

COVER SHEET FOR COMMUNITY PLANNING SUBMITTALS

Name(s) of Submitting Government(s): ; UfXYb 7 J]m

RC: **CGRC**

Submittal Type: ; UfXYb 7 J]m&\$%5ddfcj YX 7 ca d`D`Ub

Preparer: RC Local Government Consultant: Specify

Cover Letter Date: %\$#&* /21

Date Submittal Initially Received by RC: %\$#&* /21

Explain Unusual Time-lags or Other Anomalies, when present:

Inaccurate/incomplete information, above, and nonconformity with the standards articulated, below, are reportable as performance errors under the terms of the annual DCA/RC contract and may lead to adverse audit findings.

- **ALL SUBMITTALS MUST BE TRANSMITTED ELECTRONICALLY USING THE DEPARTMENT'S SHAREPOINT SITE.**
- **COMBINE ALL INDIVIDUAL IMAGES, DOCUMENTS AND SPREADSHEETS INTO ONE SINGLE, SEARCHABLE PDF (INCLUDING COVER LETTERS, APPENDICES, ETC.), PUT THIS COMPLETED FORM AS THE FIRST PAGE OF THE PDF AND THEN UPLOAD IT.**
- **REVISED SUBMITTALS MUST INCLUDE THE ENTIRE DOCUMENT, NOT ONLY THE REVISED PORTION.**
- **EMAILED OR HARDCOPY MATERIALS WILL NOT BE ACCEPTED FOR DCA REVIEW.**
- **ALL SUBMITTALS MUST BE CHanneled THROUGH THE APPROPRIATE REGIONAL COMMISSION.**

COMPREHENSIVE PLAN 2040

GARDEN CITY

2020 UPDATE



Adopted by Garden City's City Council
October 18, 2021



GARDEN CITY
2040

**ADVANCING TOGETHER.
REDEFINING TOMORROW.**

**A RESOLUTION BY THE MAYOR AND COUNCIL OF GARDEN CITY, GEORGIA,
AUTHORIZING THE ADOPTION OF THE 2021 UPDATED GARDEN CITY
COMPREHENSIVE PLAN 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 the Department of Community Affairs requires written notice that the Comprehensive Plan for Savannah, Georgia was adopted;

BE IT THEREFORE RESOLVED that the City of Garden City does hereby adopt the Garden City Comprehensive Plan and authorizes the City Manager to transmit the Resolution of Adoption to the Coastal Regional Commission and Department of Community Affairs as required by the Georgia Planning Act of 1989.

Adopted this 18th day of October, 2021

GARDEN CITY, GEORGIA

By: 
Don Bethune, Mayor

Attest: 
Rhonda Ferrell-Bowles, City Clerk



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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*

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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Special Thanks

Patty McIntosh, AICP—*Contract Editor*



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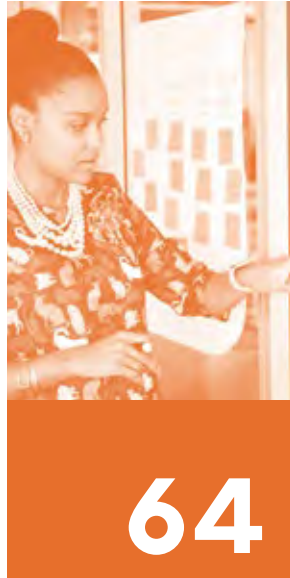
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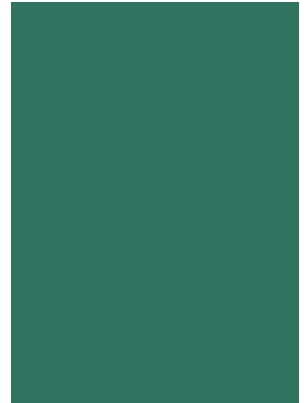
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WELCOME LETTER

LETTER FROM THE MAYOR



Don Bethune, Mayor of Garden City

A handwritten signature of Don Bethune in black ink, appearing to read "Don Bethune".

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 jurisdiction. 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 development of this planning document.

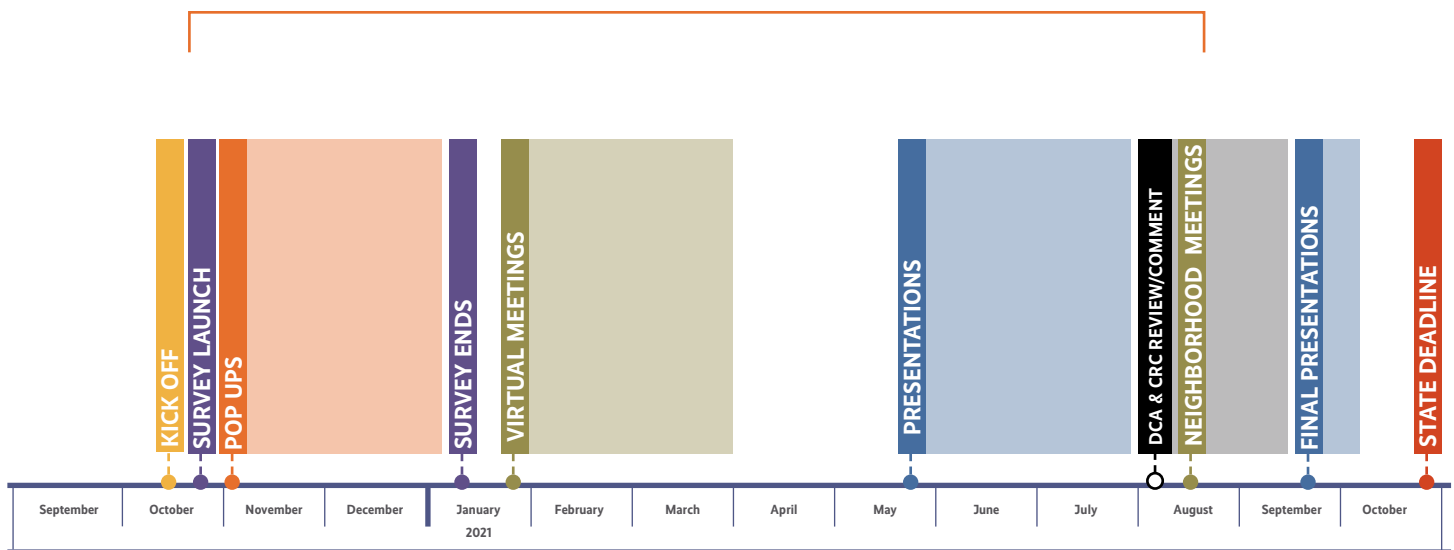


PLAN SCHEDULE

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

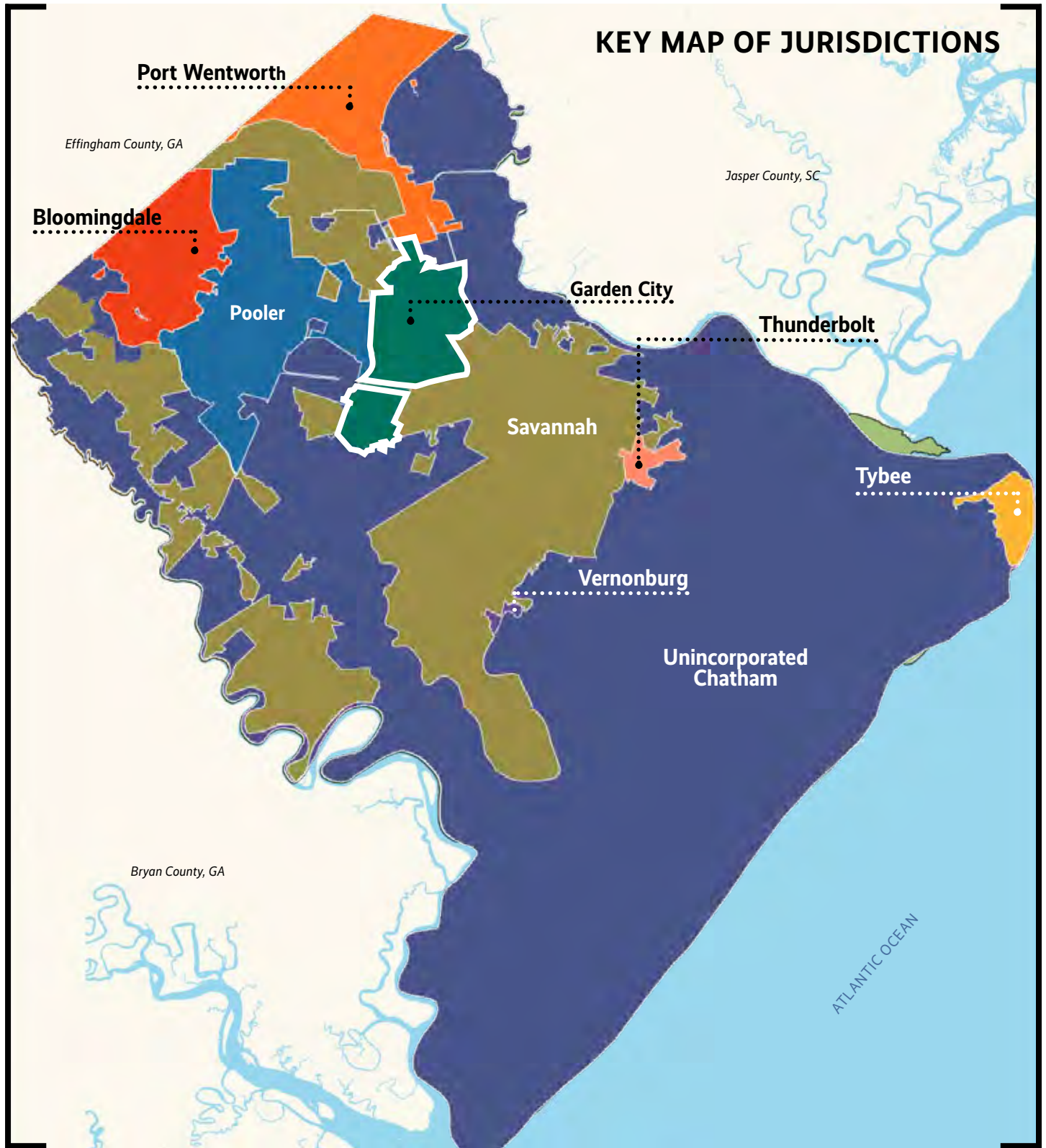
- Draft Element Visions & Goals
- Draft Short Term Work Programs
- Public Engagement Evaluation
- Virtual Meetings
- Subcommittee Meetings

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 the responsible party/parties, the time frame within which the action should occur, and other details for implementation to 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

The following words shall have the meaning as contained herein unless the context does not permit such meaning.

	Definitions
Character Areas	<p>A specific geographic area or district within the community that:</p> <ul style="list-style-type: none"> • Has unique or special characteristics to be preserved or enhanced, • Has Potential to evolve into a unique area with more intentional guidance of future development, • Requires special attention due to unique development issues. <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>
Community	Local jurisdiction (county or municipality) or group of local jurisdictions (in the case of a joint plan) that are preparing a local plan
Comprehensive Plan	<p>A plan meeting the 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 comprehensive plans, established by the Department in accordance with O.C.G.A. 50-8-71(b) and 50-8-72</p>
Comprehensive Planning Process	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
Conflict	<p>Any conflict, dispute, or inconsistency arising:</p> <ul style="list-style-type: none"> • Between or among plans, or components thereof, for any counties or municipalities, as proposed, prepared, proposed to be implemented, or implemented • Between or among plans for any regions, as proposed, prepared, proposed to be implemented, or implemented • 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

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
Core Elements	<p>Community, Goals, Needs and Opportunities, and Community Work Program. These are the primary elements that must be included, at a minimum, in each community's comprehensive plan</p>
County	Any county of this state
Days	Meaning calendar days, unless otherwise specified
Density	An objective measurement of the number of people or residential units allowed per unit of land, such as dwelling units per acre
Department	Department of Community Affairs established under O.C.G.A.50-8-1
Governing Body	Board of Commissioners of a county, sole commissioner or a county, council, commissioners, or other governing authority of a county or municipality
Infrastructure	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
Qualified Local Government	Any county, municipality, or other political subdivision of the state
MPO	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 the transportation needs of their respective constituencies, and prioritizing and programming projects (bicycle and pedestrian projects) for federal funding
Minimum Standards and Procedures	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
Mediation	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)
Municipality	Any municipal corporation of the state and any consolidated government of the state
Plan	The comprehensive plan for any county or municipality
Plan Amendment	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
Plan Update	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
Planning	The process of determining actions which state agencies, Regional Commissions, and local governments propose to take
Qualified Local Government	A county or municipality that adopts and maintains a comprehensive plan as defined in the Minimum Standards and Procedures.
Regional Commission	A Regional Commission established under O.C.G.A 50-8-32
Regional Plan	The comprehensive plan for a region prepared by the Regional Commission in accordance with the standards and procedures established by the Department

	Definitions
Rules for Environmental Planning Criteria	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.
Service Delivery Strategy	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"> The services to be provided by the local government, as identified in the plan, cannot exceed those identified in the agreed upon strategy The service areas identified for individual services that will be provided by the local government must be consistent between the plan and Strategy As provided in Code Section 36-70-28 (b)(1), Service Delivery Strategies must be reviewed, and revised if necessary, in conjunction with county and municipal comprehensive plan updates
Supplemental Planning Recommendation	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.
Update Schedule	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. 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



Signs pinned to the tent include:
- "Dedicated Bike Lane @ Forest St"
- "Trucking Lane"
- "Great Streets"

PLAN 2040
Advancing Together, Redefining Tomorrow

PLAN 2040
Advancing Together, Redefining Tomorrow

PLAN 2040
SHARE YOUR THOUGHTS

WHAT MAKES A CITY GREAT?
Let your voice be heard.

DIRTY PEN



COMMUNITY PARTICIPATION

Introduction

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 preparation 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 that are addressed primarily in the comprehensive plan.

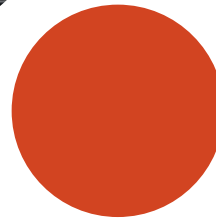
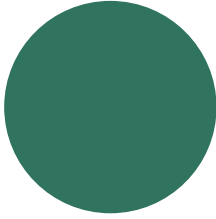
COMMUNITY PARTICIPATION PROGRAM

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.

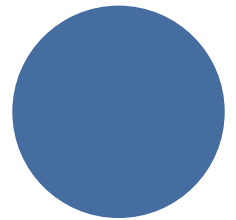
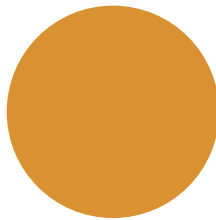
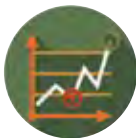
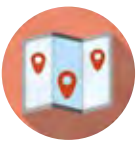
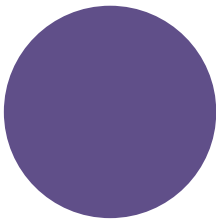
The Garden City 2040 process collected valuable input from diverse platforms, community members, and stakeholders to shape the Plan's vision and goals. The outreach process involved a variety of different approaches, which are listed below:

- 14 Virtual Public Meetings
- 10 Email Blasts
- 6 Quarterly Newsletters
- MPC Annual Report
- Press Releases (Traditional Media Interviews)
- Garden City Online Website Promotion
- Online Interactive Comment Mapper (~300 Comments)
- Social Media (Instagram, Twitter, Facebook)
- Utility Bill Messages
- 4 Pop-up events
- Dedicated Plan 2040 Website
- Online Survey (101 Participants)





GARDEN CITY 2040



COMMUNITY SURVEY & SWOT ANALYSIS

Survey Overview

MPC staff 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
- Housing
- Land Use
- Natural Resources (Sea Level Rise)
- Transportation
- Economic Development

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.

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

Survey Respondents

To get a better understanding of the citizens who 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?

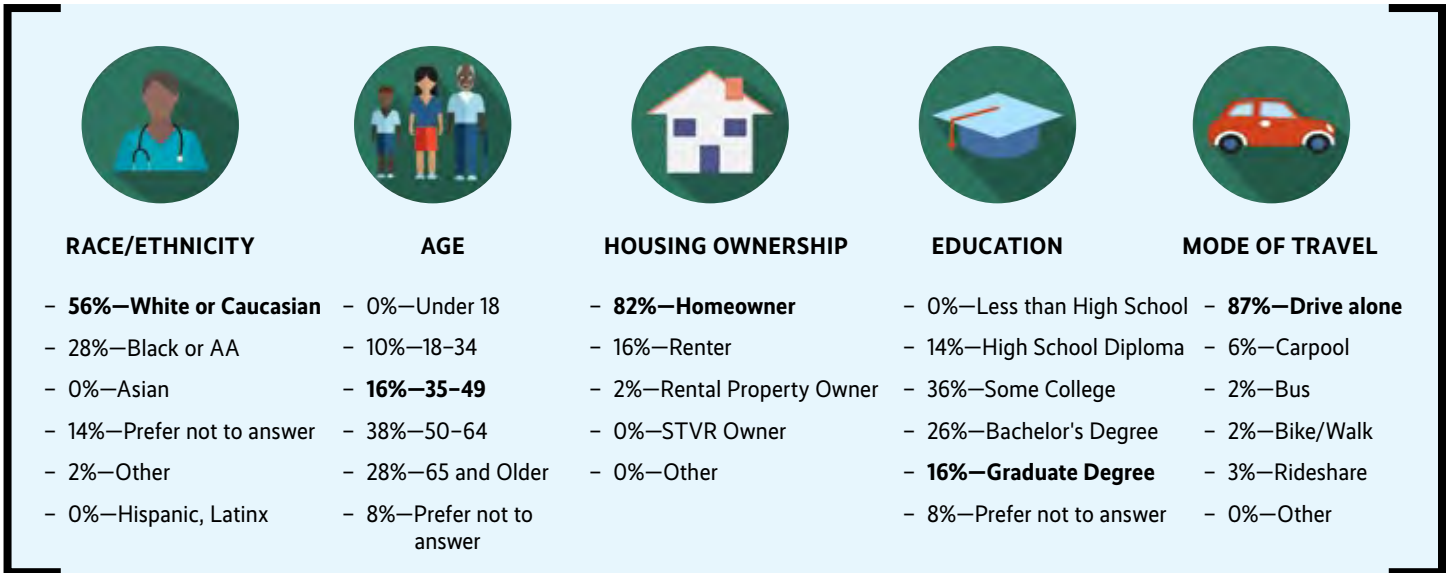
Stakeholder Needs Analysis

The Plan's Stakeholder Committee participated in an exercise analyzing issues and opportunities in Garden City.

The SWOT analysis was designed to identify priority needs and opportunities, both internally and externally for Garden City and was used as a basis for shaping the future vision and goals for the community.

The Stakeholder Committee's input helped determine the needs and opportunities as part of the comprehensive planning process. The results of the needs and opportunities analysis are incorporated into the body of the plan and are outlined by plan element on pages 38 and 39.

Survey Respondents By The Numbers



SWOT ANALYSIS

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

PLAN 2040 SURVEY QUESTIONS & RESPONSES

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 describe 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

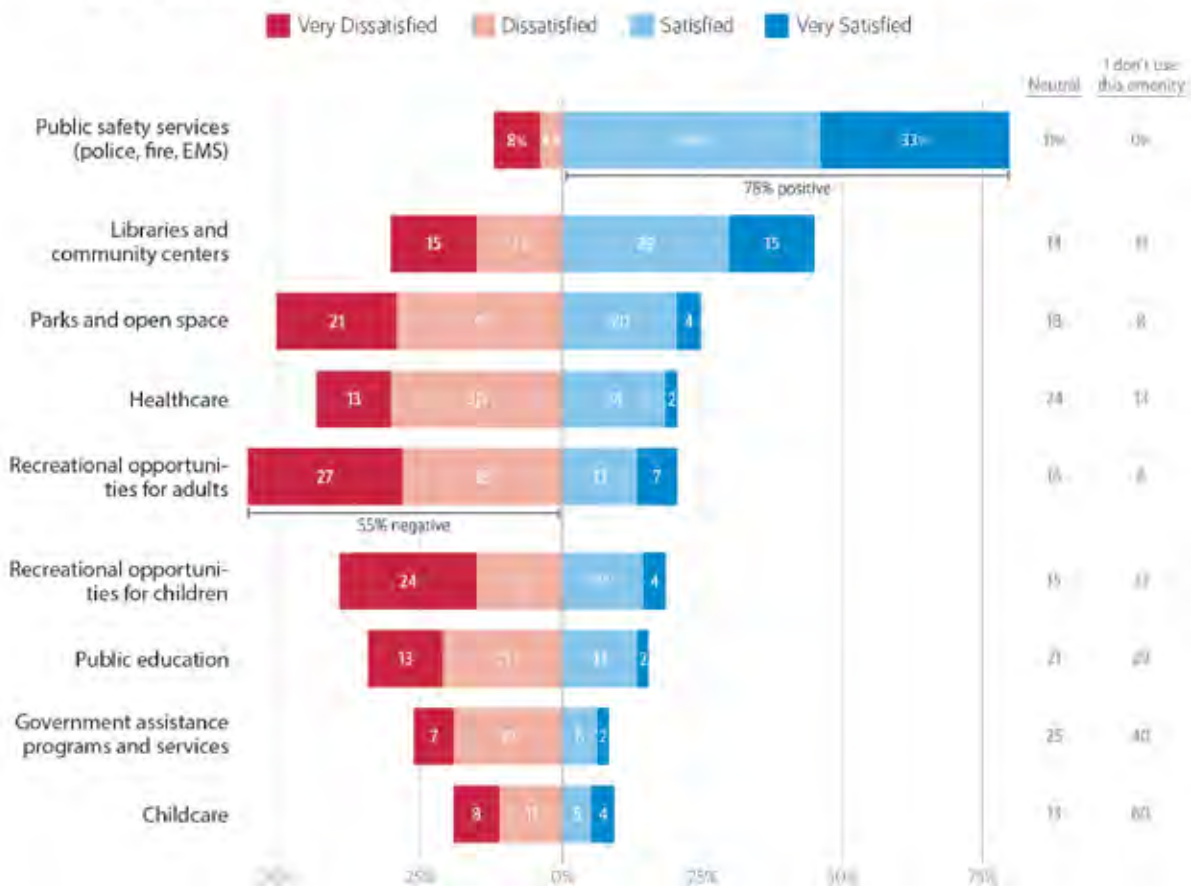
20. On a scale from 1 to 5, with 1 being the most negative and 5 being the most positive, how would you rate the general growth in the past 5 years?
21. How strongly would you agree with the following statements about economic development?
22. How important are the following objectives to you?
23. Do 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?

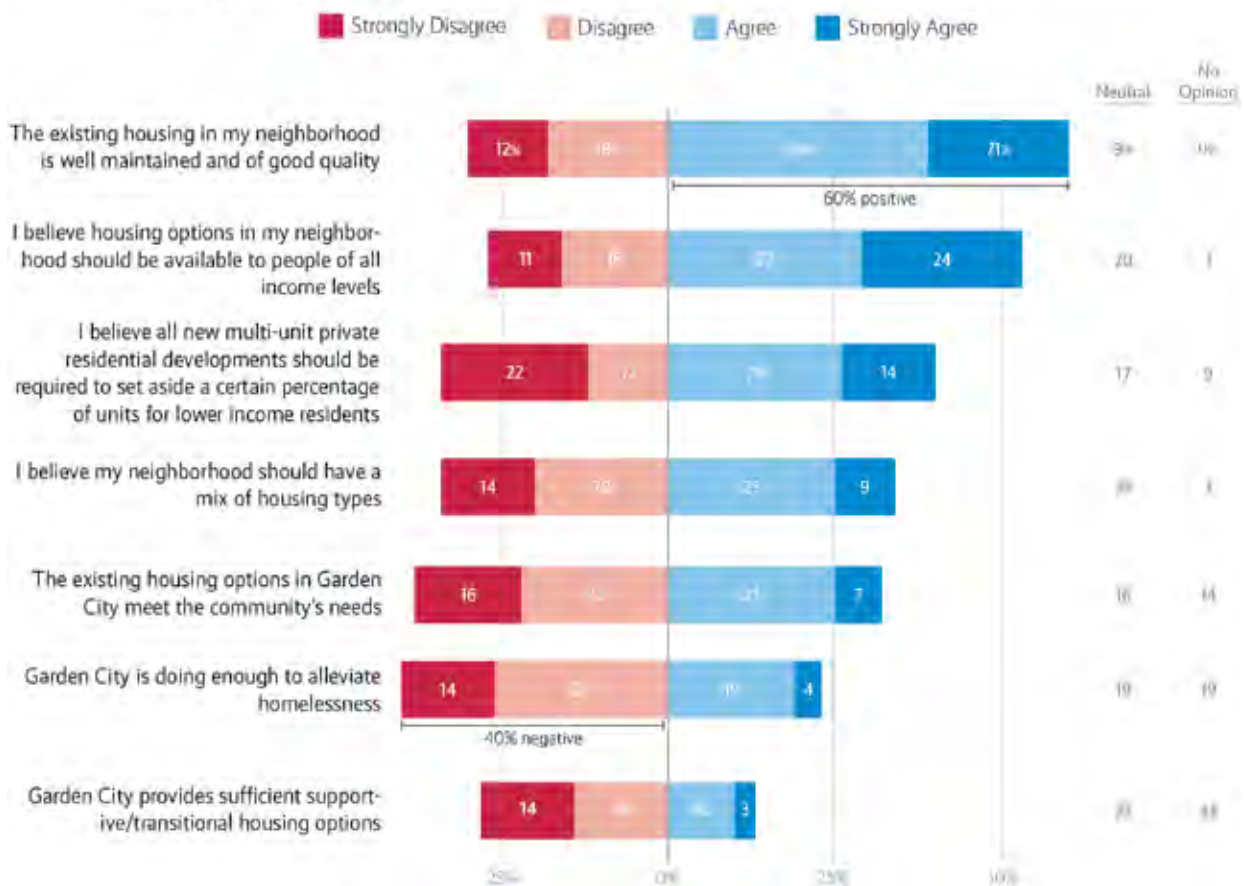
% of survey respondents who are _____ with the following public amenities and services in their community.



Housing

1. Which categories describe 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?

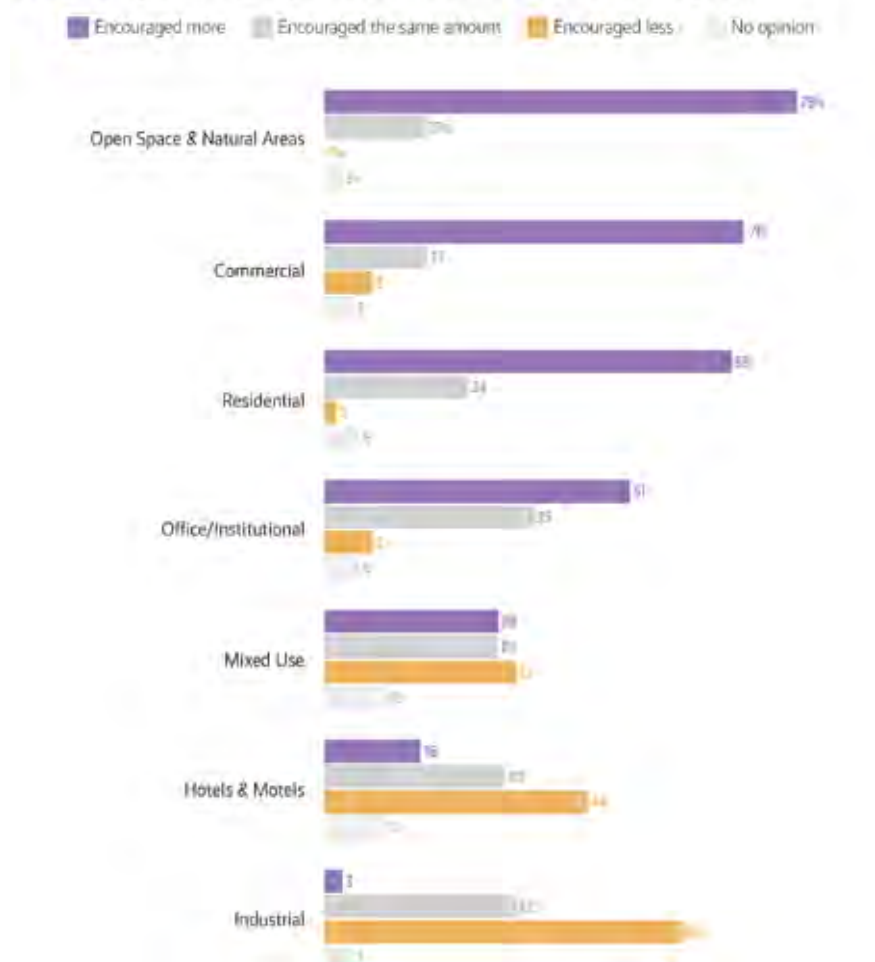
% of survey respondents who _____ with the following statements about housing in Garden City.



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?

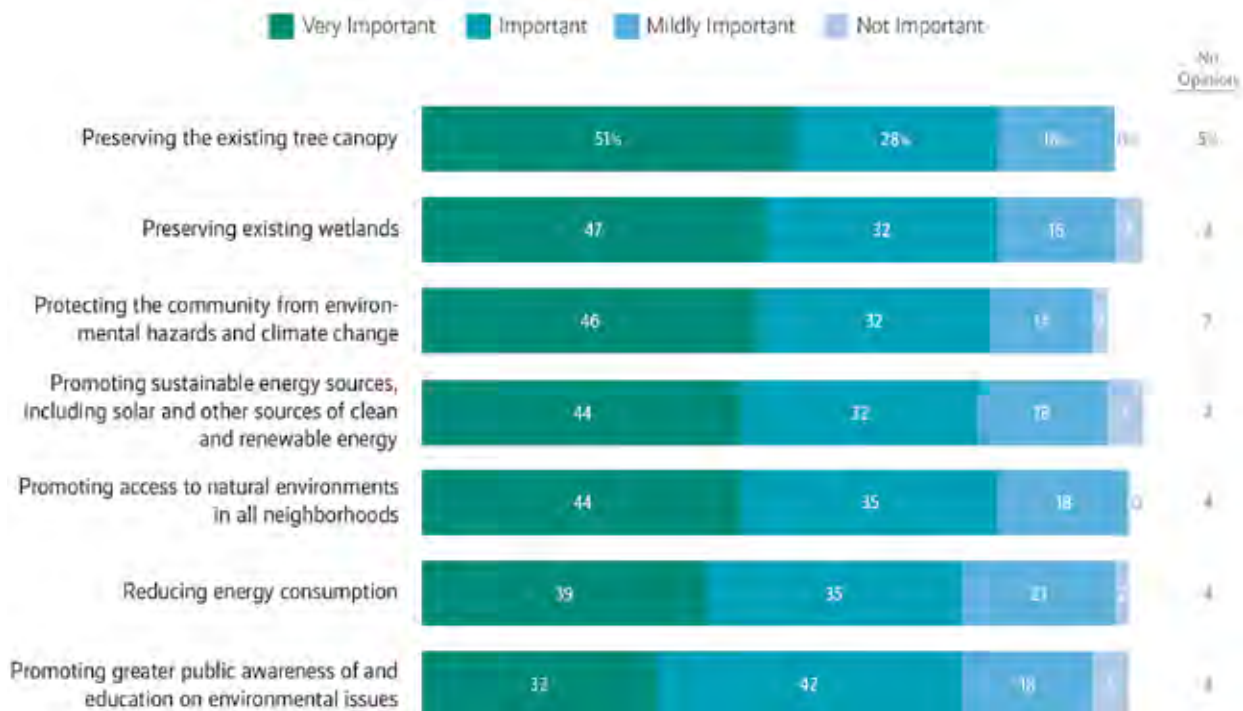
% of survey respondents who think the following types of development should be encouraged more, less, or about the same over the next 10 years.



Natural Resources

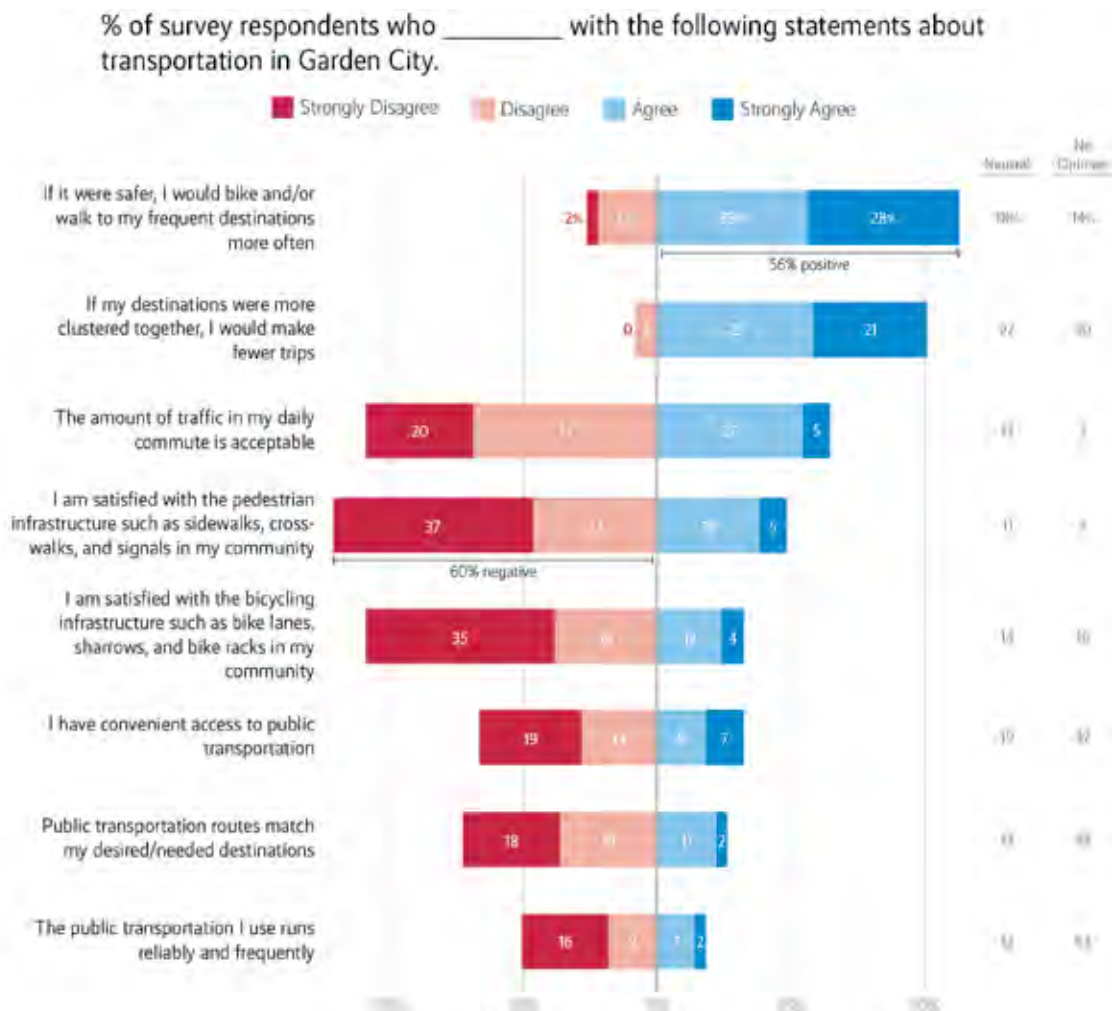
1. How strongly would you agree with the following statements about natural resources? (Results Below)
2. How important are the following objectives to you?
3. Which of the following strategies would you support to protect resources from hazards related to climate change?

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



Transportation

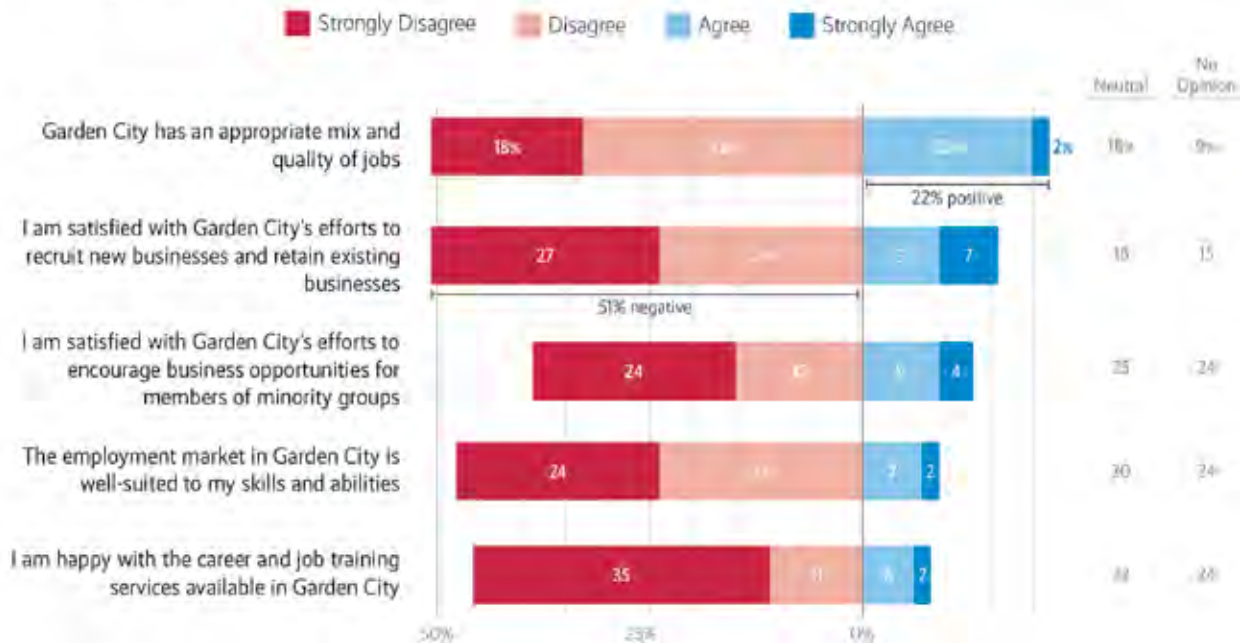
1. What is your primary mode of travel?
2. How strongly do you agree with the following statements about transportation? (Results Below)
3. Do you have any additional comments about transportation?



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?

% of survey respondents who _____ with the following statements about economic development in Pooler.



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

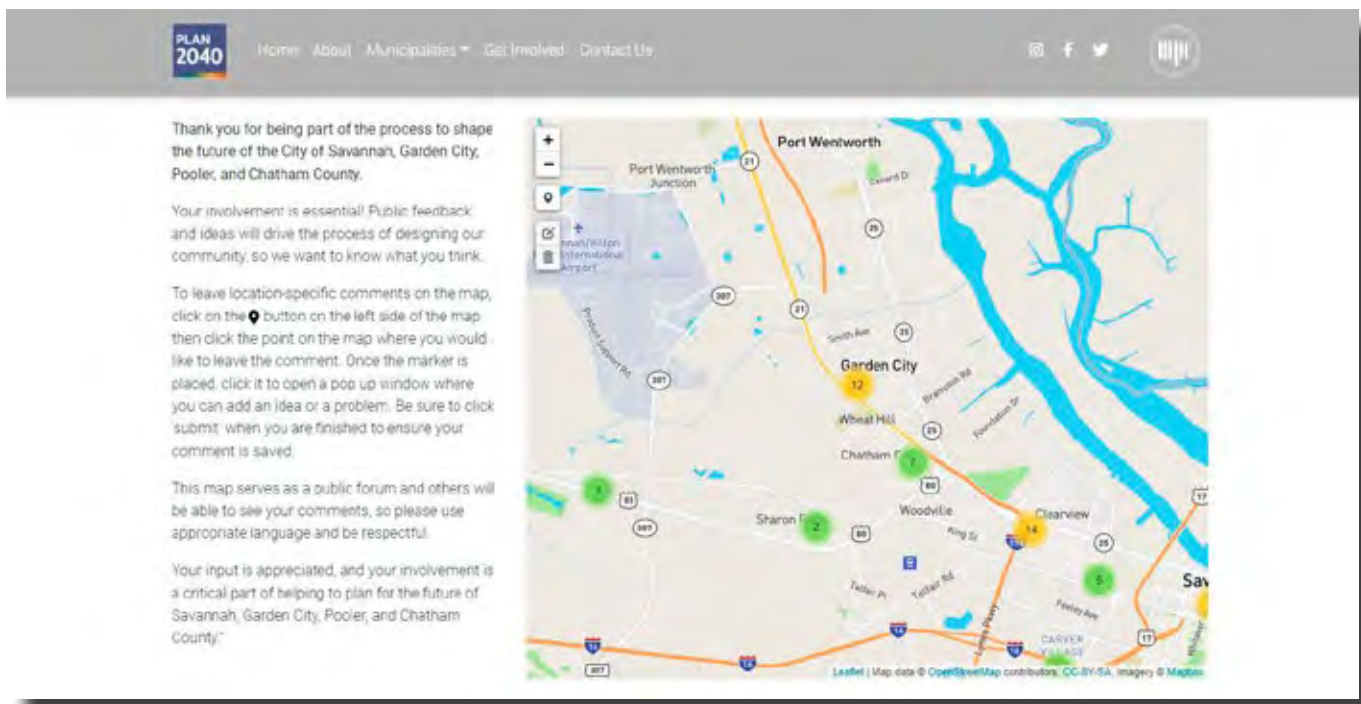
Comment Map Overview

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 community members to anonymously 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 to the right 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

- More CAT Bus Stops Needed
- 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

Community Outreach Overview

The Garden City 2040 team conducted a series of five 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 organizations 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 150 residents attended these pop-ups and provided over 500 comments.



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)



NEEDS & OPPORTUNITIES



QUALITY OF LIFE

- **Needs:**
 - Increase and improve lighting
 - Improve streetscape beautification
 - New holiday street lights needed
 - Need gateway signage and beautification
 - Need another grocery store
 - Increase supply of commercial businesses
- **Opportunities:**
 - City needs more opportunities for community outreach
 - Need better access to farmer's markets
 - Need to address issues with trash and litter
 - Great police force, Garden City feels safe



HOUSING

- **Needs:**
 - 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
- **Opportunities:**
 - Expand the interest in tiny homes
 - City is doing a good job at eradicating condemned and blighted housing



LAND USE

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



NATURAL RESOURCES

- **Needs:**
 - Preservation of existing tree canopy
 - More buffering between land uses
 - Preservation of Salt Creek area resources
 - More trees along major roadways
 - Enforce no residential development in flood zones
- **Opportunities:**
 - Many of the undeveloped areas of the City still have beautiful natural resources



TRANSPORTATION

- **Needs:**
 - Trains blocking the street systems and isolating neighborhoods while the trains are not moving
 - Address heavy traffic on Highway 21
 - More connectivity of sidewalks
- **Opportunities:**
 - Increase public transit routes with CAT
 - More public transit would decrease the length of walking for students and increase safety



ECONOMIC DEVELOPMENT

- **Needs:**
 - Overarching concern on the growth and impact of the GPA on Garden City
 - More energy into business recruiting for entertainment venues
 - Need for Workforce development
- **Opportunities:**
 - Need to publicize Garden City and all of its many assets





**COMMUNITY
PROFILE
ELEMENT**

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.

With the exception of the population snapshot found in Figure 1.3, the population data presented throughout is from the U.S. Census Bureau’s American Community Survey (ACS) multiyear estimates covering the 2014–2018 period and was the most current publicly available ACS multiyear data at the time of reporting.

