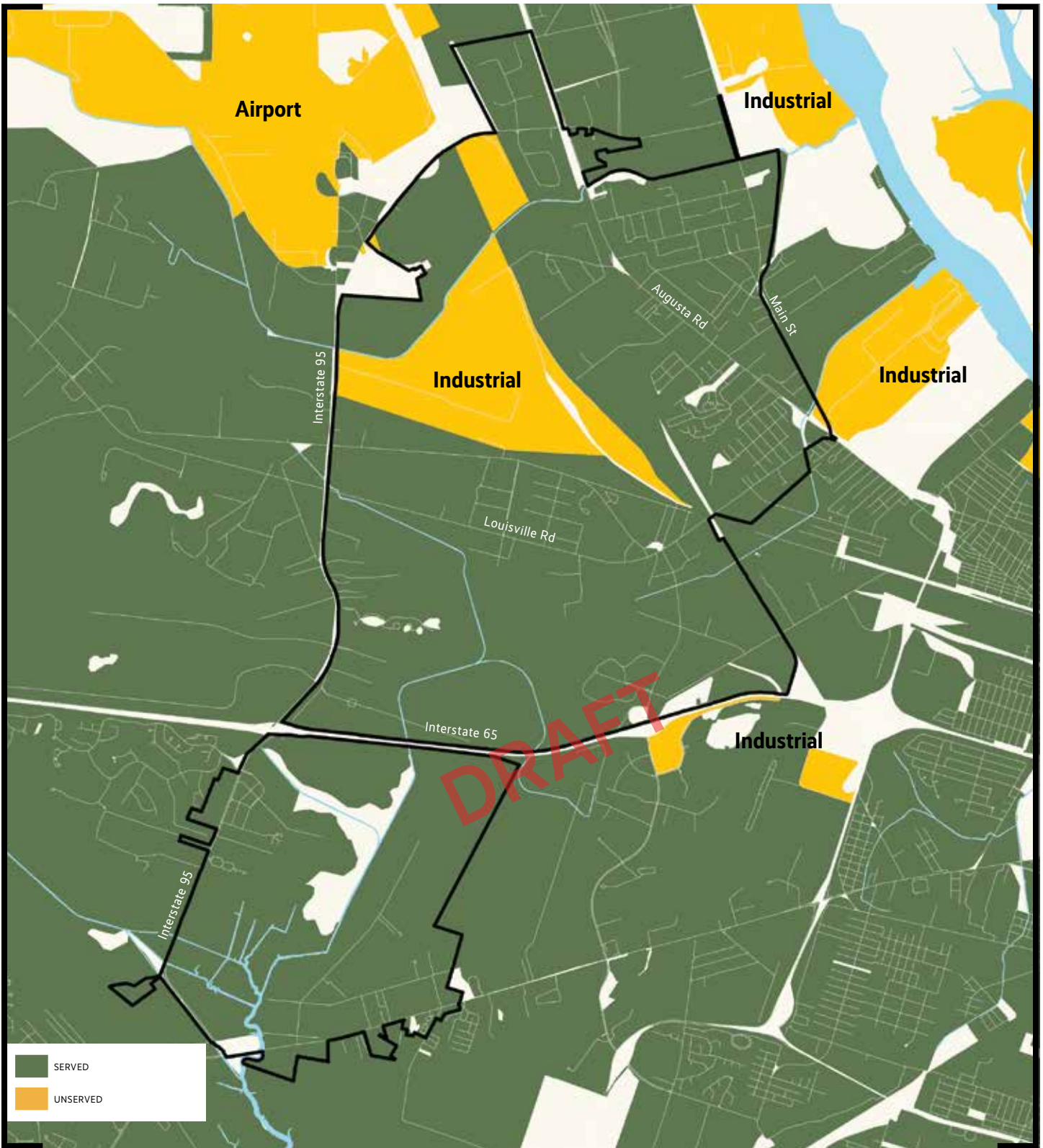


Figure 8.3–Broadband Access Map, Garden City

Still, survey responses show that Chatham County households recognize a need for the internet. When asked why the household did not subscribe to household internet services, an overwhelming number of households report that services are too expensive (76.5%), roughly a third (35.3%) rely on their mobile devices, while the same percentage (35.3%) rely on access to the internet outside the home. Outside the home could mean at work or school, the library, or even public Wi-Fi locations around town. Lastly, and not insignificantly, 17.6% of county households report that the internet is not available at their home.