Population Growth, 1970–2018

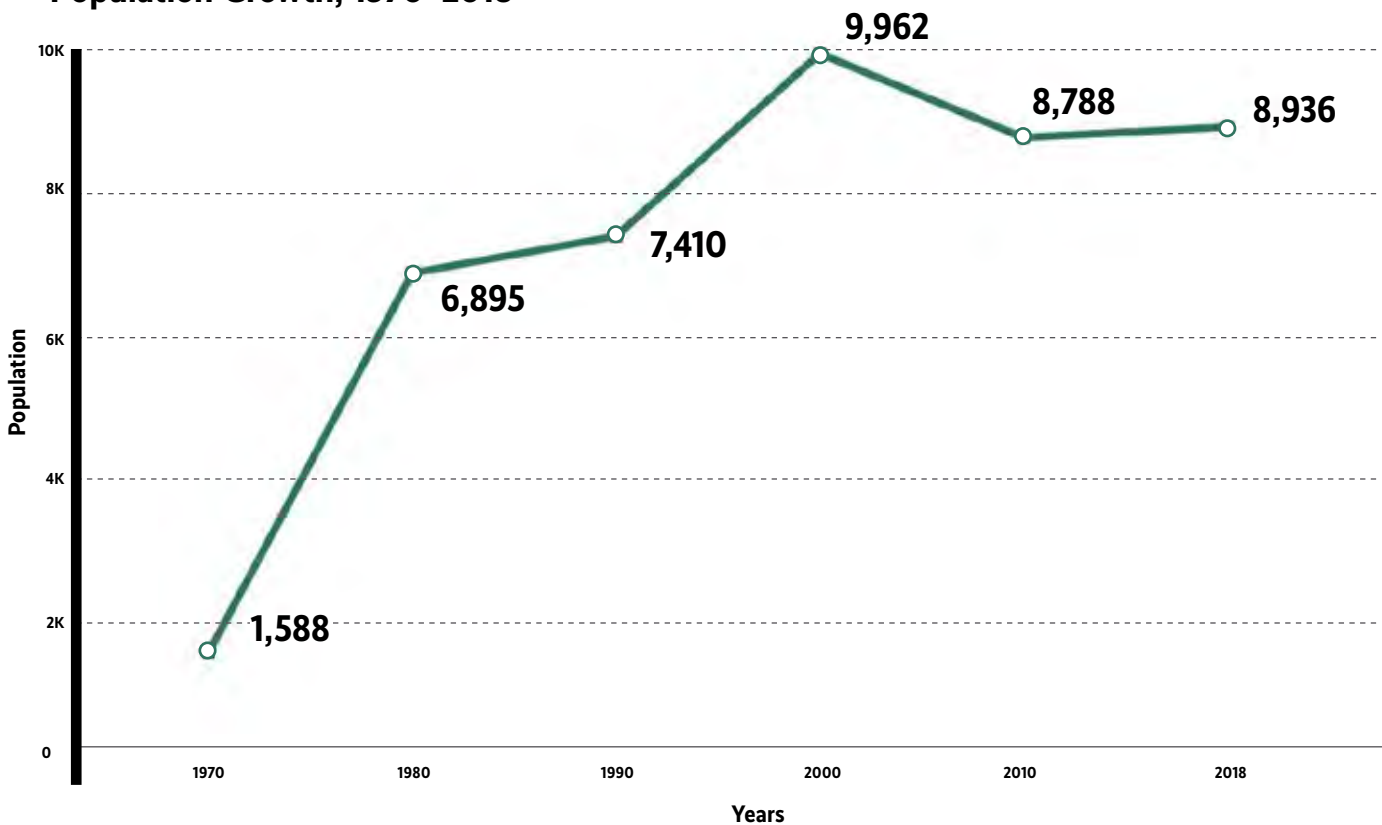


Figure 1.1–Population Growth, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



Population Growth Comparison, 1970–2020

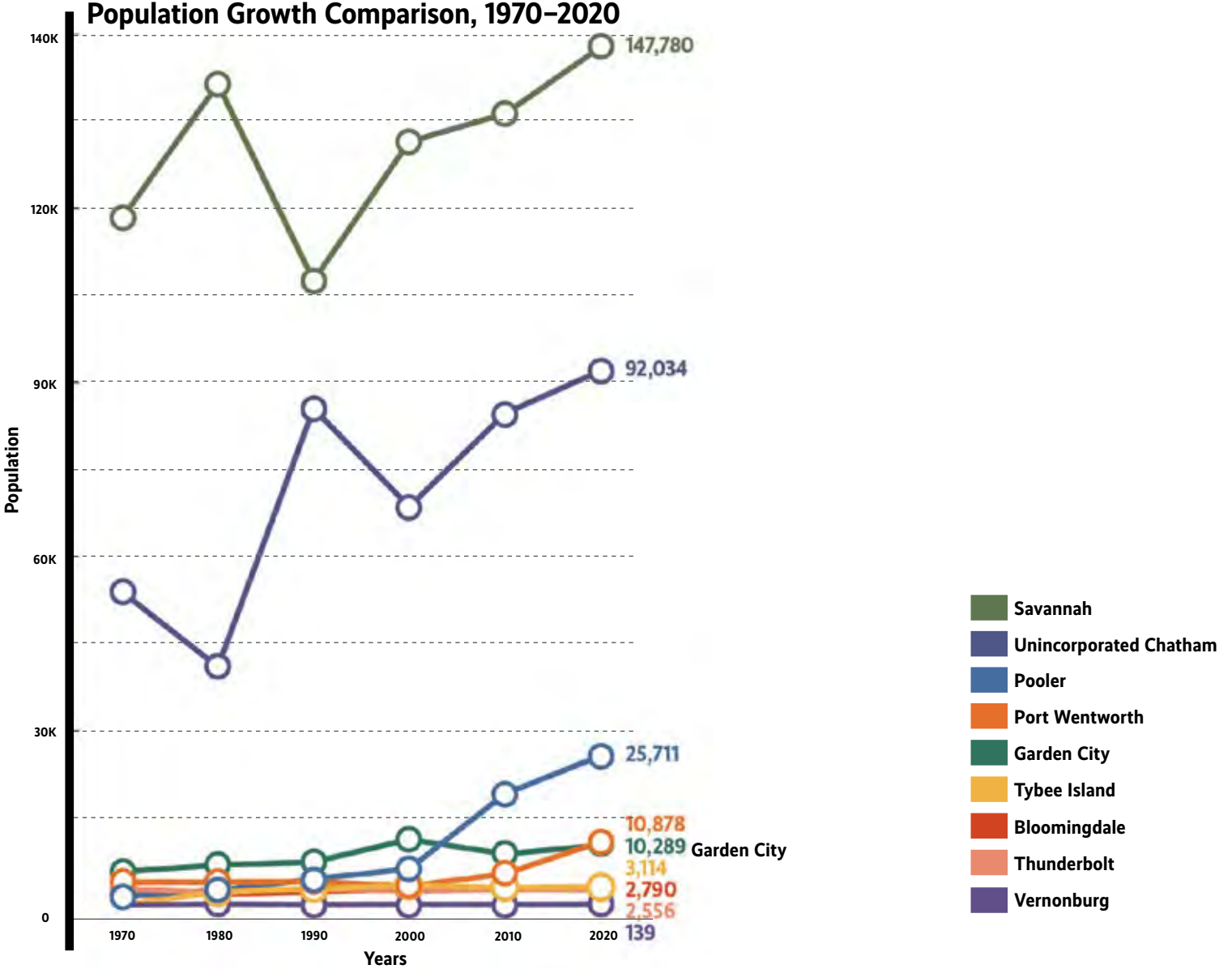


Figure 1.2–Population Comparison, 1970–2020, Garden City
 U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



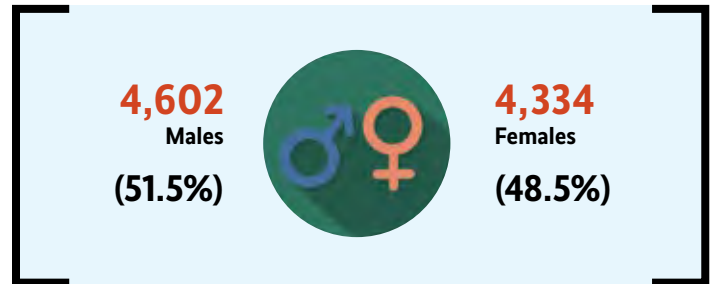
Gender & Age

Of the 8,936 people living 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 number 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

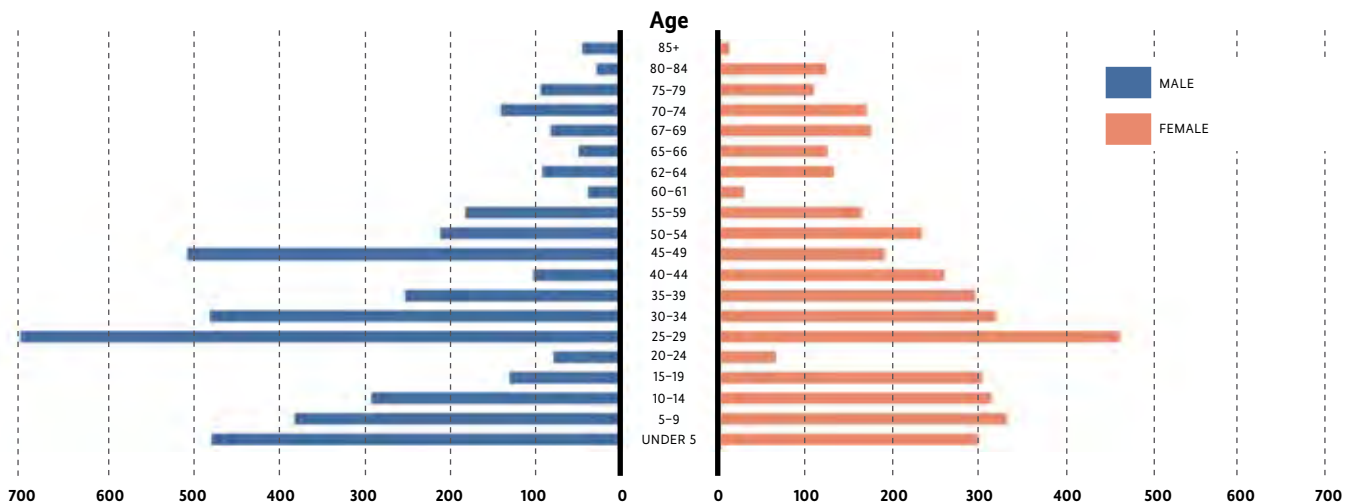
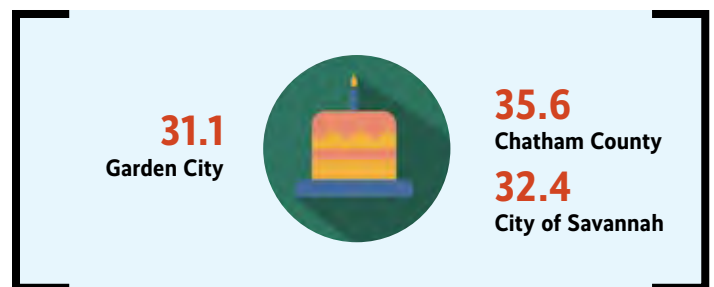


Figure 1.3–Population Pyramid, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

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 50 years, the non-white share of Garden City's population has doubled from roughly 25% in 1970 to 52.9% 2018.

Population by Race, 2014–2018

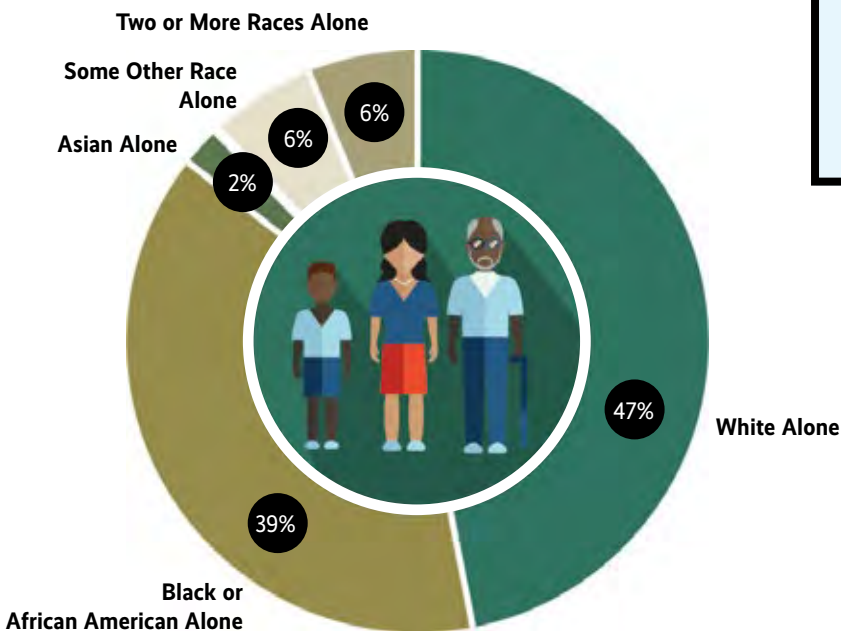
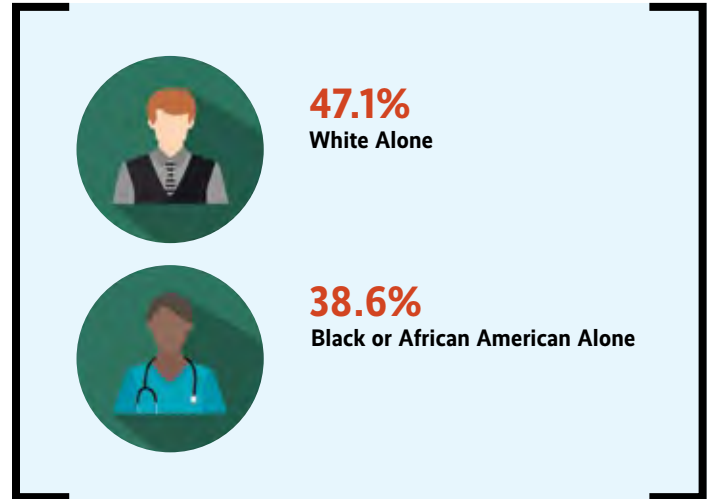
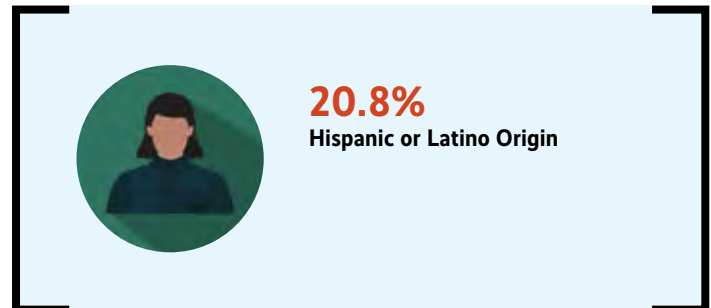


Figure 1.4–Population by Race, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

Racial Majority Characteristics, 2014–2018



Ethnicity, 2014–2018



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.

Philip Meyer, Shawn McIntosh, THE USA TODAY INDEX OF ETHNIC DIVERSITY, International Journal of Public Opinion Research, Volume 4, Issue 1, SPRING 1992, Pages 51–58

Race & Ethnicity Changes, 1970–2010

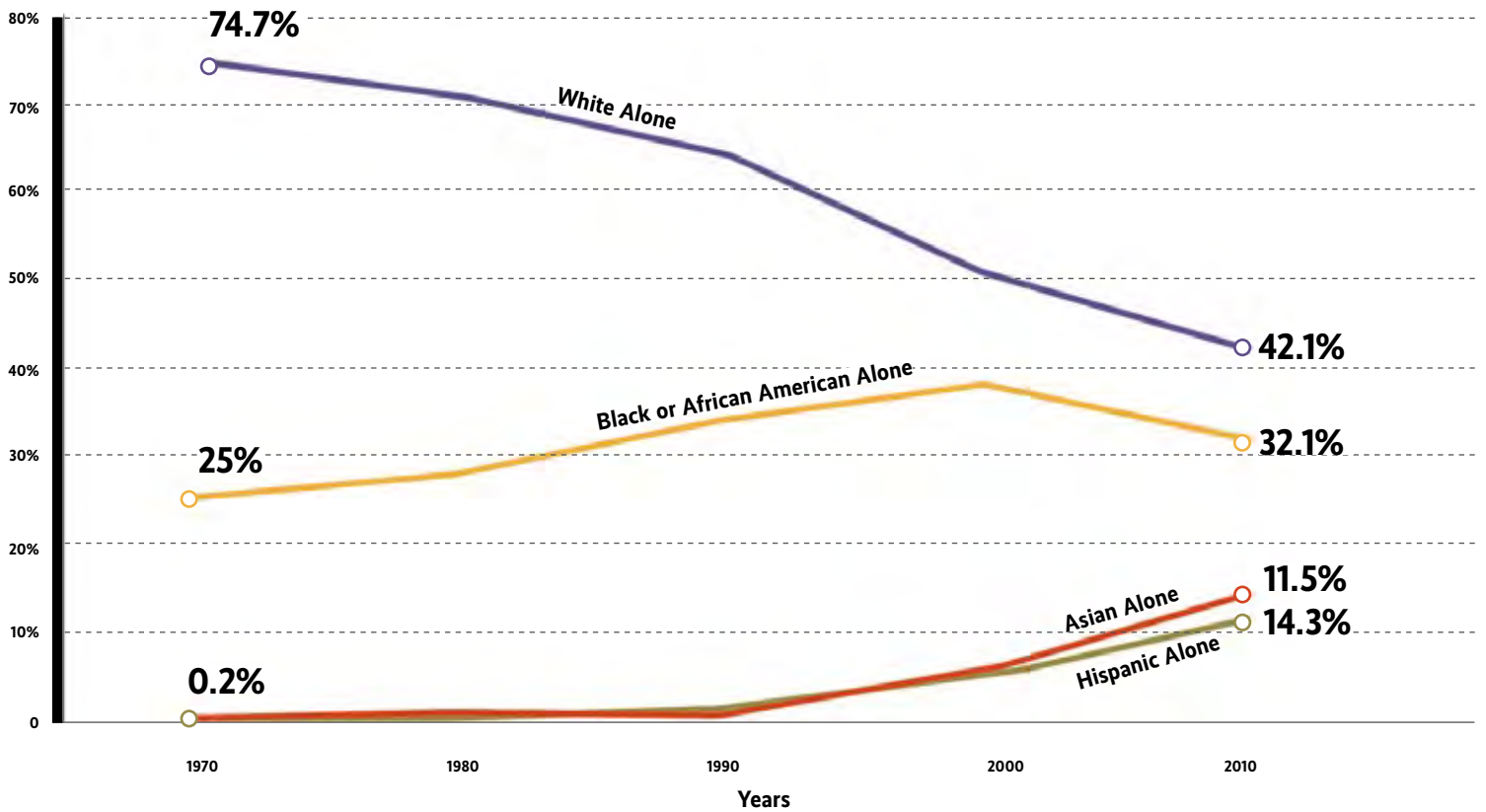
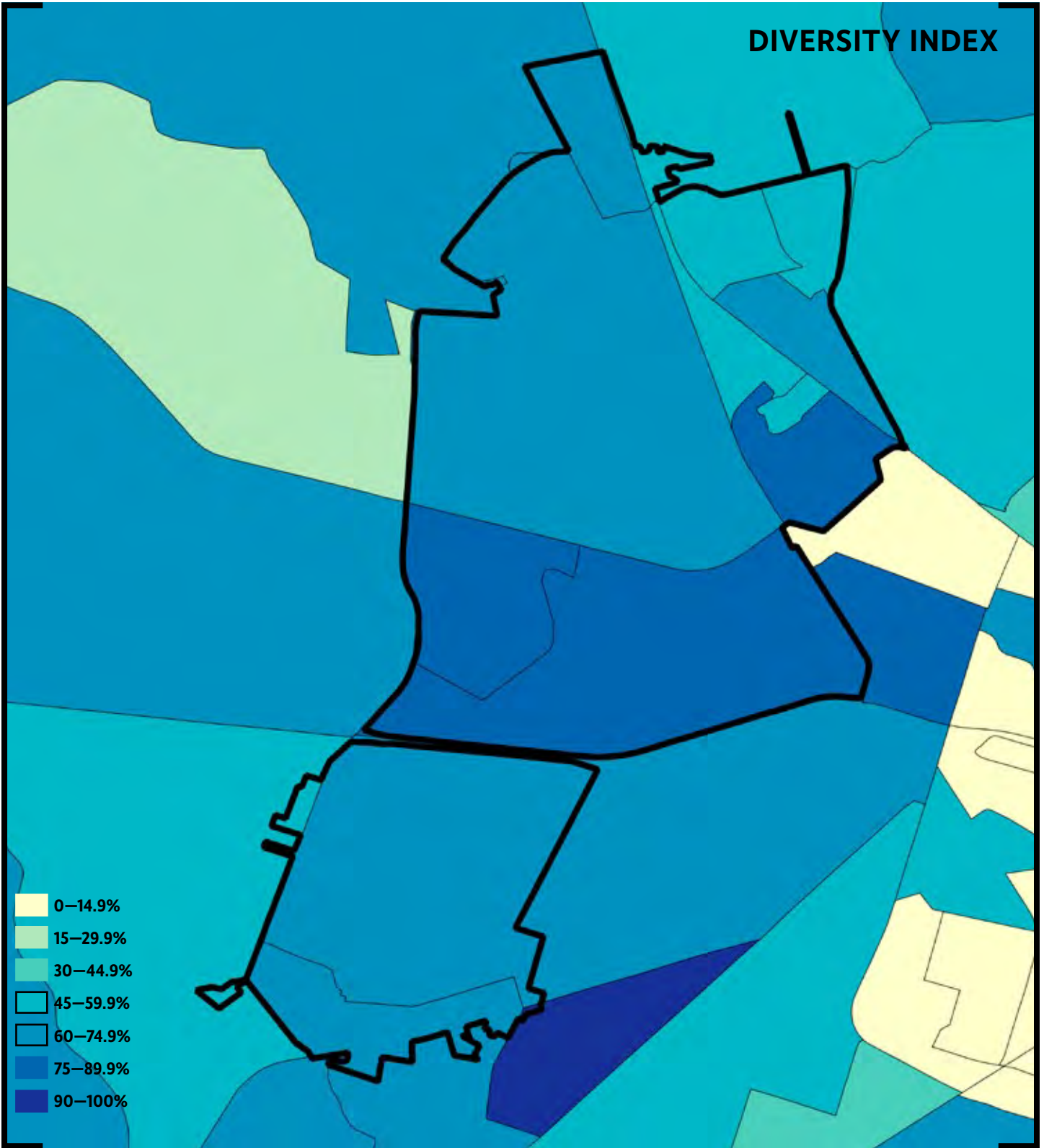


Figure 1.5—Race & Ethnicity Over Time, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



Map 1.1—Diversity Index by Block Group, 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

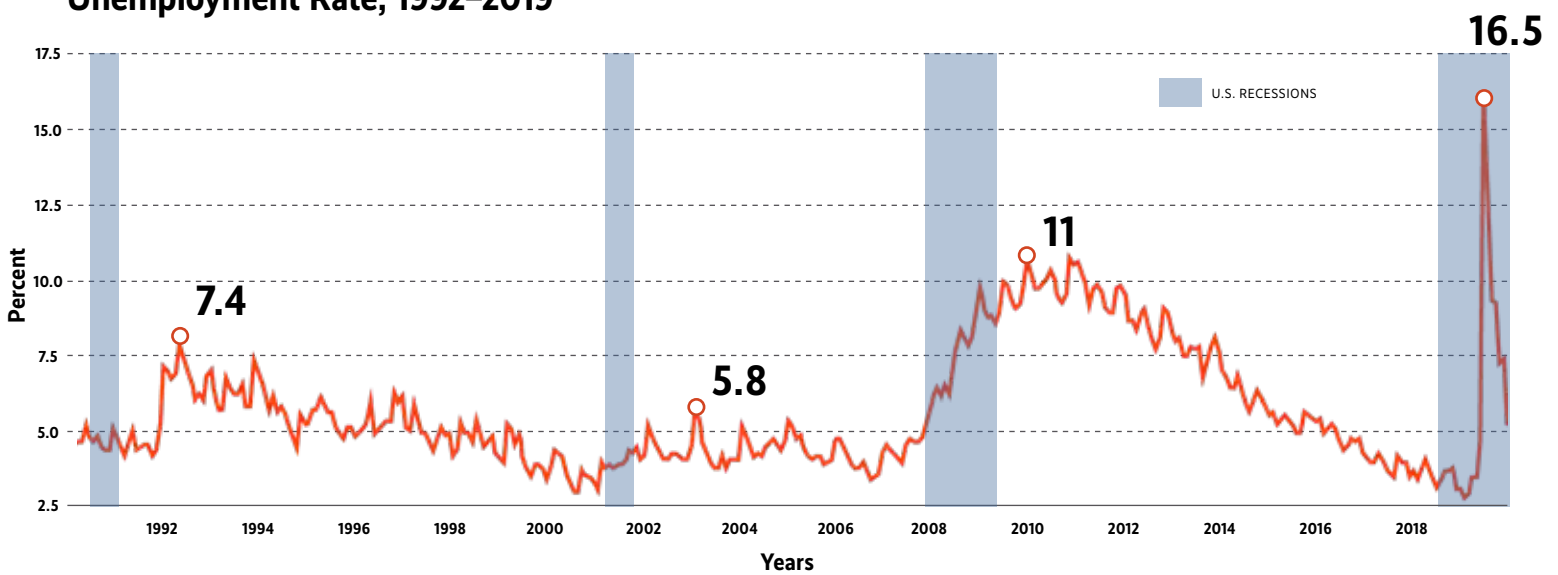


Figure 1.6—Unemployment Rate in Chatham County
Federal Reserve Economic Data (FRED)

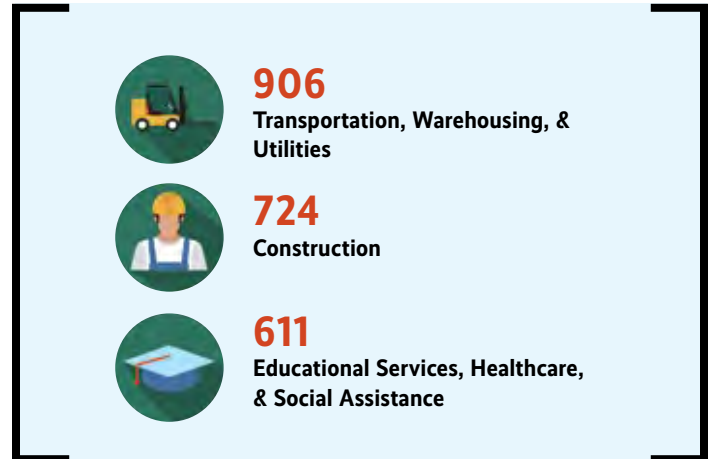
Industry

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 over the 2009–2013 period, more than 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 four 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

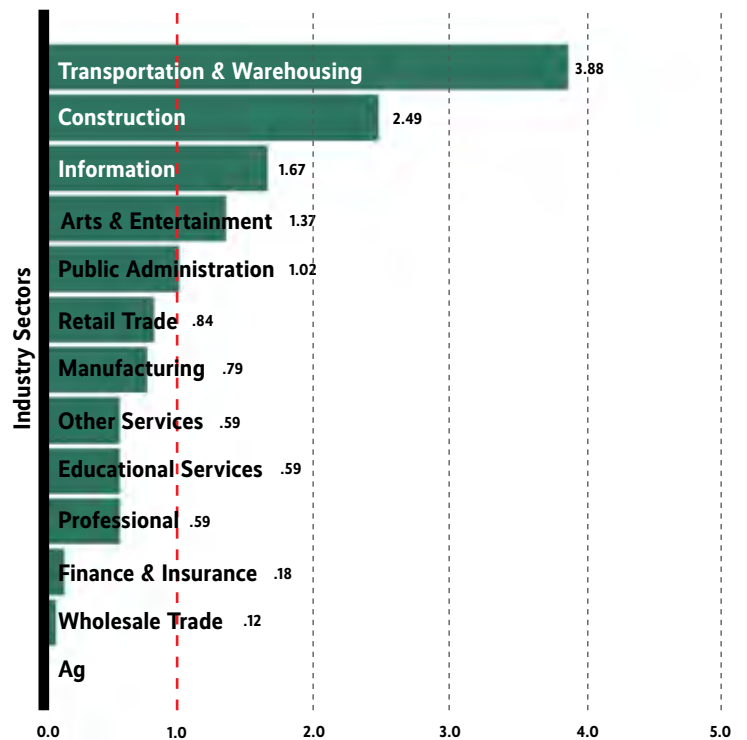


Figure 1.7—Industry Sector, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



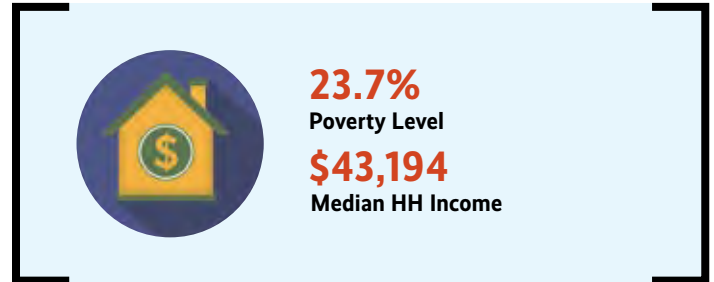
Income & Poverty

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 over 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 with 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

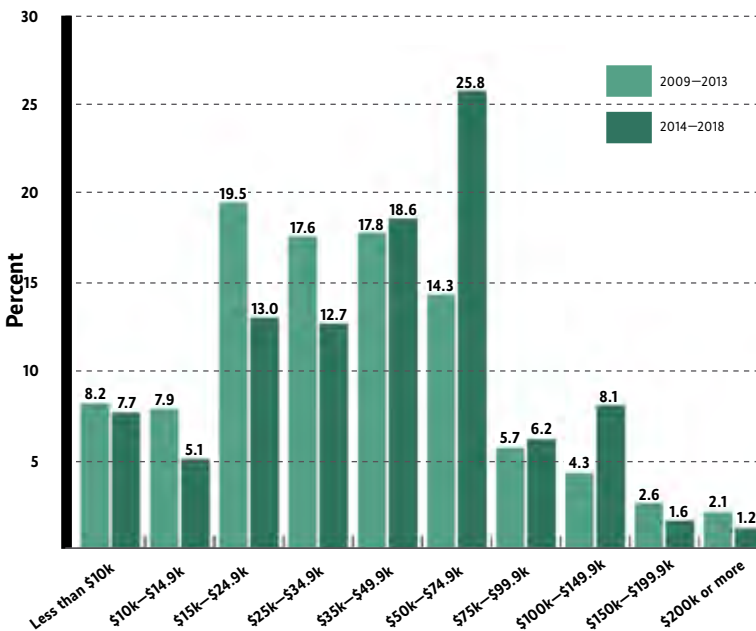


Figure 1.8—Median Household Income Change, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

Status of Poverty by Age, 2014–2018

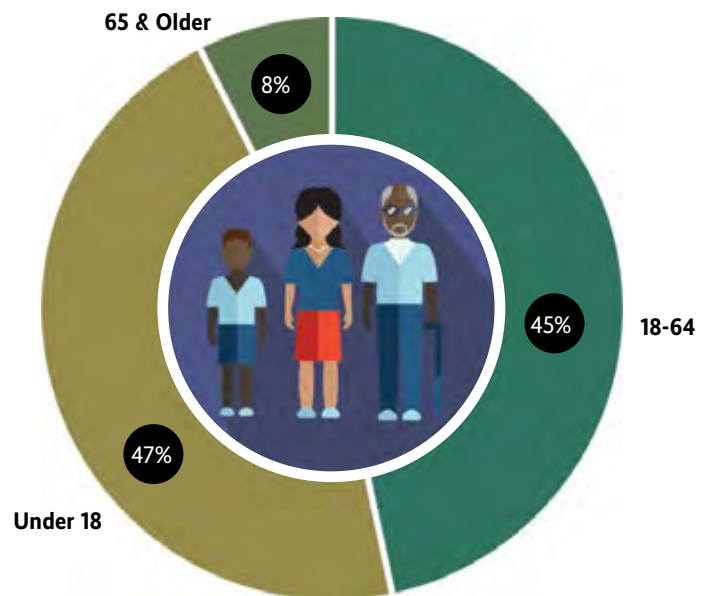
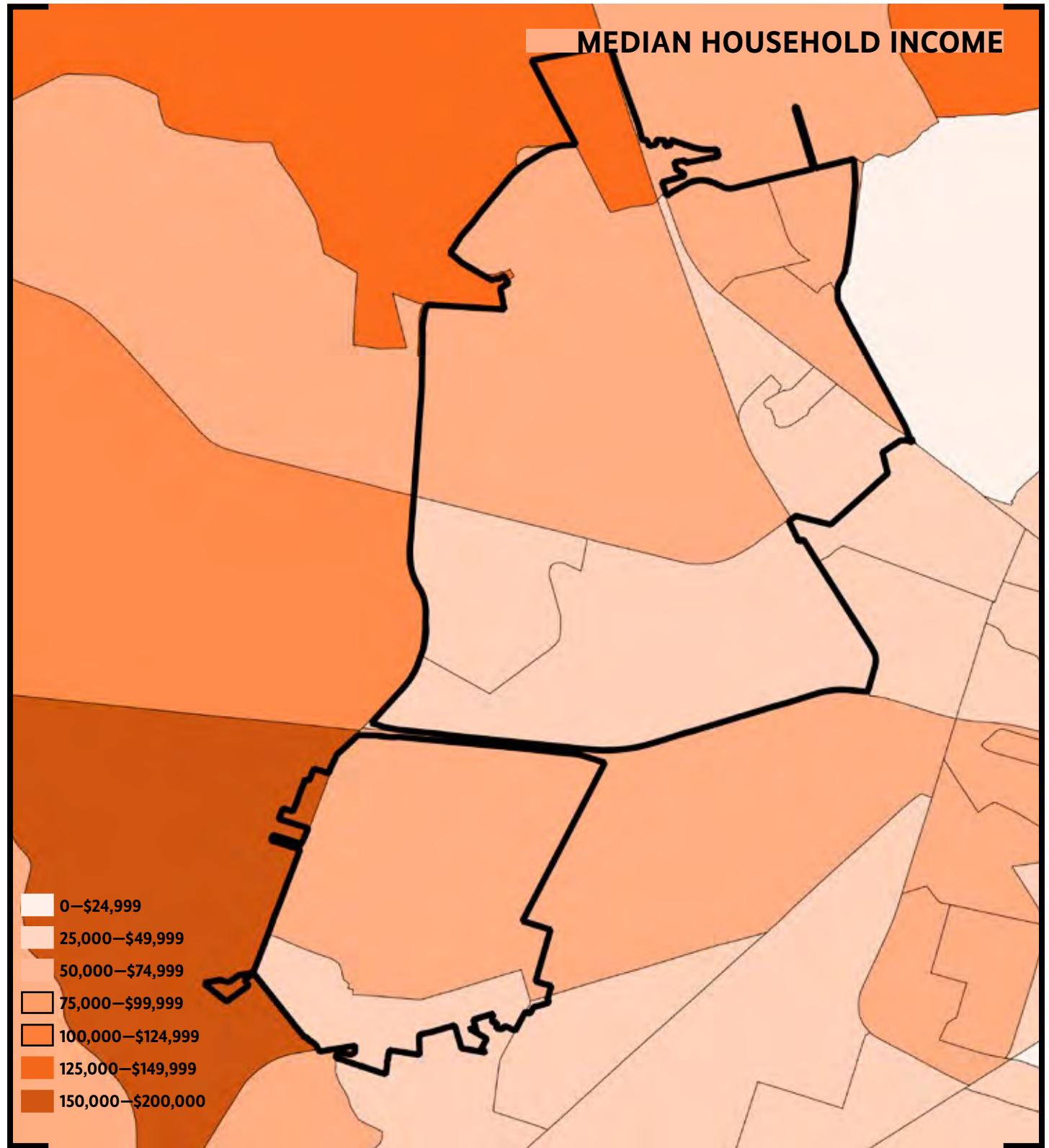


Figure 1.9—Poverty Age Status, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



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

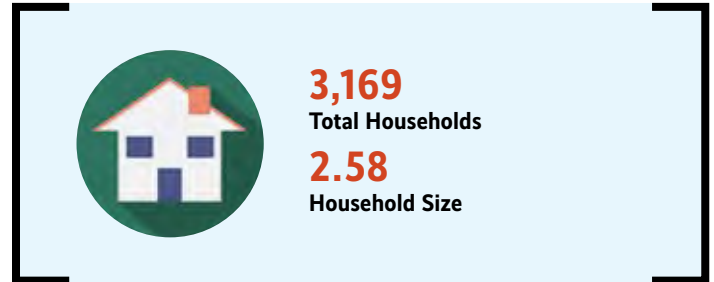


Households & Families

National trends throughout the 20th Century that saw a long-term decline in household size as families had fewer and fewer children 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

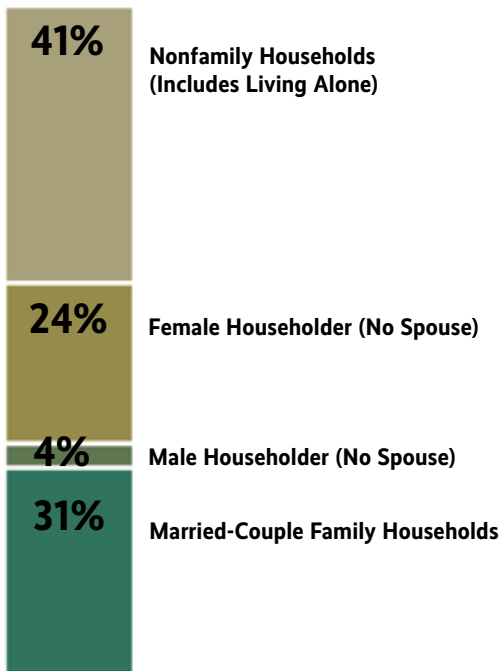


Figure 1.10—Household by Type, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

Marital Status, 2014–2018

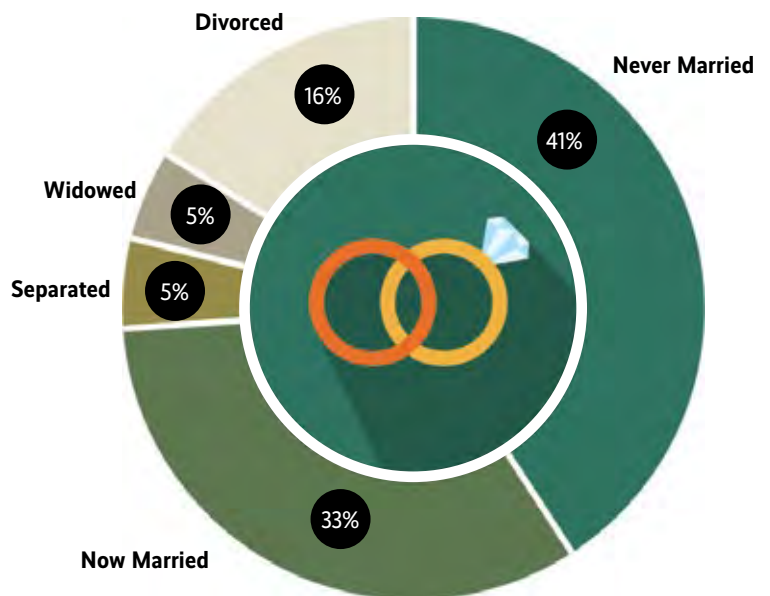


Figure 1.11—Marital Status Population 15 Years and Over, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

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

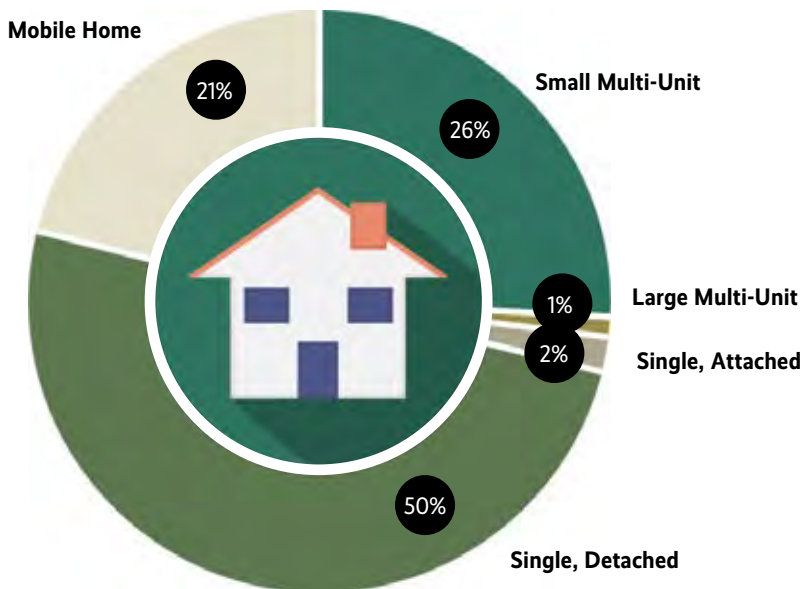
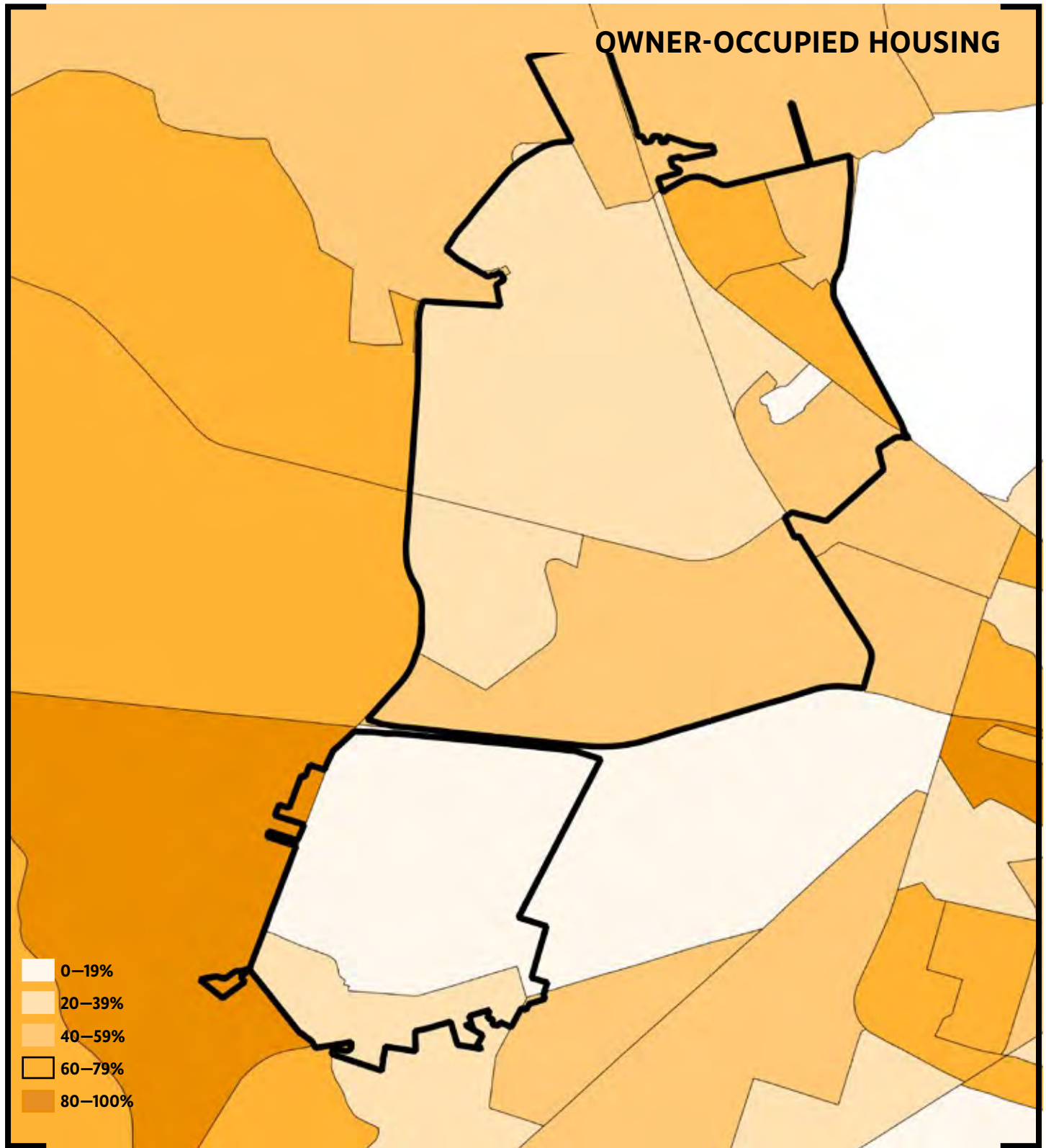
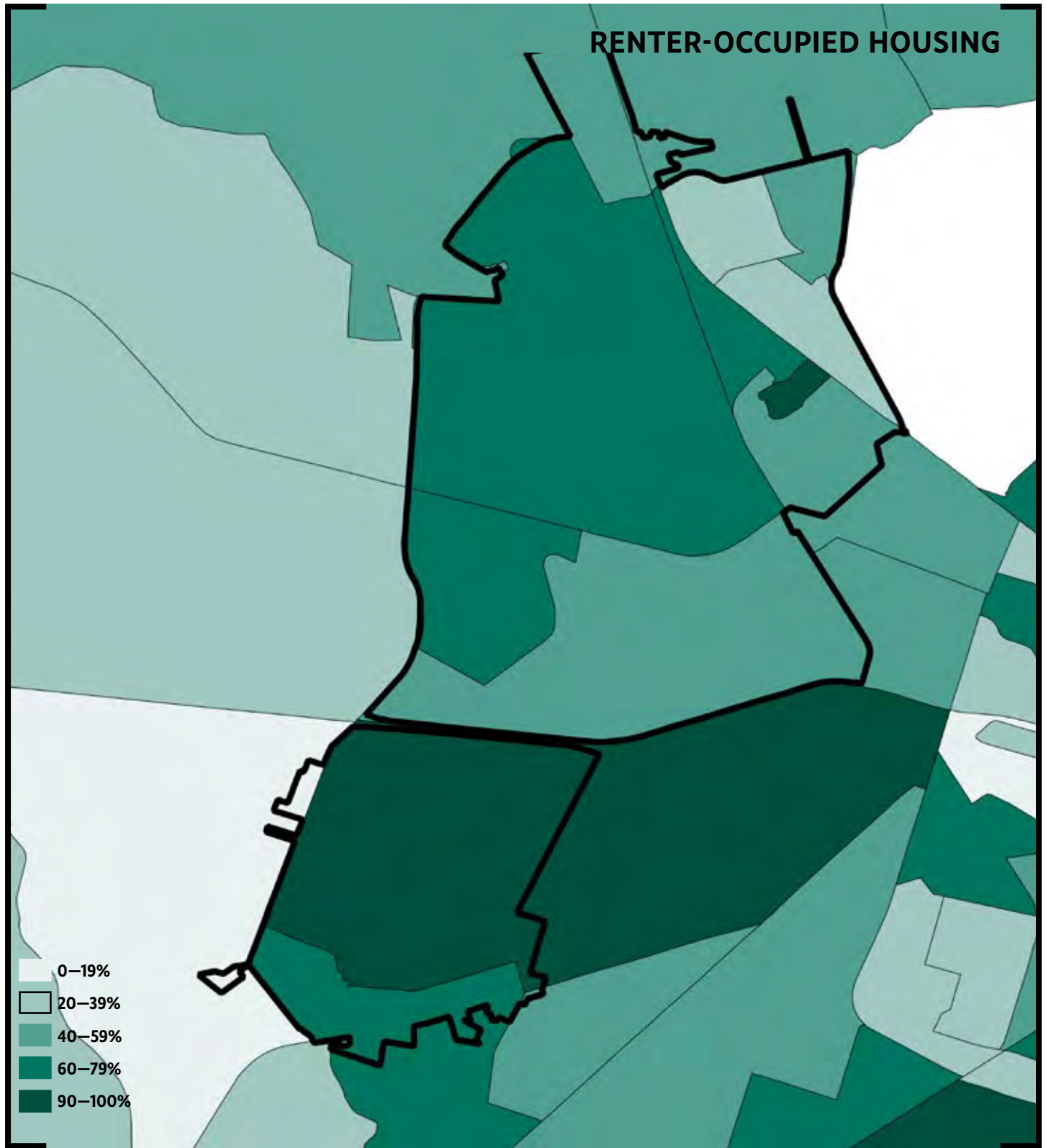


Figure 1.12–Housing Type, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates





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

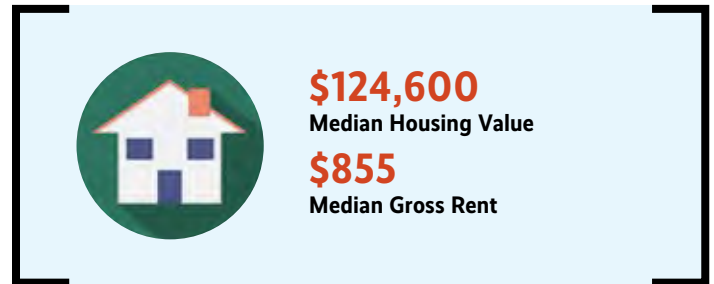


Housing Value & Costs

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

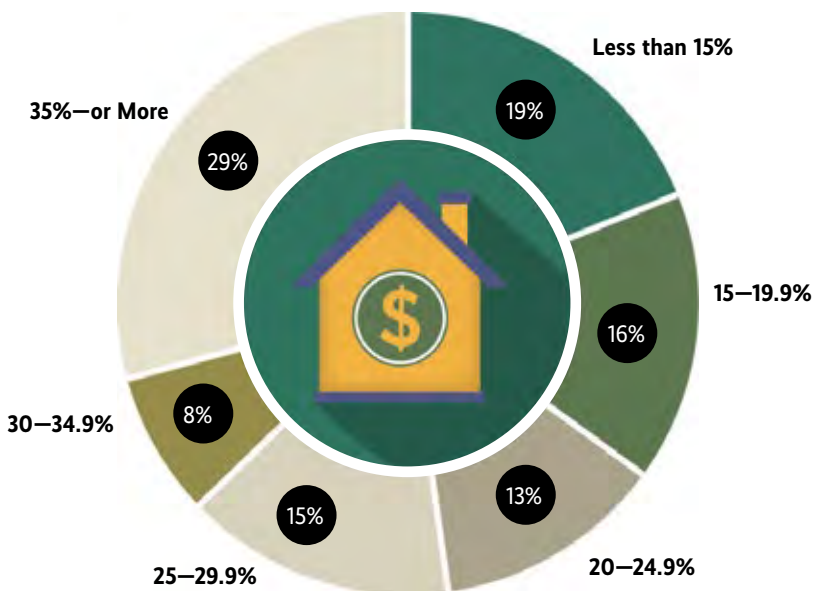
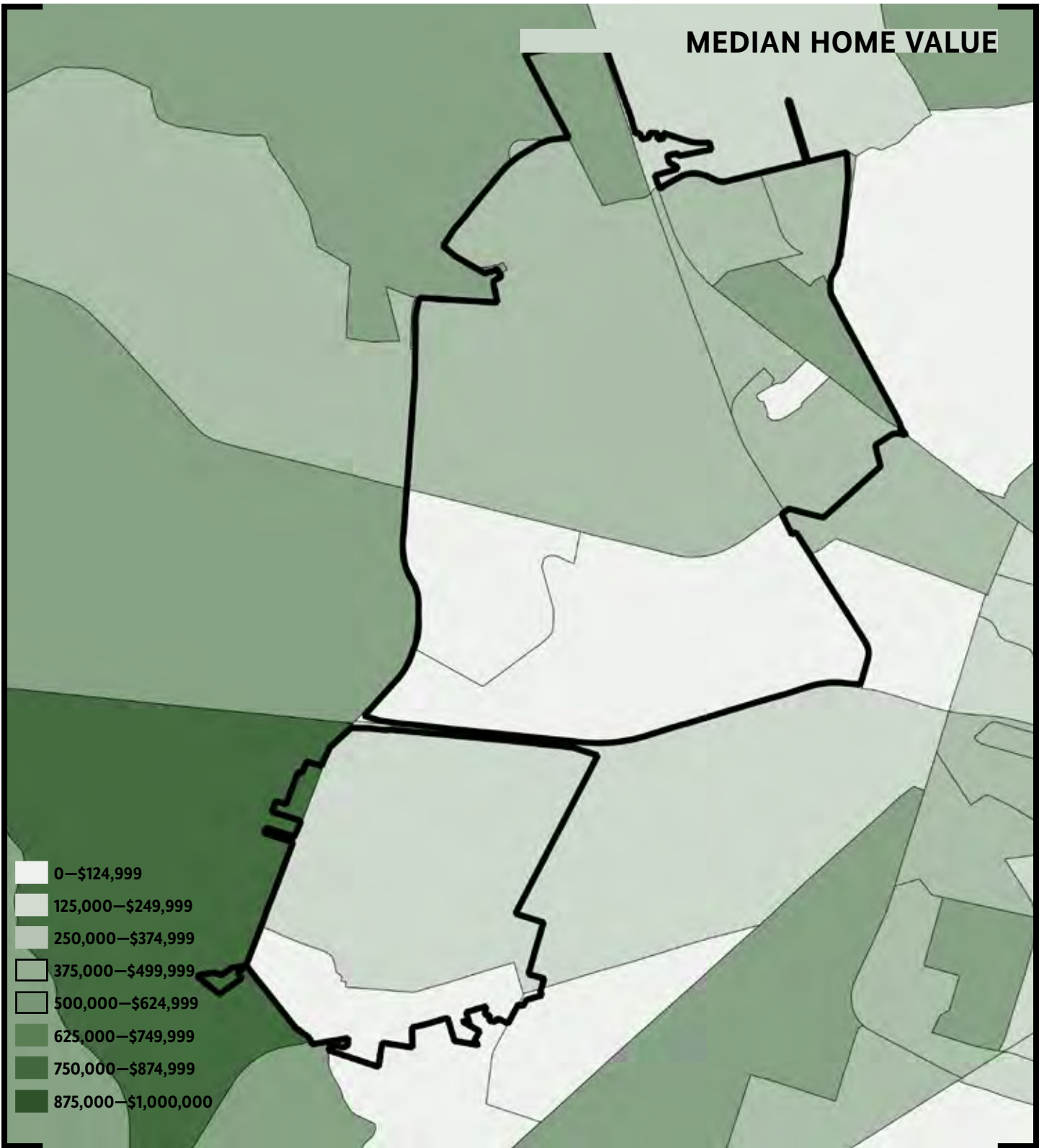