Some important observations can be made in comparing these two sets of data. First, while cost of service appears to be the reality of market conditions in Chatham County, two additional reasons hint at possible workaround solutions for non-subscribing households that need internet access; "access internet with mobile phone" and "access internet elsewhere".

Reflecting a national trend, internet-enabled mobile devices are emerging as a necessary substitute for home internet access. A remarkable 35.3% of non-subscribing households report their mobile phone as a reason their household does not subscribe to internet services. These homes do not willingly choose mobile over wired connections; they use their mobile phones out of necessity because wired residential service is too expensive. Where cost is an issue, if given the choice between wired home internet access or inferior and costly mobile internet access, most will choose mobile wireless because of the voice and mobility aspects. Likewise, no non-subscribing Chatham County households say they do not subscribe to services because they access internet elsewhere. Yet when given the opportunity for multiple responses, that response increases to 23.5% of households that access the internet outside the home, possibly at work, school, or a public place such as a library or a restaurant likely because they have no affordable choice for their household.

To get an idea of how many non-subscribing Chatham County households would subscribe to services if given the opportunity, a series of questions in the same 2016 survey gauged how much the internet is a part of their household functions.

Taken together, the survey of non-subscribing households clearly indicates that Chatham County residents recognize the importance of the internet to their household and would likely adopt services if available at an affordable price.

*Summarized from Chatham County, Georgia Fiber-Optic Feasibility Study (May 2017 Magellan Advisors), as well as the City of Savannah Municipal Fiber Feasibility Study (May 2017 Magellan Advisors)*

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## Next Steps

Reiterating the recommendations, the next steps move Chatham County toward developing and realizing county-wide fiber-optic infrastructure goals. Many of these recommendations center around forming local collaborations to aggregate demand and formalize broadband-friendly policies across the county. Many of the next steps are low-cost, organizational, and policy-oriented steps that will lead to a broader fiber-optic partnership and county-wide fiber-optic deployment.

*These findings shine a light on issues beyond access to the internet and reveal a digital divide in Chatham County that is based more on cost of services*



### AN ISSUE INTENSIFIED BY COVID-19

All learning, services, commerce, most workplaces and daily interactions online require a high-speed connection to the internet. As communities around the world adapted to a world with COVID-19, broadband connectivity and access became more critical than ever before.

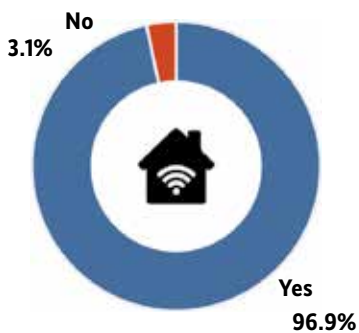
Chatham County was forced to find new ways to work, go to school, communicate, and connect. In the United States alone, state and local directives urged millions of Americans to stay in and, when possible, work from home.

It is possible that at the end of the COVID-19 crisis, the future will look different from the world we left when the crisis began in 2019.

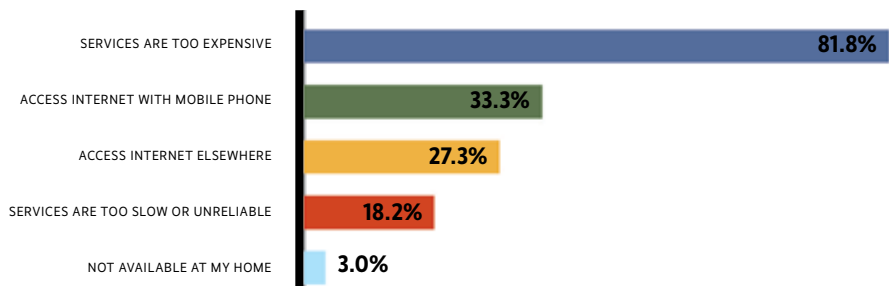
## Household Survey Findings

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Households with Internet Access



Reasons for not having Internet Access





# SHORT TERM WORK PROGRAM

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## SHORT TERM WORK PROGRAM

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### Introduction

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The Short Term Work Program (STWP) is comprised of projects that are ongoing or should be launched over the next five years to further the goals of Garden City 2040. The STWP is organized by element and lists the timeline, lead partner, funding source, and cost estimates for each strategy.

Progress on the activities and goals established in this section will be tracked and reported on an annual basis.