Figure 1.13—Cost Burdened Renter, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



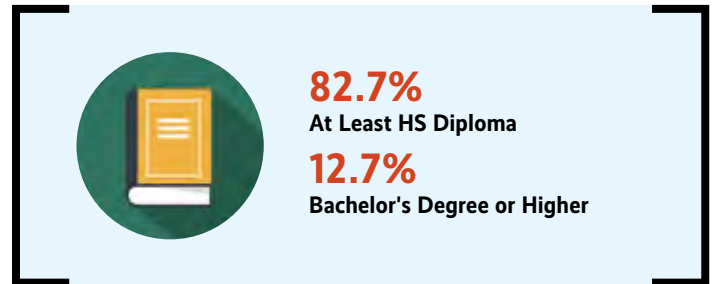
Map 1.5—Median Home Value by Block Group, Garden City
 U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



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

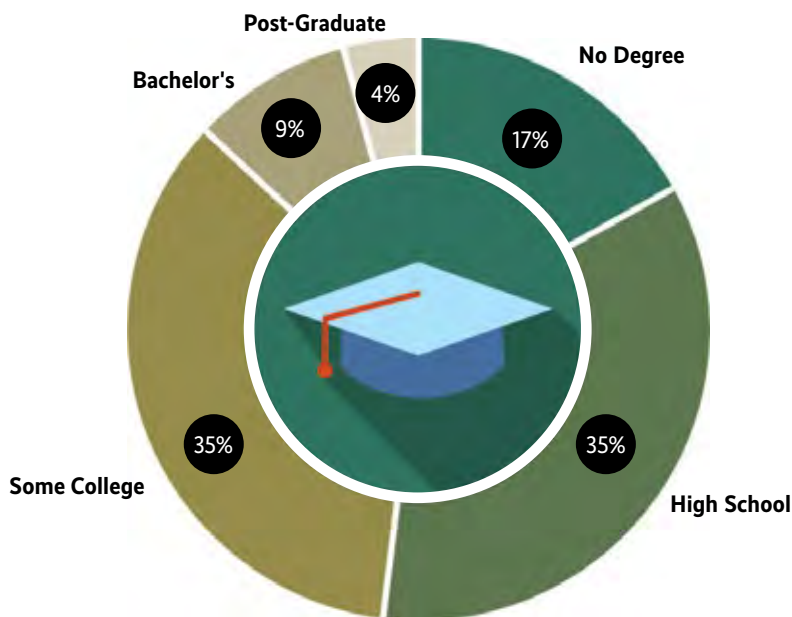
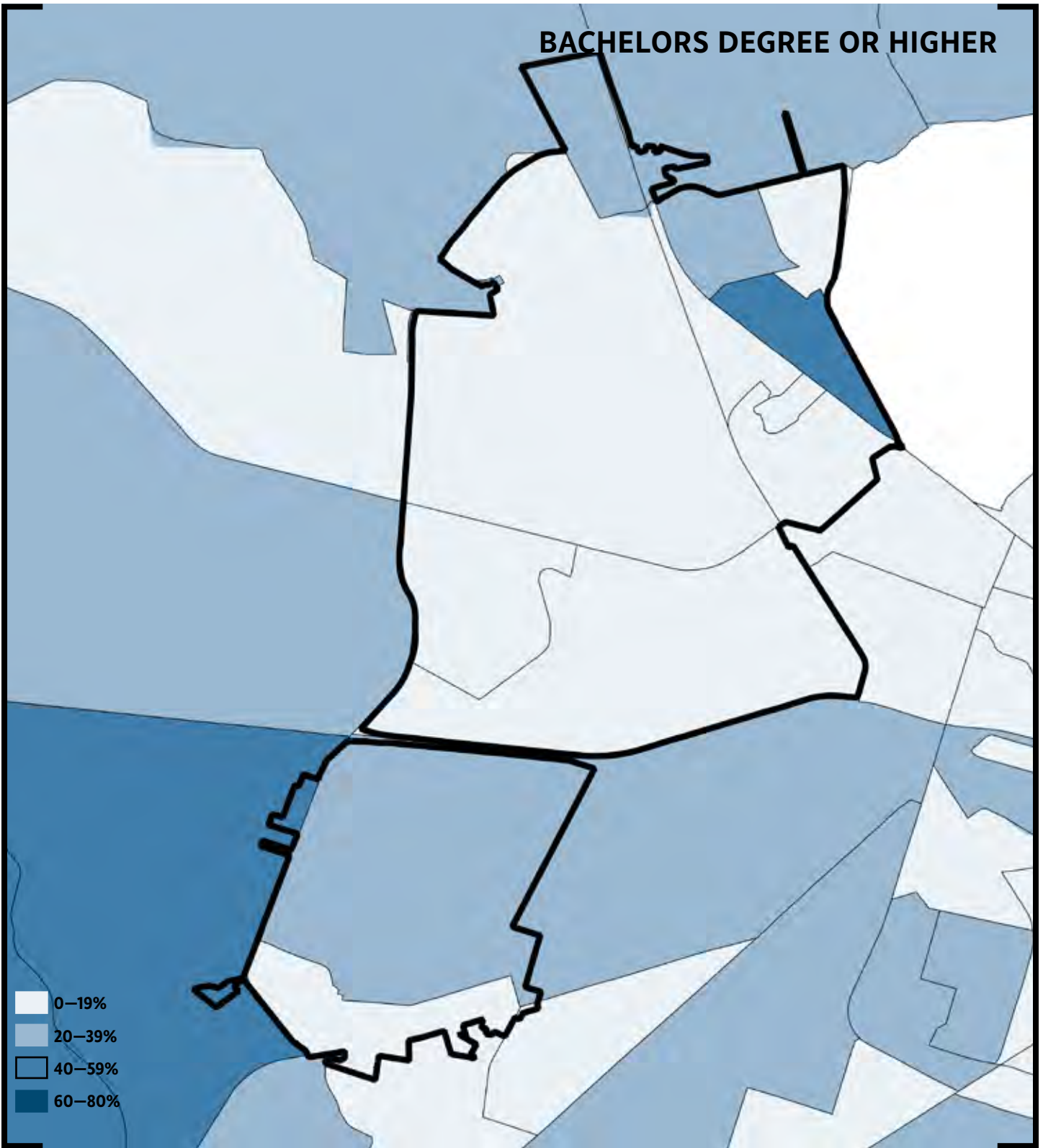


Figure 1.14–Educational Attainment, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

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 five 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

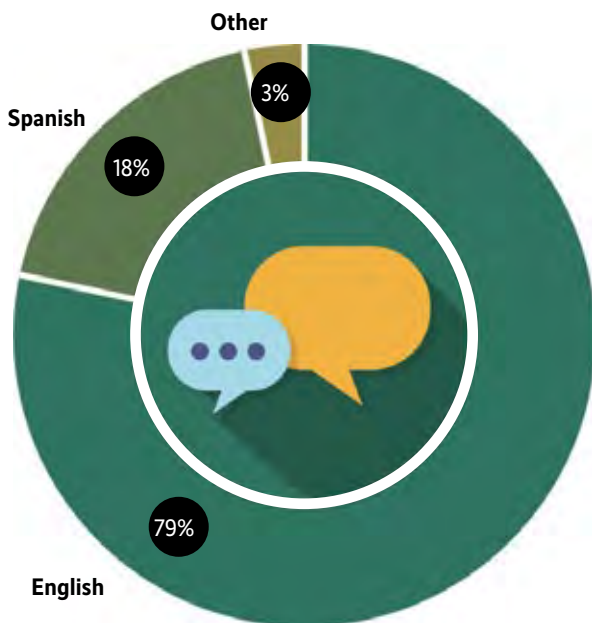


Figure 1.15—Language Spoken at Home, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

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

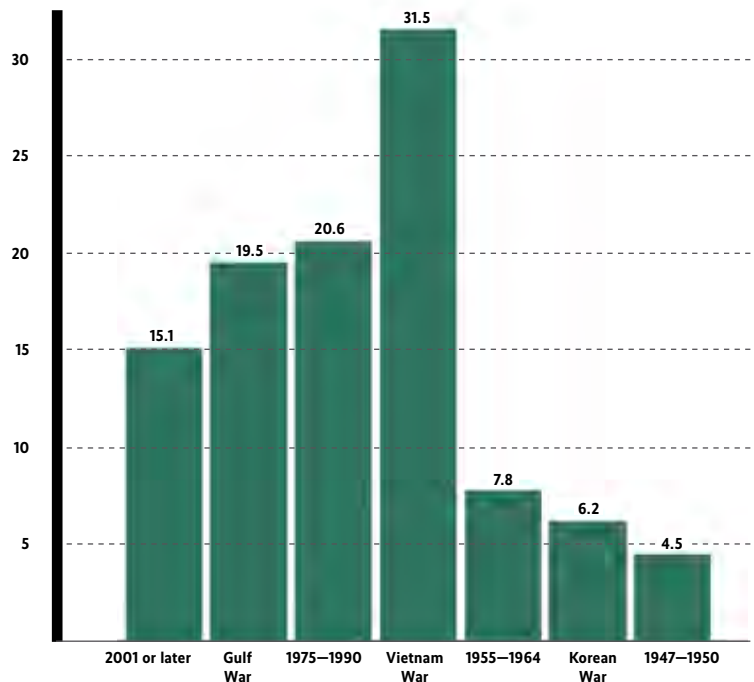


Figure 1.16—Period of Military Service for Adult Veterans, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

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

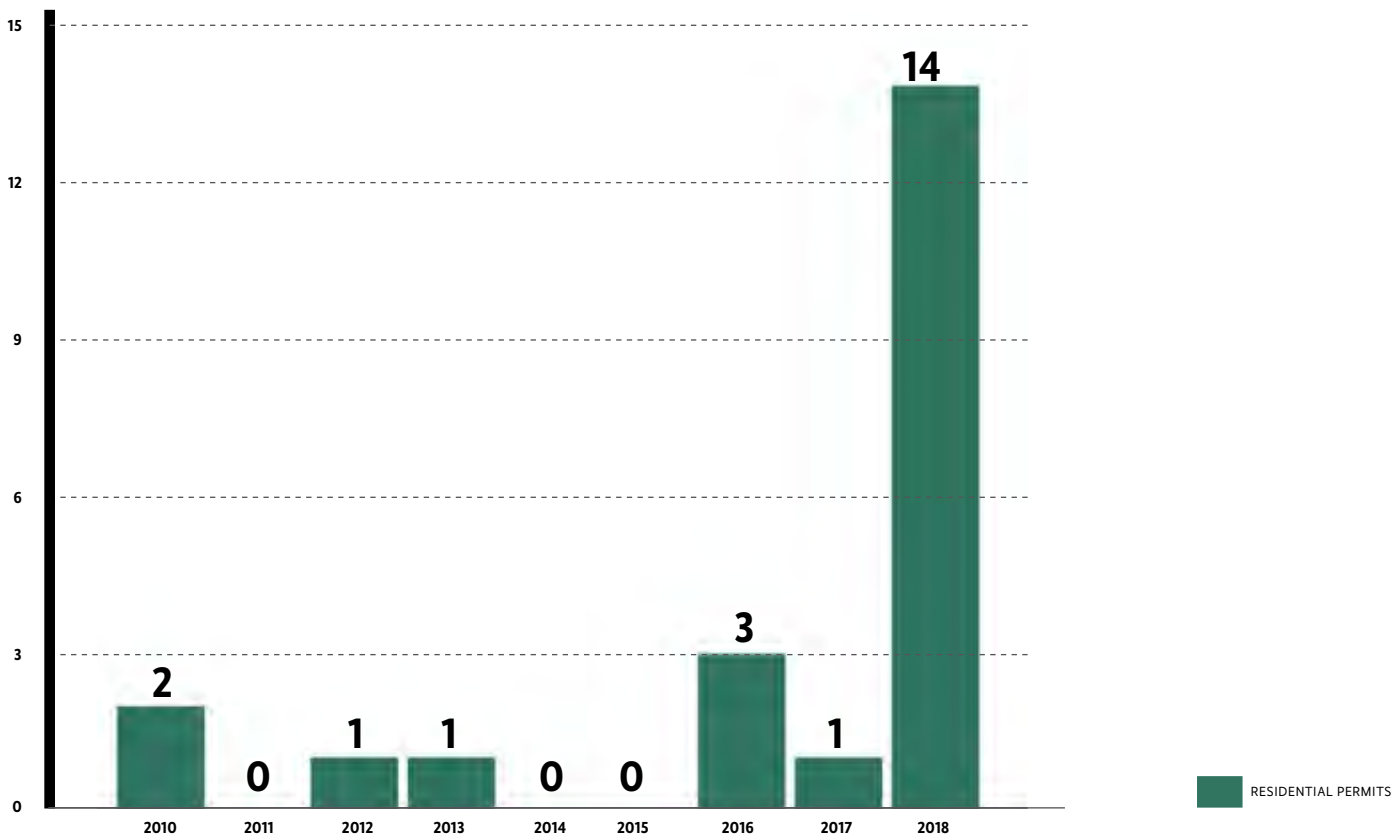


Figure 1.17–Construction Permits, Garden City
Chatham County Building Safety & Regulatory Services



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 with 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

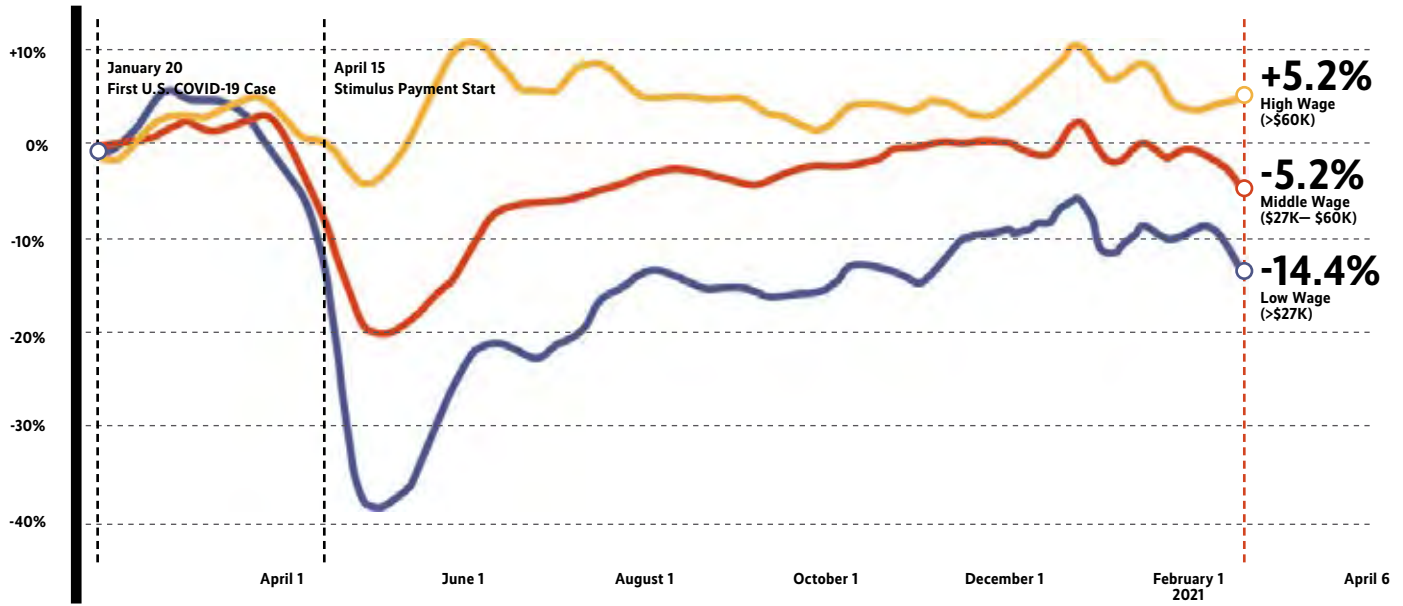


Figure 1.18–Percent Change in Employment, Chatham County

Time Spent Outside Home Chatham County

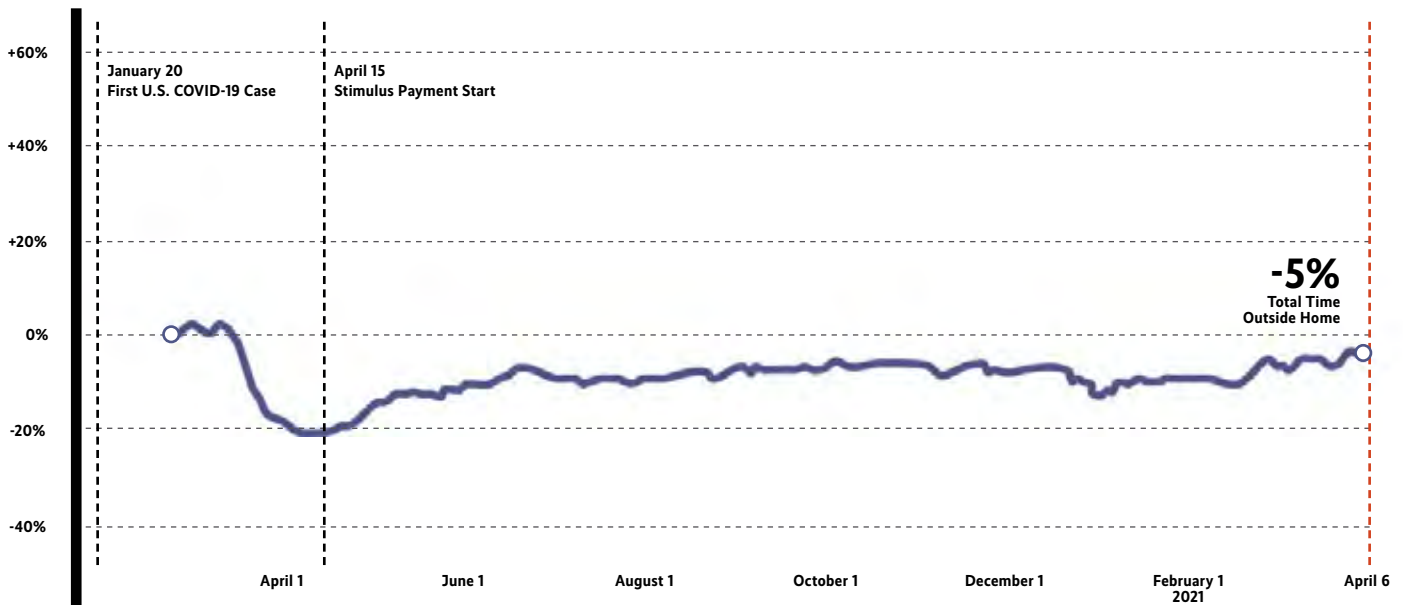


Figure 1.19–Percent Change in Time Spent Outside Home, Chatham County



**COMMUNITY GOALS
ELEMENT**

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.

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.

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 provide 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 its 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





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



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**

03



ECONOMIC DEVELOPMENT

Introduction

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 Garden City's 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 U.S. 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 City 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 element 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

Year	GARDEN CITY	SAVANNAH MSA
	%	%
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.

ARE YOU LOOKING FOR MORE INFORMATION ON EDUCATION?

For more information see the Quality of Life Element under Education page 250



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 of 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

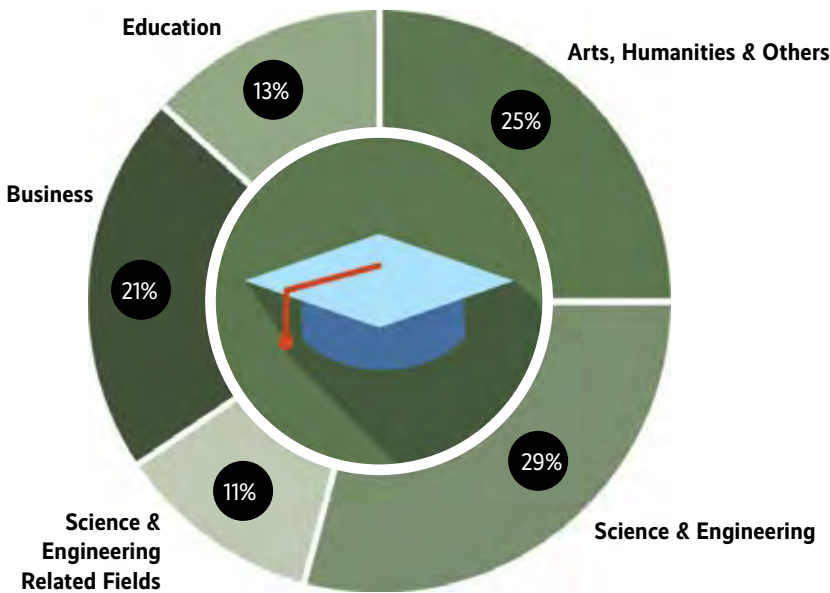


Figure 3.3—First College Major for Residents 25 or Older, Savannah MSA
 U.S. Census Bureau: 2019 American Community Survey 5-Year Estimates



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, and 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.

One area that is declining but that may benefit the overall economy is “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.



Plan 2040 Survey

Forty-eight percent (48%) of the respondents felt that developing a 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.



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 to 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 or transportation and child care challenges 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

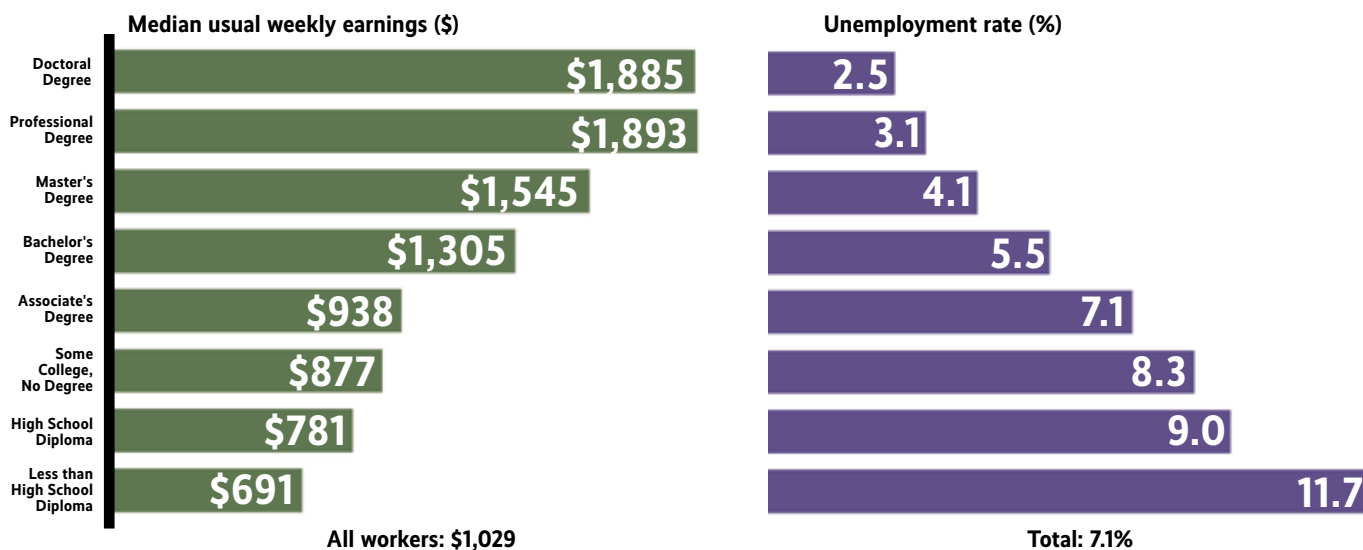


Figure 3.6—Earnings & Unemployment Rates by Educational Attainment, 2020
U.S. Bureau of Labor Statistics, Current Population Survey

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.



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 U.S.
- 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, the ship is 1,299 feet long
- 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 this 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, which 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

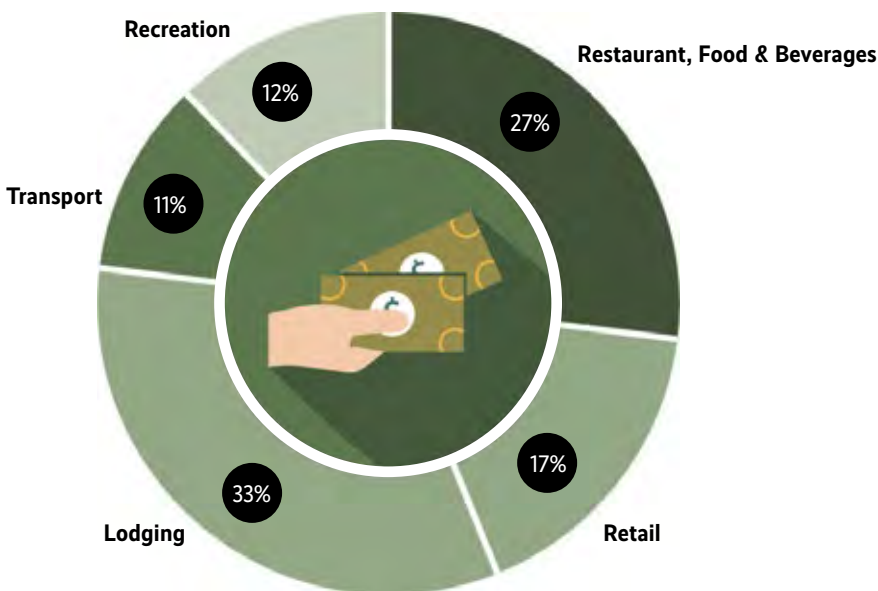


Figure 3.7—Total Overnight Spending by Sector, Savannah MSA
Savannah Area Chamber of Commerce 2019

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.



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



Average Yearly Residential Per Capita Income

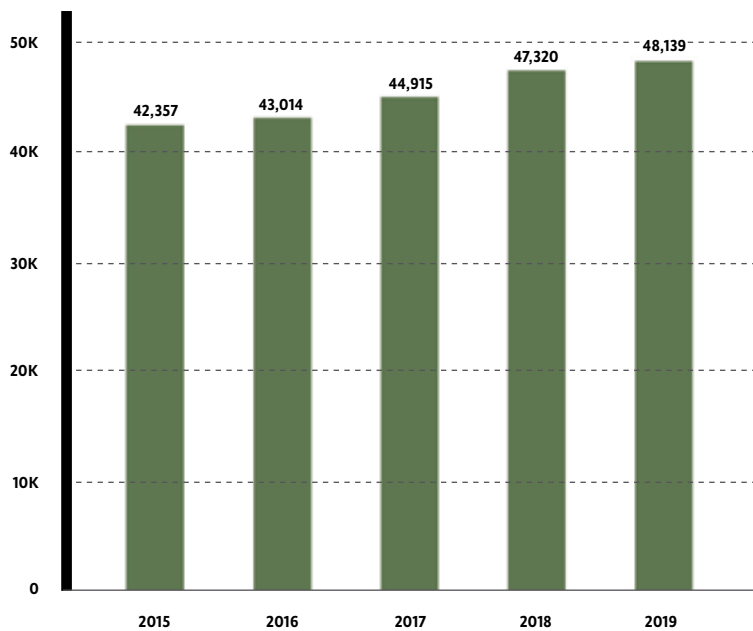
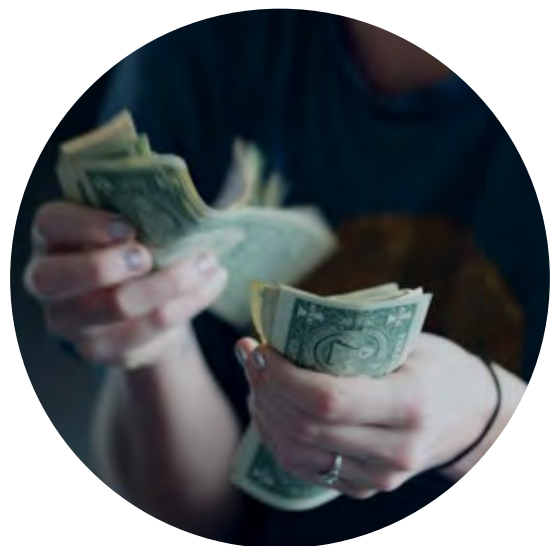


Figure 3.9—Average Yearly Income, Savannah MSA
Georgia Department of Labor 2015–2018



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

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

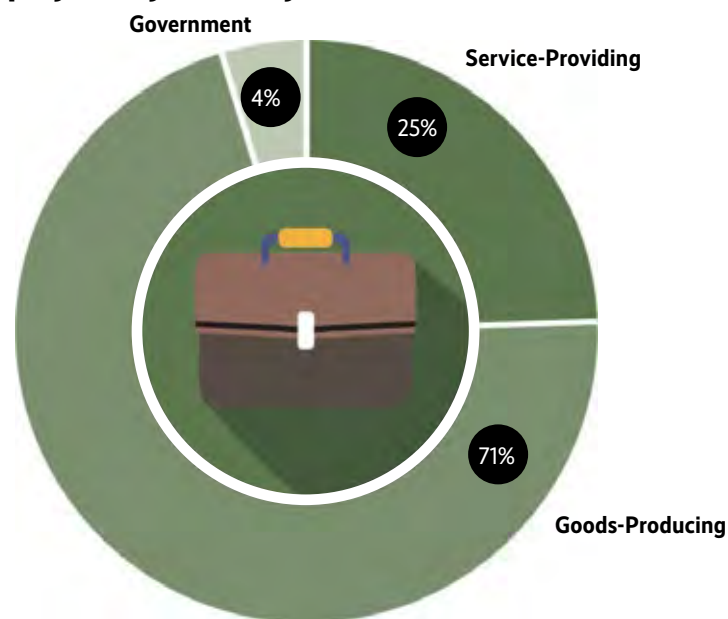


Figure 3.11—Percentage of Employees by Industry, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimate

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 grew 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



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 3.15–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 3.16—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 is 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:

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

Figure 3.17—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

04



LAND USE

Introduction

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 by the city of Savannah to the southeast, 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 known as Industrial City Gardens, Garden City was established as a bedroom community or suburb of the city of Savannah. Garden City 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 and drives industrial development in the city.

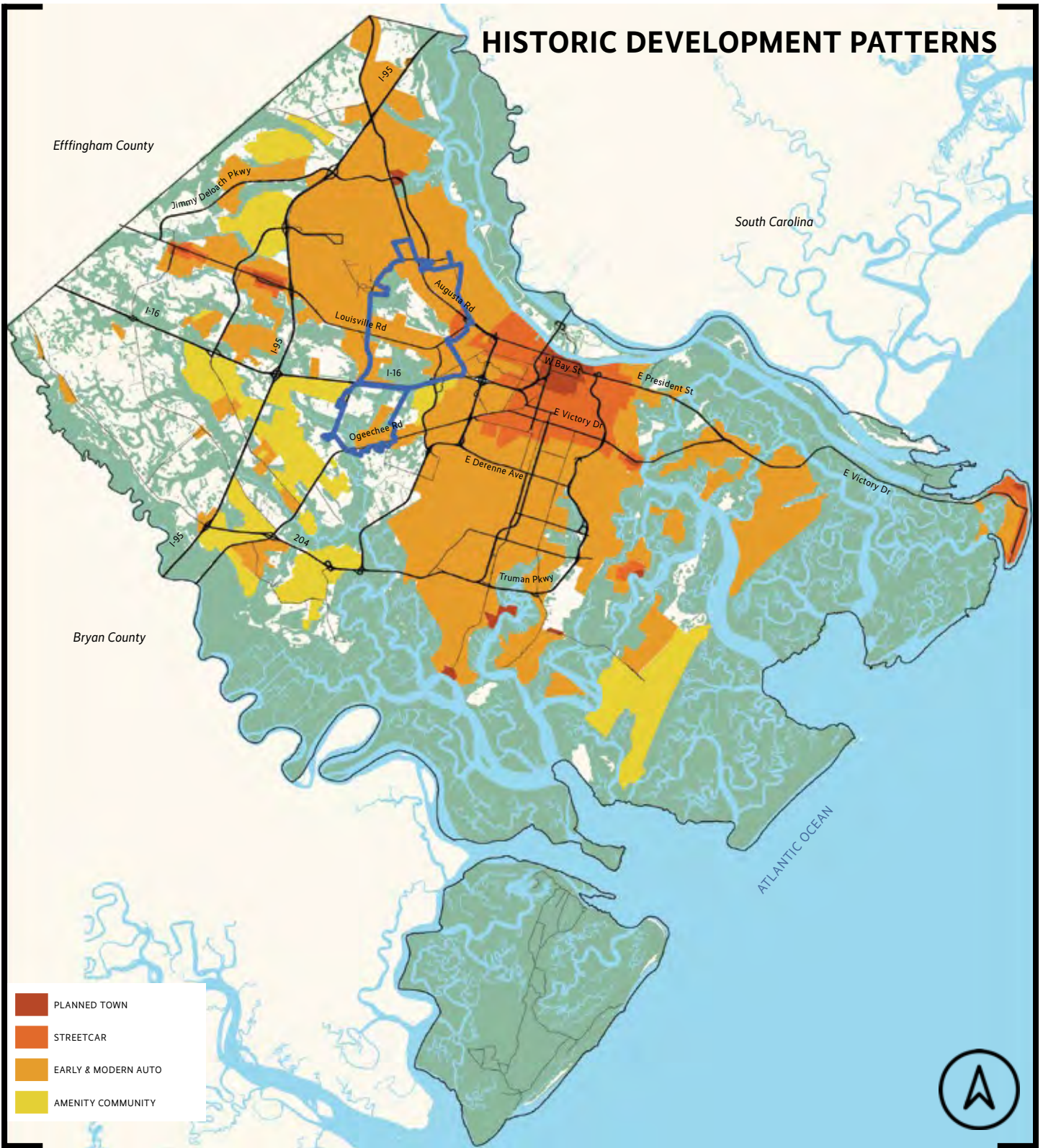
The establishment of the Garden City Terminal, as well as development pressures being pushed west from the city of Savannah, caused development in Garden City to shift from residential to largely industrial. The city's adopted Urban Redevelopment Plan (2016) specifically cites development pressure as causing "disinvestment in some of the older neighborhoods, the encroachment of industrial uses, declining pockets of commercial, and deteriorating buildings." In partnership with others, this 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.

ARE YOU LOOKING FOR MORE INFORMATION?

You can find more statistics & information under the Community Profile Element, page 40



HISTORIC DEVELOPMENT PATTERNS



Map 4.1—Chatham County's Development Patterns Over Time



EMPLOYMENT CENTERS

This component highlights some areas of Chatham County that influence land use patterns as areas with existing and projected job growth. Employment centers have been identified based on a concentration of one or more of the following employment sectors: hospitality, industrial/manufacturing, tourism, retail, health care, educational/public services, and other. Individual employers that 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 employment center is situated between Augusta Road and I-95 and encompasses 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 marketing of aircraft. Commuters traveling to and from this area typically travel by automobile.

2. Georgia Ports Authority

- » The Georgia Ports Authority (GPA) 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 whom utilize modes of transportation other than a car, such as walking, bicycling, or public transit.

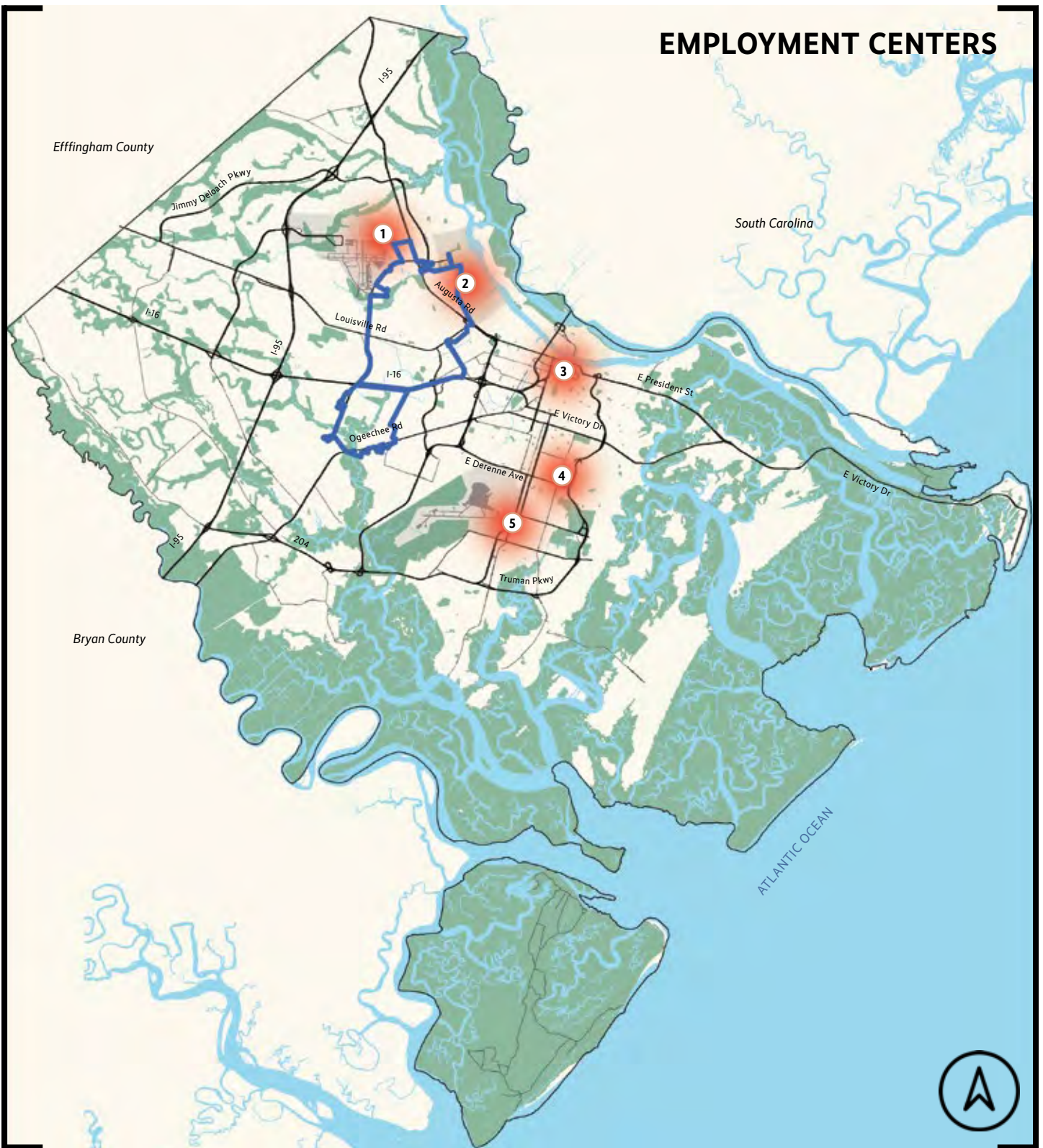
4. South Savannah Medical

- » This employment area is located along DeRenne Avenue near the 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 commuters use automobiles.

5. Abercorn Extension Commercial Corridor

- » This area is located along the Abercorn Street Extension, which serves as a centerline for regional commercial activity on either side. This employment corridor is home to many businesses, including some of the county's largest employers such as Walmart, Kroger, and Georgia Southern University (Armstrong). This is a high traffic area, with both commuters and shoppers traveling primarily by automobile, with some utilizing the public bus system.

EMPLOYMENT CENTERS



Map 4.2—Chatham County Employment Centers

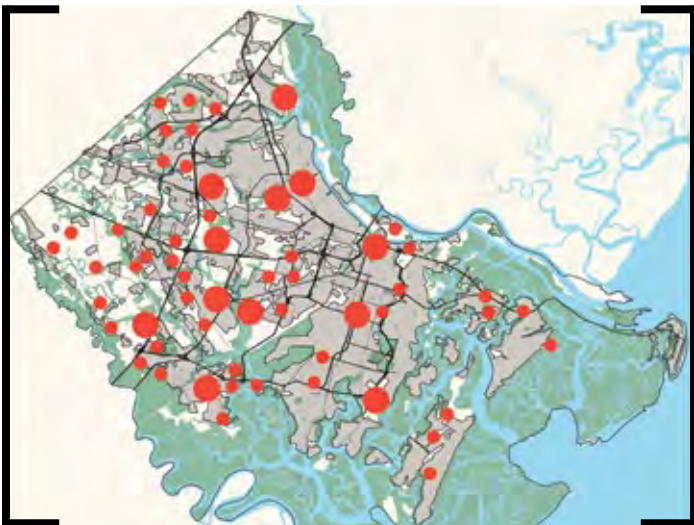


FUTURE GROWTH STRATEGIES

Option for the Future

Over the next 20 years, various mechanisms can be used to manage growth and promote sustainable development within the county. Three alternative approaches were presented to the public and stakeholders for feedback during development of the Comprehensive Plan in 2020: Business as Usual, Strong Corridor, and Compact Growth.

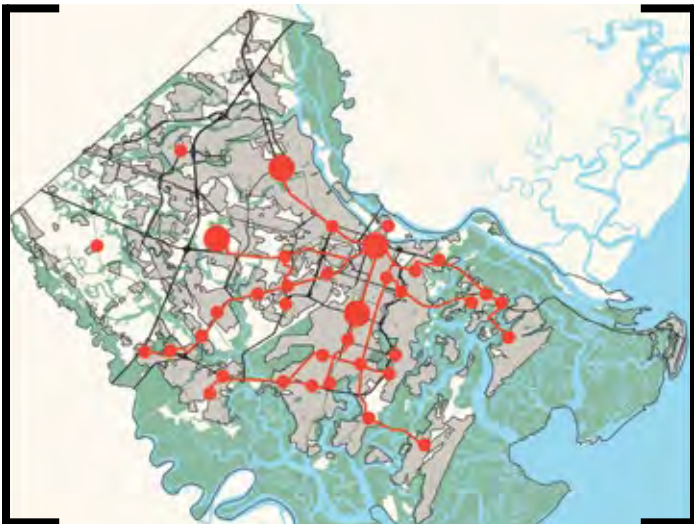
The intent was to allow the public to visualize different potential directions growth could take over the next 20 years and gauge the desirability of each.



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

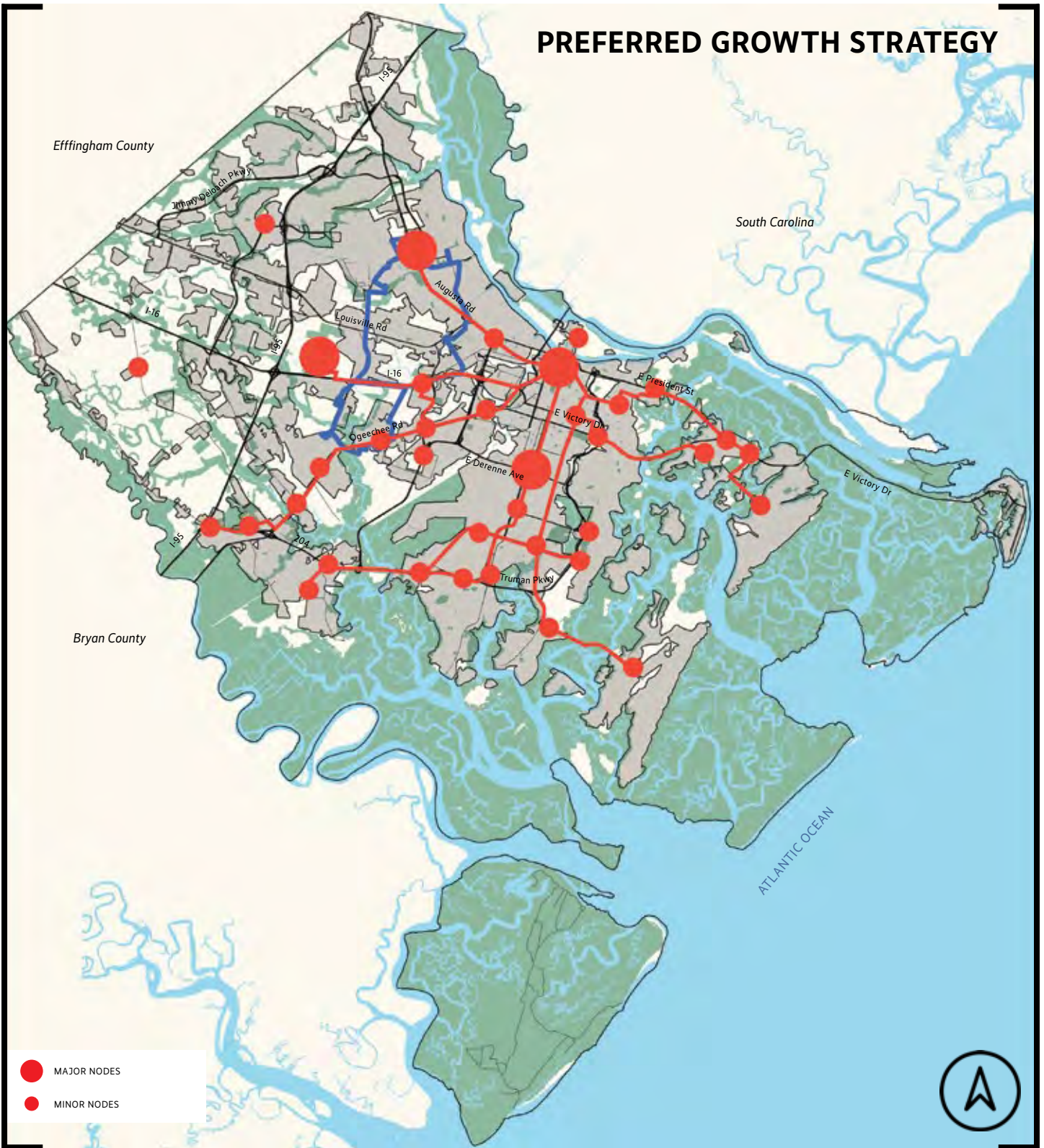
Given the choice of three scenarios in an online public survey, Garden City's respondents supported the "Strong Corridors" option: Forty-two percent (42%) of survey respondents chose this strategy as their first preference. Under the Strong Corridor Scenario the following activities and concepts become 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 municipalities
- Preserve undeveloped natural resource areas
- Brownfield redevelopment

With continued growth pressure in Garden City and other areas of the county, a coordinated growth strategy across the nine jurisdictions will be critical. The adoption and successful implementation of a coordinated, regional growth policy can aid in the mitigation of the negative externalities of growth—such as traffic congestion, air pollution, and loss of tree canopy—and will help to promote sustainable and equitable development countywide.

The Strong Corridor scenario became the basis for developing the Growth Centers Map, identifying Character Areas, and updating the Future Land Use Map found on the following pages.

PREFERRED GROWTH STRATEGY



Map 4.3—Preferred Growth Strategy: Strong Corridors



GROWTH CENTERS

Purpose

The intent of the Growth Centers Map is to highlight areas of Garden City that may be suited to accommodate future development or redevelopment/infill efforts. These areas include suburban, commercial, or employment centers that should be studied 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 priority focus of these studies. More generally, the identification of growth areas that may support new development has implications in guiding future land use decisions.

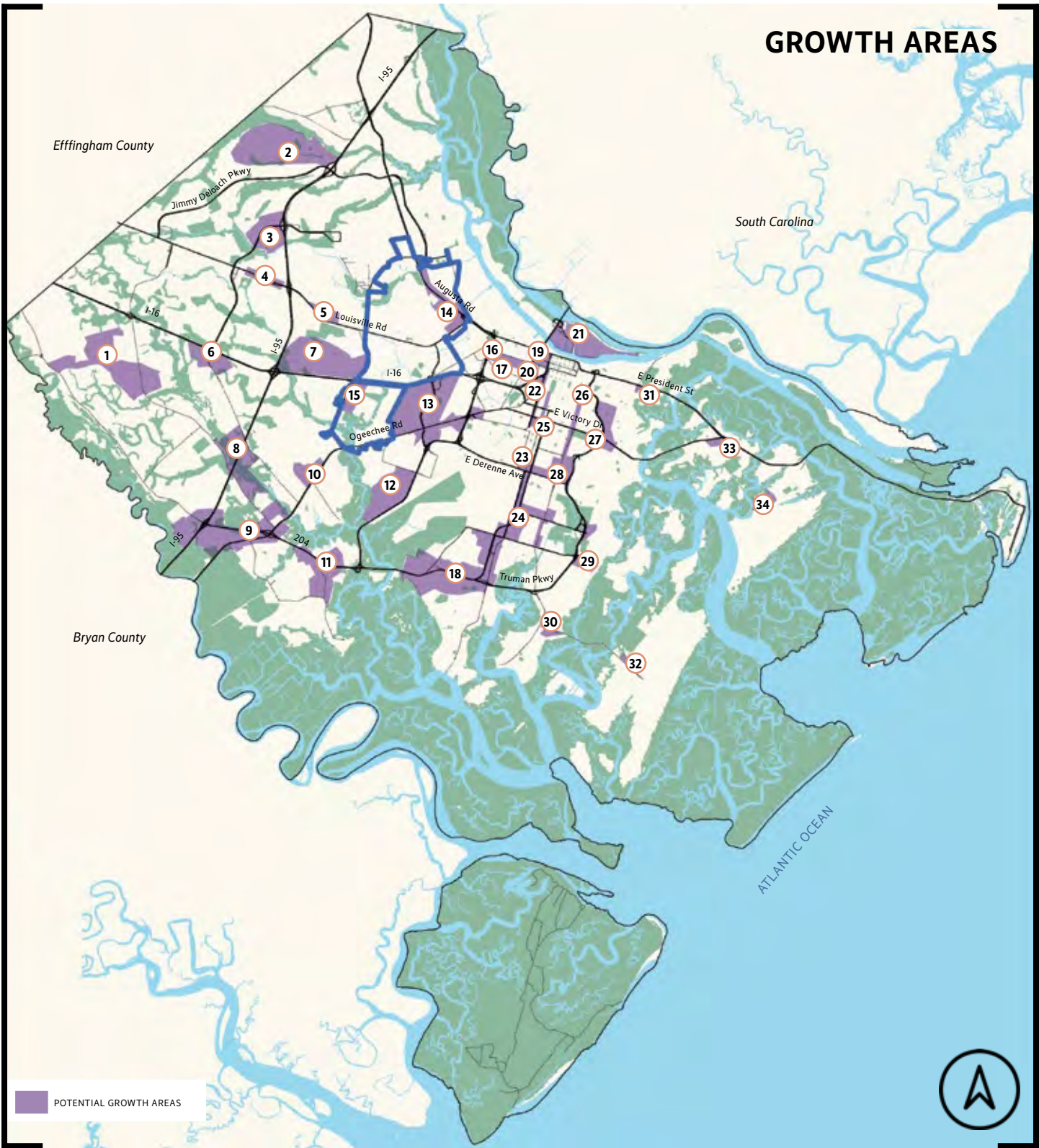
The Growth Centers Map defines the prioritization of lands for development to maximize areas that already have public investment (water, sewer, utilities, roadways, and services). Also taken into consideration are historic development patterns, employment centers, service areas, existing transportation nodes, and flood zones.

The Growth Centers 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 through the prioritized land analysis and preferred growth strategy. The listing below is in no particular order and does not indicate the level of importance or priority of one area over another. There are three 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
2. Highlands
3. Godley Station
4. Historic Mainstreet
5. US 80 Corridor
6. Quacco Corridor
7. Megasite
8. Hopeton
9. Fort Argyle
10. Berwick
11. Georgetown
12. Rockingham Farms
13. **Chatham Parkway**
14. **Highway 21**
15. **Garden City South**
16. West Savannah
17. Tremont
18. Savannah Mall
GSU–Armstrong Vicinity
19. Yamacraw Village
20. Canal District
21. Hutchinson Island
22. Kayton-Frazier
23. Derenne Ave Corridor
24. Oglethorpe Mall
25. Abercorn Corridor
26. Waters Ave Corridor
27. Victory Square/Olympus
28. Medical Arts
29. Sandfly
30. Marshpoint
31. Beech & Capital
32. Skidaway
33. Whitmarsh Island
34. Wilmington Island



Map 4.4–Potential Growth Areas Throughout Chatham County



WAYS TO ACCOMMODATE GROWTH

Transit-Oriented Development (TOD)

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 spaces—located within one-half mile of a transit station and designed to encourage transit use. The typical “station area” is within a half-mile radius, which is considered to be an acceptable 10-minute walking distance for most transit users if the area contains a destination, provides dedicated walking routes, is safe, and is 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 facilities and service levels similar to rail transit are provided.

- Implementation of a TOD 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 property owners
- » Providing easy access to goods and services for families, seniors, and people with disabilities
- » Creating vibrant centers and corridors for pedestrians

- Possible incentives for developers could include the following:
 - » Fast track development review (expedited review process)
 - » Incentives for constructing multi-unit housing projects with 25 or more units
 - » Prohibiting certain uses within one-quarter 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. It is often best applied in suburban landscapes with larger undeveloped parcels.

Cluster development regulations are implemented through municipal zoning, subdivision, and land development ordinances in order to provide applicants with appropriate design standards and 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 number of acres

Traditional Neighborhood Development (TND) Ordinance

Traditional Neighborhood Development (TND) Ordinances 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 (TC) Overlay

The Town Center (TC) Overlay districts are intended to be developed based on standards consistent with the 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.

Planned Development (PUD/PD)

Conventional ordinances are often to blame for the automobile oriented subdivisions that have taken claim to many landscapes. A planned unit development (PUD) or planned development (PD), however, can provide the flexibility needed for a TOD and, more generally, encourage innovative site planning and lot design. 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 of PUDs.

Suburban Retrofit

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

- Creating a street grid
- Rezoning single use commercial to mixed-use
- Creation of public spaces
- Developing missing middle housing
- Preservation of wetlands & marshlands

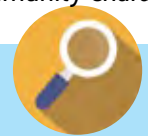
Adaptive Reuse

Adaptive reuse is when existing older buildings are repurposed for new uses. While the practice is commonly associated with historic preservation, 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 Urban Redevelopment Plan

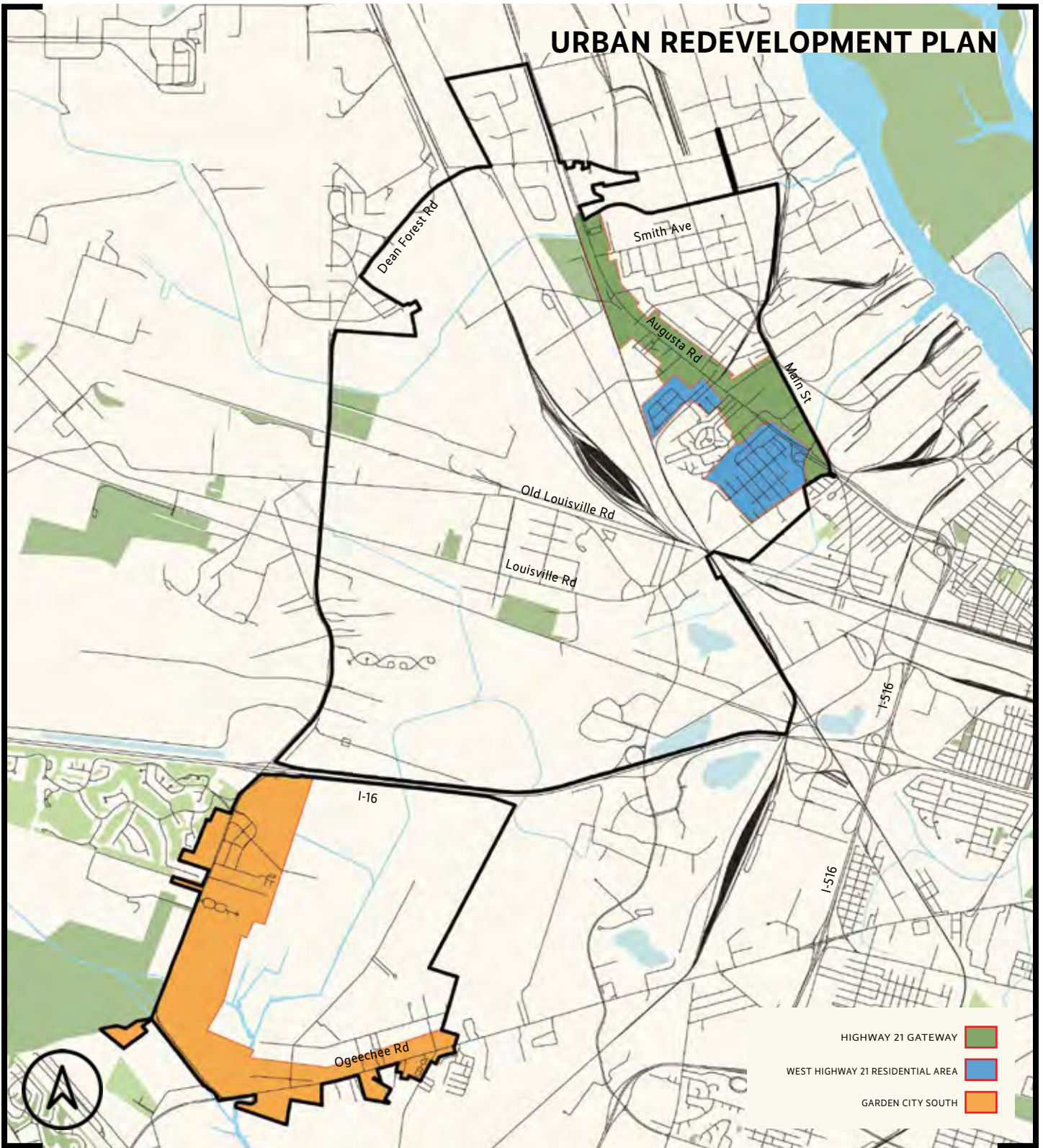
Garden City adopted the Urban Redevelopment Plan (URP) in 2016 as a tool to assist with development and redevelopment of the city due to the changing dynamics in its older neighborhoods, encroaching industrial uses, declining pockets of commercial, and deteriorating buildings.

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 4.5 - Urban Redevelopment Plan, Garden City



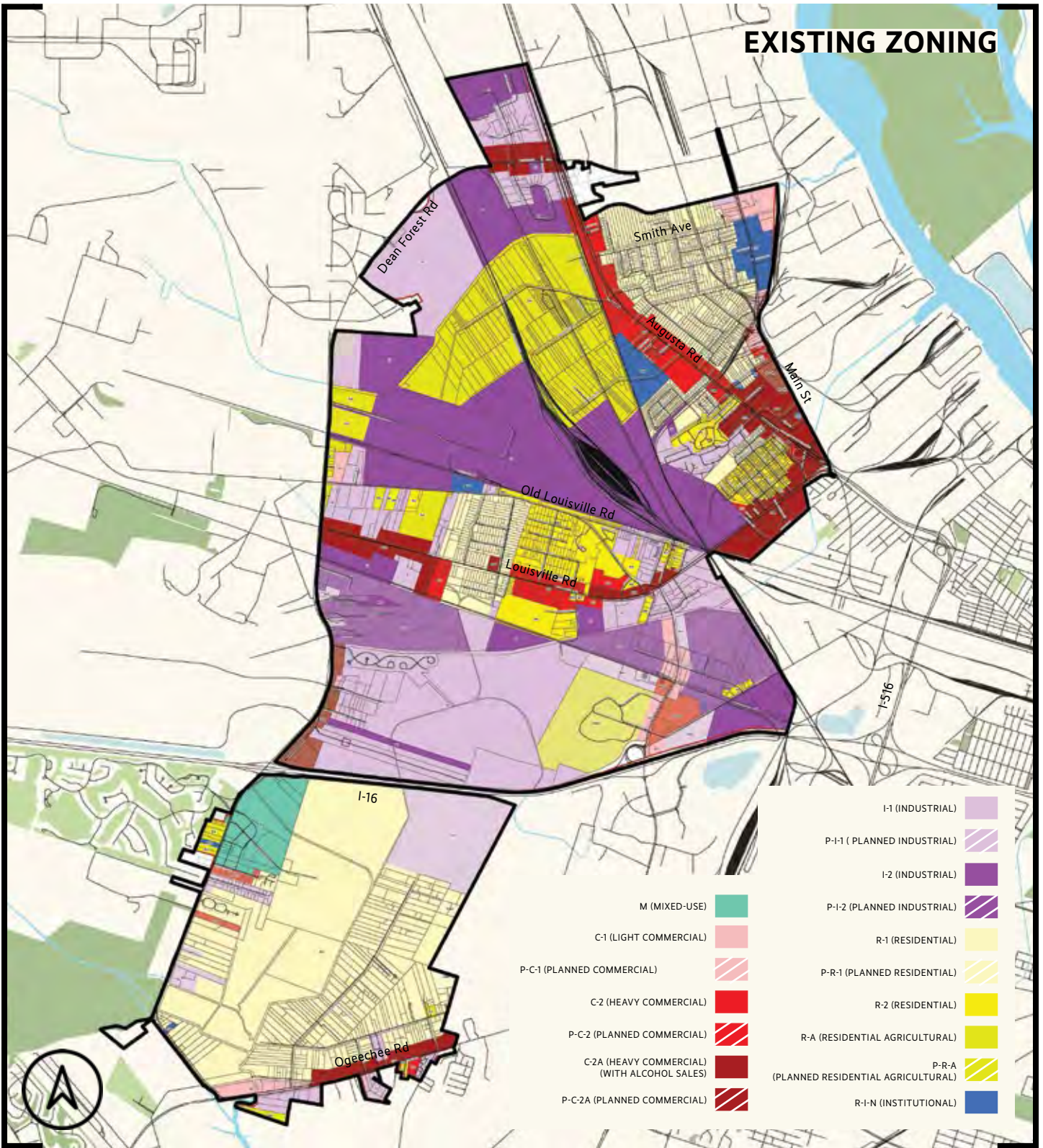
EXISTING ZONING

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 the zoning districts shown below in Figure 4.1.

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 Agricultural
R-I-N	Institutional

Figure 4.1–Existing Zoning Classifications, Garden City



Map 4.6—Existing Zoning Classifications, Garden City



CHARACTER AREAS

Character Areas

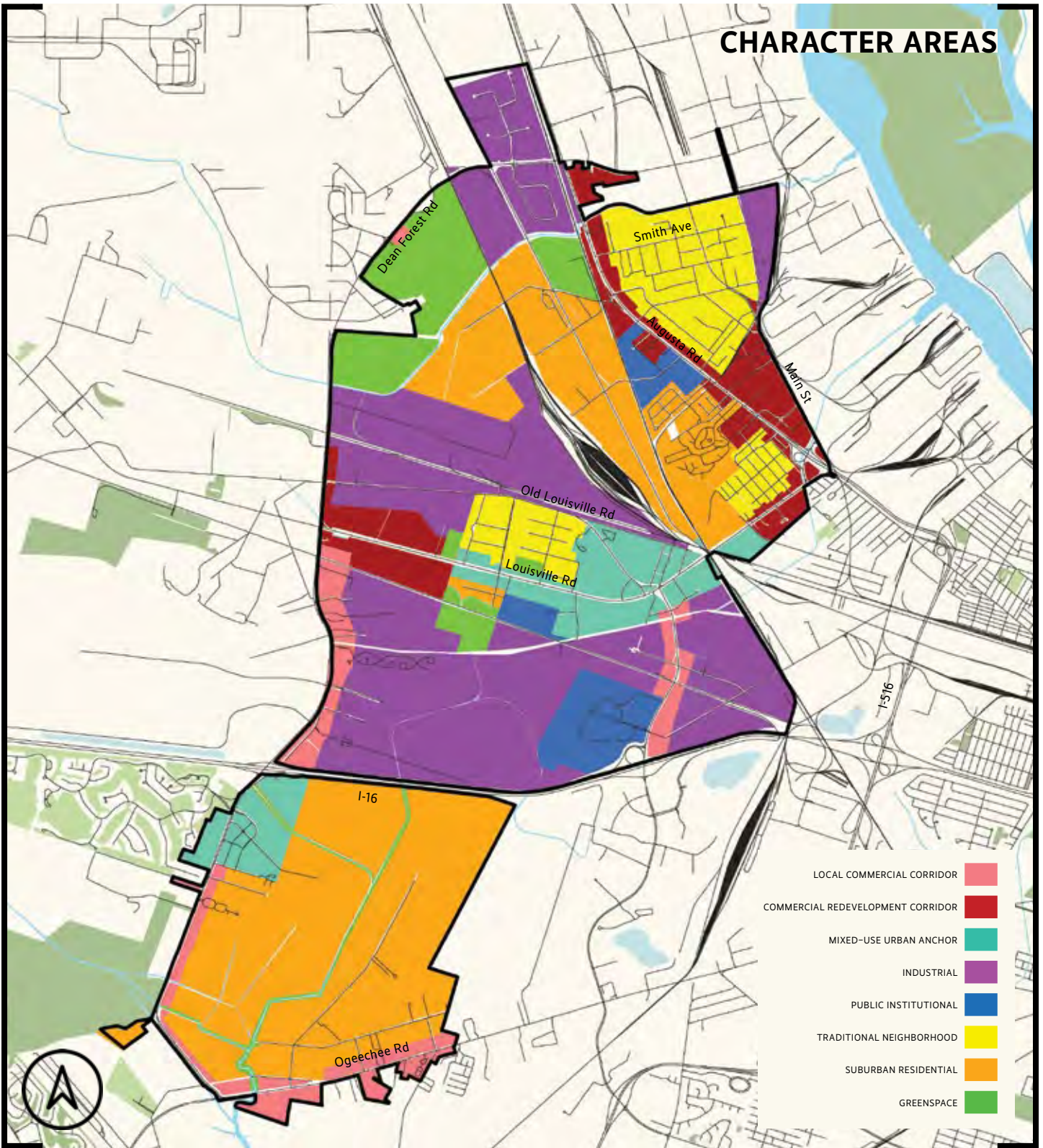
Character areas are places that may contain a multitude of specific land uses, but share defining characteristics such as development intensity or topography. Garden City's character areas were developed utilizing the existing 2016 Comprehensive Plan character areas, existing community character, and 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 jointly with the Future Land Use Map (FLUM). The CAM is not intended to represent future zoning; however, it is important that the CAM be considered along with the FLUM, the city's zoning ordinance, and other local policies when decision-makers 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

CHARACTER AREAS



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% 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 permitted uses reflect the needs of the local market and are compatible with nearby residential neighborhoods
- Ensure design and architectural standards are compatible with surrounding areas
- Ensure road edges are clearly defined by locating buildings closer to the road frontage with parking in the rear or at the side
- Evaluate the need for 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

The Commercial Redevelopment Corridor character areas are highly trafficked and consist primarily of commercial/industrial uses adjacent to highways; however, some residential development is scattered along the highway and on local streets. This character area was established to enhance and reevaluate the quality and compatibility of development, promote safe and efficient movement of traffic, and 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 this character area contains a mix of zoning categories (including residential districts), the majority of these areas are zoned for commercial and industrial uses. 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 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 traditional categories in the current zoning code do not necessarily lead to the desired vision for development within this character area. The City should consider rezoning 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:

- Encourage residential development and commercial uses that complement each other and create a live/work environment
- Allow for varied residential densities and housing types
- Encourage commercial uses that include a mix of retail, services, and offices to serve neighborhood residents' day-to-day needs and that match the character of the neighborhood
- Ensure mixed-use area design is very pedestrian-oriented, with strong, walkable connections between different uses
- Rezone some or all of the Mixed-Use Urban Anchor character area to M (Mixed-use), or create an overlay district to facilitate a consistent form of development



INDUSTRIAL

Garden City has long occupied the superior strategic location within the county 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. The Industrial character area identifies areas where industrial uses can be segregated from an inappropriate level of unrelated uses.

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 areas.

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, 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 current public/institutional services are meeting the city's potential needs



TRADITIONAL NEIGHBORHOOD

Traditional Neighborhood character areas 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 continuation of the street grid pattern
- Ensure 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 tree canopy is preserved citywide



SUBURBAN NEIGHBORHOOD

The Suburban Neighborhood character area is generally distinguished by single-family structures either on large lots or in subdivision developments with relatively uniform housing types and densities. Multi-family apartments and attached single-family subdivisions are also prevalent in these areas. New developments should have sidewalks and 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 Greenspace character area is defined by natural, open, vegetated spaces. The availability of greenspace in conjunction with well-planned, well-promoted cultural and historic resources and well-placed urban centers speaks to quality of life in a community. Properly planned greenways provide efficient pedestrian linkages that can serve as alternative transportation routes to and from work, 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

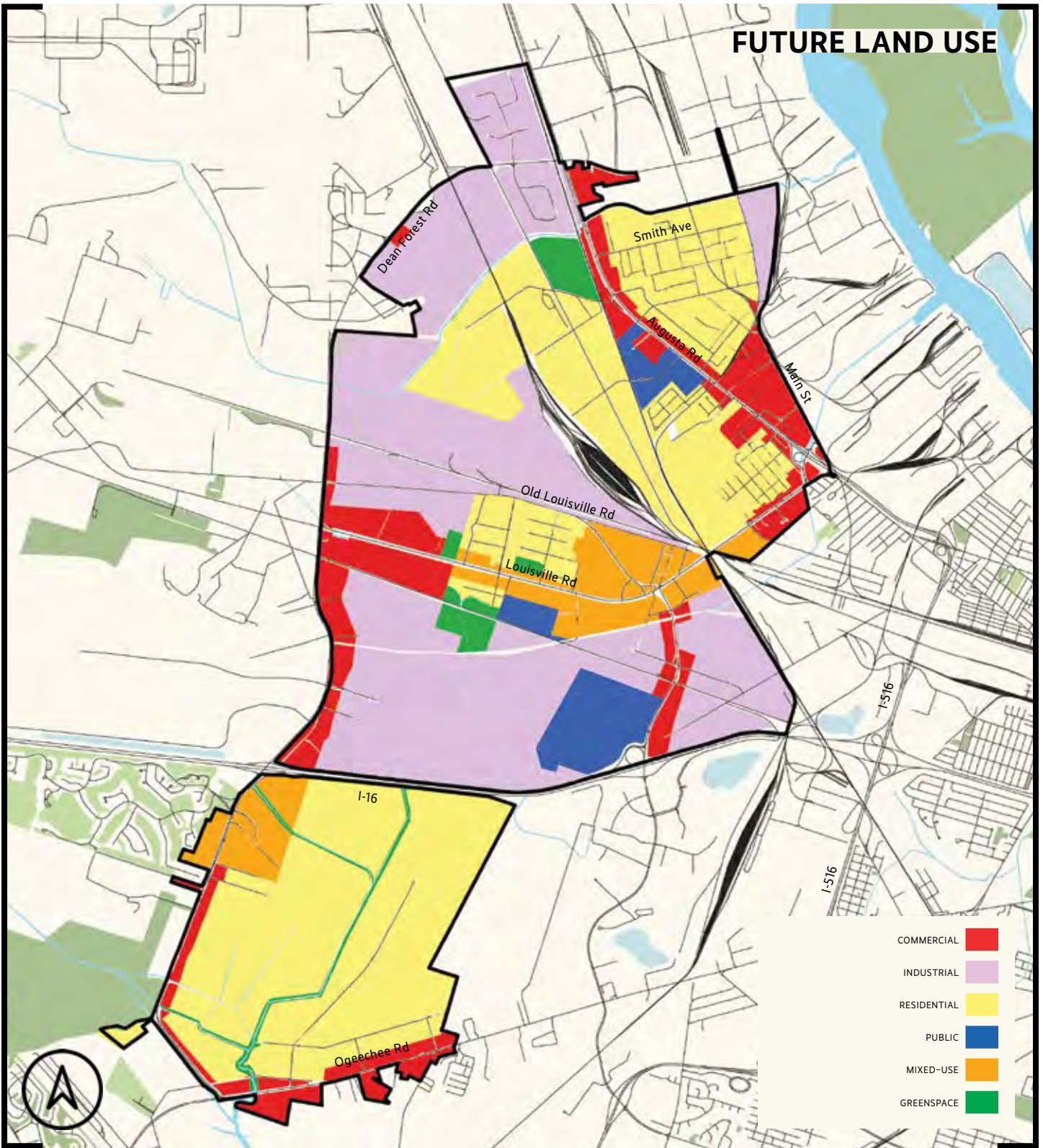


FUTURE LAND USE

Garden City 2040 sets out a vision for the community and its future land use decisions. In addition to the CAM, the Land Use Element includes a FLUM to present information, strategies, and recommendations to guide future land use policies and decisions. The FLUM and the CAM envision future land uses with attention to the interconnected elements of community character, development patterns, transportation infrastructure, equity, and natural resources.

The FLUM provides direction for zoning decisions through specific land use categories, while the CAM identifies the character vision for Garden City. In combination with one another, the FLUM and the CAM are intended to guide the character and direction of land use decisions in the city with the goal of furthering consistent uses and character.

Garden City's future land use patterns are shown on the FLUM. The FLUM contains land use and overlay categories which visually represent the land uses that serve to guide future zoning and development policy decisions. Land use categories are defined in detail on the following pages. Interpretation of the FLUM should be considered along with all zoning requests, local policy reviews, recommendations, and decisions when policymakers consider land development questions or requests.



Map 4.8-Future Land Use, Garden City



LAND USE CATEGORIES

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 intensity. Commercial uses may be located as a single use in 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, wholesale trade facilities, mining or mineral extraction activities, or other similar uses.
USES	Commercial Retail, Commercial Office	Light Industry, Heavy Industry

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, and military installations, among others. Examples of institutional land uses include colleges, churches, cemeteries, and hospitals. This category does not include facilities that are publicly owned but would be classified more accurately in another land use category.
USES	Single-Family, Multi-Family	Public/Institutional

MAP COLOR	
LAND USE	Mixed-Use
DEFINITION	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), as well as the allowable density of each use.
USES	

MAP COLOR	
LAND USE	Greenspace
DEFINITION	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.
USES	



TRANSPORTATION ELEMENT

05





TRANSPORTATION

Introduction

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

While investments in our roadway infrastructure are necessary to increase capacity for vehicular uses, other forms of infrastructure investment should be considered—including bike lanes, walking paths and sidewalks, and bus service—to create additional opportunities for connectivity to our region.

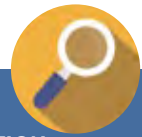
TRANSPORTATION CONDITIONS & TRENDS

Chatham County has 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 Authority.

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 Garden City.



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)

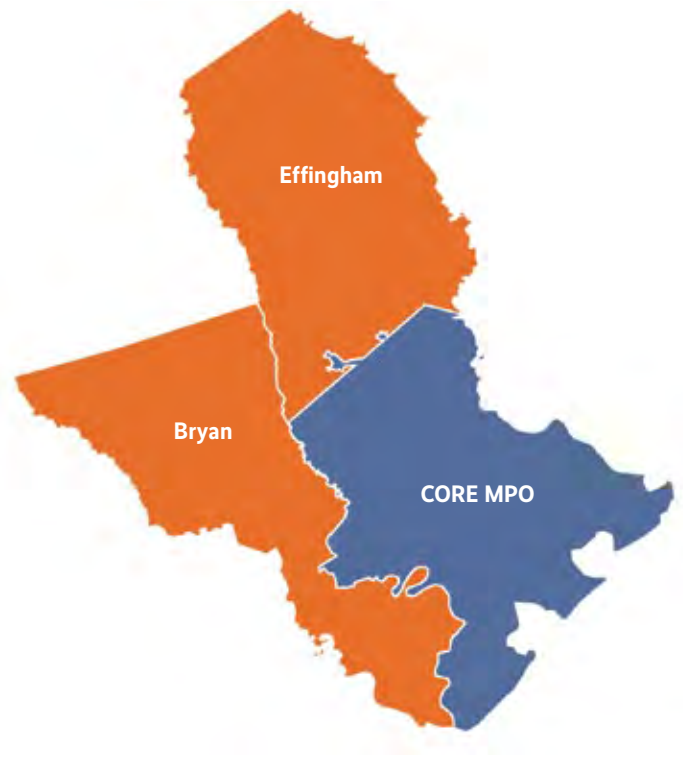


Figure 5.1—CORE MPO Boundary

Coastal Region MPO

The boundaries of the CORE MPO, 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).

CORE MPO Statistics

Total Population in MPO*

276,406

Land Area (Square Miles)*

651

Year Established*

1983

*Metropolitan Planning Organization (MPO) Database



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

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



TRAVEL CHARACTERISTICS

Regional Commuting Patterns


Chatham County and 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 flowing through Garden City.

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%

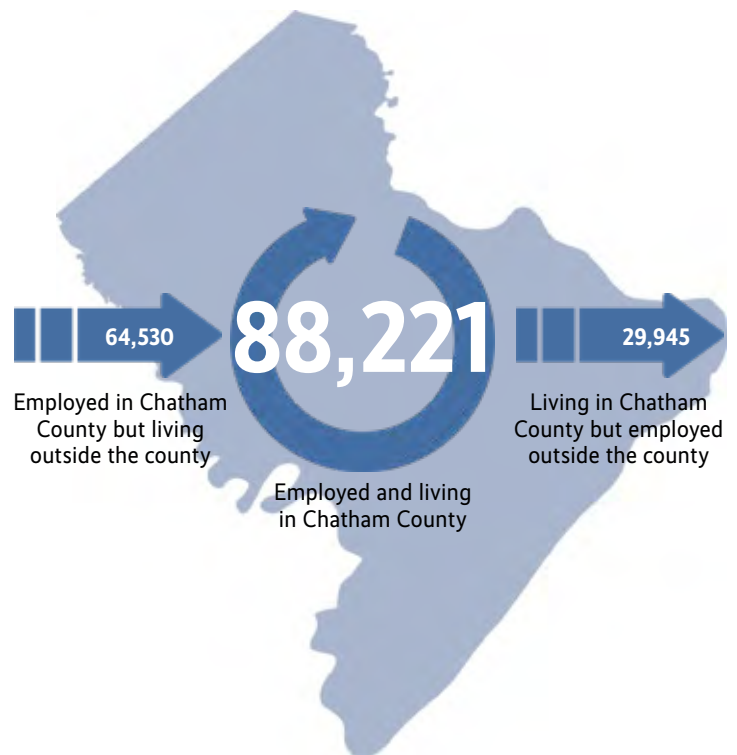
Figure 5.2—Regional Commuting Characteristics
U.S. Census Bureau: 2017 American Community Survey 5-Year Estimates



COMMUTING PATTERN

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

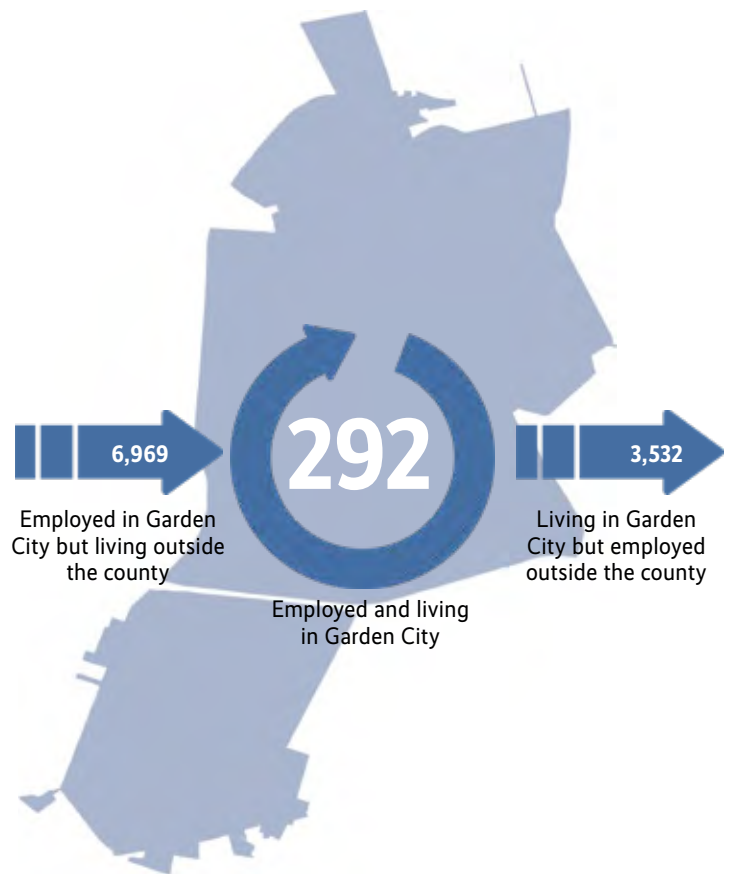
—Census Bureau



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

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 Garden City live outside of the city, while nearly 93% of people who live in Garden City commute outside for employment. The high amount of commuting in and out of the city is evident with the high volume traffic that often 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 5.3, most work trips in Garden City are by automobile, as is the case for the state and country overall. Workers living within Garden City 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 5.3 for 2018, 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 U.S., while 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 U.S. 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.



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). They have also resulted in some unintended, negative consequences for individuals and society, however, 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 public transit, carpooling, walking, biking, or telecommuting for their commute to work.

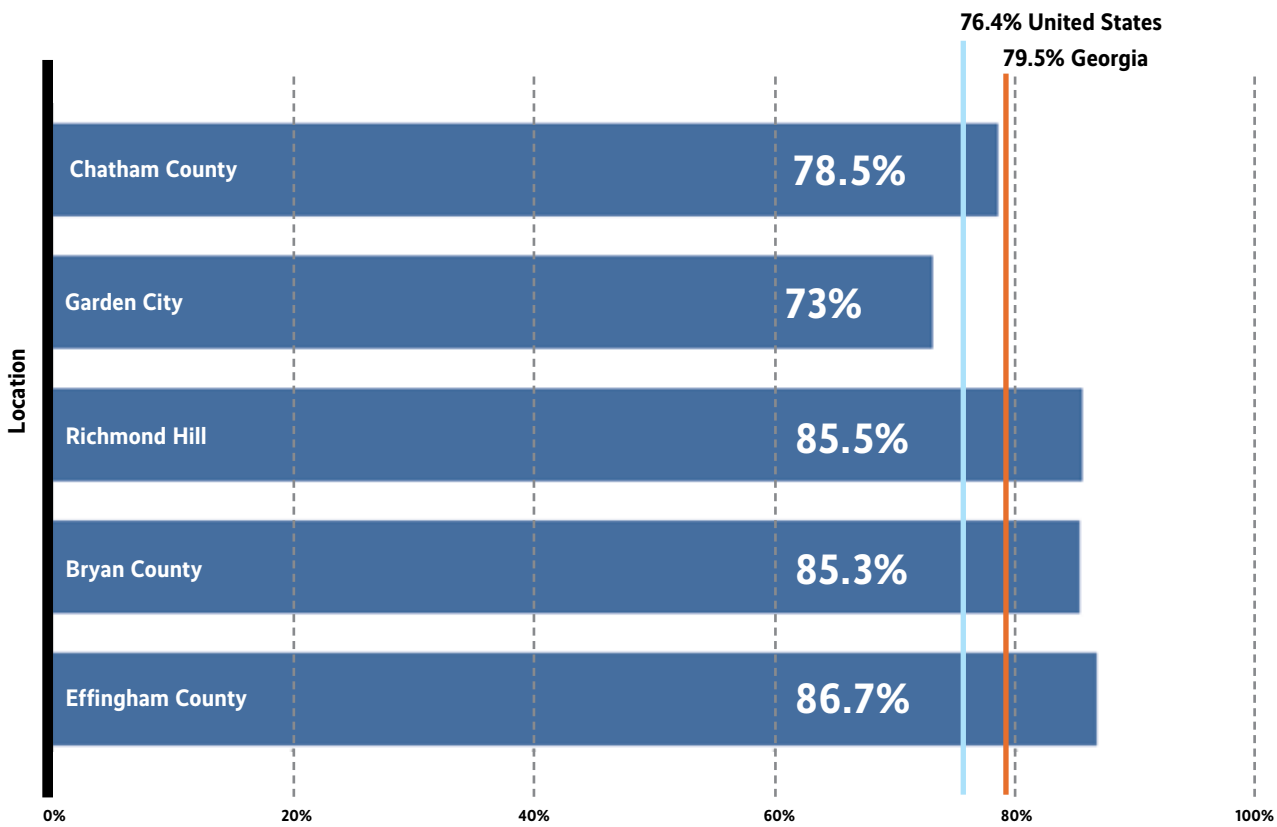


Figure 5.3—Percent of Commuters Who Drive Alone to Work
 U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



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.

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 region's 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 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).

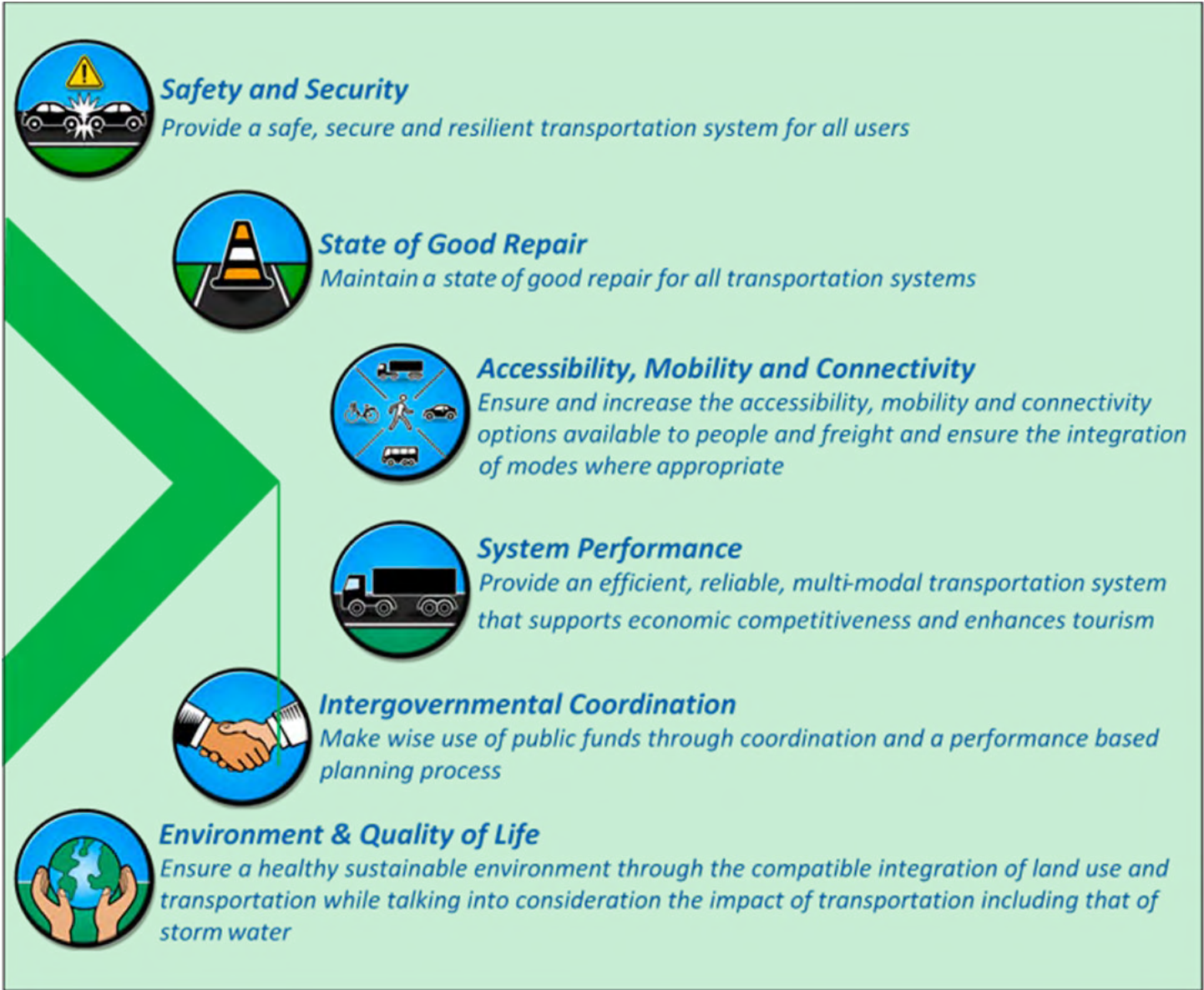


Figure 5.4–Mobility 2045 Goals



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)

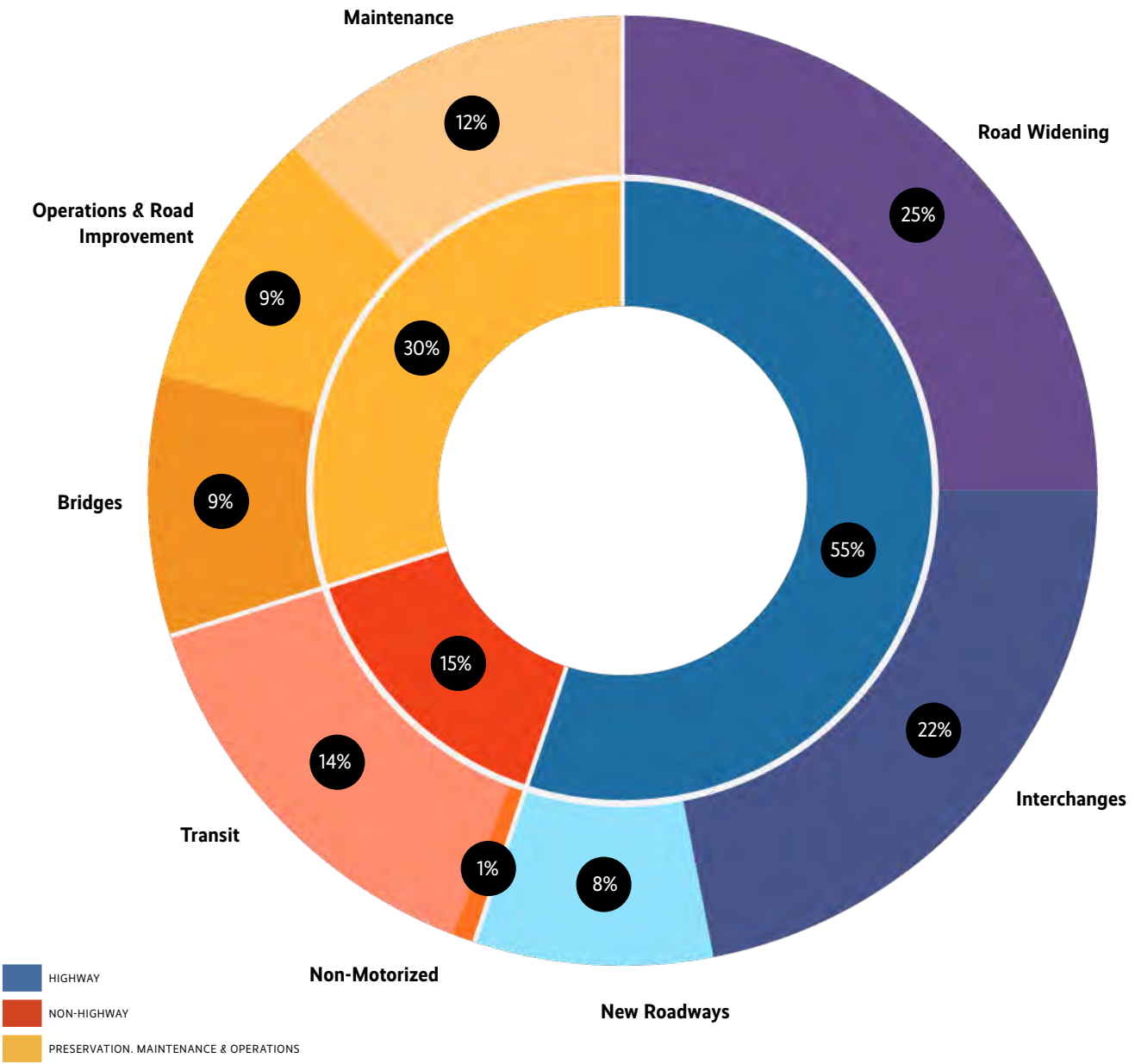


Figure 5.5—Funding for Transportation Projects
Coastal Region Metropolitan Planning Organization (CORE MPO)



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.

Maps 5.3 and 5.4 depict the functional classification of the roadway network in the Savannah MSA and Garden City while Figure 5.7 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.