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# TRANSPORTATION

	STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
T.1	Implement a road asset management and maintenance system to prioritize improvements	0–2 Years	Executive	General Fund	\$70,000
T.2	Implement impact fees for infrastructure installation program	0–2 Years	Executive; Planning & Zoning	Staff Time	Staff Time
T.3	Apply for funding for streetscape projects along major roadways (Highway 17, 21, 25, 80, 307)	0–5 Years	Executive	Staff Time; Grants	Project Dependent
T.4	Set priorities for local transportation investment & expansion to include public transportation via CAT	0–2 Years	Executive; CAT	Staff Time	GC Staff; CAT Staff Time
T.5	Improve and/or install sidewalk connections on Highway 17, 21, 80, 307 and traffic circle to create safer areas for pedestrian connectivity citywide	0–5 Years	Executive	Staff Time; Grants	Project Dependent
T.6	Establish a community-wide pedestrian network through sidewalks to adjacent and nearby residential and commercial districts	0–5 Years	Executive; Bike/Walk Savannah	General Fund; Grants	Project Dependent

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# ECONOMIC DEVELOPMENT

	STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
E.1	Expand relationships with the Convention and Visitors Bureau (CVB) to Promote Garden City	0-2 Years	Executive	General Fund; CVB	Staff Time
E.2	Adopt incentives for desirable redevelopment & infill projects to include both commercial & affordable housing efforts	0-5 Years	Executive; Habitat for Humanity	Staff Time	Staff Time
E.3	Complete an economic development plan to Include a targeted marketing strategy for desirable retail & commercial development	0-5 Years	Executive	General Fund; CVB	\$45,000

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# LAND USE

	STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
LU.1	Adopt design guidelines for commercial and industrial areas where higher cost, long-term business investment is anticipated	0–5 Years	Planning & Zoning	General Fund; Grants	\$75,000
LU.2	Pursue funding opportunities for an infrastructure capital improvement project to extend water on to Highway 17 to encourage new residential development	0–5 Years	Planning & Zoning	GEFA; Water/ Sewer Fund; Grants	\$5 Million
LU.3	Deter development within high-risk flood zones	0–2 Years	Executive	Staff Time	Staff Time
LU.4	Identify areas of blight and determine activities and funding to address blight	0–5 Years	Executive	General Fund; Grants; Staff Time	Staff Time
LU.5	Demolish abandoned structures	0–5 Years	Planning & Zoning	General Fund	\$25,000/ Annually
LU.6	Review and implement the recommendations of the safe growth audit	0–5 Years	Executive; Planning & Zoning	General Fund; Grants; Staff Time	Staff Time; Project Based Cost
LU.7	Develop an intergovernmental coordination plan/strategy with Savannah/Hilton Head International Airport (SHHIA) to ensure that the near term and long-term development plans of both Garden City and the SHHIA are compatible	0–2 Years	Executive; SHHIA Staff	General Fund	Staff Time



# HOUSING

STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
H.1 Complete a housing study to determine which types and styles of affordable housing options are most needed to allow and accommodate local housing needs	0–2 Years	Executive; Planning & Zoning	General Fund	\$50,000
H.2 Review codes related to vacant structures to streamline process for enforcement, acquisition, or demolition	0–2 Years	Planning & Zoning	Staff Time; Consultant	\$20,000
H.3 Implement mechanisms that will assist in rehabilitating older homes	0–5 Years	Garden City Housing Team	Staff Time; Grants	\$100,000/Annually
H.4 Expand senior housing and affordable housing	0–2 Years	Private Developers	General Fund	Project Driven/ Private Dollar
H.5 Continue to participate in the Chatham County—Savannah land bank authority	0–5 Years	Planning & Zoning	Staff Time	Staff Time

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# NATURAL RESOURCES

STRATEGY		TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
NR.1	Evaluate water quality BMPs around Salt Creek & Pipemakers Canal watersheds	0–2 Years	Executive; Drainage	Stormwater Utility	\$10,000
NR.2	Improve greenspace, parks, and public facilities to maintain the high desirability of the areas	0–5 Years	Executive	Stormwater Utility	\$20,000/Annually

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# QUALITY OF LIFE

	STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
Q.1	Complete a historic resources survey for Garden City to include a list & accompanying maps of proposed areas	0–2 Years	Executive; MPC	General Fund	\$4,000
Q.2	Create a Historic Preservation Commission (Bylaws, Manuals, Training, etc.)	0–5 Years	Executive; MPC	General Fund	\$18,000
Q.3	Create a Local Historic Preservation Ordinance (Including Neighborhood Meetings, etc.)	0–5 Years	Executive; MPC	General Fund	\$12,000
Q.4	Apply for and Achieve Certified Local Government (CLG) Status	0–5 Years	Executive; MPC	General Fund	\$6,000
Q.5	Apply for grants for remaining portions of city not previously surveyed through CLG Program	0–5 Years	Executive; MPC	General Fund; Grants	\$3,500
Q.6	Market the City's historic resources	0–2 Years	Executive	General Fund; Grants; CVB	\$20,000