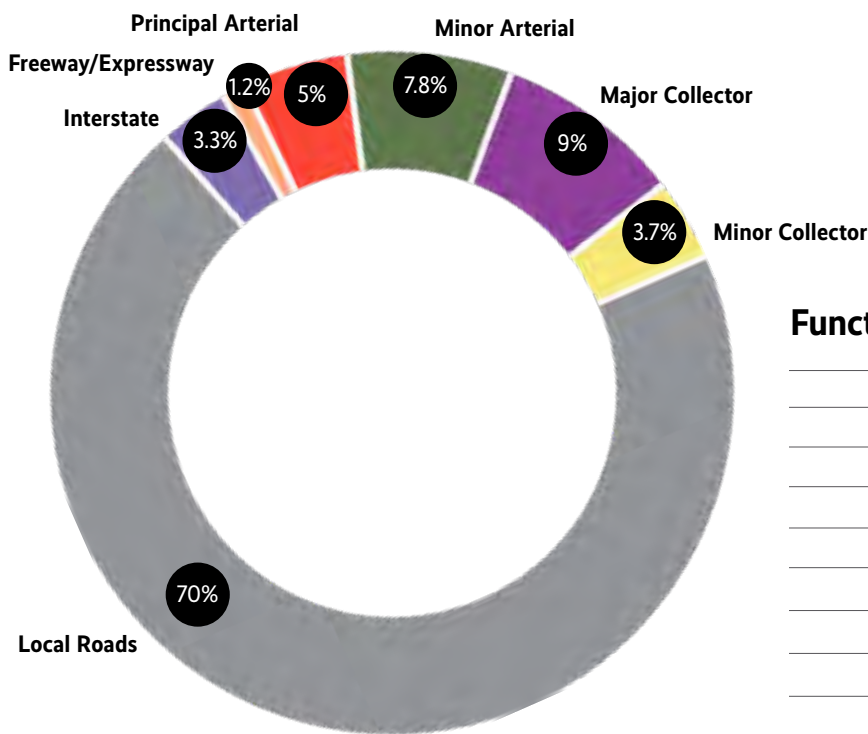


Figure 5.6—Percentage of Roadway in Region by Functional Classification
Coastal Region Metropolitan Planning Organization (CORE MPO)

Functional Classification

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 5.7—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.

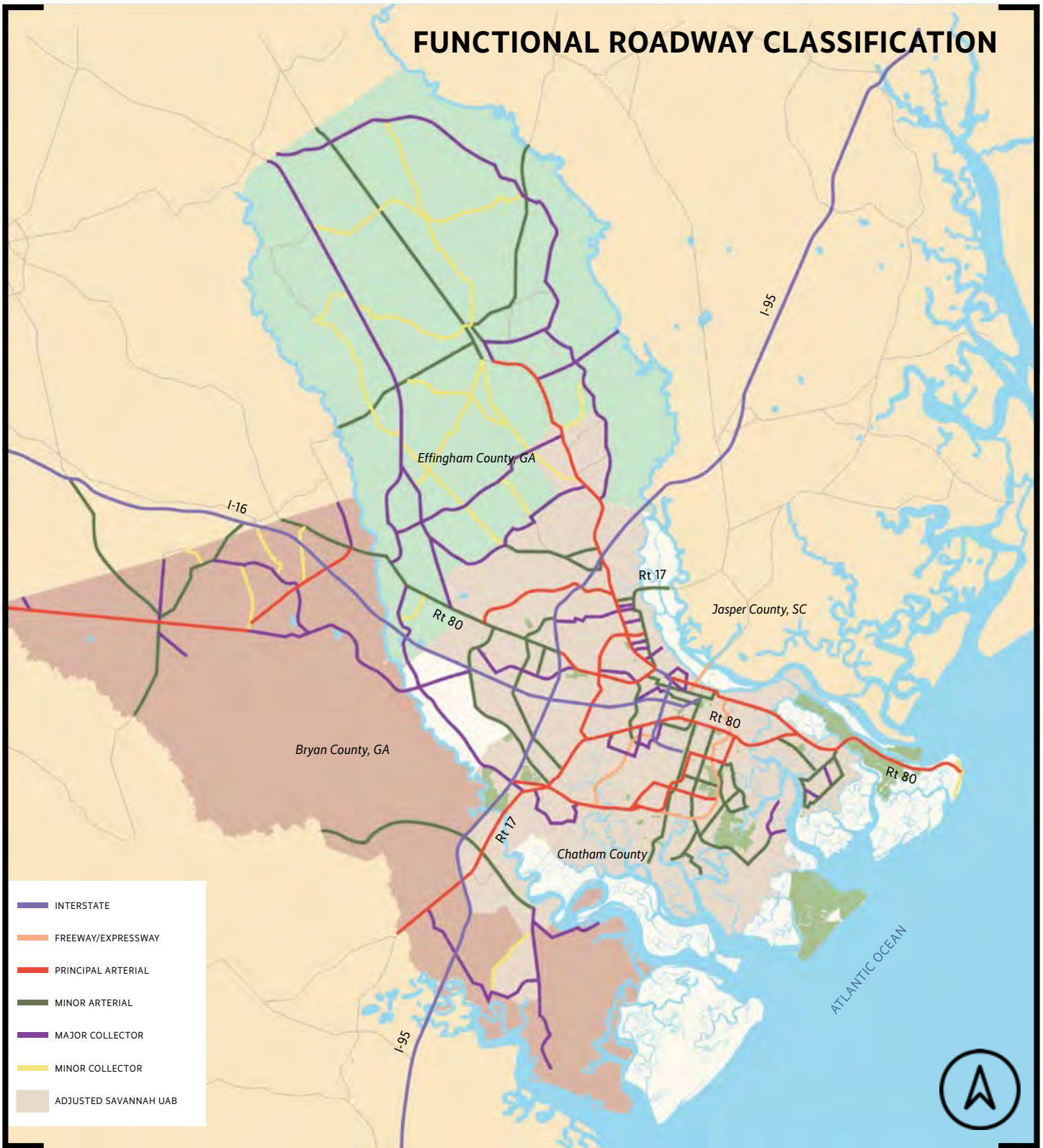
Local Roadways

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.

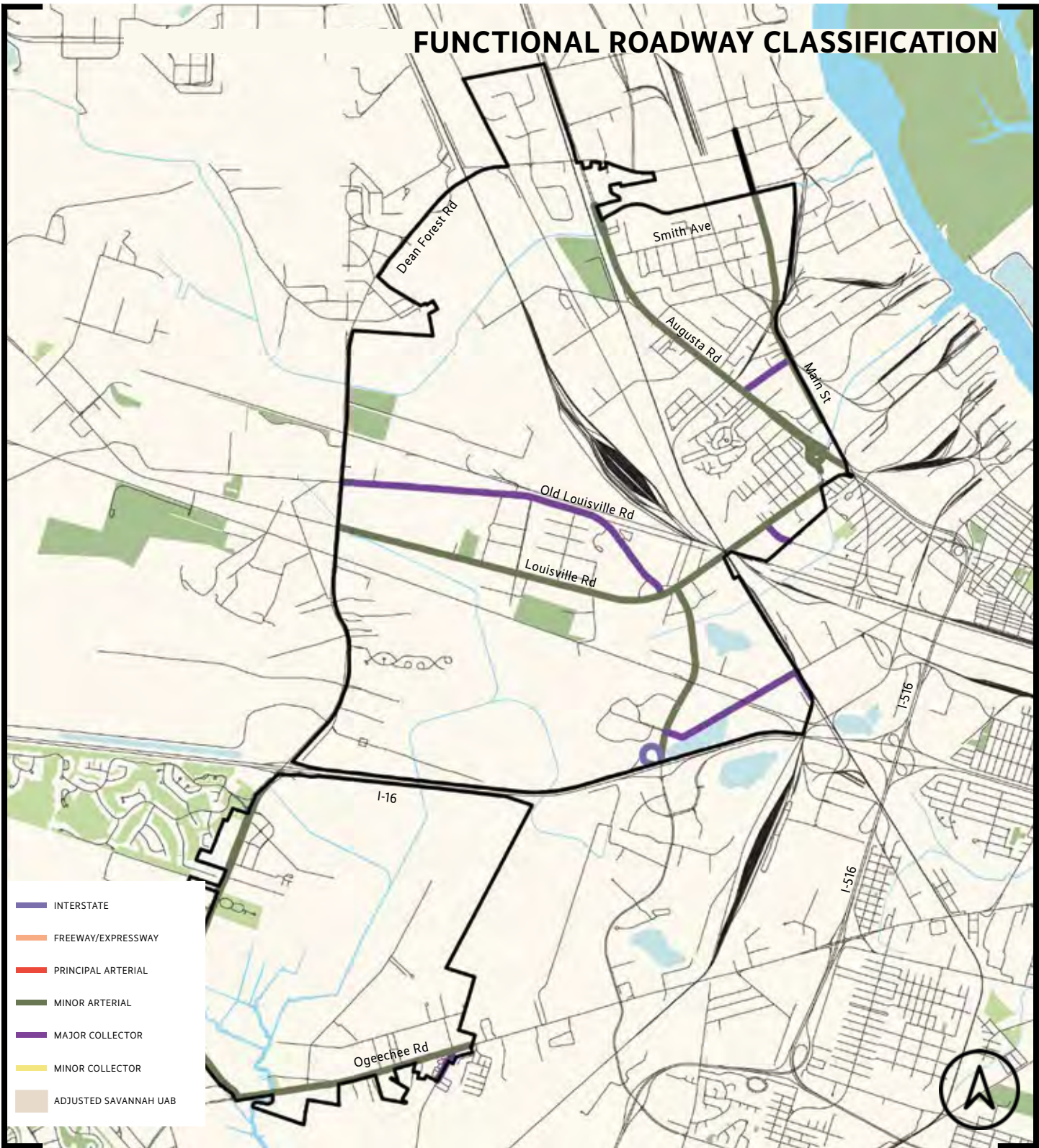
—CORE MPO



FUNCTIONAL ROADWAY CLASSIFICATION



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 Garden City, 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 5.5 shows an inventory and conditions of the bridges in Garden City.

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 structurally deficient (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 is described as acceptable or structurally deficient (SD).

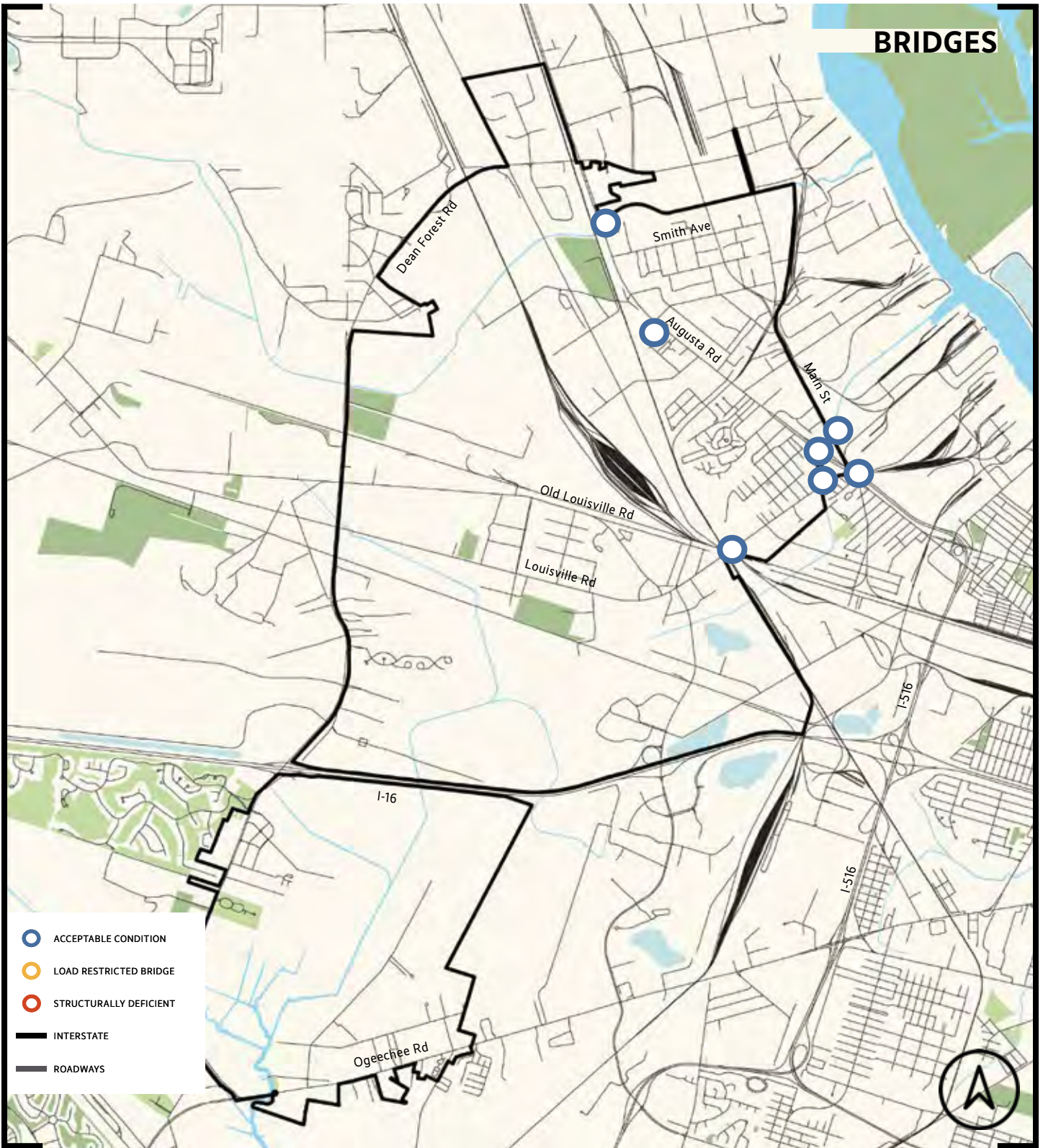
As shown by Map 5.5, there are currently no bridges in Garden City labeled structurally deficient.

ARE YOU LOOKING FOR MORE INFORMATION?

More information on bridges can be found in the U.S. 80 Bridges Study.

See...

**[https://www.thempc.org/
Core/Studies#gsc.tab=0](https://www.thempc.org/Core/Studies#gsc.tab=0)**



Map 5.5—Bridge Locations and Conditions, Garden City
Coastal Region Metropolitan Planning Organization (CORE MPO)

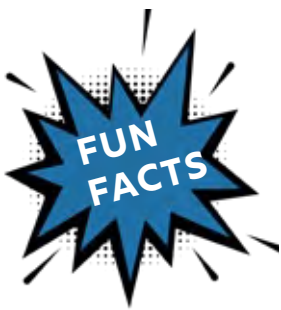


INTERMODAL TRANSPORTATION

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.

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

The Port of Savannah is currently in the final staging of 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 in Garden City and beyond 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 positioned between Garden City, Pooler, and Savannah. 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 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% 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.

The first regularly scheduled international flight by a major air carrier was in 2017 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 has also begun 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 has begun design on a new air cargo complex.



NON-MOTORIZED TRANSPORTATION

While the automobile is the primary mode of transportation in Garden City, 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 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 identifies 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 5.6, from that MPO-adopted plan, shows existing and recommended improvements in the Garden City planning area.

NON-MOTORIZED TRANSPORTATION

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

—CORE MPO



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

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). In addition, there are three new routing concepts in the region, Tide to Town, East Coast Greenway, and US1.

NON-MOTORIZED PLAN



Map 5.6-2020 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 with potential for crossing into Garden City.

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 going through Garden City. 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 in Garden City, 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 in Garden City then 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.



TRANSIT SYSTEMS

Chatham Area Transit Authority

Chatham Area Transit (CAT) is the agency responsible for the provision of public transit services to the Garden City area, including fixed route and paratransit. CAT currently operates a fleet of 65 fixed route buses, six 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 revised. 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 five-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



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.



Garden City CAT Service

As shown in Map 5.7, CAT currently operates 16 routes with 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)

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

CHECK OUT CAT'S INTERACTIVE MAP

For more details about CAT's Bus System and Routes...

<https://www.catchacat.org/current-schedules/>

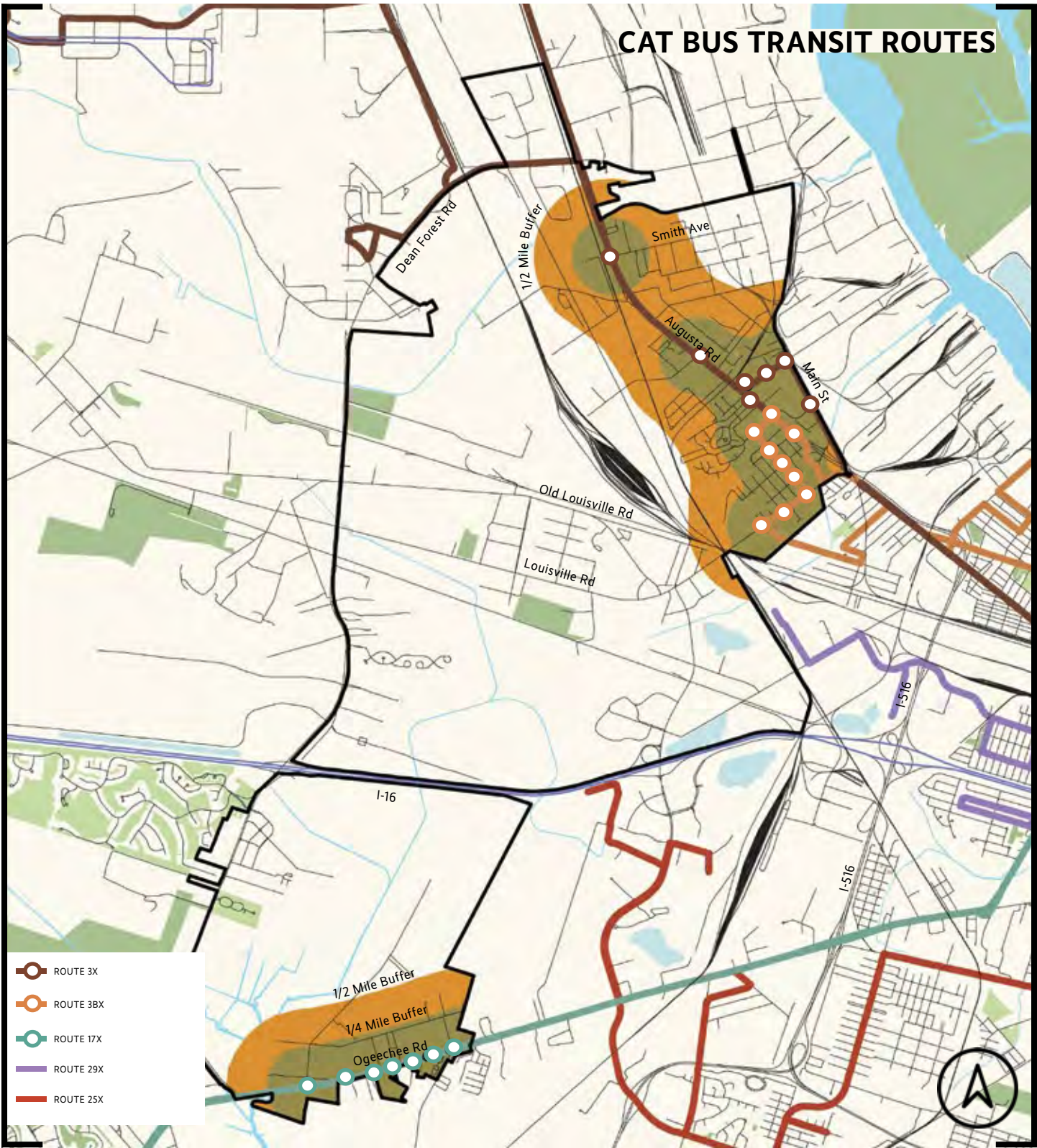
Average Annual Passenger per Hour by Route

Route/Year	2013	2014	2015	2017	2018
100X Airport Express	3.8	3.0	3.0	2.7	2.7
3X W. Chatham	18.1	18.3	16.4	16.1	15.1
3BX Augusta	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
17X Silk Hope	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 5.8–Average Annual Passenger Per Hour by Route
Chatham Area Transit 2013–2018



CAT BUS TRANSIT ROUTES



Map 5.7-CAT Transit Routes, Garden City
Chatham Area Transit System Map



TRANSPORTATION TECHNOLOGY

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.

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 United States Department of Transportation (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 system, infrastructure, and society is different.

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.

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)

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.

GDOT has expanded the Regional Traffic Operations program to the Garden City and Chatham County area. This was their first expansion outside the Atlanta area. The Savannah Regional Traffic Operations Program (SRTOP) is managed by GDOT and is a regional effort including Garden City, the City of Savannah, Chatham County, and other local jurisdictions. The program provides:

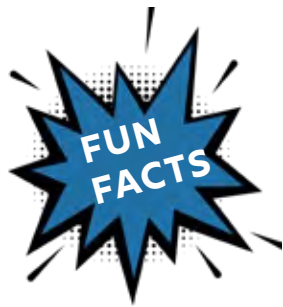
- Weekly AM, Midday, and PM drive throughs of the corridors to monitor signal timing adjustment needs, congestion, and any other traffic operation deficiencies
- Routine preventative maintenance (PM) activities to ensure all equipment and communications are operational
- Upgraded traffic signal software to current statewide platform
- The new software provides more functionality, as well as remote monitoring capabilities
- Assisted managing traffic operations during St. Patrick’s Day festivities
- Responded to emergency situations that required signal timing adjustments to accommodate shift in traffic patterns
- Monitor operations after storms to ensure signals are operational
- Repaired items, such as malfunctioning detection (vehicle, pedestrian), pull boxes, replaced cabinets, etc

Specifically, GDOT monitors Highway 21 and Highway 80 via the Regional Operations Plan.



Automated Vehicles/Self-Driving Cars

Automated vehicles, 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 U.S. 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 Georgia in the Atlanta 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 consistently driving around. This is 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 CO₂ 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 who 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.

Photo Credit: SCAD District



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 currently 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.

Parking

Most drivers prefer to park as close to their destination as possible which creates 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.

A parking study can often identify the demand for parking and identify potential parking solutions. 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.



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 Garden City's transportation planning.

Garden City is cognizant of the interconnectedness between land use and public health. As such, programs and policy changes will continue to be 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, Garden City 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.



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 Garden City due to its negative impacts on water quality. 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 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 their 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, locally, 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.

- Garden City’s implementation of a transit-oriented development ordinance could 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

06



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 associated housing issues and needs 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, 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

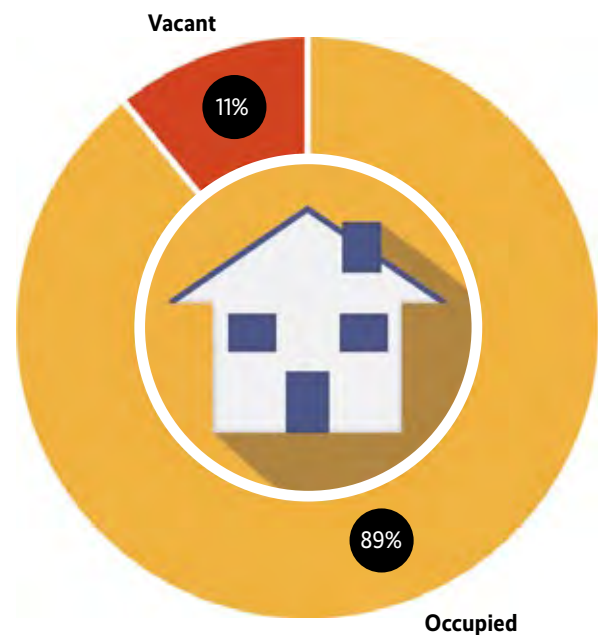


Figure 6.2–Housing Occupancy, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



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 consists of 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 factors 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 interest in 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

Housing Type	GARDEN CITY	
	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.

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

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.



Year Housing Structure Built, 2018

Year Built	GARDEN CITY	
	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.

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. Almost 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

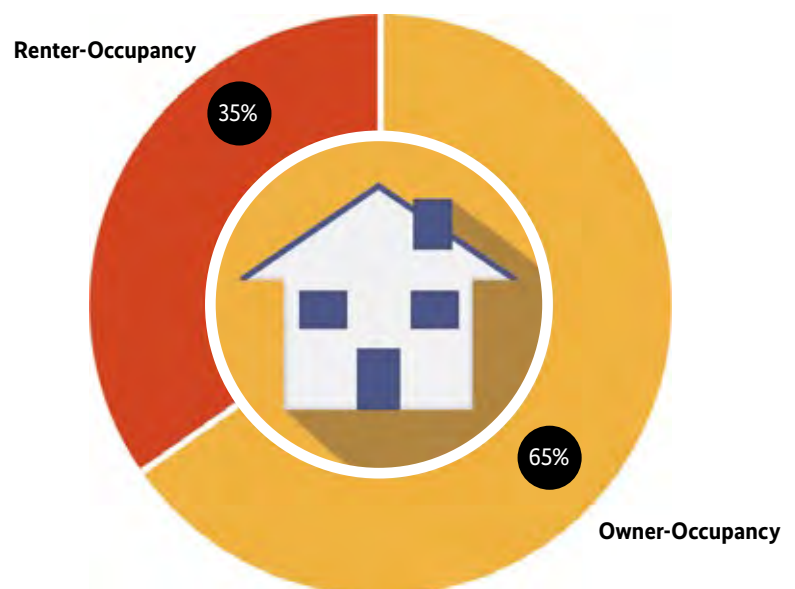


Figure 6.5—Housing Tenure, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



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 time frame 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 35% 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 Figure 6.7, 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 \$1,000 to \$1,499 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 \$2,000 or higher in monthly 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

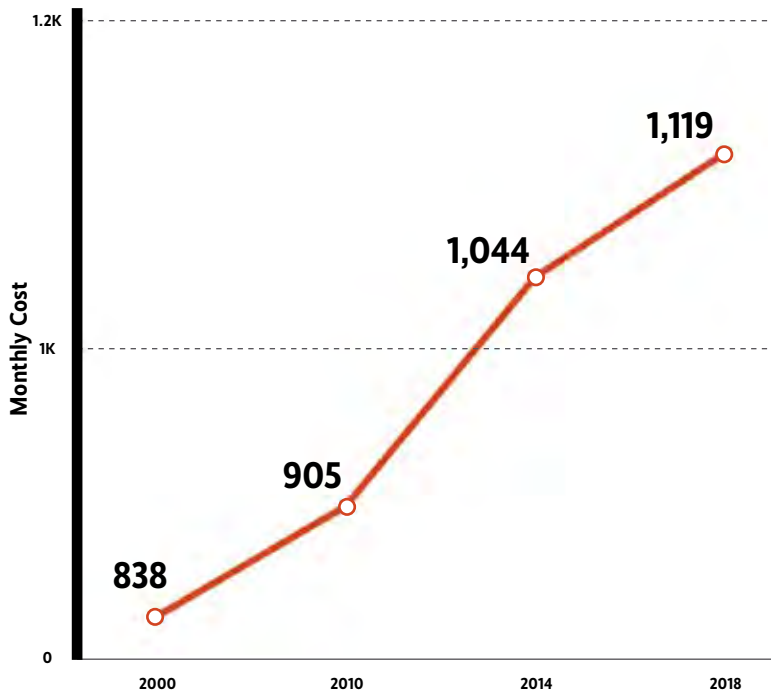


Figure 6.8—Monthly Mortgage Costs, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

Monthly Rent Costs, 2000–2018

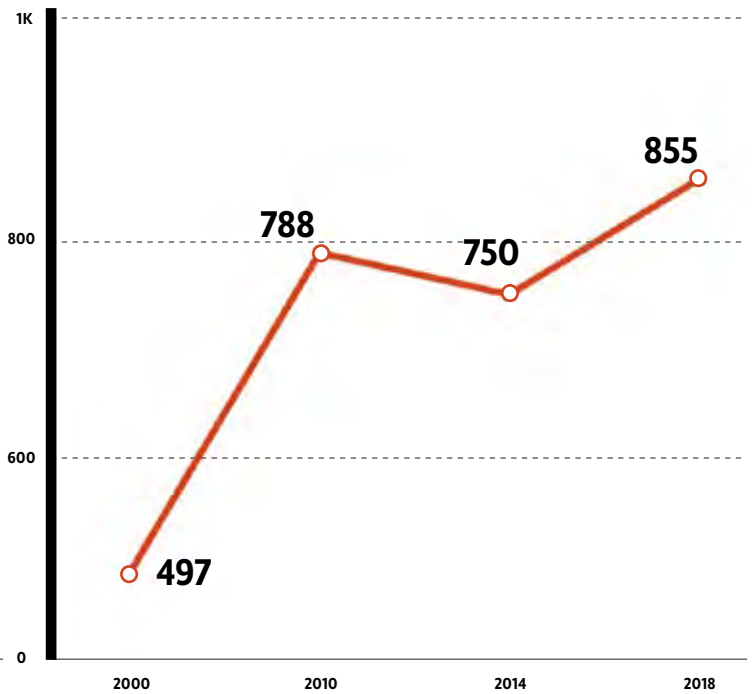


Figure 6.9—Monthly Rent Costs, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates



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 the 35 to 44-year-olds with a projected increase of 20.1% from the 2010 counts, 55 to 64-year-olds increasing 15.4% and individuals who are over 65 increasing by over 85%. Younger age groups, by contrast, are projected to experience either a very modest growth from current and previous levels.

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, 2010–2030

Age	2010	2020	2030	%Chge. 2010-2030
Under 5	18,334	17,948	18,443	0.6%
5 to 14	31,751	33,172	36,654	15.4%
15 to 24	45,223	41,611	45,311	0.2%
25 to 34	40,557	46,267	41,995	3.5%
35 to 44	32,571	36,867	39,133	20.1%
45 to 54	34,782	33,244	38,304	10.1%
55 to 64	29,435	35,606	33,964	15.4%
65 and Over	33,218	45,835	61,720	85.8%

Figure 6.10–Chatham County Population Projections by Age Cohort
 U.S. Census Bureau: 2010 American Community Survey 1-Year Estimates & Georgia Office of Planning and Budget



COST-BURDEN

Housing Costs

According to the U.S. Department of Housing and Urban Development, cost-burdened families are 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, 1/4 of 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 pays a large amount of income toward housing. As shown in the Figure 6.11 and 6.12, cost-burden was at its highest around 2010 for homeowners, and 2014 for renters.



COST-BURDENED

Cost-burdened families are 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% 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

The definition of affordable housing is often assumed to refer to low-income housing. However, in this document, "Affordable Housing" and "Low-Income Housing" are two different categories, with affordable housing referring to individuals who make a moderate income (police officers, teachers, social workers) and low-income referring to residents who live below the poverty line.

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 higher 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 still fit seamlessly into existing residential neighborhoods. These housing types can include duplexes, triplexes, fourplexes, rowhouses, and townhouses.

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. 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.

Gentrification

An additional important factor in the affordable housing conversation is gentrification. Gentrification refers to the process of higher income individuals moving into a low-income area, leading to the displacement of longtime residents due to increased property values and cost of living. There are multiple areas in Chatham County that are experiencing gentrification, creating a need to prevent displacement. This could involve providing property tax breaks for longtime residents, and home buyer programs for renters who have been priced out of the area. This is especially important for senior and disabled residents, who are often on a fixed income.



PUBLIC HOUSING

Public Housing in Garden City

Public housing is defined as government-owned and -operated or privately subsidized housing that is available for low-income individuals who cannot afford market rate prices. Garden City has three public housing complexes to serve the population who need subsidized and low-income dwellings. As a significant percentage of residents in Garden City live in poverty, access to public housing is critical in ensuring that individuals have access to secure housing. Garden City decision makers should explore other options outside of the traditional housing complex, such as the Housing Choice Voucher Program, also known as Section 8. Voucher programs not only expand the low-income housing stock, but also prevent the concentration of poverty.

Another important factor in creating public housing is location. The placement of housing is an important determinant in the overall quality of life of residents, especially in regard to access to vital resources. This includes access to food, jobs, and educational advancement. All housing should be placed in an area that is economically advantageous to residents, and this is especially important for low-income individuals who face more barriers in terms of job and food access.



PUBLIC HOUSING

Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single-family houses to high rise apartments for elderly families.

—HUD

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, as they are often located 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, and energy efficient 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.



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 A 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

Chatham County has an array of housing services to help its residents. 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.

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





**NATURAL RESOURCE
ELEMENT**

07



NATURAL RESOURCES

Introduction

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 environment. Since the earliest times of Oglethorpe, people have wanted to live near the water.

Coastal Georgia's 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 coastline. The region continues to grow as people leave colder climates to live near the beautiful oak trees and sandy beaches. With population growth, however, 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 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 remain a place of beauty for centuries to come.

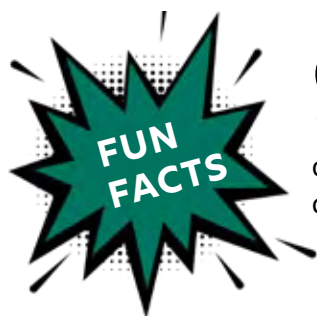




Coastal Resources

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 the state 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 are 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 of land area. The river basin is located entirely in the State of Georgia and has played a significant role in forming Wassaw, Ossabaw, Saint Catherine's, Blackbeard, 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.

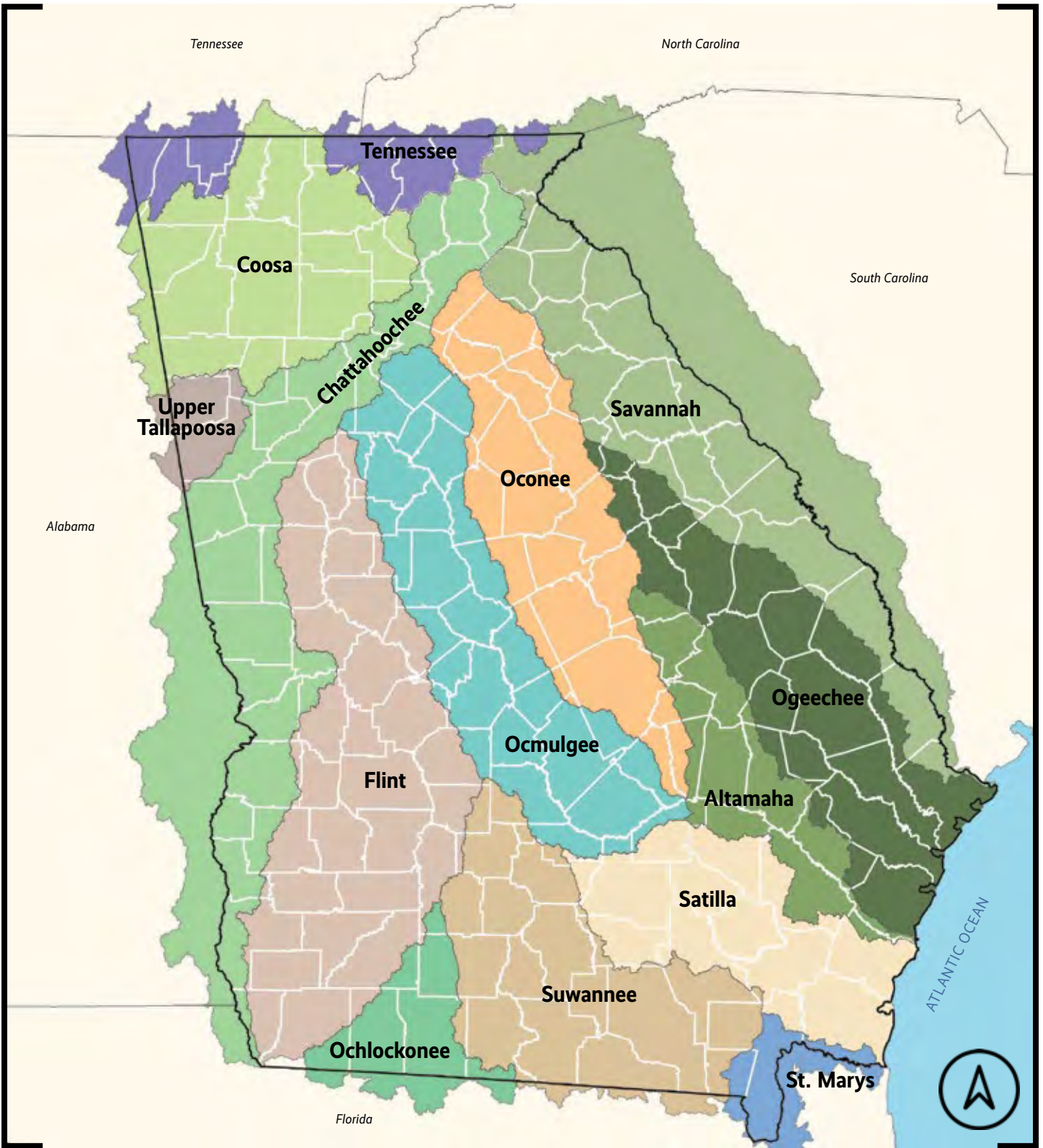


WATERSHEDS

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





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 underlies an area of about 100,000 square miles in southeastern Mississippi, 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); 98% of the water provided by these systems 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 in the aquifer system. 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 local municipalities, major domestic water companies, and major industrial water users to reduce groundwater pumping.

Saltwater intrusion into the Floridan aquifer in the Savannah area 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 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 and led to a multi-step approach to managing groundwater withdrawals along the coast.



Map 7.2–Floridan Aquifer System



Map 7.3—Chatham County's Large Watersheds



Red Zones

The Chatham and southern 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. Subsequent analysis of pumping indicated that the permit restrictions, conservation measures, and additional management strategies were proving effective. In October 2015, EPD again 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.



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.



SALTWATER INTRUSION

Saltwater intrusion occurs when too much groundwater is pumped from coastal aquifers and saltwater migrates inland, contaminating the water supply.

—USGS

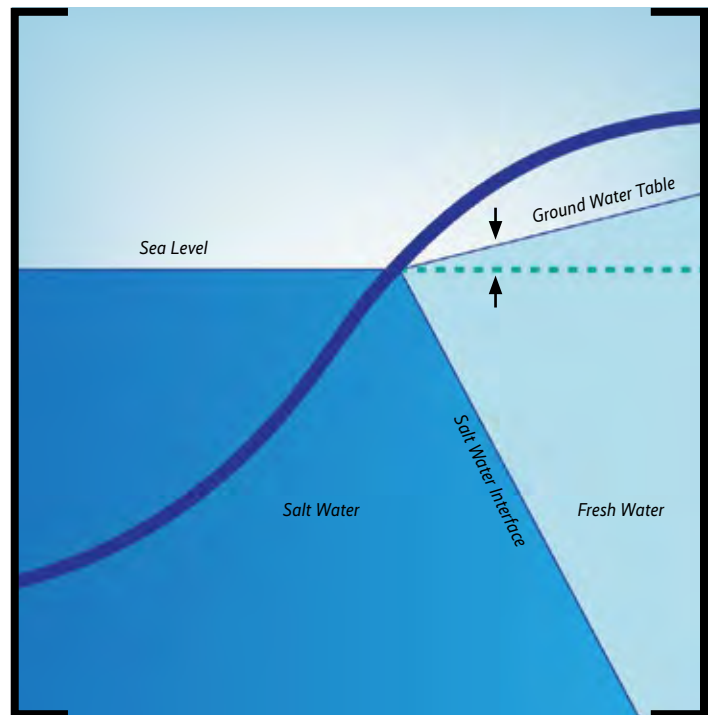
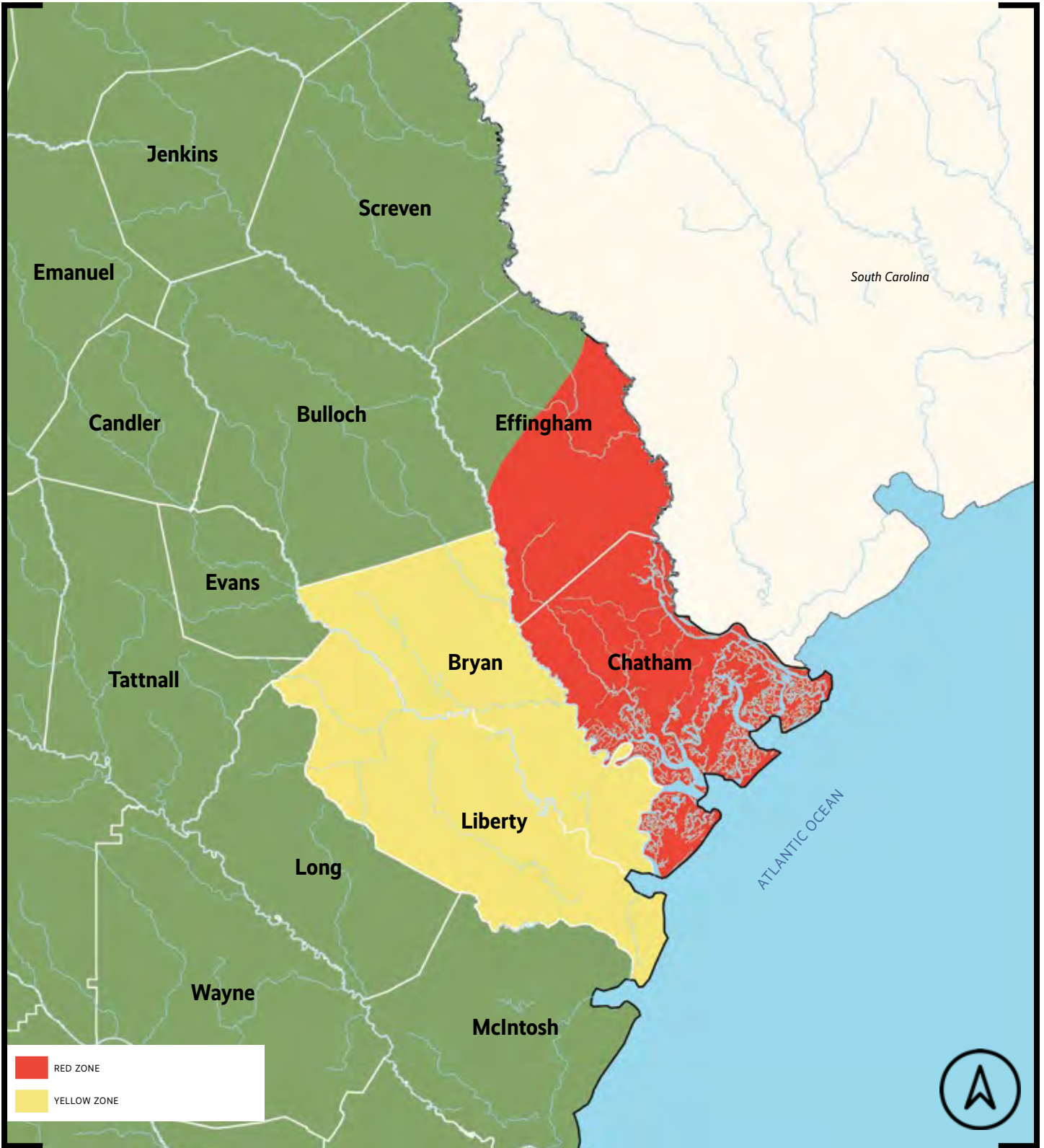


Figure 7.1–Aquifer Impact Diagram



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



Groundwater Recharge Areas

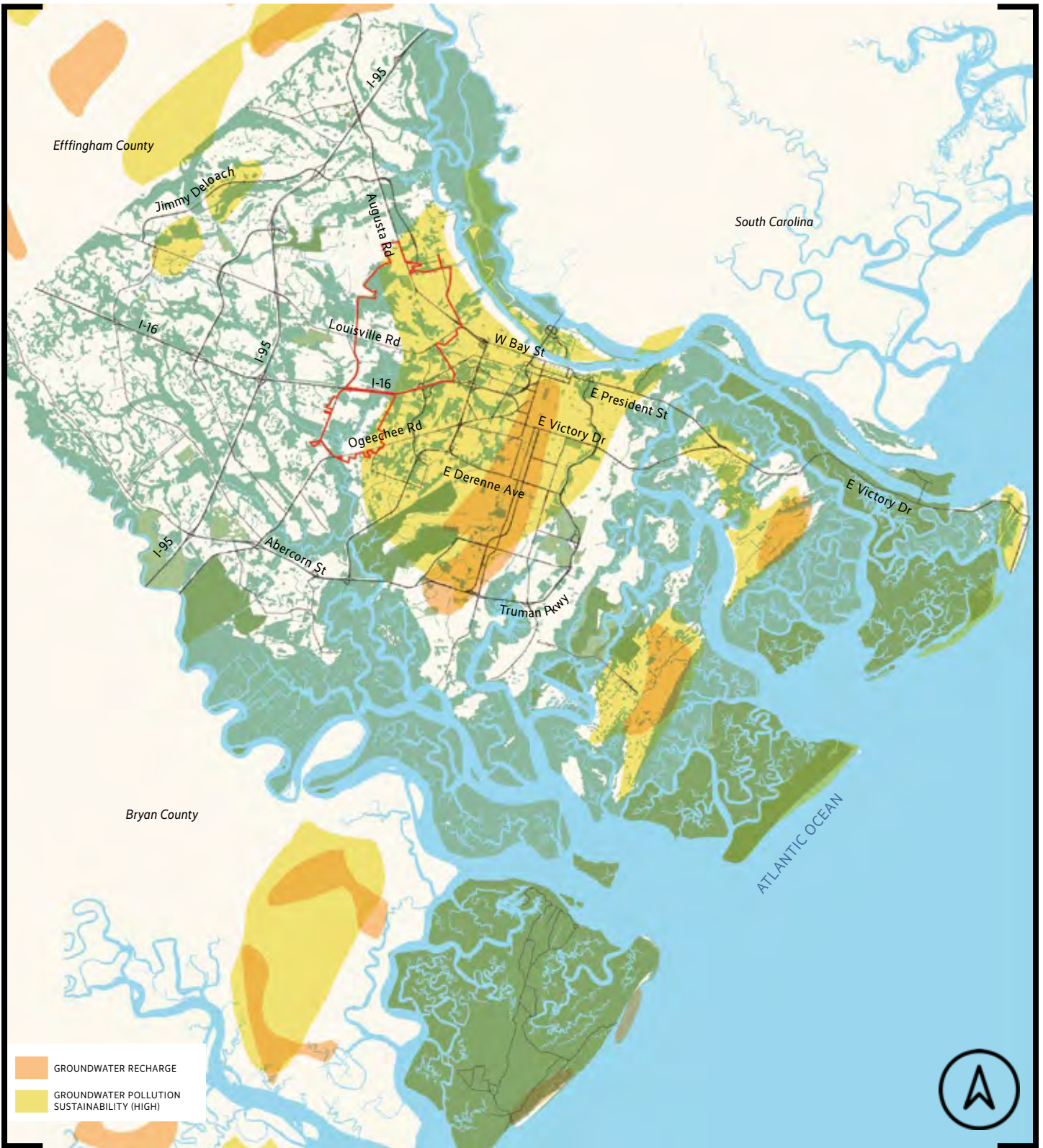
A groundwater recharge area is the land where the water that eventually seeps down into an aquifer first enters the ground. Groundwater can move readily through soils and rocks that have large pore spaces (porous) such as sand, gravel, sandstone, or limestone. However, soils and rocks with small pore spaces (non-porous) such as clay, shale, or granite, hinder water movement. 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 affecting 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 Zoning Administrator 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.

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. Impaired waters have been identified as polluted and are not currently or are not expected to meet applicable water quality standards. The Georgia EPD has a complete “303(d) list” for the State of Georgia and Garden City.

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. One of these impaired bodies is Pipemakers Canal, a major waterway and floodway that traverses several jurisdictions and should be considered for more stringent protection measures due to the amount and type of flood waters it receives.

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

	Name
1	Salt Creek
2	Pipemakers Canal

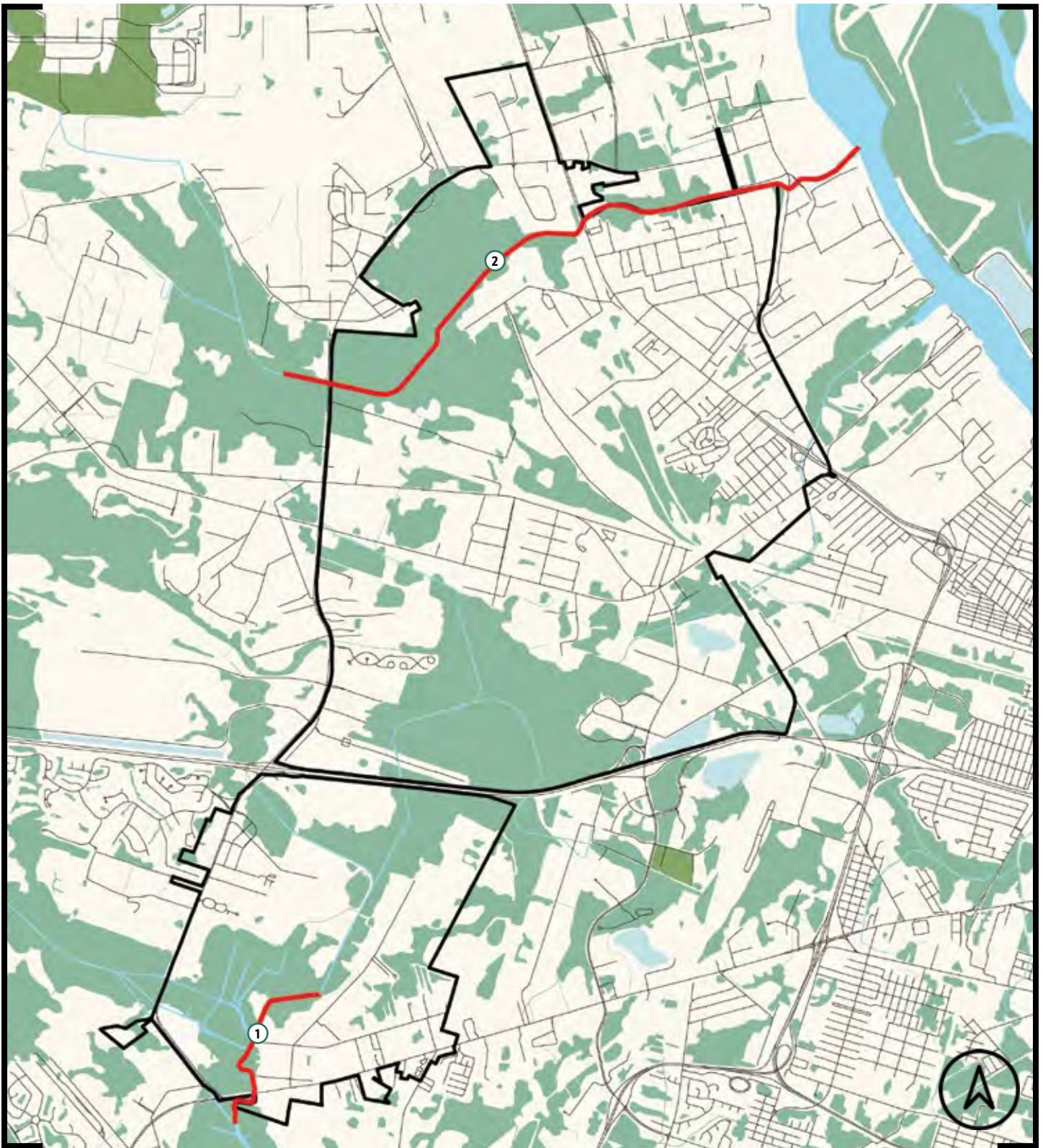
Figure 7.2–Impaired Water Bodies

ARE YOU LOOKING FOR MORE INFORMATION?

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

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





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 (www.EPA.gov/npdes/npdes-stormwater-program).

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

Municipal Stormwater Programs & Permits

	MS4 Permit Number	Location
1	GAS000205	Savannah
2	GAS000206	Chatham County
3	GAS000207	Bloomingdale
4	GAS000208	Garden City
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, the County and all of the municipalities within it should work towards addressing stormwater issues collectively. 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 (LID).



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 is within 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.

Garden City's soils tend to predominantly fall into the D-type category of soils, with shallow water tables that make 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 (<https://engineering.purdue.edu>). The average soil rating in Chatham County and Garden City, as measured by the National Commodity Crop Productivity (NCCPI), is 47.



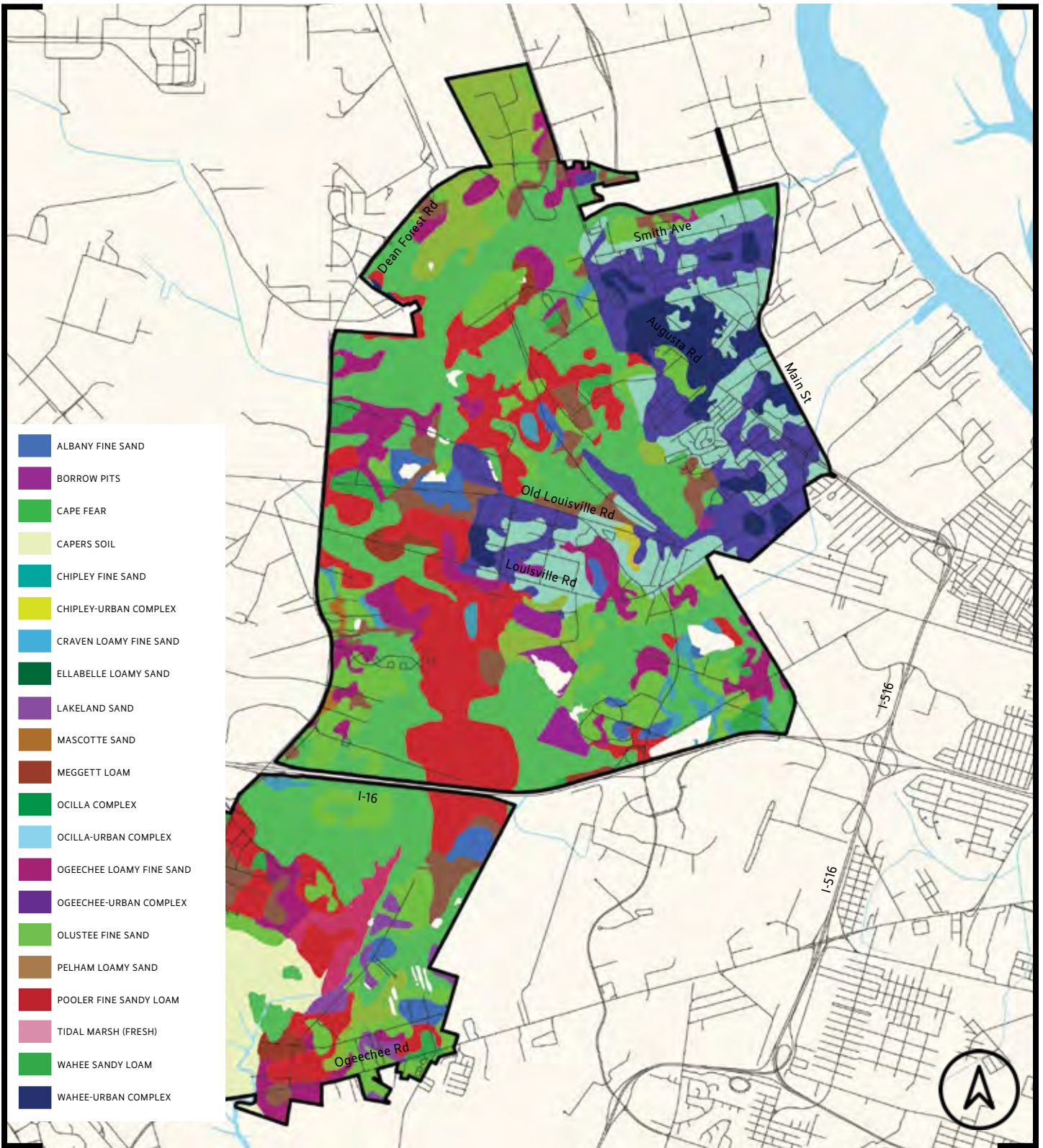
NATIONAL COMMODITY CROP PRODUCTIVITY

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





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 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.



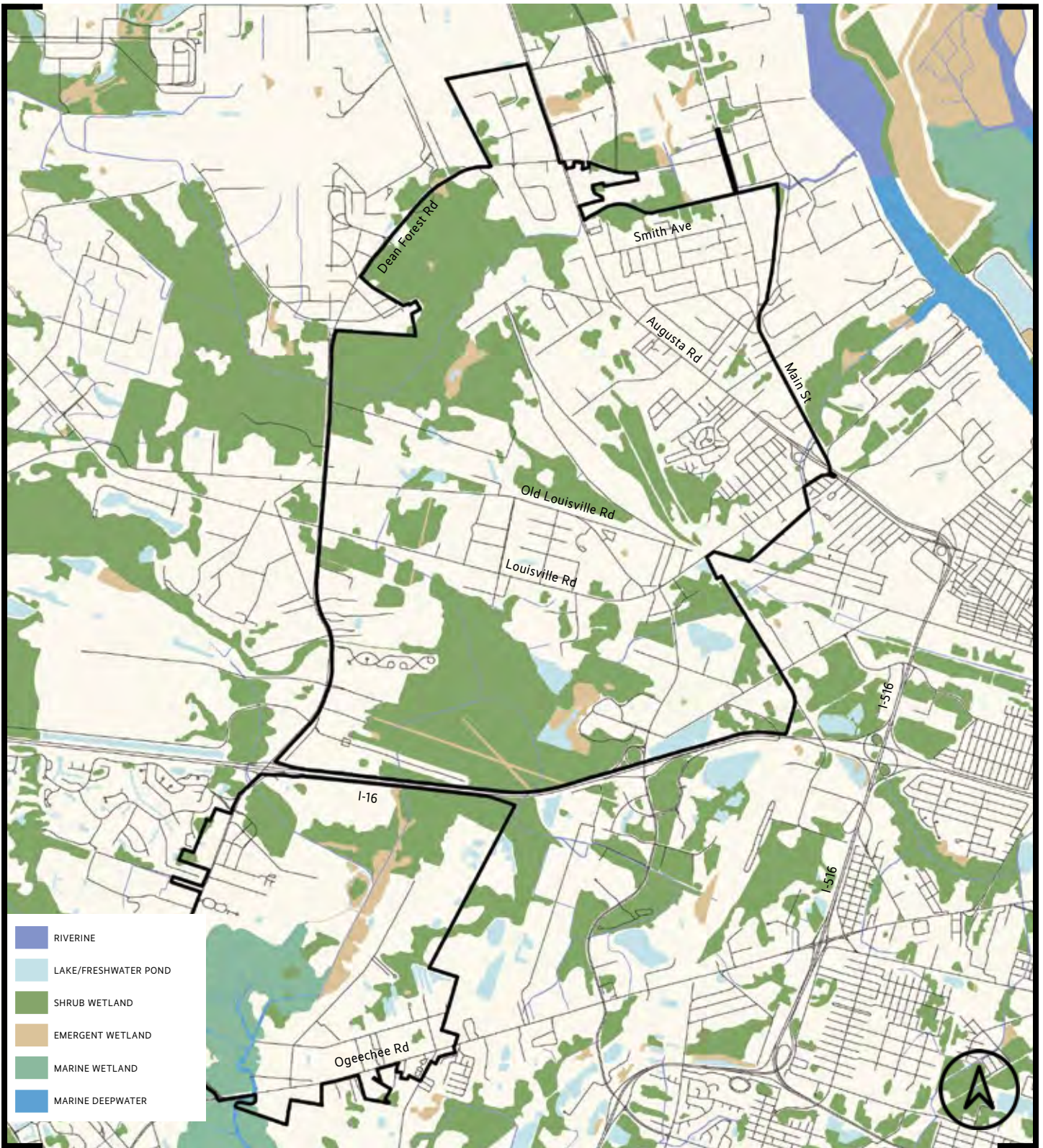
BENEFITS OF WETLANDS

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



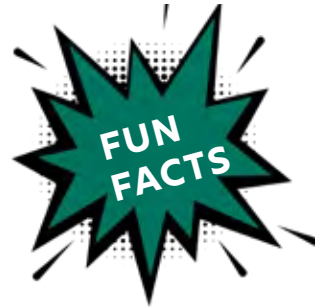


Map 7.8—Wetland Classification, Garden City



Directly related to the need for wetland conservation, under the Part V Environmental Planning Criteria requirements, Garden City has adopted a Wetland Protection Ordinance that provides a procedure 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 nonconventional development standards such as subdivision regulations, stormwater management ordinances, and floodplain ordinances—are other means of protecting wetlands that have been implemented locally.



5.7

square miles of wetlands exist in Garden City



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.

According to NOAA's Office of Coastal Management (NOAA OCM) CCAP Land Cover data, 8.54% of total area in Chatham County changed land cover from 1996–2016. This includes a net loss of 5.5 square miles of wetlands and 15.9 square miles of forested land, and a net gain of 23.9 square miles of developed land 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 Cover Changes Over Time

Land Cover Categories	1996 Area (sq. mi.)	Area Lost (sq. mi.)	Area Gained (sq. mi.)	2016 Area (sq. mi.)	Percent Change	Net Change (sq. mi.)
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 Cover 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 home, business, or land faces. This information can aid in making decisions regarding investments or alterations to property that will minimize possible risks, when making preparations for potential flooding events, and in determining if flood insurance is necessary.

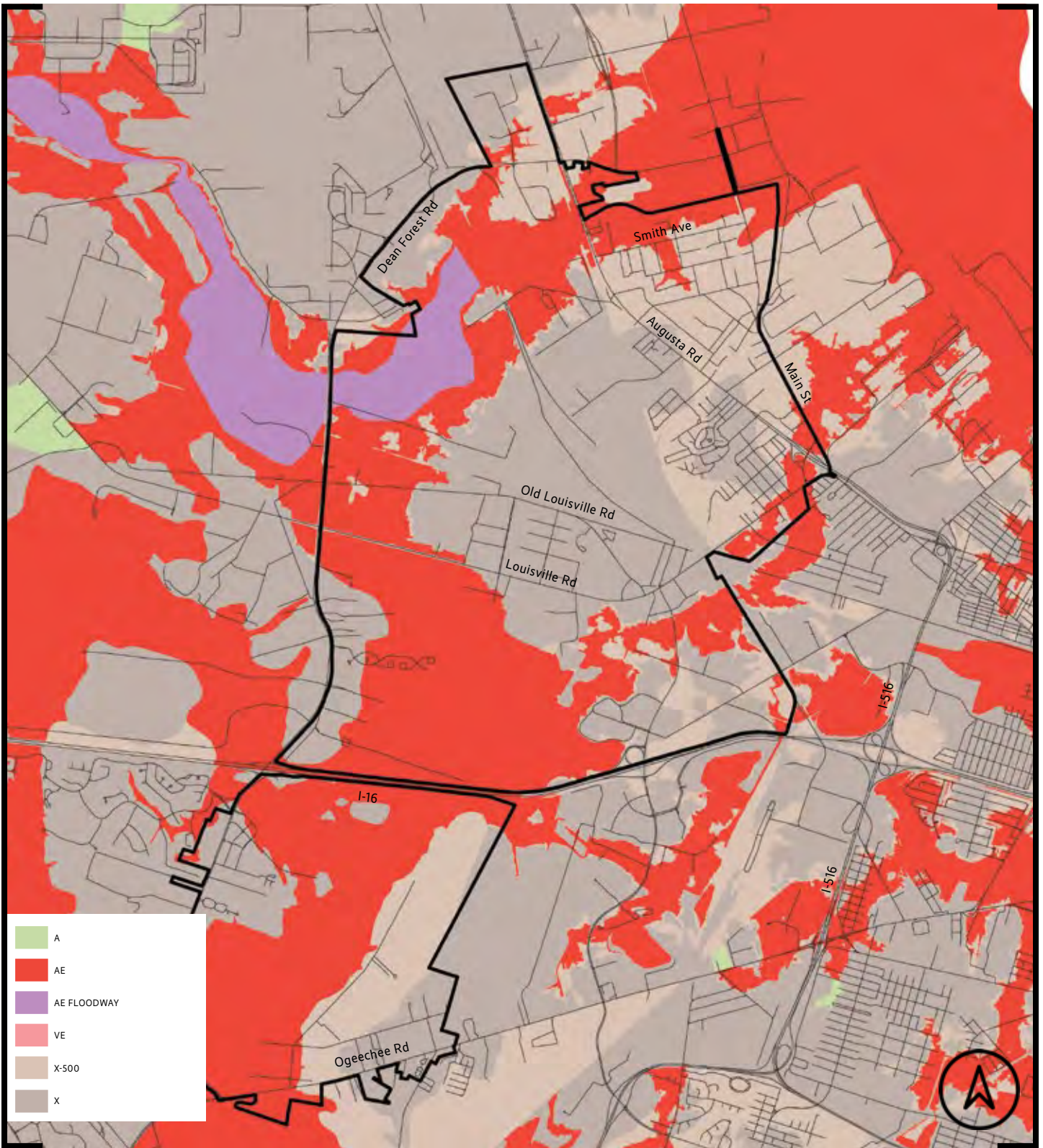


FLOOD ZONES

Flood zones are a geographic areas that 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 7.9—Flood Zones 2018, Garden City



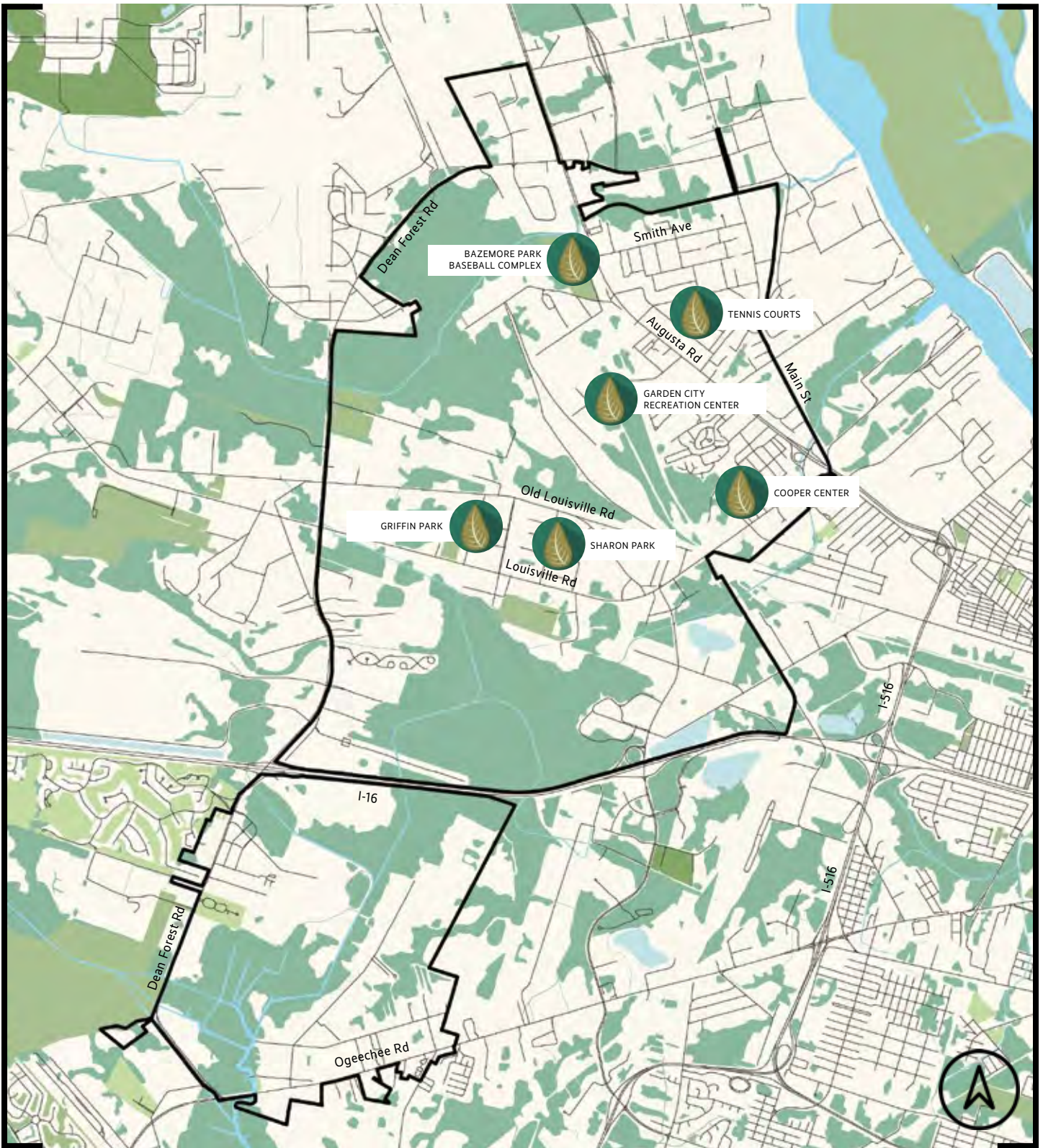
PARKS, RECREATION, & CONSERVATION AREAS

The natural and scenic amenities of Garden City offer many recreational and cultural opportunities. As open space in the city continues to be lost to development, 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, and pedestrian paths, as well as other non-vehicular paths should be incorporated 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 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.





Map 7.10—Parks, Recreation and Conservation Areas, Garden City

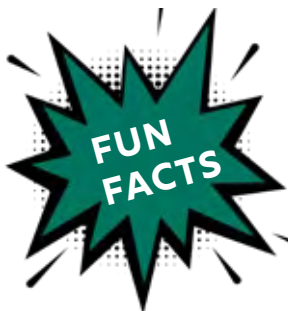


PRIME AGRICULTURAL & FOREST LAND

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 farmland or forest is being developed for residential subdivisions or commercial uses. The loss of these lands negatively impacts the environment in multiple ways: by increasing impervious surfaces resulting in flooding and nonpoint source pollution; by reducing air quality through the elimination of trees that filter pollutant gases; and by increasing energy consumption due to the additional miles traveled transporting crops and livestock. The loss of agricultural land can also make 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 in Chatham County from 35 to 67 farms totaling 4,677 acres. Chatham County’s average farm area in 2017 was 70 acres. The number of farms in the 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.

Now more than ever, the implementation of land use regulations and incentive-based programs to prevent the 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 and illustrated 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
Garden City	53%	66%	13%	1,207
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 7.5–Chatham County Tree Canopy 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 relatively constant in that time period. However, sustained regional growth and industrial expansion in the city will continue to drive the reduction in 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. Most urban live oaks will live to be about 150 years old, which means many local trees will age 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 more than 1,000 Sugarberry trees to an unknown disease and the Asian Longhorned Beetle—whose larvae feed on hardwoods and have led to large-scale destruction of trees elsewhere in the U.S.—was recently found nearby in South Carolina.

Impacts of a 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. By naturally absorbing large amounts of stormwater and helping to mitigate any flood impacts from increased sea levels, trees are a powerful resource for the local environment. However, a negative consequence of saltwater infiltration and storm surge can often be seen after storms and recurrent flooding: the rising waters cause 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 temperature and overall “heat stress” in communities, especially those 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 because 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, 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

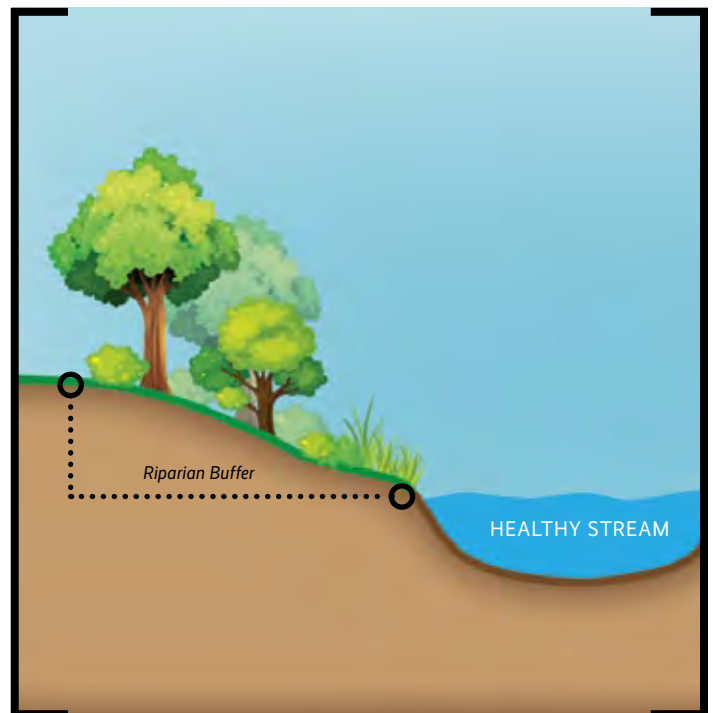


Figure 7.6—Riparian Buffer



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. Extracting these resources negatively impacts the environment, while burning fossil fuels contributes to poor air quality which can lead to respiratory disease and other ailments. The culmination of these actions depletes the atmosphere and exacerbates climate change.

Facing the challenge to accelerate the development and deployment 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 Garden City's residents.

Fundamentally, some basic goals that should be a focus include:

- Develop and adaptively refine a measurable working definition of "sustainability"
- Improve energy-efficiency to reduce power consumption
- Transition to clean energy
- Improve the diversity, equity, and stability of employment and investment in the green energy economy
- Reduce dependency on power sources that emit greenhouse gases
- Improve the ability to monitor and evaluate the parameters of "sustainability" in general, as well as the effects of policies, practices, and actions/projects initiated in accordance with the Comprehensive Plan

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 who enjoy the benefits of the profits generated and their customers who enjoy the relatively inexpensive disposal fees. However, because of the high land costs in Chatham County, it is unlikely that land will be available to construct new landfills when existing ones 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 will demand a premium to accept waste generated outside of their area.

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



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.

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	109,415	329	3	06.01.2024	333
Superior Landfill & Recycling Center 2 MSWL	Municipal Solid Waste Landfill	2,463	766,270	2,737	9	10.09.2030	280

Figure 7.7—Chatham County Permitted Landfills



CLIMATE CHANGE

It is widely recognized that shifts in large scale weather patterns—known as climate change—are already impacting residents in Chatham County. Negative impacts of climate change experienced 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 more frequent flooding in the region due to sea level rise. 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 and 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 both tax dollars spent to mitigate impacts and the loss of revenue by small, local businesses that rely on fishing or working the land for their livelihood, 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 are developed 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 preserving greenspace (particularly ecologically valuable land), preserving existing trees and/or requiring the planting of new trees, limiting the amount of impervious surfaces permitted, transitioning from fossil fuels to renewable and 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. All new infrastructure should be designed with climate change in mind.

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 heat waves. 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
- Flood risks in coastal and low-lying areas
- Natural ecosystem transformation
- Economic and health risks for more rural and low-income communities



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 viability of the people and critical regional resources located within, are increasingly at risk due to heat, flooding, and vector-borne disease brought about by a changing climate (<https://nca2018.globalchange.gov/chapter/19/>). 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 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 (<https://nca2018.globalchange.gov/chapter/19/>).

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, sea levels, hurricanes, floods, droughts, and warming ocean temperatures are expected to redistribute species and modify ecosystems. As a result, future generations can expect to experience and interact with natural systems that are much different than those 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 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 city'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 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 the more rural and more urbanized areas of Garden City. Additionally, drought has been a recurrent issue affecting the community's water resources. Drought is increasingly a concern for the local jurisdiction's water resource managers, as well as the area's ecosystems and energy producers.



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.



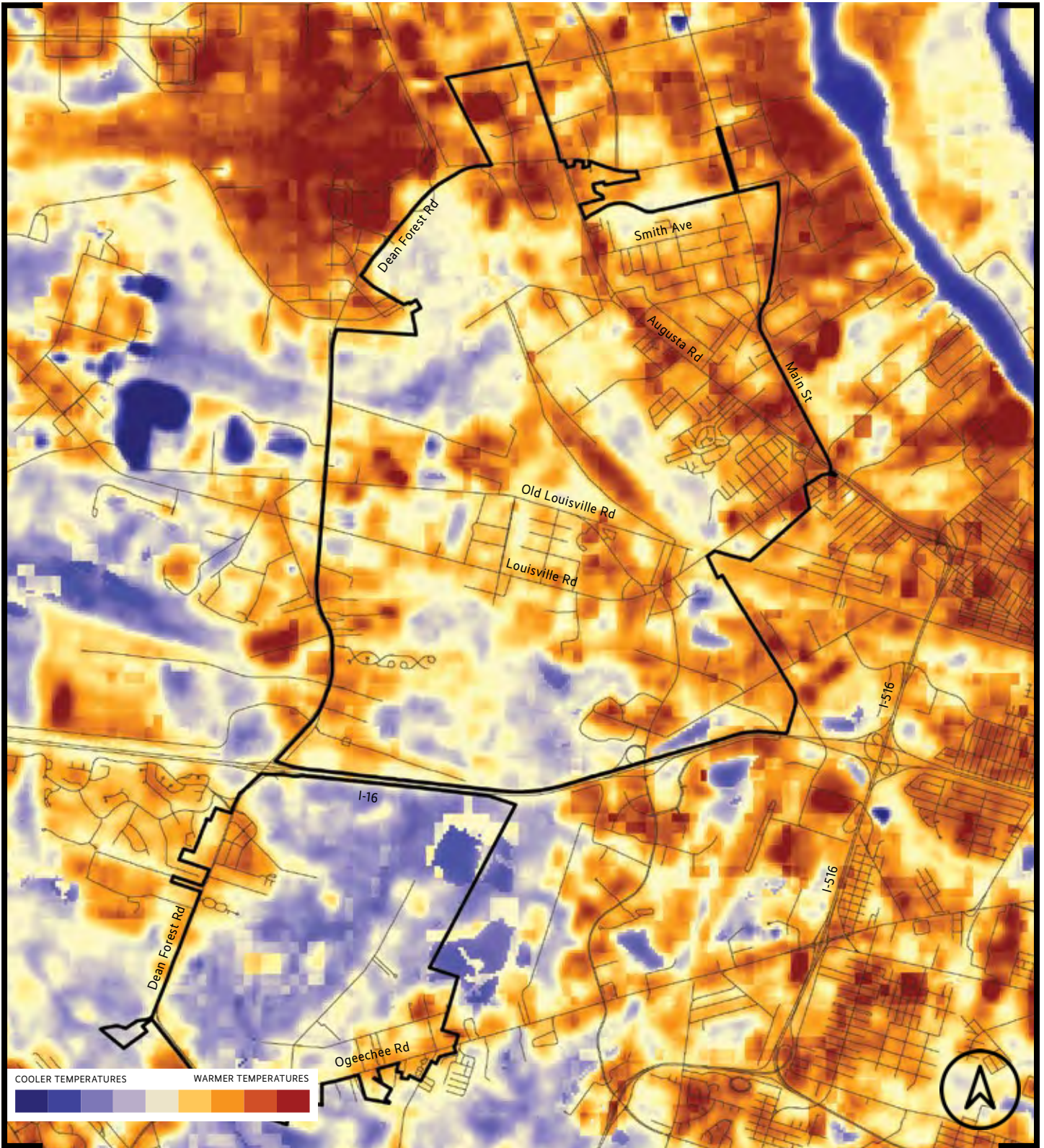
URBAN HEAT ISLAND EFFECT

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 the community for all residents.



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 by:

- Building compactly and use energy-efficient, green building techniques, which reduce emissions from both electricity generation and transportation
- Reusing existing infrastructure and buildings to take advantage of previous investments and the energy already used to build them
- Putting 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
- Preserving green space, which can sequester CO₂, by conserving ecologically valuable land and promoting development in previously developed areas, which helps reduce pressure to build on undeveloped land

ARE YOU 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 Garden City 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. 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, Chatham County and the City of Savannah collaborated to assess the vulnerability of the region's stormwater management system to future changes due to sea level rise. The Stormwater System Sea Level Rise Vulnerability Assessment and Coastal Watershed Management Plan (CWMP) was completed in 2020 and provides actionable information for Chatham County, the City of Savannah, and other jurisdictions to use in developing plans and implementing appropriate capital improvement projects that can increase the resilience of the regional stormwater system to future conditions.

According to the CWMP, sea level data recorded at the tide gauge at Fort Pulaski 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.

The results of the vulnerability assessment indicate that up to 3% of inland stormwater drainage structures in unincorporated Chatham County are currently vulnerable to daily tidal inundation, while 8% are currently vulnerable to inundation at least once a year during the year's highest annual tide (HAT).

The vulnerability assessment for 2100 indicates that up to 19% of structures in unincorporated Chatham County would be vulnerable to daily tidal inundation, with 30% being vulnerable to inundation at least once a year. Results for the city of Savannah indicate that approximately 0.3% of stormwater inlets are vulnerable to daily tidal inundation, with 1% vulnerable at least once a year during the year's highest annual tide event.



By 2100, these results would increase to 9% of inlet structures being vulnerable to tidal flooding on a daily basis, and 15% being vulnerable at least once a year during the highest annual tide. Based on the assessment, extensive measures that would likely include a combination of shoreline elevation, extensive tide gates, installation of pumps, and strategic disinvestment within areas that may be deemed infeasible to protect would be required for adaptation to the 2100 sea level rise condition.



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.

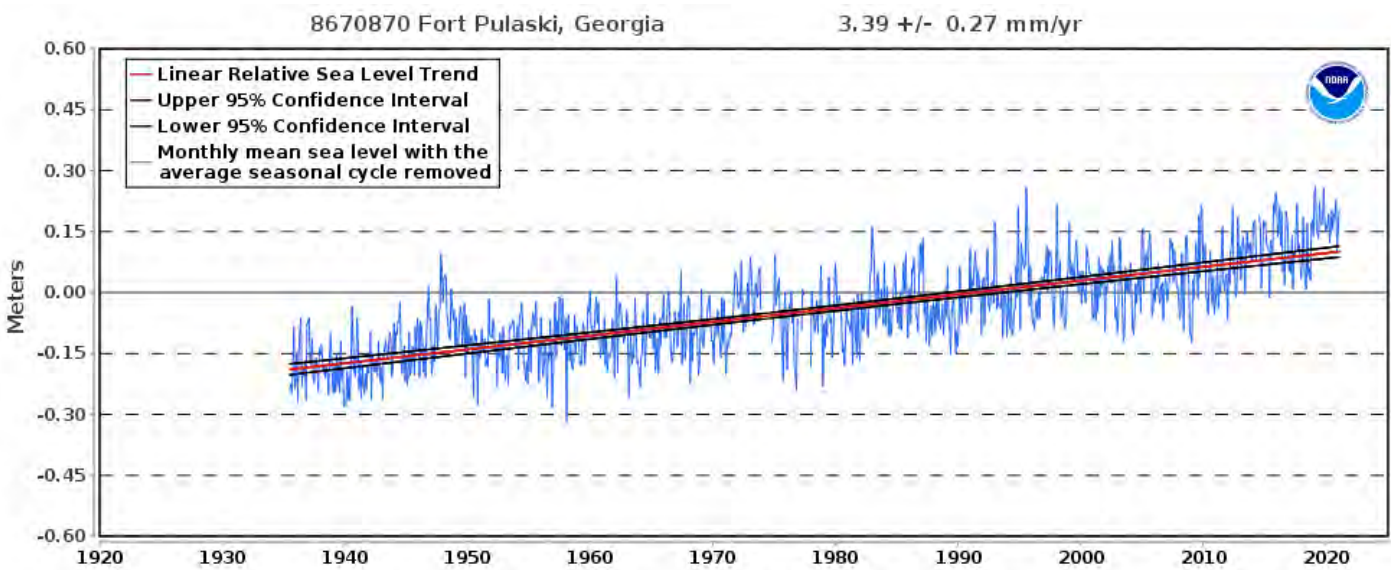


Figure 7.8–Local Increasing Sea Level Trends



RESILIENCE & 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, businesses, 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 resilience 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 to create a truly resilient community.

Temperature & Precipitation Projections

Increase in Extremely Hot Days*

82%  Within 25 Years

Increase in Days with Heavy Precipitation *

2%  Within 25 Years

*Headwaters Economics



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).

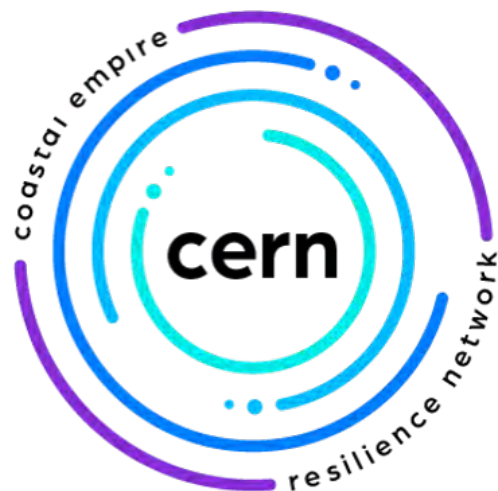
CERN will engage regional community partners, municipal staff, and policymakers to coordinate strategies to address the physical, economic, and social challenges that the region faces due to climate change and other hazards. Also included will be an effort to ensure all local level policy makers have 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



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 warming ocean temperatures. In addition, rising sea level has resulted in higher storm surges during these storm events, most recently in 2016 with Hurricane Matthew (category 2 off the Chatham coast), Hurricane Michael in 2018 (category 1 and tropical storm in Georgia), and Hurricane Dorian in 2019 (category 3 off the 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 the coast. For this reason, population growth, flood plain management, and housing development issues are carefully monitored by government agencies to ensure that all coastal communities and their inhabitants are safe for years to come.

COVID-19 Impacts

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 (www.bdo.global).



HURRICANES

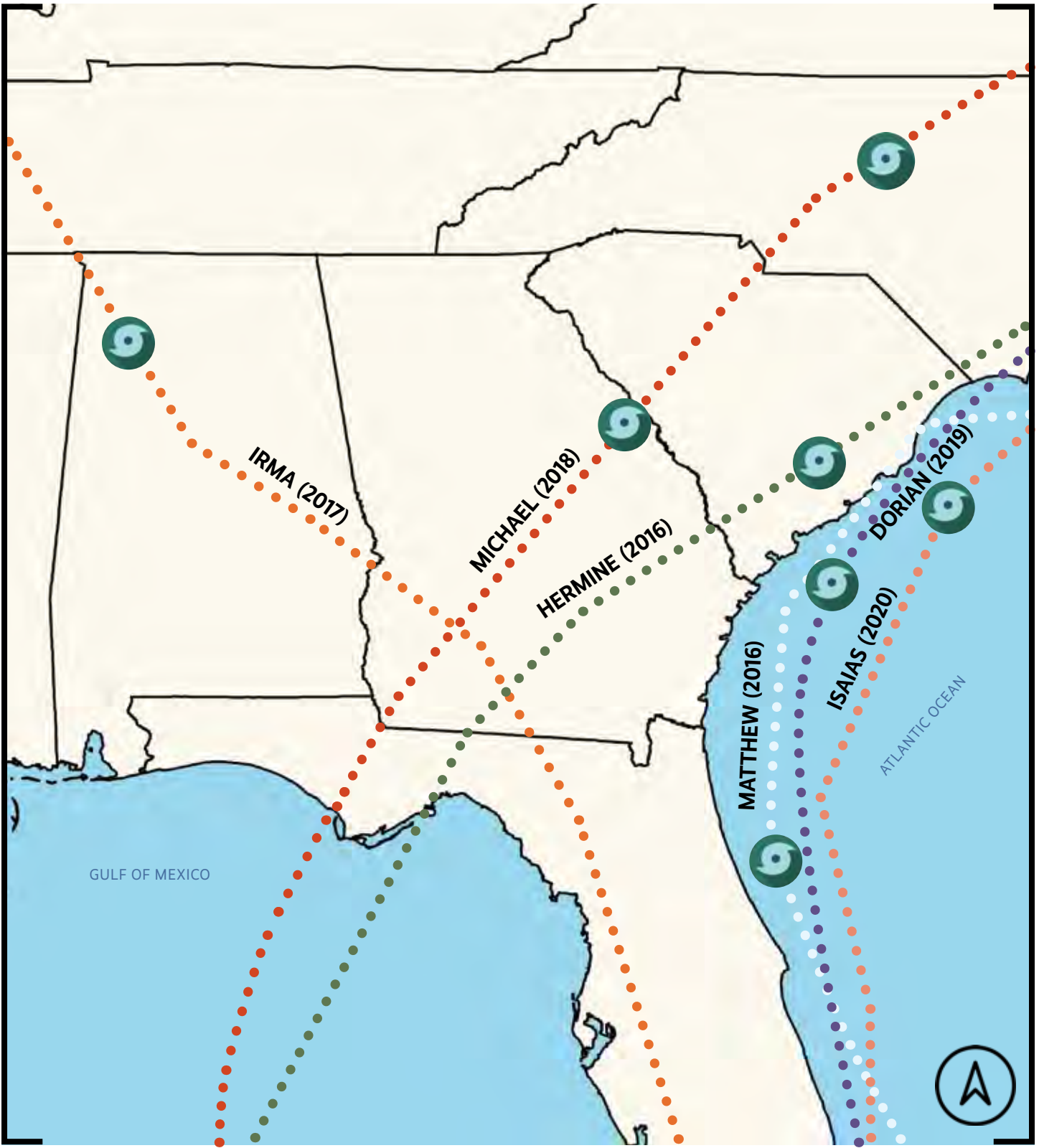
A hurricane is a type of storm called a tropical cyclone that forms over tropical or subtropical waters. When a storm's maximum sustained winds reach 74 mph, it becomes a hurricane. The Saffir-Simpson Hurricane Wind Scale gives the storm a 1 to 5 rating, or category, based on the hurricane's maximum sustained wind.

—NOAA

Hurricane List 2016–2020

Storm Name	Date Range	Max Wind Speed	Min Pressure	Max Category
Hurricane Hermine	8.28.16–9.08.16	70 mph	981 mb	1
Hurricane Matthew	9.28.16–10.10.16	145 mph	934 mb	5
Hurricane Irma	8.30.17–9.13.17	155 mph	914 mb	5
Hurricane Michael	10.06.18–10.15.18	140 mph	919 mb	5
Hurricane Dorian	08.24.19–09.09.19	160 mph	910 mb	5
Hurricane Isaias	7.23.20–7.05.20	75 mph	987 mb	1

Figure 7.9–Hurricanes Impacting Chatham County



Map 7.12-Hurricane & Tropical Storm Tracks



PLANNING ISSUES & OPPORTUNITIES

In order to determine the adequacy of existing natural resource policies and programs, a thorough assessment of both is needed. This will ensure that resources are utilized, developed, managed, and preserved wisely for maximum long-range benefits for the community.

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 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, and donation, to name a few. Also in need of continued protection are 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 (www.bdo.global).

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 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 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 certain 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.



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 (www.epa.gov/brownfields).

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 and facilitate job growth through job creation. Brownfield redevelopment also 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. The importance of using these properties throughout the city 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 total usage for the region and 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 its 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 and 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 a 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 (HMP) 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:

Environmental racism refers to the disproportionate exposure to and impact of environmental harm on people of color (POC). POC-majority neighborhoods are often more likely to be exposed to these harms due to previous redlining and development policies that segregated their communities into specific areas. These areas are often more likely to be near pollutant-heavy industries and/or traffic-heavy roads, lack foliage and contain a large amount of asphalt, impacting how hot the neighborhood is for residents. Summertime temperatures in neighborhoods containing fewer trees are often more than five degrees hotter than in a tree-heavy neighborhoods. Furthermore, redlined neighborhoods tend to be low-lying neighborhoods that experience recurring flooding.

These environmental impacts may increase health problems such as asthma, cancer, and heat-related illness. Stronger policy action—such as reducing pollution, reducing segregation, enhancing the tree canopy, and investing in flood protection—is necessary to improve the environmental health of these communities.



A photograph of a family of four sitting on a blanket in a park. A man is on the left, a woman is in the center, and a young boy is on the right. They are all smiling and appear to be in conversation. The background is filled with trees and foliage, suggesting a natural outdoor setting. The entire image is overlaid with a semi-transparent purple filter.

**QUALITY OF LIFE
ELEMENT**

08



QUALITY OF LIFE

Introduction

The Quality of Life 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 also 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



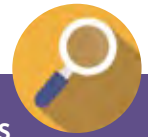
Community Health

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 that 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

Year of the last known historic resource survey for Garden City conducted by the MPC



DUNDEE CANAL



BRAMPTON CEMETERY



LOUISVILLE ROAD



GARDEN CITY HISTORY

The Irene Mounds

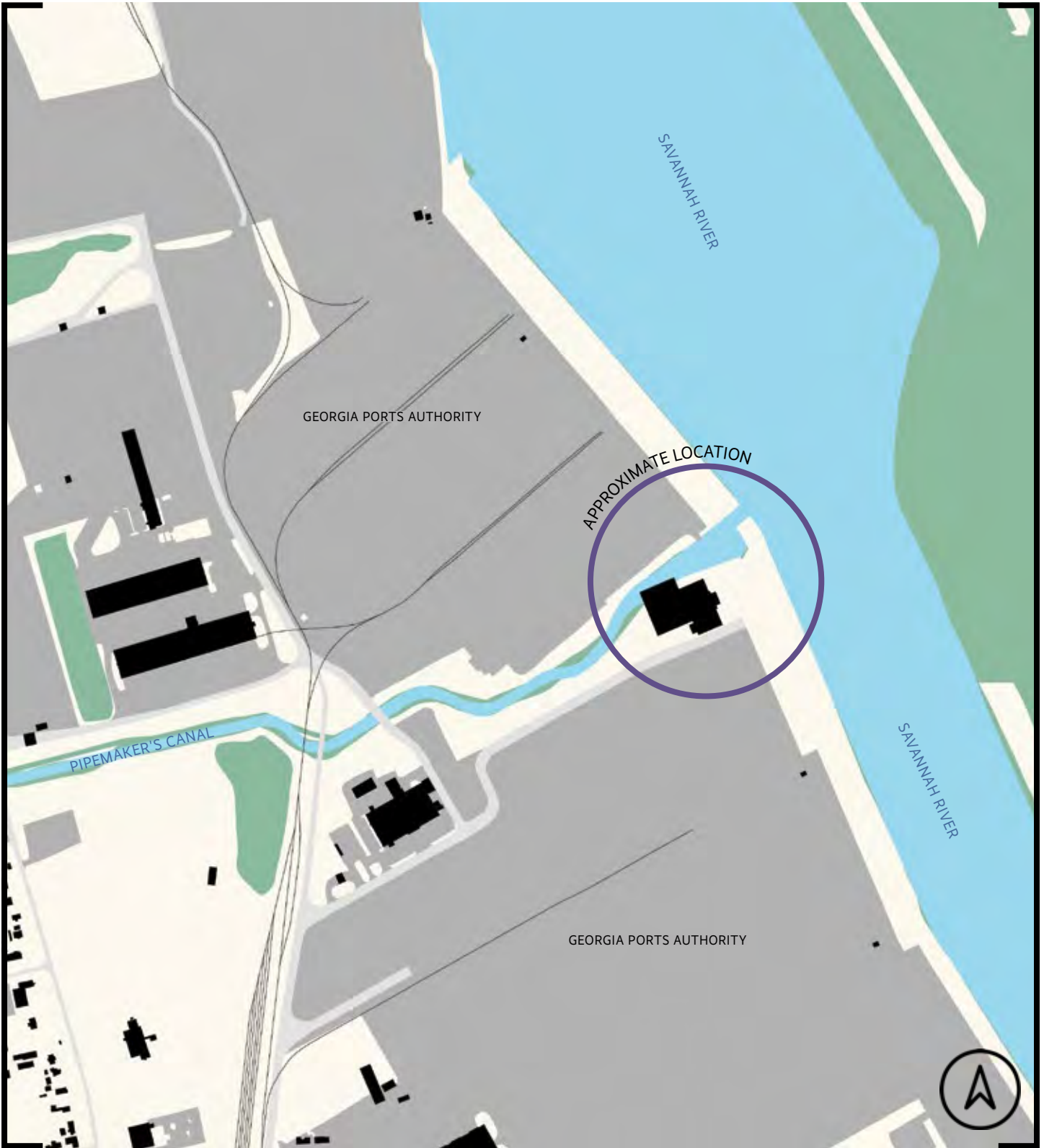
The area now known as Garden City began with Indigenous peoples, whose presence is indicated by the Irene Mounds. The site was occupied during the Middle and Late Mississippian period (A.D. 1100–1600) and likely abandoned before the Europeans began to visit the Georgian coast. The Irene Mounds were located 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 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 that was completed almost entirely by women. While the project was run and passed among 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 shown on the Map 8.1.