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# CAPITAL PROJECTS

## General Government Services

STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
GG.1 Improve & expand communication with general public & residents to include mechanisms such as Town Hall Meetings & State of the City Address	0-2 Years	Executive; Mayor & Council	Staff Time	Staff Time
GG.2 Continue partnership with county to expand & enhance fiber throughout the city	0-2 Years	Executive; IT	Staff Time	Staff Time
GG.3 Enhance existing broadband service to improve quality of service for residents & businesses	0-5 Years	Executive; IT	Staff Time; General Fund; Grants	Staff Time
GG.4 Plan & implement solar powered lighting opportunities for main roadways	0-5 Years	Executive; Public Works	Staff Time; General Fund; Grants	\$10,000/ Annually
GG.5 Install more street lighting throughout city	0-5 Years	Executive; Public Works; GA Power	Staff Time; General Fund; Grants	\$10,000/ Annually
GG.6 Update noise ordinance	0-5 Years	Executive; GC Police	Staff Time; General Fund	Staff Time
GG.7 Complete a staff compensation evaluation every 3-years	0-5 Years	Executive; Human Resources	General Fund	\$20,000
GG.8 Complete a residential customer service survey	0-2 Years	Executive; Water/ Sewer Billing	Staff Time	Staff Time

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## Public Safety

STRATEGY		TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
PS.1	Increase neighborhood police patrols	0–2 Years	Police	Staff Time; General Fund	Staff Time
PS.2	Increase police traffic enforcement	0–2 Years	Police	Staff Time; General Fund	Staff Time
PS.3	Apply for grants to install police surveillance cameras	0–2 Years	Police	General Fund; Grants	Staff Time
PS.4	Install police school zone cameras	0–5 Years	Police	Staff Time; General Fund	Staff Time
PS.5	Enhance public safety staff recruitment program	0–2 Years	Police; Human Resources	Staff Time; General Fund	Staff Time
PS.6	Implement citizen engagement programs and enhance public safety staff interaction to communicate with public	0–2 Years	Police	Staff Time; General Fund	Staff Time
PS.7	Enhance police crime prevention programs	0–2 Years	Police	Staff Time; General Fund	Staff Time

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## Public Works

STRATEGY		TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
PW.1	Improve ditch & right-of-way maintenance	0-2 Years	Public Works	Stormwater Utility	Staff Time
PW.2	Routinely conduct a utility rate study to ensure affordable rates are maintained	0-5 Years	Executive; Water/Sewer/Stormwater	Water/Sewer Fund; Stormwater Utility	\$5,000/Annually
PW.3	Complete citywide water & wastewater system model	0-5 Years	Executive; Water/Sewer	Water/Sewer Fund	\$200,000
PW.4	Improve water system where needed throughout city	0-5 Years	Executive; Water/Sewer	Water/Sewer Fund	\$1 Million
PW.5	Purchase new street sweeper	0-5 Years	Public Works	Stormwater Utility	\$350,000
PW.6	Update the Stormwater Drainage Basin Master Plan	0-5 Years	Executive	Stormwater Utility	\$50,000
PW.7	Review latest data and models to determine the impacts of sea level rise on the city's infrastructure & population	0-5 Years	Executive	Stormwater Utility	\$20,000
PW.8	Develop a citywide pavement management system to prioritize city streets for future work	0-2 Years	Executive; Public Works	General Fund	\$70,000



## Recreation

	STRATEGY	TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
REC.1	Update the existing Parks and Recreation Masterplan to include proposed areas for expansion & improvements	0–2 Years	Executive; Recreation	SPLOST; General Fund; Grants	\$100,000
REC.2	Expand and improve recreational facilities in neighborhoods to specifically include Silk Hope and Rossignol Hill	0–5 Years	Executive; Recreation	SPLOST; General Fund	TBD; Final Project Scope
REC.3	Construct new recreation complex	0–2 Years	Executive; Recreation	SPLOST; General Fund	\$3.5 Million
REC.4	Increase recreation staffing	0–2 Years	Executive; Recreation	General Fund	\$100,000/Year
REC.5	Implement after school programs	0–2 Years	Recreation	General Fund	Staff Time
REC.6	Identify property for acquisition as community and pocket parks	0–2 Years	Executive; Recreation	SPLOST; General Fund	\$50,000
REC.7	Implement senior citizen Pick-up/Drop-off service	0–2 Years	Recreation	General Fund	Staff Time
REC.8	Increase parking at Bazemore Park	0–2 Years	Recreation	SPLOST; General Fund	\$250,000
REC.9	Garden City gym & stadium rehabilitation	0–5 Years	Executive; Parks & Recreation	SPLOST; General Fund	\$500,000