Map 8.1—Approximate Location of the Irene Mounds



Garden City Plantations & Pipemakers 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 Pipemakers Creek, which was used for rice and cotton cultivation.

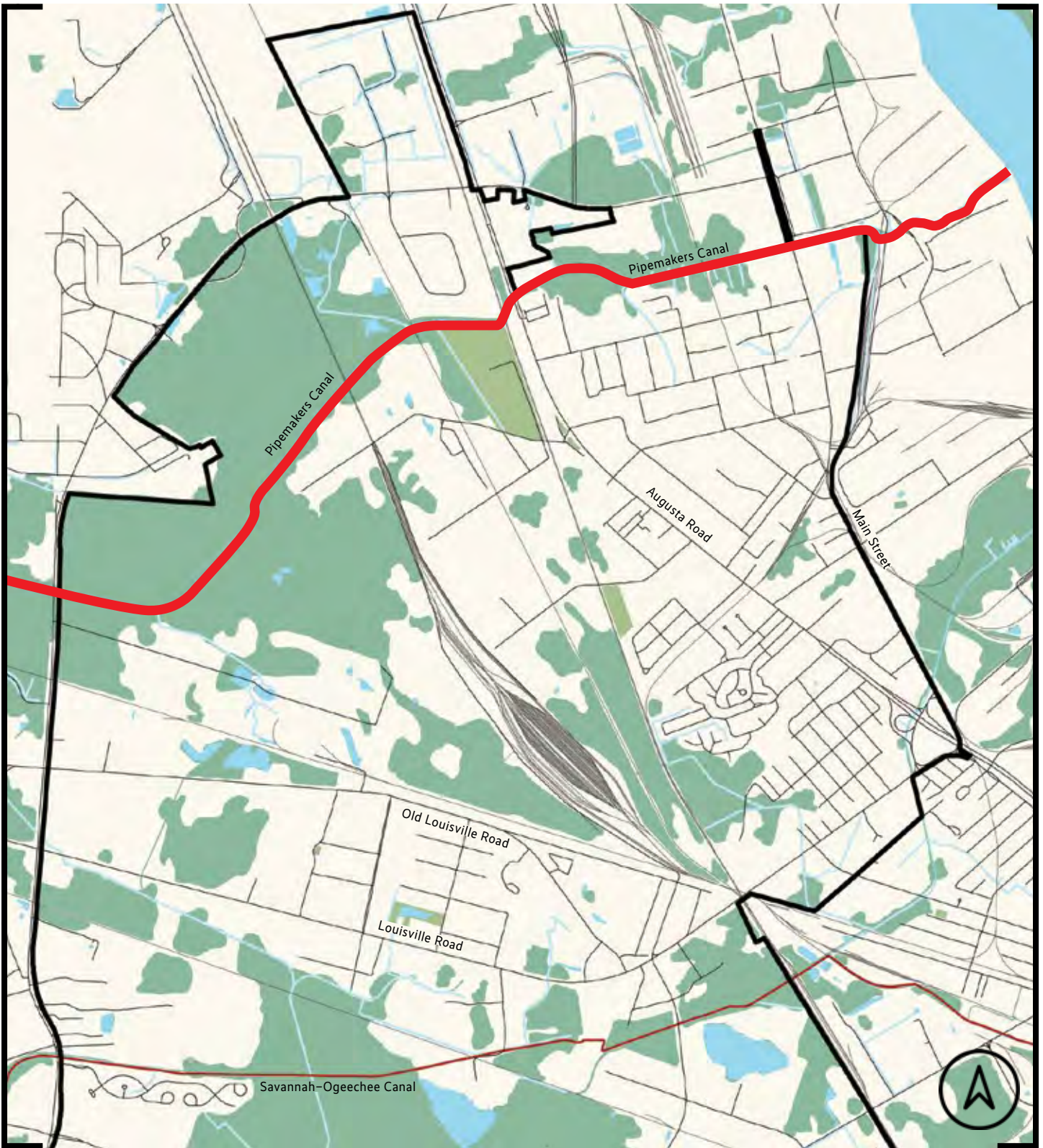
Pipemakers Creek was converted into Pipemakers Canal gradually over the span of about 100 years. The creek originally formed the boundary between the Whitehall plantation and Rae's Hall, which encompassed 450 acres of land that included the Irene Mounds. The first conversion of the creek to a canal was 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 municipal 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 Pipemakers 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 that 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 changing the name to Garden City, as many residents felt that the name was too long and implied a mill town.



Map 8.2-Pipemakers Canal



EXISTING HISTORIC RESOURCES 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 resources 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 that were surveyed in Garden City:

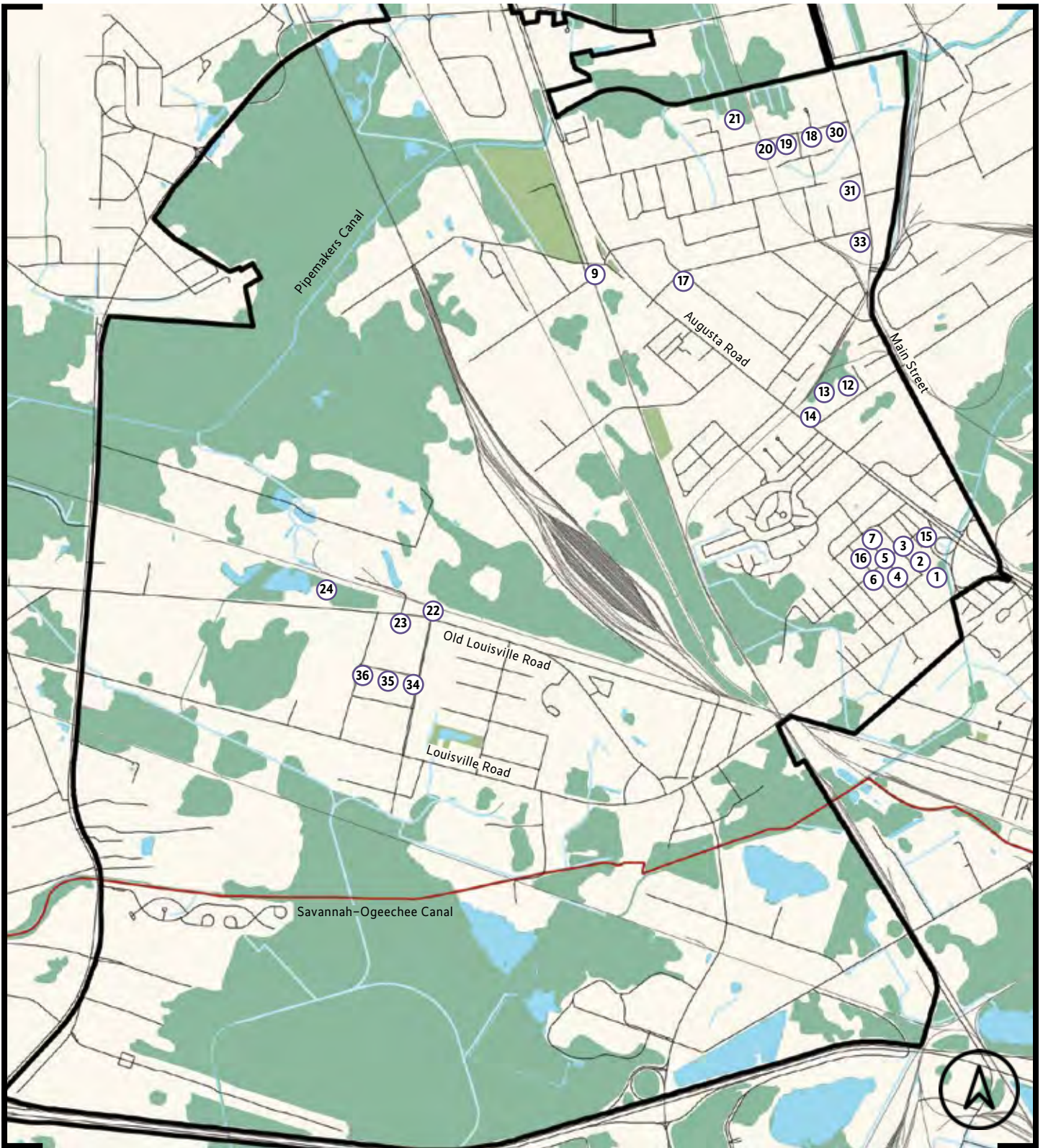
Historic Places: National Register Eligibility—Garden City

	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 RESOURCES 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 that 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.

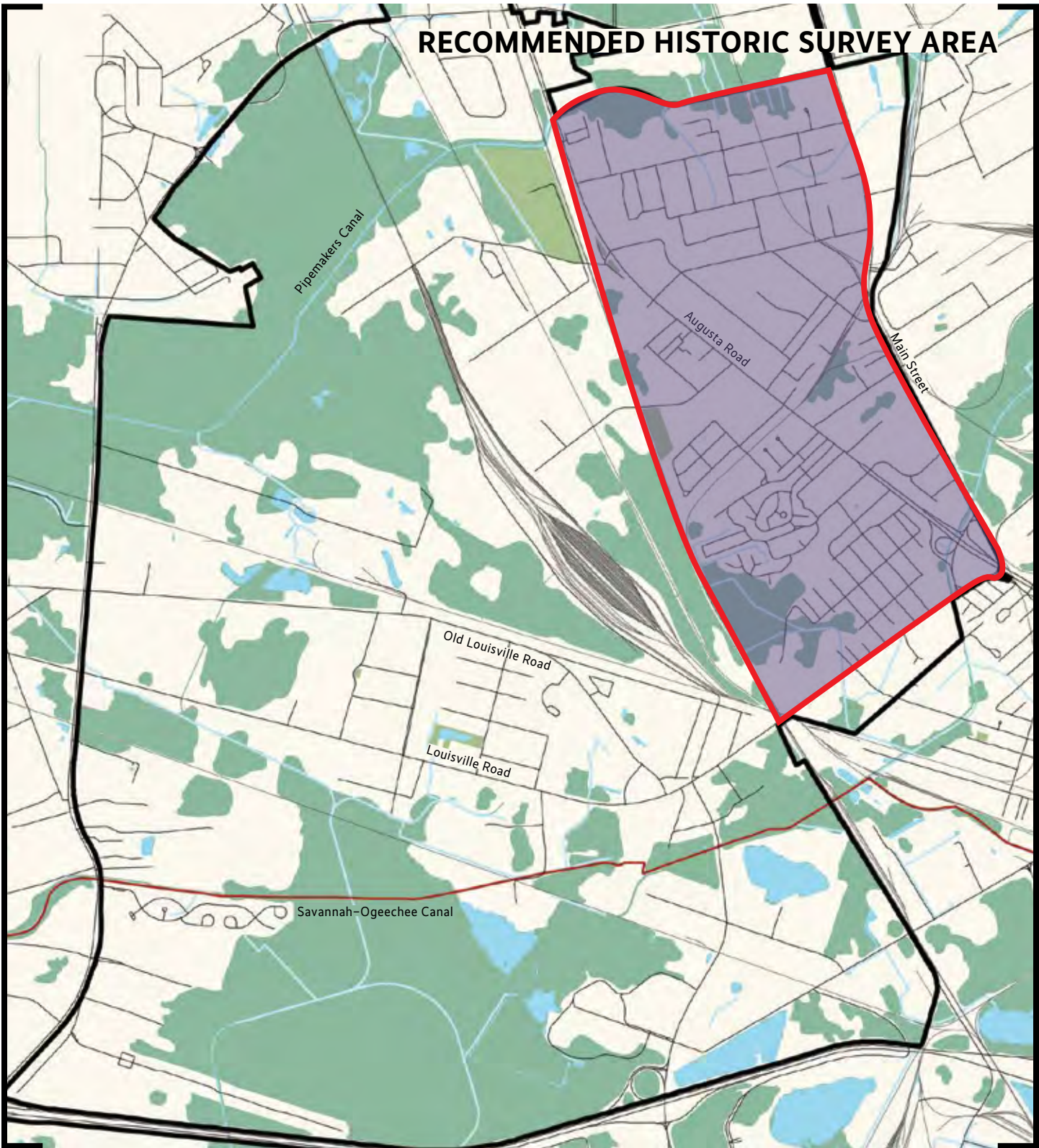


RECOMMENDED HISTORIC SURVEY AREA

The 1992/1993 survey area, roughly bounded by U.S. Highway 80 to the east and south, Pipemakers 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.





Map 8.4—Recommended Historic Resources 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 Chatham County are managed and operated by the Savannah—Chatham County Public School System (SCCPSS). As of 2020, the school system consists of twenty-four elementary schools, seven K-8 schools, eight middle schools, eleven high schools, and five 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 three 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.



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

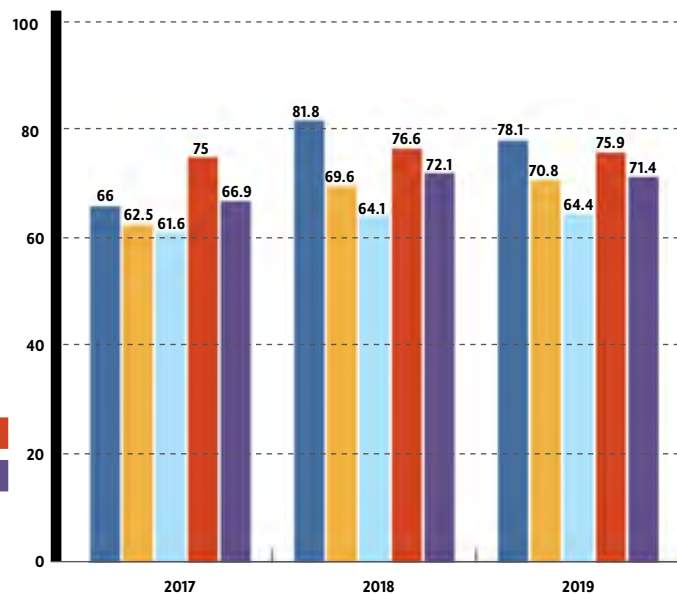
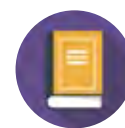


Figure 8.2—CCRPI Single Score Average 2017–2019
Georgia Department of Education



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 challenges.

A current trend that 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 effective 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 8.3 shows that the high school graduation rate in the county has increased over 6% in the past five years; this calculation only reflects the students who graduated within four years.

Graduation Rate Trends, 2015–2019

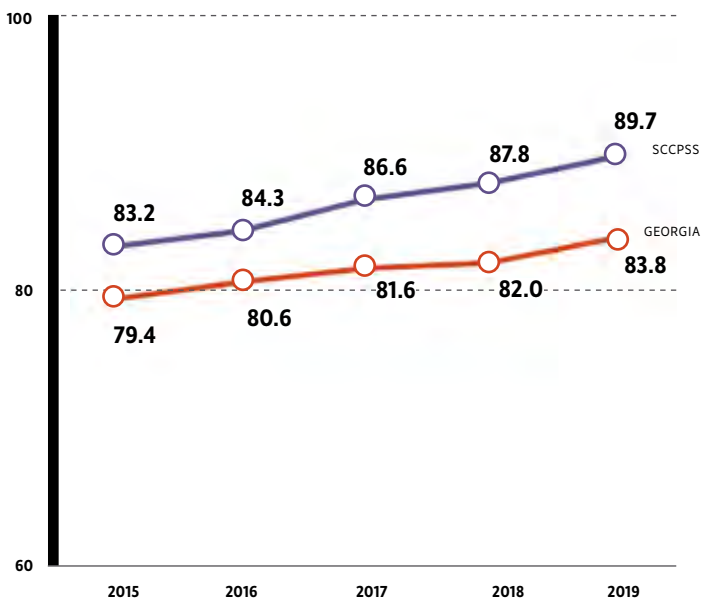


Figure 8.3—Graduation Rate Trend Chart 2015–2019
Savannah—Chatham County Public School System

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% in 2013 to 26.6% in 2018. Figure 8.4 illustrates the breakdown of educational attainment in Garden City.

Educational Attainment, 2014–2018

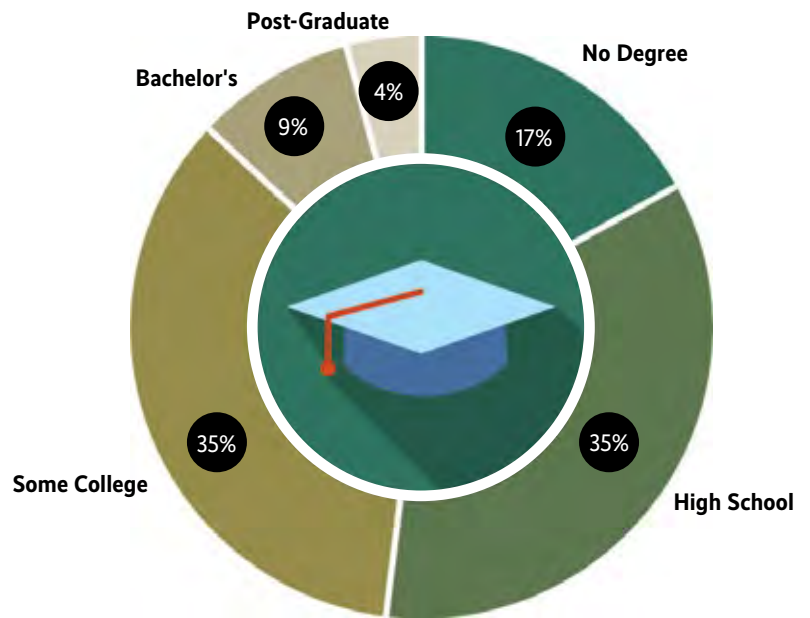


Figure 8.4—Educational Attainment, Garden City
U.S. Census Bureau: 2018 American Community Survey 5-Year Estimates

EDUCATIONAL FACILITIES



Map 8.5—Educational Facilities, Garden City



Savannah College of Art and Design (SCAD)

SCAD is a private, nonprofit institution founded in 1978 in 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 oldest historically black college or university (HBCU) in Georgia, 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 five 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. SSU's Marine Science Program is the number one producer of both Master of Science and Bachelor 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 undergraduates and graduate levels. The university's Waters College of Health Professions 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 nine programs that 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

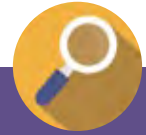
Live Oak Public Libraries provides programs and services in Chatham, Effingham, and Liberty Counties through 16 library locations and community outreach. There are 12 libraries in Chatham County, with two of those located in Garden City.

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.

Live Oak Public Libraries is focused on increasing access, community engagement, and 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
Garden City Library	54,676	48,420	30,507
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
Port City Library	37,649	35,983	22,607
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
Total	977,503	840,163	547,271

Figure 8.5—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
Garden City Library	5,833	12,940	10,963
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
Port City Library	2,352	2,832	8,767
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
Total	75,876	207,548	188,638

Figure 8.6—Wireless Internet Usage Trends

Live Oak Public Library

In 2020, the impacts of COVID-19 were seen in the libraries' in-person engagement and use of digital resources



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 results 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 that 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 in transportation infrastructure, parks and recreation, and healthy food retail can positively impact the community's 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 Center for Disease Control. REACH (Racial and Ethnic Approaches to Community Health).

The primary goal of the REACH grant is to reduce health disparities among African American and Hispanic/Latino Americans in low-income Chatham County neighborhoods.



Mapping 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.

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



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.



Food Access & Nutritional Education

The foods available to a community have a direct 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. These days 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.



FARM TRUCK 912

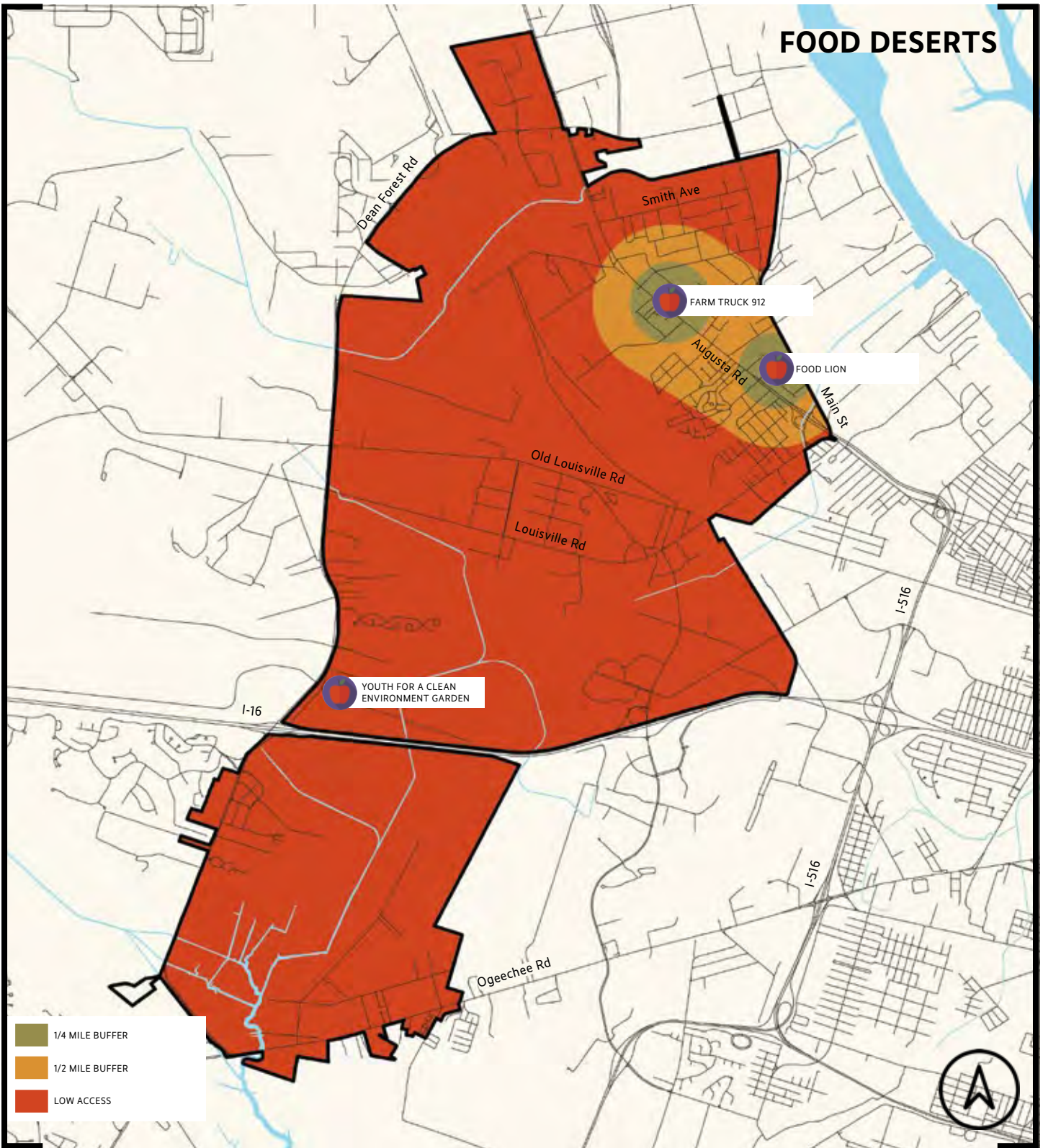
In an effort to increase the access to healthy and affordable foods, Farm Truck 912 is stationed at Sheppard's Gas & Food Mart on Thursdays in the City offering local and fresh produce for to the public most in need of healthy foods.



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.

FOOD DESERTS



Map 8.6—Food Deserts, Garden City



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 decrease 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 among residents.

A 2016 Housing Survey indicated that the Rossignol Hill Community had a large number of homes in need of repair, as shown in Map 8.7. 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.



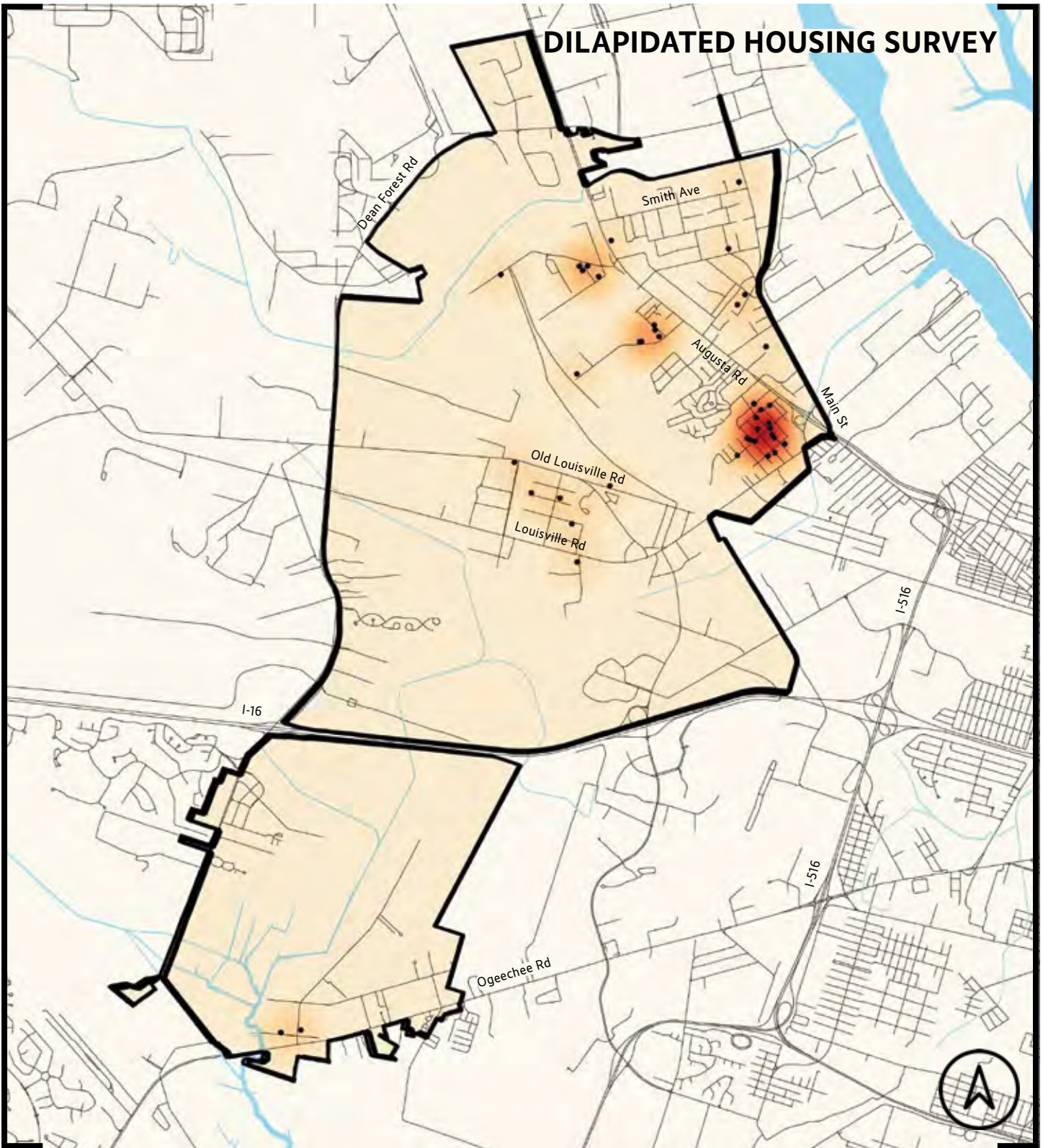
ARE YOU LOOKING FOR MORE INFORMATION?

In the Housing Element of Garden City 2040, you can find more information about blighted homes.

Check it out on page 172!



DILAPIDATED HOUSING SURVEY



Map 8.7—Dilapidated Properties 2016 Housing Survey, Garden City



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 myriad 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
Garden City	6.2	5.0	4.3	3.9	8.5

Figure 8.7—County & City Unemployment Rates
U.S. Bureau of Labor Statistics, Current Population Survey

Climate Change

As the nation continues to experience drastic changes in weather patterns due to climate change, the consequences will be felt by individuals, economies, and governments alike.

More frequent and intense heat episodes have increased the number of emergency room visits for strokes, dehydration, and other heat-related illnesses. Studies have also revealed the correlation between excessive heat and violent crimes, which are especially linked in low-income areas (*The Urban Crime and Heat Gradient in High and Low Poverty Areas* | NBER).

It is known that renewable energy sources, such as wind and solar, help to reduce the human impact on climate change by reducing noxious emissions from coal-fired power plants. Research also shows that implementing renewable energy policies have the added benefit of improving public health as well. A concentrated local effort must be made to help reduce the impacts of emissions and other pollutants on Garden City's population.

Labor Force Participation, 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 8.8—Labor Force Participation, Garden City
U.S. Bureau of Labor Statistics, Current Population Survey

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 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.



ARE YOU LOOKING FOR MORE INFORMATION?

For more information about unemployment please check our Economic Development Element.

Check it out on page 76!



PUBLIC SAFETY

Public Safety

It is the responsibility of 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 and longevity of its residents and economy.

In today's world, there are critical threats that communities must continuously monitor: domestic and international terrorism, drastic shifts in weather patterns, rising sea levels, and pandemics such as COVID-19. In response to these threats, a successful government employs departments and passes ordinances 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.

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.

CEMA 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 and emergencies. In the Hazard Mitigation Plan, CEMA has listed severe weather, extreme heat, and flooding as the most likely hazards to impact the county.

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





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 seven 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 20 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 department is only one of 43 police departments in Georgia to receive national accreditation.

The Garden City Police Department is also 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 in Georgia that are both Nationally (CALEA) accredited and State certified.



CHAT WITH A COP INITIATIVE

To help better connect with the community and to build transparency with its Public Safety Officers, the Garden City Police Department scheduled a series of informal events throughout the city to assist in curbing criminal activity.

Police Statistics and Trends

Crime Records

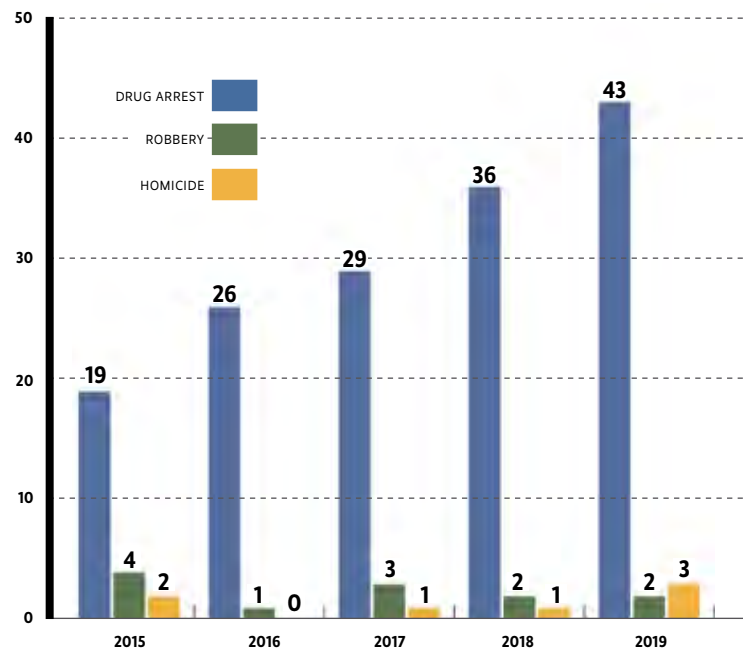


Figure 8.9—Reported Crime Records, Garden City
Garden City Police Department



Fire

The Garden City Fire Department and Emergency Service Department provide 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 that 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 firefighter 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 Calls 2015–2019

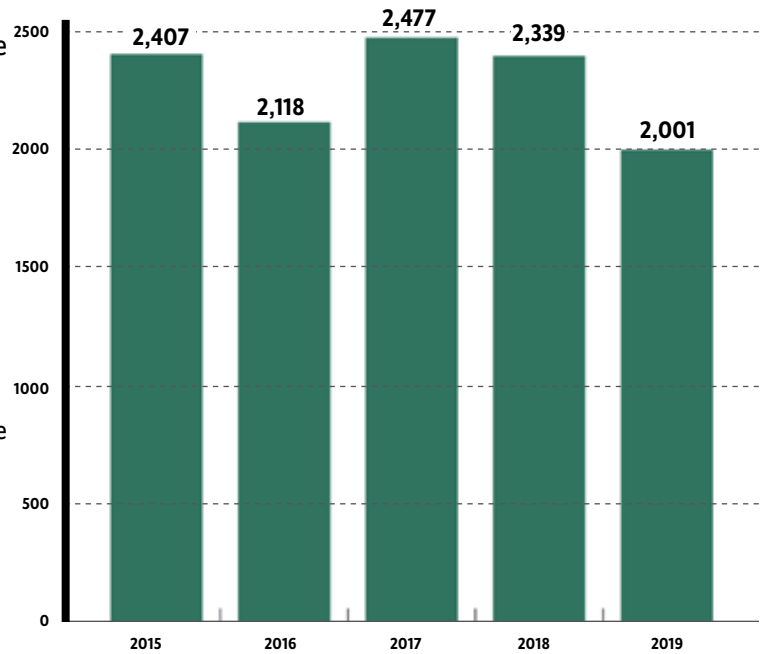


Figure 8.10–Total Fire Calls, Garden City

Structure Fires

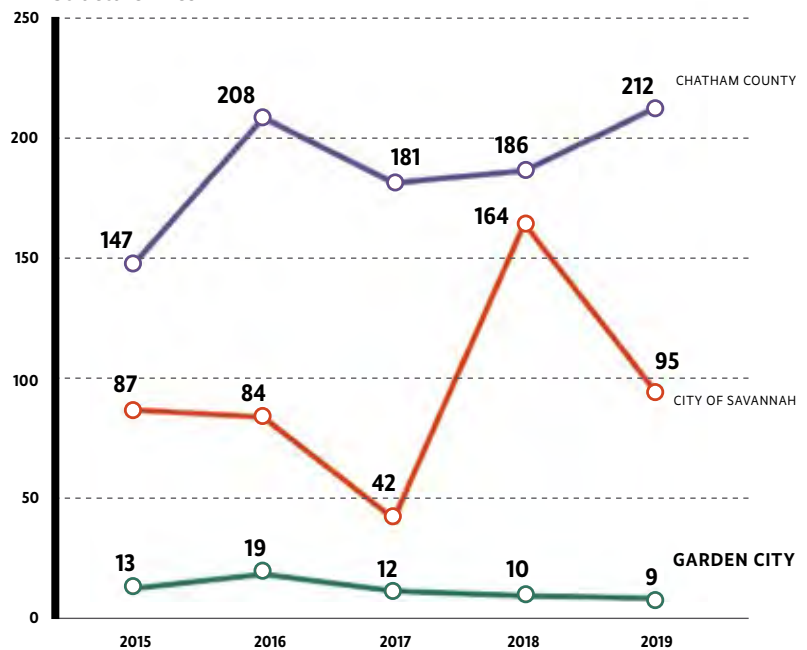


Figure 8.11–Structure Fires, Garden City



FIRE ENGINE DONATION

To continue efforts to establish partnerships and communication between 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's fiber optic feasibility study completed in 2017 was 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 internet 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 in volume moving forward. 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.





Network Technology

Broadband refers to high-speed internet services, which provide online content—websites, television shows, video conferencing, cloud services, or voice conversations, for example—to be accessed and shared via computers, smartphones, and other devices. The Federal Communications Commission defines broadband to be at least 25 megabits per second (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-optic cables—or just “fiber”—are considered the gold standard for supporting broadband, and are essential for fast, reliable connections. 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.

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 older technologies result in slower, less reliable access to internet content. Due to capacity limits of this infrastructure, companies



INTERNET ACCESS

The COVID-19 pandemic has reinforced the importance of having reliable internet access at home. Many Chatham County residents depend on the internet to work and learn remotely, purchase essential items, access telehealth services, and connect with friends and family from afar.

cannot reliably provide high speeds, and often limit the amount of data consumers can use. Fiber provides the robust infrastructure that connects telephone and cable infrastructure between communities and around the world. It was originally used by telecommunication utilities for their core infrastructure, to connect their major switching centers, and was only available to their biggest corporate and institutional customers. Today, fiber is in homes and businesses throughout the world providing telephone and television as well as internet 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 achieve better connectivity and increased 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

A 2017 survey found that 1.7% of households in Chatham County reported not subscribing to internet services. It is important to understand the reasons why households do not subscribe to the internet, as the survey found strong support for the idea that internet access is essential: across all surveyed households, none reported that they chose not to subscribe because they do not need the internet.

Among non-subscribing households in Chatham County, an overwhelming 76.5% said the main reason they chose not to subscribe to internet service is because it is too expensive. Nearly one in five households (17.6%) that do not subscribe to broadband said that broadband is not available at their home.

Top Reasons for Non-Subscribership

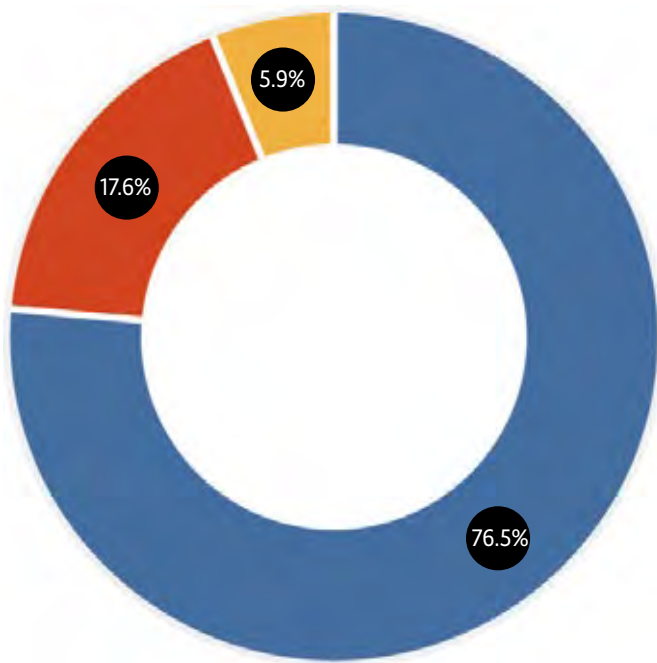


Figure 8.12—Most Important Reason for Not Subscribing to Internet

■ SERVICE TOO EXPENSIVE
 ■ NOT AVAILABLE AT MY HOME
 ■ TOO SLOW OR UNRELIABLE

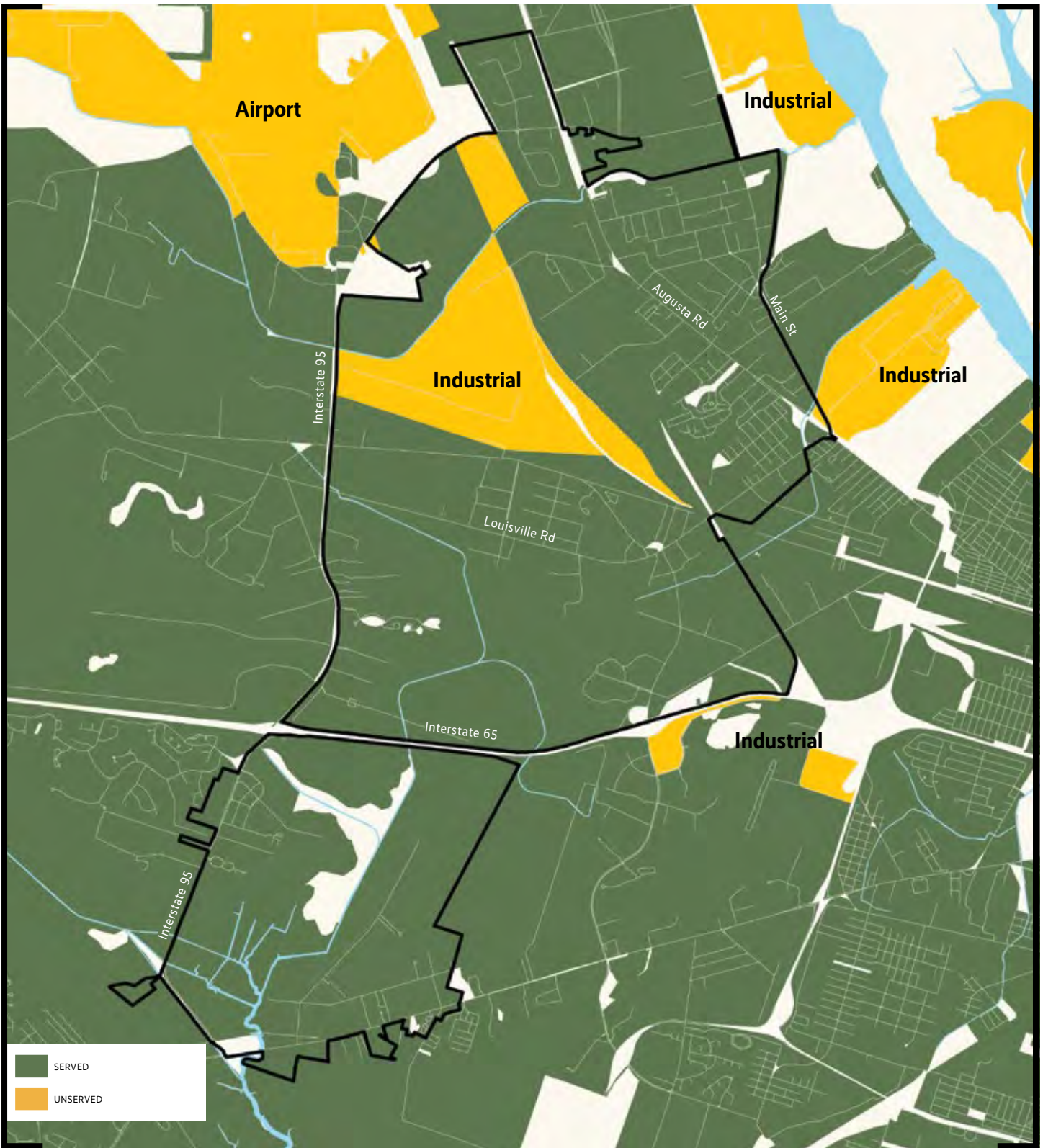
From a quality of service perspective, 5.9% of non-subscribing households say that available services are too slow or unreliable, perhaps dropping service from poor previous experience. However, every household responding to a 2016 survey recognized a need for the internet.



Nearly 1 out of 5 non-subscribing households in Chatham County said broadband is not available at their home

While these percentages are very telling of local broadband market conditions, both Chatham County's findings contradict national household averages. Recent U.S. Department of Commerce research found "no internet availability" as the primary barrier in 48% of non-subscribing households nationally and "expensive service" as the primary barrier in 28% of non-subscribing households. These findings illuminate issues beyond simply having access to the internet and reveal the digital divide in Chatham County is based more on cost of services rather than availability.

This could be an indication that current service providers are charging too much for service, but may also be the result of poor economic conditions of some households in the county. Indeed, the threshold for a good or service being "too expensive" is relative, as what is out of financial reach for some households and income levels could be considered discretionary spending for others.



Map 8.8—Broadband Availability 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 drawn from this data. First, given high cost of service is the result of market conditions in Chatham County, two additional reasons for non-subscribership hint at possible workaround solutions for 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 2017 survey gauged how much the internet is a part of their household functions.

Overall, 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)



Next Steps

Drawing on recommendations from the local study, the next steps move Chatham County toward developing and realizing countywide 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 measures that will lead to a broader fiber-optic partnership and countywide fiber-optic deployment.

These findings shine a light on issues beyond access to the internet and reveal the digital divide in Chatham County 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

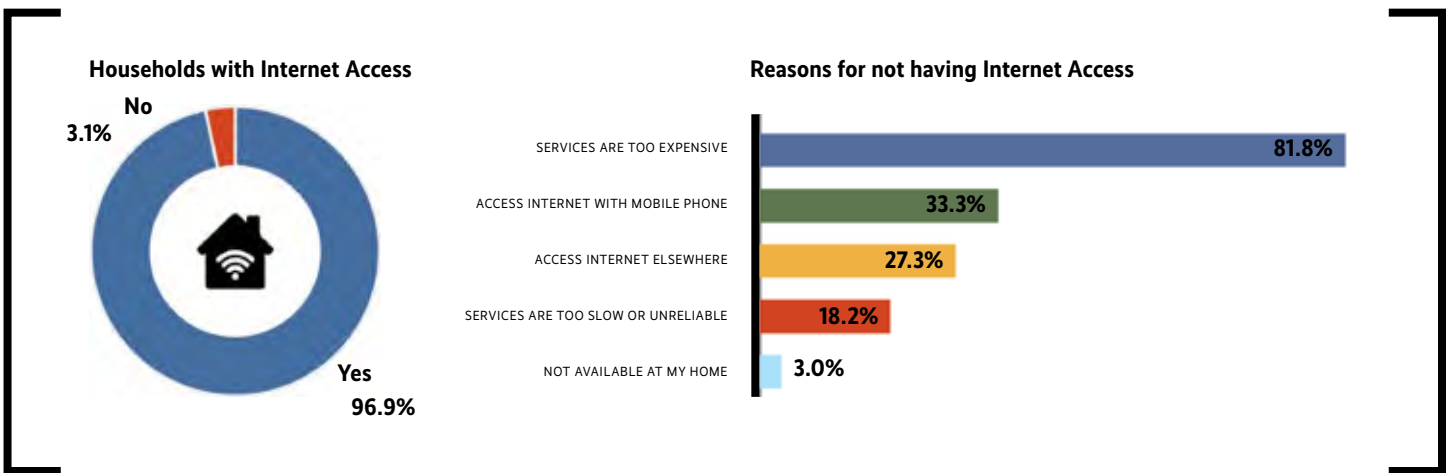


Figure 8.13–Household Survey Findings



SHORT TERM WORK PROGRAM

09



SHORT TERM WORK PROGRAM

Introduction

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.