# REPORT OF ACCOMPLISHMENTS

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
INTERGOVERNMENTAL COORDINATION							
IC.1	Adopt a resolution in support of the Chatham County Blueprint	✓				The city adopted a resolution in support of the Chatham County Blueprint in 2016	2016
IC.2	Identify applicable goals and strategies from the Blueprint related to education, the economy, health, and quality-of-life for the implementation at the municipal government level	✓				The city identified applicable and appropriate goals and strategies from the Blueprint and has since incorporated those into the city's vision, goals, and short term work program for the future	Complete

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
HOUSING							
H.1	Coordinate with the Garden City Community Housing Team to restore, revitalize, and rehabilitate city neighborhoods		✓			The City has been working with our local 501c3 entity (Garden City Community Housing Team) for several years to implement this task	Ongoing
H.2	Explore alternative housing options to accommodate local and regional housing needs/trends (container housing)		✓			The City has been working with Habitat for Humanity on advancing its affordable housing program with very good success	Ongoing
H.3	Review codes related to vacant structures to evaluate if the mitigation process can be streamlined	✓				The City reviewed codes and increased its dilapidated structure demolition work in recent years to reduce blight and other negative impacts associated with such properties	Ongoing
H.4	Achieve "minimum standards" compliance with the Regional Plan for Coastal Georgia	✓				The City achieved minimum standards compliance with the Regional Plan. Garden City continues to incorporate applicable standards and requirements from the Regional Plan into its daily operations	2016



TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
ECONOMIC DEVELOPMENT							
ED.1	Support development and promotion of the Farmer's Market as a source of local produce				✓	The State of Georgia has been non-committal and cautious with regards to future operations of the site thereby placing the city's efforts on hold	
ED.2	Implement activities proposed in the Urban Redevelopment Plan (URP)		✓			The city continues to assess strategic implementation of the URP through corridor improvements as well as collaboration with Habitat for Humanity and other partners for housing infill and redevelopment	Ongoing
ED.3	Develop overlay districts with design guidelines for the commercial target areas defined in the Urban Redevelopment Plan		✓			The city has begun a corridor study for State Route 21 (SR 21) as an initial step in developing a future overlay district to coincide with the opening of the new K-12 school complex.	Ongoing
ED.4	Develop an Economic Development Plan that includes appropriate commercial business recruitment and support			✓		The city intends to utilize the outcome of the SR 21 Study discussed above to revisit this project opportunity	Postponed
ED.5	Identify and create Business Improvement Districts (BIDs), CIDs, TADs, or other entities to support economic development initiatives		✓			The city adopted an Enterprise Zone (EZ) Ordinance for Garden City Town Center in 2018 to incentivize economic growth for the area	Ongoing
ED.6	Develop a strategy for business recruitment			✓		See Item 7 above	Postponed

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
NATURAL & CULTURAL RESOURCES							
NR.1	Work with FEMA and ISO to improve the city's Community Rating System (CRS) score	✓				The city improved its Community Rating System (CRS) to a 6 in 2019, which puts Garden City in the top 20% of floodplain management programs in the country	2019
NR.2	Devise a water supply plan or strategy using existing and future withdrawal permit restrictions and outside sources	✓				The city participated in the Update to the Chatham County Water Supply Management exercise in 2017	2018
NR.3	Participate in an update to the Chatham County Water Supply Management Plan	✓				The city participated in the Update to the Chatham County Water Supply Management exercise in 2017	2018
NR.4	Identify property for acquisition as community and pocket parks		✓			This project was first budgeted in FY21 by the city and the project is ongoing at this time.	Ongoing
NR.5	Continue to educate residents regarding the need to protect designated flood zones or high risk flood areas		✓			The city educates its citizens and businesses regarding this matter on an annual basis via brochures, utility bill inserts and news articles	Ongoing
NR.6	Perform a tree inventory in public ROW and city parks			✓		The city has postponed this task due to a lack of funding	Postponed
NR.7	Update stormwater ordinances and local design manual to incorporate basin specific designs into the regulations		✓			The city staff has been working with its consultants to enhance existing ordinances to better protect properties and structures from flooding	Ongoing





TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
TRANSPORTATION							
T.1	Improve traffic level of service and road conditions for Chatham Parkway and associated roads in the Telfair area	✓				The city completed a \$3 million road improvement project for Chatham Parkway in 2018. This project improved the operational function of the road system to accommodate the increased traffic in the area	2018
T.2	Develop a citywide pavement management system to prioritize city streets for future work			✓		The city has considered implementation of a Pavement Management System (PMS) to assess the conditions of city streets but inadequate funding has kept the city from moving forward with this task as of this time	Postponed
T.3	Improve pedestrian safety and mobility around city arterials and state routes		✓			The ongoing SR 21 Study is the city's most focused effort on addressing this issue. It is anticipated that the completed study will provide the city the needed guidance to move this task forward in the future	Ongoing
T.4	Implement the city's comprehensive Capital Improvement Program (CIP)		✓			The city has been annually evaluating its CIP and then strategically budgeting for its implementation each fiscal year.	Ongoing
T.5	Work with Chatham Area Transit (CAT) to expand services to targeted areas of the city		✓			The city has been working very closely with CAT to expand services along the SR 21 corridor in recent months with implementation of the expanded program likely within the next 12 to 18 months	Ongoing

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
RESILIENCY & SUSTAINABILITY							
RS.1	Continue to participate in disaster preparedness exercises with CEMA and other neighboring jurisdictions		✓			The city regularly coordinates and collaborates with CEMA and neighboring jurisdictions as it relates to emergency preparedness	Ongoing
RS.2	Coordinate with CEMA on the Disaster Recovery Plan and Redevelopment Plan	✓				The city adopted the Chatham County Hazard Mitigation Plan in 2020 and regularly coordinates with CEMA on related plans and efforts	Ongoing
RS.3	Deter development within the regulated high risk flood zones		✓			The city's Flood Damage Prevention Ordinance (FDPO) is a tool that is routinely utilized by the Planning and Engineering Review staff as it relates to managing the land development review and approval process	Ongoing
RS.4	Review and implement the recommendations from the Greenhouse Gas Emissions Inventory to reduce the impact of government operations			✓		The city has postponed this task due to a lack of funding	Postponed
RS.5	Review and implement the recommendations of the Safe Growth Audit		✓			The city through its zoning, land development, stormwater runoff and floodplain management ordinances is implementing the general recommendations as set in the Safe Growth Audit from 2013	Ongoing
RS.6	Review existing Sea Level Rise studies and data trends to understand how the city may be impacted		✓			The city is working closely with Chatham County as it relates to the county's ongoing studies pertaining to sea level rise in the coastal Georgia region. The city intends to adopt strategic measures as put forth by the county to assist the city in addressing this issue in the future	Ongoing

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
FACILITIES & SERVICES							
FS.1	Implement the Parks and Recreation Master plan to include new and renovated facilities		✓			The city has developed a preliminary concept design and established a line item in the SPLOST budget for the planned recreation complex within the Master Plan	Ongoing
FS.2	Continue to expand water and wastewater service south of I-16 in association with the Town Center development and the South Garden City Urban Redevelopment Area		✓			The city has expanded its water and sewer service within the Garden City Town Center (GCTC) area to facilitate new development. The other areas further south from I-16 are still in the preliminary planning stages at this time	Ongoing
FS.3	Explore ways to better track citizen requests through apps, live real-time reporting, and other technologies		✓			In addition to a phone work order system, the city implemented an online work order system as well as social media tools to enable citizens to provide information to the city staff for review and possible follow up action	2019
FS.4	Upgrade the City's Water Pollution Control Plant (WPCP) to a reuse discharge standard)				✓	The Georgia EPD has not mandated that the city upgrade its WPCP as of this time	N/A
FS.5	Proactively maintain the MS4 as required by the Phase I NPDES permit to mitigate the impacts of flooding		✓			The city continues to allocate significant resources to its ongoing drainage system maintenance program via the city's Stormwater Utility revenue stream	Ongoing
FS.6	Improve citywide fire service to maintain/improve ISO rating		✓			The city is continuously reviewing and looking to improve its fire services to ensure that we maintain the appropriate ISO rating for the community	Ongoing

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