TRANSPORTATION

	STRATEGY	PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
T.1	Implement a road asset management and maintenance system to prioritize improvements	2022-2023	Executive	General Fund	\$70,000
T.2	Implement impact fees for infrastructure installation program	2022-2023	Executive; Planning & Zoning	Staff Time	Staff Time
T.3	Apply for funding for streetscape projects along major roadways (Highway 17, 21, 25, 80, 307)	2024-2026	Executive	Staff Time; Grants	Project Dependent
T.4	Set Council priorities for local transportation investment & expansion to include public transportation via CAT	2022-2023	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	2024-2026	Executive	Staff Time; Grants	Project Dependent
T.6	Establish a community-wide pedestrian network through sidewalks to adjacent and nearby residential and commercial districts	2024-2026	Executive; Bike/Walk Savannah	General Fund; Grants	Project Dependent
T.7	Work with Chatham Area Transit (CAT) to expand services to targeted areas of the city	2025-2026	Executive; CAT	Staff Time	GC Staff; CAT Staff Time



ECONOMIC DEVELOPMENT

	STRATEGY	PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
E.1	Expand relationships with the Convention and Visitors Bureau (CVB) to promote Garden City	2022-2023	Executive	General Fund; CVB	Staff Time
E.2	Adopt incentives for desirable redevelopment & infill projects to include both commercial & affordable housing efforts	2024-2026	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	2024-2026	Executive	General Fund; CVB	\$45,000



LAND USE

	STRATEGY	PROJECT 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	2024–2026	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	2024–2026	Planning & Zoning	GEFA; Water/ Sewer Fund; Grants	\$5 Million
LU.3	Identify areas of blight and determine activities and funding to address blight	2024–2026	Executive	General Fund; Grants; Staff Time	Staff Time
LU.4	Demolish abandoned structures	2024–2026	Planning & Zoning	General Fund	\$25,000/ Annually
LU.5	Review and implement the recommendations of the Safe Growth Audit	2024–2026	Executive; Planning & Zoning	General Fund; Grants; Staff Time	Staff Time; Project Based Cost
LU.6	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	2022–2023	Executive; SHHIA Staff	General Fund	Staff Time
LU.7	Implement activities proposed in the Urban Redevelopment Plan (URP)	2022–2026	Executive; Planning & Zoning	General Fund; Grants; Staff Time	Staff Time; Project Based Cost
LU.8	Develop overlay districts with design guidelines for the commercial target areas defined in the Urban Redevelopment Plan	2022–2026	Executive; Planning & Zoning	General Fund; Grants; Staff Time	Staff Time; Project Based Cost



HOUSING

STRATEGY	PROJECT 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	2022-2023	Executive; Planning & Zoning	General Fund	\$50,000
H.2 Review codes related to vacant structures again to streamline process for enforcement, acquisition, or demolition	2022-2023	Planning & Zoning	Staff Time; Consultant	\$20,000
H.3 Implement mechanisms that will assist in rehabilitating older homes	2024-2026	Garden City Housing Team	Staff Time; Grants	\$100,000/ Annually
H.4 Expand senior housing and affordable housing	2022-2023	Private Developers	General Fund	Project Driven/ Private Dollar
H.5 Participate in the Chatham County/Savannah Land Bank Authority	2024-2026	Planning & Zoning	Staff Time	Staff Time



NATURAL RESOURCES

	STRATEGY	PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
NR.1	Evaluate water quality BMPs around Salt Creek & Pipemakers Canal watersheds	2022-2023	Executive; Drainage	Stormwater Utility	\$10,000
NR.2	Improve greenspace, parks, and public facilities to maintain the high desirability of the areas	2024-2026	Executive	Stormwater Utility	\$20,000/ Annually
NR.3	Perform a tree inventory in public ROW and city parks	2025-2026	Executive	General Fund	\$20,000
NR.4	Update stormwater ordinances and local design manual to incorporate basin specific designs into the regulations	2025-2026	Executive	Stormwater Utility	\$20,000



QUALITY OF LIFE

	STRATEGY	PROJECT 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	2022–2023	Executive; MPC	General Fund	\$4,000
Q.2	Create a Historic Preservation Commission (Bylaws, Manuals, Training, etc.)	2024–2026	Executive; MPC	General Fund	\$18,000
Q.3	Create a Local Historic Preservation Ordinance (Including Neighborhood Meetings, etc.)	2024–2026	Executive; MPC	General Fund	\$12,000
Q.4	Apply for and Achieve Certified Local Government (CLG) Status	2024–2026	Executive; MPC	General Fund	\$6,000
Q.5	Apply for grants for remaining portions of city not previously surveyed through CLG Program	2024–2026	Executive; MPC	General Fund; Grants	\$3,500
Q.6	Create a plan to market the City's historic resources	2022–2023	Executive	General Fund; Grants; CVB	\$20,000



CAPITAL PROJECTS

General Government Services

STRATEGY	PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE	
GG.1	Expand and improve communication with general public & residents to include mechanisms such as Town Hall Meetings & State of the City Address	2022–2023	Executive; Mayor & Council	Staff Time	Staff Time
GG.2	Maintain partnership with County to expand & enhance fiber throughout the city	2022–2023	Executive; IT	Staff Time	Staff Time
GG.3	Improve quality of existing broadband service for residents & businesses	2024–2026	Executive; IT	Staff Time; General Fund; Grants	Staff Time
GG.4	Plan & implement solar powered lighting opportunities for main roadways	2024–2026	Executive; Public Works	Staff Time; General Fund; Grants	\$10,000/ Annually
GG.5	Install more street lighting throughout city	2024–2026	Executive; Public Works; GA Power	Staff Time; General Fund; Grants	\$10,000/ Annually
GG.6	Update noise ordinance	2024–2026	Executive; GC Police	Staff Time; General Fund	Staff Time
GG.7	Complete a staff compensation evaluation every 3 years	2024–2026	Executive; Human Resources	General Fund	\$20,000
GG.8	Complete a residential customer service survey	2022–2023	Executive; Water/ Sewer Billing	Staff Time	Staff Time
GG.9	Review and implement the recommendations from the Greenhouse Gas Emissions Inventory to reduce government ops impacts	2022–2026	Executive; Public Works	Staff Time; General Fund; Grants	Project Based

Public Safety

STRATEGY		PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
PS.1	Increase neighborhood police patrols	2022–2023	Police	Staff Time; General Fund	Staff Time
PS.2	Increase police traffic enforcement	2022–2023	Police	Staff Time; General Fund	Staff Time
PS.3	Apply for grants to install police surveillance cameras	2022–2023	Police	General Fund; Grants	Staff Time
PS.4	Install police school zone cameras	2024–2026	Police	Staff Time; General Fund	Staff Time
PS.5	Update and enhance public safety staff recruitment program	2022–2023	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	2022–2023	Police	Staff Time; General Fund	Staff Time
PS.7	Update and enhance police crime prevention programs	2022–2023	Police	Staff Time; General Fund	Staff Time



Public Works

STRATEGY		PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
PW.1	Develop plan to improve ditch & right-of-way maintenance	2022–2023	Public Works	Stormwater Utility	Staff Time
PW.2	Conduct a utility rate study to ensure affordable rates are maintained	2024–2026	Executive; Water/Sewer/Stormwater	Water/Sewer Fund; Stormwater Utility	\$5,000/Annually
PW.3	Complete citywide water & wastewater system modeling	2024–2026	Executive; Water/Sewer	Water/Sewer Fund	\$200,000
PW.4	Improve water system where needed throughout city based on studies	2024–2026	Executive; Water/Sewer	Water/Sewer Fund	\$1 Million
PW.5	Purchase new street sweeper	2024–2026	Public Works	Stormwater Utility	\$350,000
PW.6	Complete an update to the Stormwater Drainage Basin Master Plan	2024–2026	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	2024–2026	Executive	Stormwater Utility	\$20,000
PW.8	Develop a citywide pavement management system to prioritize city streets for future work	2022–2023	Executive; Public Works	General Fund	\$70,000
PW.9	Continue to expand water/wastewater south of I-16 in association with the Town Center development and the South GC URA	2025–2026	Executive; Public Works	Water/Sewer Fund; SPLOST	TBD

Recreation

	STRATEGY	PROJECT TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
REC.1	Update the existing Parks and Recreation Master Plan to include proposed areas for expansion & improvements	2022-2023	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	2024-2026	Executive; Recreation	SPLOST; General Fund	TBD; Final Project Scope
REC.3	Construct new recreation complex	2022-2023	Executive; Recreation	SPLOST; General Fund	\$3.5 Million
REC.4	Increase recreation staffing	2022-2023	Executive; Recreation	General Fund	\$100,000/Year
REC.5	Implement after school programs	2022-2023	Recreation	General Fund	Staff Time
REC.6	Identify property for acquisition as community and pocket parks	2022-2023	Executive; Recreation	SPLOST; General Fund	\$50,000
REC.7	Implement senior citizen Pick-up/Drop-off service	2022-2023	Recreation	General Fund	Staff Time
REC.8	Construct additional parking at Bazemore Park	2022-2023	Recreation	SPLOST; General Fund	\$250,000
REC.9	Rehab Garden City gym & stadium	2024-2026	Executive; Parks & Recreation	SPLOST; General Fund	\$500,000



ONGOING ACTIVITIES

LAND USE STRATEGY		ANNUAL TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
OG.1	Deter development within the regulated high risk flood zones	Ongoing	Planning & Zoning	General Fund	Staff Time
TRANSPORTATION STRATEGY		ANNUAL TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
OG.2	Improve pedestrian safety and mobility around city arterials and state routes	Ongoing	Executive	General Fund; SPLOST	Project Based
OG.3	Implement the city's comprehensive Capital Improvement Program (CIP)	Ongoing	Executive	General Fund; Water/Sewer Utility; Stormwater Utility	Project Based
HOUSING STRATEGY		ANNUAL TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
OG.4	Coordinate with the Garden City Community Housing Team to restore, revitalize, and rehabilitate city neighborhoods	Ongoing	GC Housing Team; Planning & Zoning	General Fund; Grants	Project Based
NATURAL RESOURCES STRATEGY		ANNUAL TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
OG.5	Educate residents regarding the need to protect designated flood zones or high risk flood areas	Ongoing	Planning & Zoning	Stormwater Utility	~\$10,000 Annually
PUBLIC WORKS-PUBLIC SAFETY		ANNUAL TIMELINE	LEAD PARTNER	FUNDING SOURCE	COST ESTIMATE
OG.6	Participate in disaster preparedness exercises with CEMA and other neighboring jurisdictions	Ongoing	Public Safety	General Fund	Staff Time
OG.7	Improve citywide fire service to maintain/improve ISO rating	Ongoing	Fire Department	General Fund; Fire Fee	Project Based
OG.8	Proactively maintain the MS4 as required by the Phase 1 NPDES permit to mitigate the impacts of flooding	Ongoing	Public Works	Stormwater Utility	Project Based



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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	2017

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	Moved to Ongoing Project List OG.4
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	Now included in New H.1 Task
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	2019
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	Removed
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	Now New LU.7
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.	Now New LU.8
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	Now New ED.3
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	2016
ED.6	Develop a strategy for business recruitment	✓				Business Recruitment Package Developed	2018

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
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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 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.	Now New REC.6 Task
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	Moved to Ongoing Project List as New OG.5 Task
NR.6	Perform a tree inventory in public ROW and city parks			✓		The City has postponed this task due to a lack of funding	Now New REC.6 Task
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	Now New NR.4 Task



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	Now New Task PW.8
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	Moved to Ongoing Project List as Task OG.2
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.	Moved to Ongoing Project List as OG.3
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	Now New Task T.7

TASK NUMBER	ACTION/ IMPLEMENTATION STRATEGY	COMPLETED	UNDERWAY	POSTPONED	NOT ACCOMPLISHED	EXPLANATION	COMPLETION DATE
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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	Moved to Ongoing Project List Under Public Safety as OG.6
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	2019
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	Moved to Ongoing Project List Under Land Use as OG.1
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	Now New Task GG.9
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 as funding allows	Now New Task LU.5
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 in addressing this issue in the future	Now New Task PW.7



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	Now New Task REC.1
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	Now New Task PW.9
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 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	Removed
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	Moved to Ongoing Project List Under Public Works: OG.8
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	Moved to Ongoing Project Lis Under Public Safety



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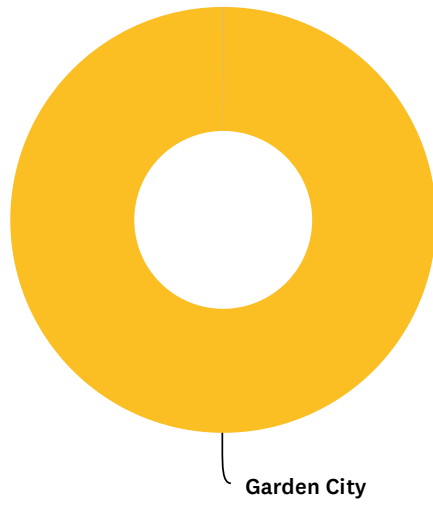


APPENDIX



Q1 First things first ... where do you live?

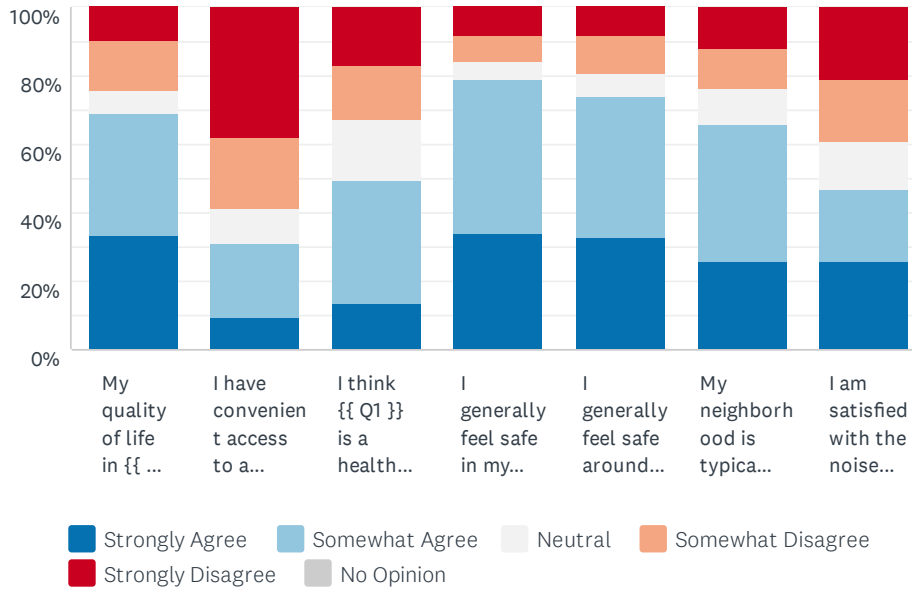
Answered: 101 Skipped: 0



ANSWER CHOICES	RESPONSES	
Unincorporated Chatham County	0%	0
Savannah	0%	0
Garden City	100%	101
Pooler	0%	0
Other/I don't know	0%	0
TOTAL		101

Q10 How strongly would you agree with the following statements about the quality of life topics in {{ Q1 }}?

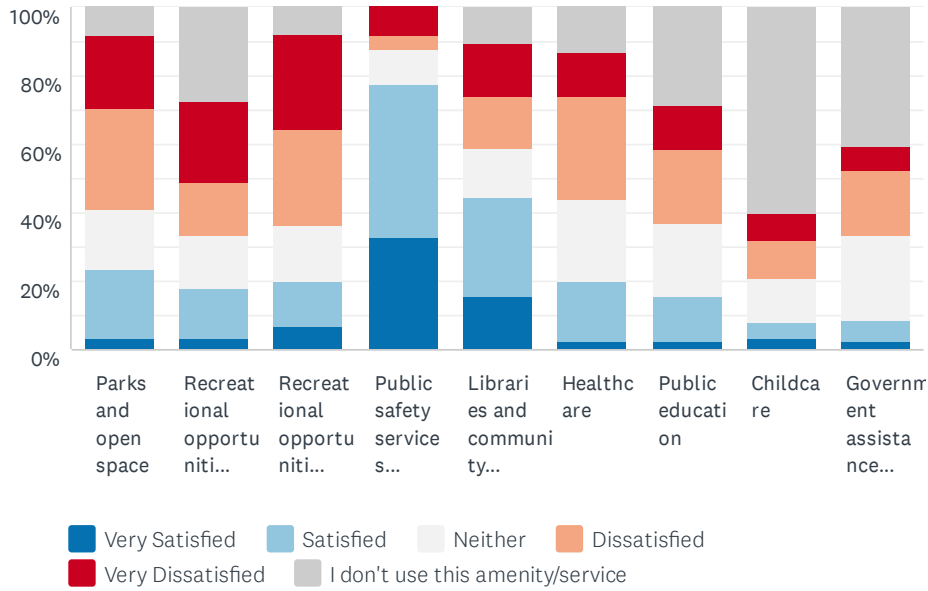
Answered: 85 Skipped: 16



	STRONGLY AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
My quality of life in {{ Q1 }} is good	33.33% 28	35.71% 30	7.14% 6	14.29% 12	9.52% 8	0.00% 0	84	2.31
I have convenient access to a range of food options, including access to healthy and fresh food	9.52% 8	21.43% 18	10.71% 9	20.24% 17	38.10% 32	0.00% 0	84	3.56
I think {{ Q1 }} is a healthy place to live	13.25% 11	36.14% 30	18.07% 15	15.66% 13	16.87% 14	0.00% 0	83	2.87
I generally feel safe in my home	34.12% 29	44.71% 38	5.88% 5	7.06% 6	8.24% 7	0.00% 0	85	2.11
I generally feel safe around my neighborhood	32.94% 28	41.18% 35	7.06% 6	10.59% 9	8.24% 7	0.00% 0	85	2.20
My neighborhood is typically clean and free of litter	25.88% 22	40.00% 34	10.59% 9	11.76% 10	11.76% 10	0.00% 0	85	2.44
I am satisfied with the noise level in my neighborhood	25.88% 22	21.18% 18	14.12% 12	17.65% 15	21.18% 18	0.00% 0	85	2.87

Q11 Please rate your satisfaction with the following public amenities and services in your community.

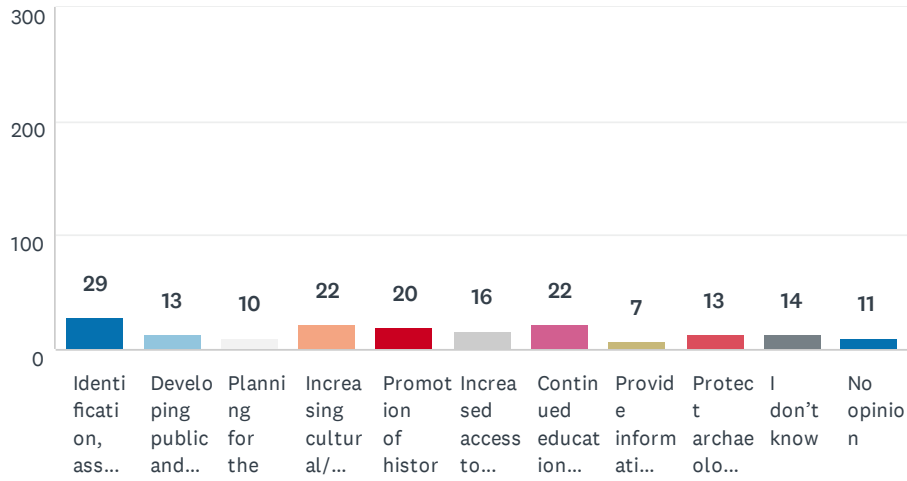
Answered: 85 Skipped: 16



	VERY SATISFIED	SATISFIED	NEITHER	DISSATISFIED	VERY DISSATISFIED	I DON'T USE THIS AMENITY/SERVICE	TOTAL	WEIGHTI AVERAG
Parks and open space	3.53% 3	20.00% 17	17.65% 15	29.41% 25	21.18% 18	8.24% 7	85	3.
Recreational opportunities for children	3.57% 3	14.29% 12	15.48% 13	15.48% 13	23.81% 20	27.38% 23	84	3.
Recreational opportunities for adults	7.06% 6	12.94% 11	16.47% 14	28.24% 24	27.06% 23	8.24% 7	85	3.
Public safety services (police, fire, EMS)	32.94% 28	44.71% 38	10.59% 9	3.53% 3	8.24% 7	0.00% 0	85	2.
Libraries and community centers	15.29% 13	29.41% 25	14.12% 12	15.29% 13	15.29% 13	10.59% 9	85	2.
Healthcare	2.38% 2	17.86% 15	23.81% 20	29.76% 25	13.10% 11	13.10% 11	84	3.
Public education	2.38% 2	13.10% 11	21.43% 18	21.43% 18	13.10% 11	28.57% 24	84	3.
Childcare	3.53% 3	4.71% 4	12.94% 11	10.59% 9	8.24% 7	60.00% 51	85	3.
Government assistance programs and services	2.38% 2	5.95% 5	25.00% 21	19.05% 16	7.14% 6	40.48% 34	84	3.

Q12 In your opinion, what are the most important historic preservation actions for {{ Q1 }}? (Select up to three.)

Answered: 86 Skipped: 15



ANSWER CHOICES	RESPONSES
Identification, assessment, and designation of historic resources	33.72% 29
Developing public and private preservation partnerships	15.12% 13
Planning for the impacts of natural disasters on historic resources	11.63% 10
Increasing cultural/ethnic diversity in the preservation movement	25.58% 22
Promotion of historic preservation through local planning and legislation	23.26% 20
Increased access to historic preservation information through online resources and local institutions	18.60% 16
Continued education and interpretation for the public	25.58% 22
Provide information on energy efficiency and alternative energy sources for historic buildings	8.14% 7
Protect archaeological sites	15.12% 13
I don't know	16.28% 14
No opinion	12.79% 11
Total Respondents: 86	

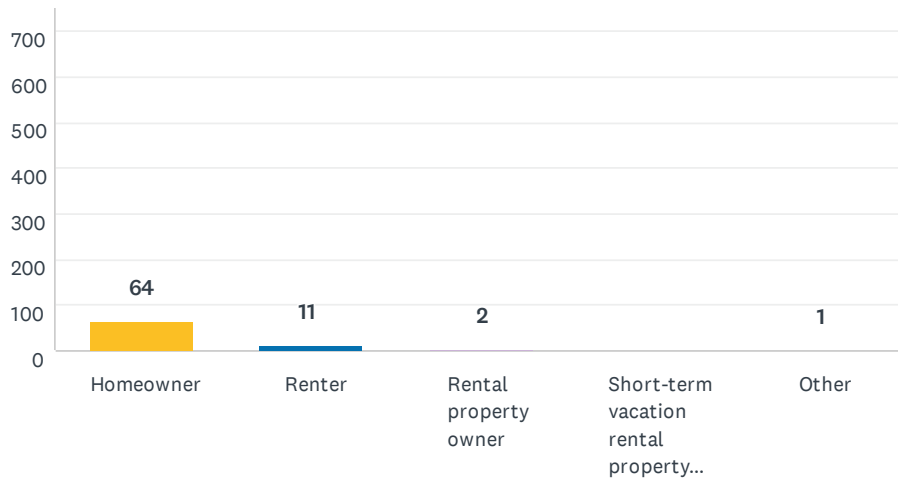
Q13 Do you have any additional comments about the quality of life in {{ Q1 }}?

Answered: 26 Skipped: 75

#	RESPONSES	DATE
1	We need a Kroger and Publix. Also some better restaurants.	2/1/2021 9:22 PM
2	We need an update to only grocery store or an additional grocery store	2/1/2021 5:19 AM
3	We need more recreational parks for small children and dog parks or dog friendly parks	1/31/2021 11:00 PM
4	More people would be inclined to live In Garden City if Garden City would put more effort into forcing homeowners to Clean up the garbage around their homes and keeping their yards cut and tidy. It would be great to have a nice place to ride a bike or walk without almost being run over by speeding lunatics.	1/31/2021 7:13 PM
5	Not at this time.	1/15/2021 9:01 PM
6	Sure, I would really like see more lights really. It's really hard to see at night. And, what's up with side walks? Having sidewalks would significantly improve qaulity of life for everyone.especially those with disabilities.	1/14/2021 5:34 PM
7	We need a beautification project to make our city look more like its name "GARDEN" city.	1/14/2021 3:02 PM
8	the crime rate needs to be addressed.	1/12/2021 10:08 PM
9	Yes more community centers where we as citizens can come together and provide more for kids, churches and the homeless and every who's in need !!!	1/12/2021 12:44 AM
10	n/a	1/11/2021 12:06 PM
11	Garden City does not have the visual appeal that Savannah and Pooler has. There are no appealing places to shop. Most if the businesses are small and have questionable looking curb appeal. Unless a nice shopping center or quality restaurants are added to Garden City, the area is not going to grow. Tear down or redo the run down buildings and bring in quality shopping and restaurants. We also need another quality grocery store, one with more variety than Food Lion.	1/5/2021 8:31 PM
12	The noise level near ports is insane. Disturbing sleep..30 mph on Russell is sometimes 80mph..especially during a train and early morning 6:45 am to 8am and late afternoon. More speed signs or patrol is needed.	1/5/2021 5:55 PM
13	We need additional businesses like grocery stores, restaurants, coffee shops, etc. to attract visitors. These might come for "Savannah" but Garden City is such an advantageous spot in that it is removed from the hustle and bustle of directly being in the city, but within such a short distance to visit daily while in the area. And in regards to residents, no more warehouses! We need these types of businesses HERE so we can stop taking our business elsewhere - coffee shops, grocery stores and restaurants. The residents want these things so we can stop driving 10-15 minutes minimum for somewhere decent. A cute boardwalk area for walking with an amphitheater and businesses nearby would be the perfect downtown Garden City - Augusta Ave area is so close to downtown and needs help to be attractive.	1/5/2021 3:38 PM
14	I made a big mistake moving to garden city. It's filthy, noisy, the roads are horrible, the neighbors are horrible, the cops don't care when you call for help, city hall never answers the phone, the list goes on and on. I have decided to sell my house and move! Goodbye filthy garden city!	12/31/2020 11:03 AM
15	Not much for residents- must go to Pooler	12/17/2020 9:44 AM
16	No	12/10/2020 10:23 PM
17	Need to see more police present in the neighborhood and talk to people in the neighborhood	12/5/2020 7:08 PM
18	Would like to see community shops in an area similar to towns in Hallmark movies. This would bring families together, especially at all the holidays!	12/5/2020 6:30 PM
19	Lived here over 50 yrs	12/5/2020 8:52 AM
20	Lived here 60 years, Garden City is not what it used to be.	12/4/2020 6:43 PM
21	Garden city stinks due to paper plants in area, hwy 21area in decline, more restrictive than Savannah on backyard livestock yet is a more rural area, no parks in annexed areas, charge for storm water drainage yet drainage ditches aren't maintained(so what are we paying for)	12/4/2020 6:02 PM
22	It will be nice to have a more community based environment. As in more parks near the Hwy 21 area and more options of shopping.	12/1/2020 10:31 PM
23	The police department is a joke. I have witnessed them bulky individuals on roadside on numerous occasions.	11/30/2020 9:04 PM
24	Always loved it.	11/30/2020 11:31 AM
25	Garden City has little to no opportunities for recreation for our children. We need afterschool programs and an up-to-date recreational facility, especially in the so-called Happy Discovery Area. Haynes field has been vacant for several years and it would be a great location for a state of the art recreational facility and Computer center for -job-training programs for young people and for older adults as well.	11/24/2020 1:06 PM
26	I think there is desperate need for accessible Greenspace and outdoor Recreation in Garden City. I think more needs to be done clean the air in Garden City.	11/19/2020 3:37 PM

Q14 Which category describes you? (Select all that apply.)

Answered: 76 Skipped: 25

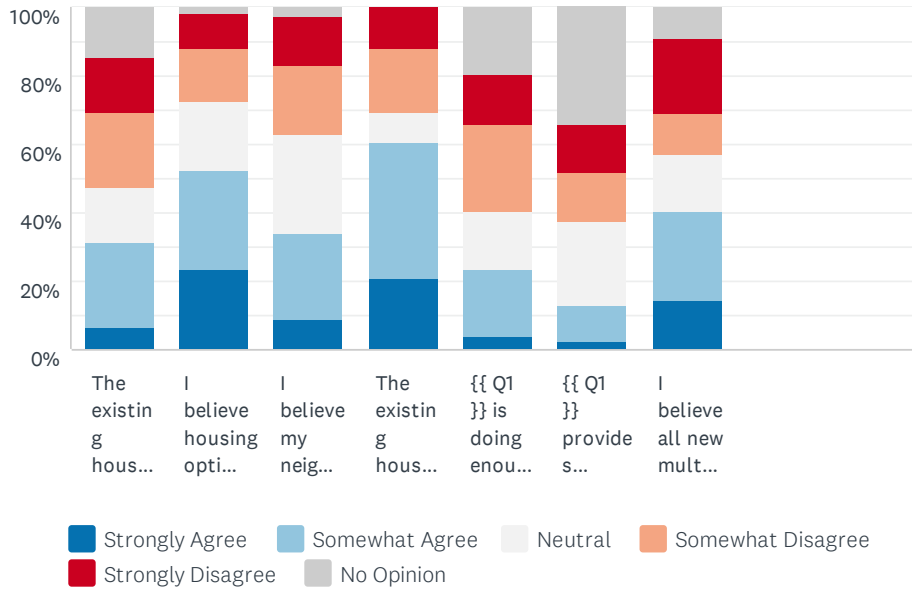


ANSWER CHOICES	RESPONSES	
Homeowner	84.21%	64
Renter	14.47%	11
Rental property owner	2.63%	2
Short-term vacation rental property owner	0.00%	0
Other	1.32%	1
Total Respondents: 76		

#	OTHER (PLEASE SPECIFY)	DATE
1	Live with mom	12/5/2020 7:11 PM

Q15 How strongly would you agree with the following statements about housing in {{ Q1 }}?

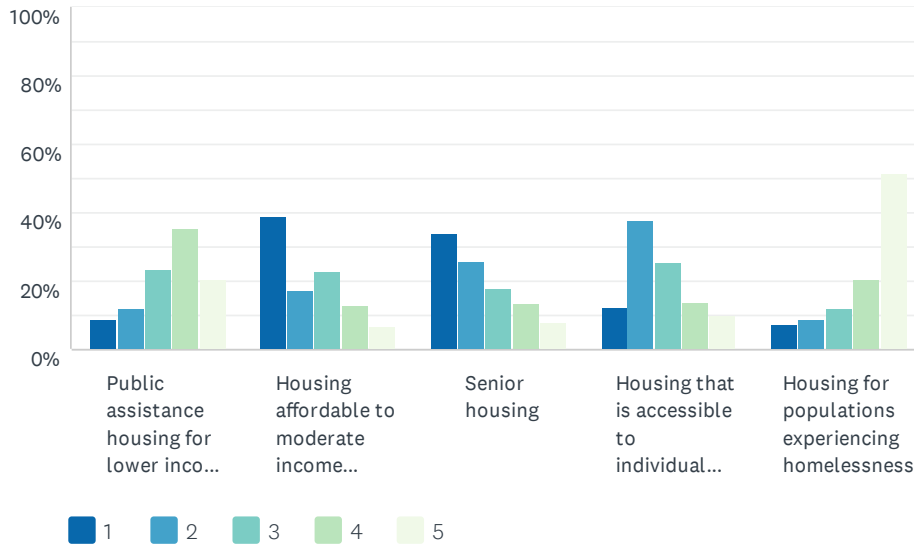
Answered: 77 Skipped: 24



	STRONGLY AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
The existing housing options in {{ Q1 }} meet the community's needs	6.58% 5	25.00% 19	15.79% 12	22.37% 17	15.79% 12	14.47% 11	76	3.18
I believe housing options in my neighborhood should be available to people of all income levels	23.68% 18	28.95% 22	19.74% 15	15.79% 12	10.53% 8	1.32% 1	76	2.60
I believe my neighborhood should have a mix of housing types	9.21% 7	25.00% 19	28.95% 22	19.74% 15	14.47% 11	2.63% 2	76	3.05
The existing housing in my neighborhood is well maintained and of good quality	21.05% 16	39.47% 30	9.21% 7	18.42% 14	11.84% 9	0.00% 0	76	2.61
{{ Q1 }} is doing enough to alleviate homelessness	3.90% 3	19.48% 15	16.88% 13	25.97% 20	14.29% 11	19.48% 15	77	3.34
{{ Q1 }} provides sufficient supportive/transitional housing options	2.60% 2	10.39% 8	24.68% 19	14.29% 11	14.29% 11	33.77% 26	77	3.41
I believe all new multi-unit private residential developments should be required to set aside a certain percentage of units for lower income residents	14.29% 11	25.97% 20	16.88% 13	11.69% 9	22.08% 17	9.09% 7	77	3.01
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00

Q16 Please rank the following housing options in order of how they should be prioritized in {{ Q1 }} in the next 5 years, with 1 being the highest priority and 5 being the lowest.

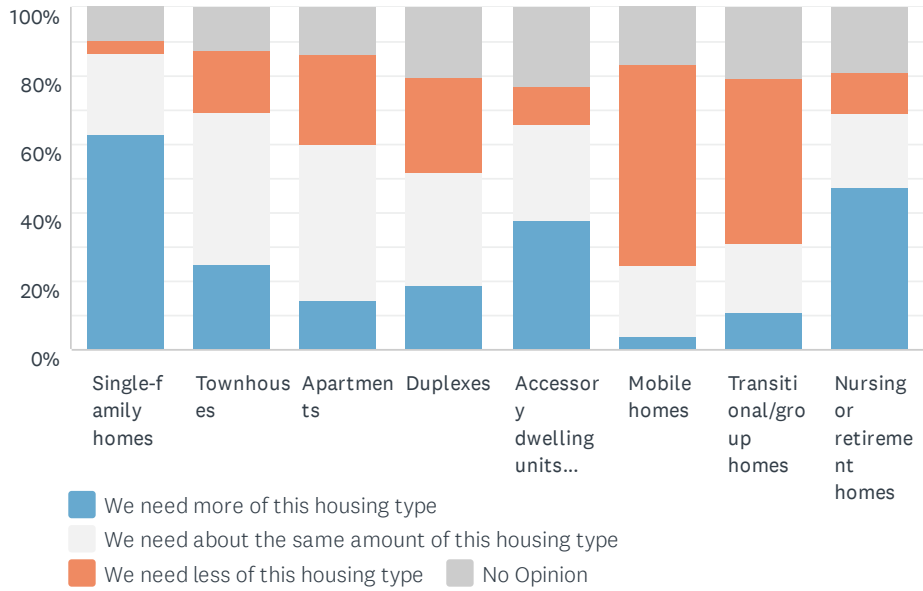
Answered: 74 Skipped: 27



	1	2	3	4	5	TOTAL	SCORE
Public assistance housing for lower income residents	8.82% 6	11.76% 8	23.53% 16	35.29% 24	20.59% 14	68	2.53
Housing affordable to moderate income residents	39.13% 27	17.39% 12	23.19% 16	13.04% 9	7.25% 5	69	3.68
Senior housing	34.25% 25	26.03% 19	17.81% 13	13.70% 10	8.22% 6	73	3.64
Housing that is accessible to individuals with disabilities	12.68% 9	38.03% 27	25.35% 18	14.08% 10	9.86% 7	71	3.30
Housing for populations experiencing homelessness	7.35% 5	8.82% 6	11.76% 8	20.59% 14	51.47% 35	68	2.00

Q17 In your opinion, does {{ Q1 }} need more, less, or about the same of the following housing types?

Answered: 75 Skipped: 26



	WE NEED MORE OF THIS HOUSING TYPE	WE NEED ABOUT THE SAME AMOUNT OF THIS HOUSING TYPE	WE NEED LESS OF THIS HOUSING TYPE	NO OPINION	TOTAL	WEIGHTED AVERAGE
Single-family homes	63.01% 46	23.29% 17	4.11% 3	9.59% 7	73	1.35
Townhouses	25.00% 18	44.44% 32	18.06% 13	12.50% 9	72	1.92
Apartments	14.67% 11	45.33% 34	26.67% 20	13.33% 10	75	2.14
Duplexes	19.18% 14	32.88% 24	27.40% 20	20.55% 15	73	2.10
Accessory dwelling units (e.g., mother-in-law suites, carriage houses)	37.84% 28	28.38% 21	10.81% 8	22.97% 17	74	1.65
Mobile homes	4.11% 3	20.55% 15	58.90% 43	16.44% 12	73	2.66
Transitional/group homes	10.81% 8	20.27% 15	48.65% 36	20.27% 15	74	2.47
Nursing or retirement homes	47.30% 35	21.62% 16	12.16% 9	18.92% 14	74	1.57

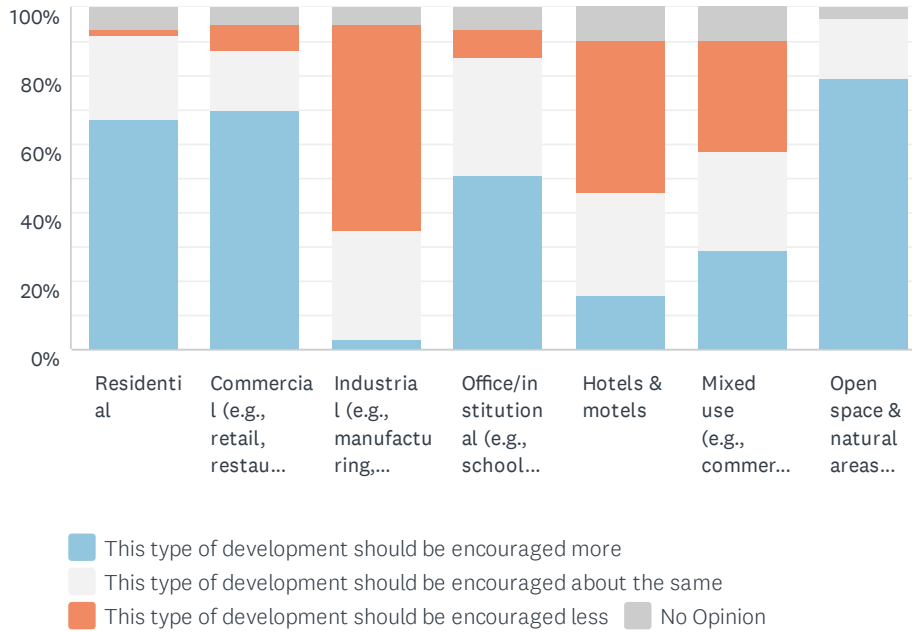
Q18 Do you have any additional comments about housing in {{ Q1 }}?

Answered: 9 Skipped: 92

#	RESPONSES	DATE
1	Not at this time.	1/15/2021 9:12 PM
2	I would really like see more affordable housing single family home be and stay available.	1/14/2021 5:42 PM
3	The homes that are being built need to be of better quality. The apartments need better structure and quality.	1/14/2021 3:06 PM
4	n/a	1/11/2021 12:13 PM
5	Focus on sidewalks and bringing up the standards of current homes.	1/5/2021 3:41 PM
6	Terrible. The whole city looks runs down and trashy.	12/31/2020 11:05 AM
7	I think there should be a better effort to repair historic houses (100 yrs old and older) occupied by senior citizens who are unable to make the repairs themselves.	11/24/2020 1:19 PM
8	We need attractive, safe affordable housing for seniors, the disabled and families.	11/23/2020 4:38 AM
9	We need safe, accessible, affordable housing for seniors and working families.	11/23/2020 4:32 AM

Q19 Compared to recent trends, do you think {{ Q1 }} should encourage the following types of development more, less, or about the same over the next 10 years?

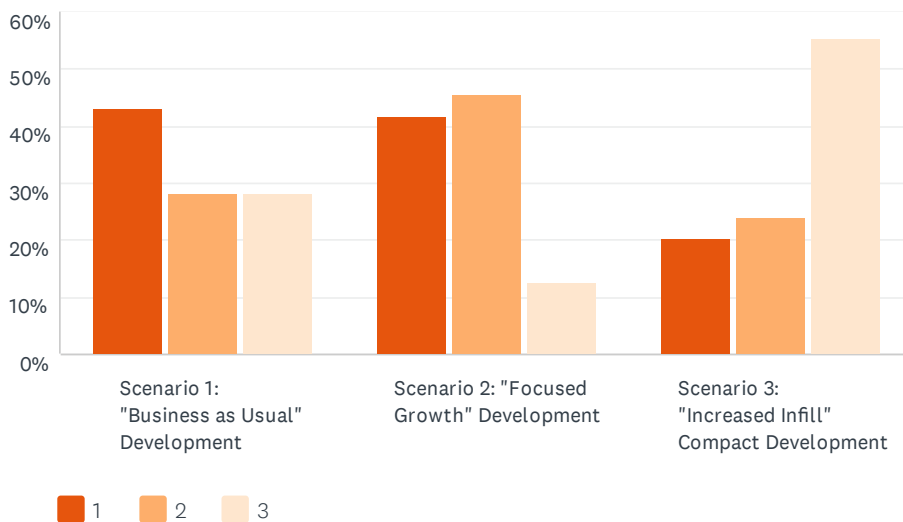
Answered: 63 Skipped: 38





	THIS TYPE OF DEVELOPMENT SHOULD BE ENCOURAGED MORE	THIS TYPE OF DEVELOPMENT SHOULD BE ENCOURAGED ABOUT THE SAME	THIS TYPE OF DEVELOPMENT SHOULD BE ENCOURAGED LESS	NO OPINION	TOTAL	WEIGHTED AVERAGE
Residential	67.7% 42	24.2% 15	1.6% 1	6.5% 4	62	1.29
Commercial (e.g., retail, restaurants, entertainment)	69.8% 44	17.5% 11	7.9% 5	4.8% 3	63	1.35
Industrial (e.g., manufacturing, warehousing, trucking)	3.2% 2	31.7% 20	60.3% 38	4.8% 3	63	2.60
Office/institutional (e.g., schools, medical, museums)	50.8% 32	34.9% 22	7.9% 5	6.3% 4	63	1.54
Hotels & motels	15.9% 10	30.2% 19	44.4% 28	9.5% 6	63	2.32
Mixed use (e.g., commercial and office space mixed with residential)	29.0% 18	29.0% 18	32.3% 20	9.7% 6	62	2.04
Open space & natural areas (e.g., parks, recreation, ball fields)	79.4% 50	17.5% 11	0.0% 0	3.2% 2	63	1.18

Q20 Please rank the following future growth scenarios in terms of your preference for {{ Q1 }}, with 1 being most preferred and 3 being least preferred. 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.

Answered: 60 Skipped: 41



	1	2	3	TOTAL	SCORE
 <p>Scenario 1: Development continues in a "business as usual" way- Typical development and growth are outward towards the County borders- Continued expansion of City and County roadway infrastructure- Traditional suburban development of single-family residential homes on larger lots- Continued expansion of industrial, warehouse, and commercial development- Most parcels have only one use- Preservation of rural lands and wetlands is less prevalent</p>	43.33% 26	28.33% 17	28.33% 17	60	2.15
 <p>Scenario 2: Development is focused around transportation corridors- Strategic infill and redevelopment along existing infrastructure corridors and focus areas- No major expansion of roadway infrastructure- There are more areas to use alternative modes of transportation such as bicycling or taking public transit- Mixed-use (commercial space on the bottom floor with residential housing above) development along existing corridors- Strategic preservation of rural lands and wetlands</p>	41.82% 23	45.45% 25	12.73% 7	55	2.29
 <p>Scenario 3: Compact development is focused in infill areas- No major expansion of roadway infrastructure- More construction and redevelopment throughout community- Transit-oriented development (TOD) that would include a mix of commercial, residential, office, and entertainment centered around or located near public transit hubs- More density of people and/or more mixed use (commercial space on the bottom floor with residential housing above) development along existing corridors and existing busy areas- There are more areas to use alternative modes of transportation such as bicycling or taking public transit- Increased preservation of rural lands and wetlands- Increased infill and compact development in existing city/town centers</p>	20.37% 11	24.07% 13	55.56% 30	54	1.65

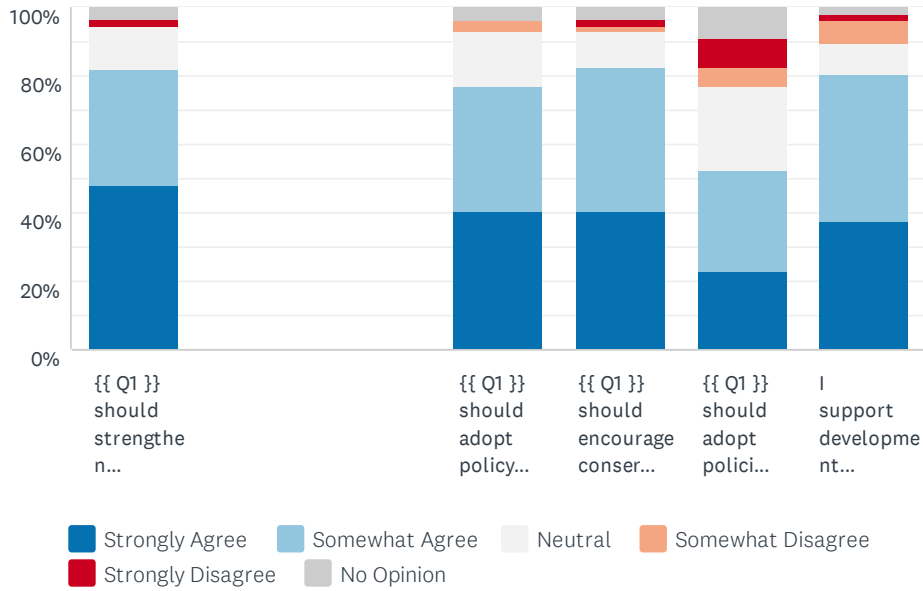
Q21 Do you have any additional comments about land use in {{ Q1 }}?

Answered: 9 Skipped: 92

#	RESPONSES	DATE
1	No	1/15/2021 9:18 PM
2	I believe in mixed home use as long as it doesn't interfere or defer more affordable low to moderate home ownership.	1/14/2021 6:04 PM
3	Focus on less industrial and more residential. We need a better quality of AIR in Garden City. This place STINKS!	1/14/2021 3:09 PM
4	n/a	1/11/2021 12:16 PM
5	Grocery store	1/9/2021 2:11 PM
6	Less warehouses and commercial trucking.	1/5/2021 8:37 PM
7	We definitely need growth and development! Open areas for alternate forms of transportations. Mixed use, commercial, office and business. This is how garden city would grow and attract new residents. Increase our housing values and keep the neighborhoods well maintained.	1/5/2021 3:48 PM
8	High 21 in particular needs more businesses and more nice restaurants. People working in this area need nice places to eat during their lunch breaks, especially at night.	11/24/2020 1:37 PM
9	Green space, recreation and Open spaces interconnected by safe walking/ biking paths as an alternative to driving should be integrated into new and existing areas.	11/23/2020 4:50 AM

Q22 How strongly would you agree with the following statements about natural resources in {{ Q1 }}?

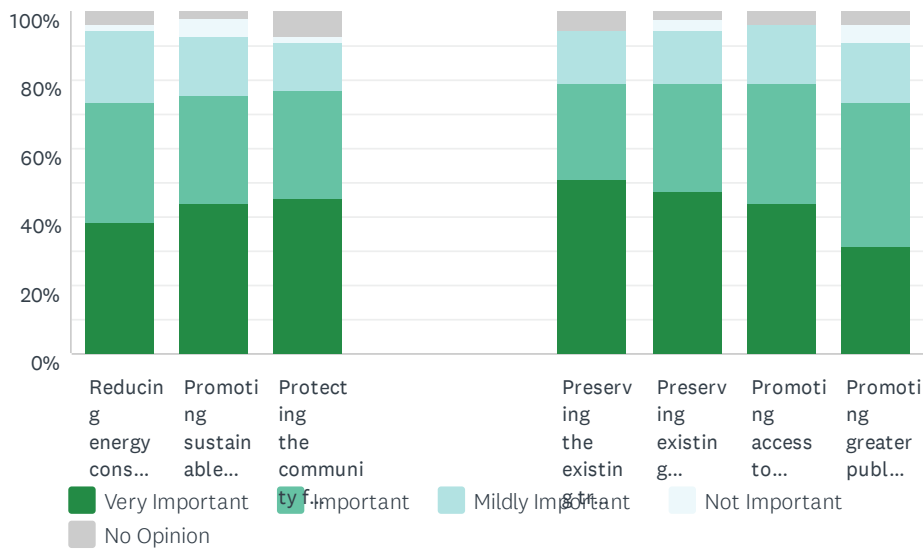
Answered: 57 Skipped: 44



	STRONGLY AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
{{ Q1 }} should strengthen policies requiring new development to protect environmentally sensitive areas	48.21% 27	33.93% 19	12.50% 7	0.00% 0	1.79% 1	3.57% 2	56	1.69
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
{{ Q1 }} should adopt policy to discourage future development and redevelopment of areas vulnerable to flooding and other coastal hazards	40.35% 23	36.84% 21	15.79% 9	3.51% 2	0.00% 0	3.51% 2	57	1.82
{{ Q1 }} should encourage conservation of land vulnerable to flooding and other coastal hazards	40.35% 23	42.11% 24	10.53% 6	1.75% 1	1.75% 1	3.51% 2	57	1.78
{{ Q1 }} should adopt policies promoting green roofs, white roofs, and other strategies to cool the local environment	22.81% 13	29.82% 17	24.56% 14	5.26% 3	8.77% 5	8.77% 5	57	2.42
I support development regulations on public infrastructure in areas susceptible to flooding and sea level rise	37.50% 21	42.86% 24	8.93% 5	7.14% 4	1.79% 1	1.79% 1	56	1.91

Q23 How important are the following natural resource objectives to you?

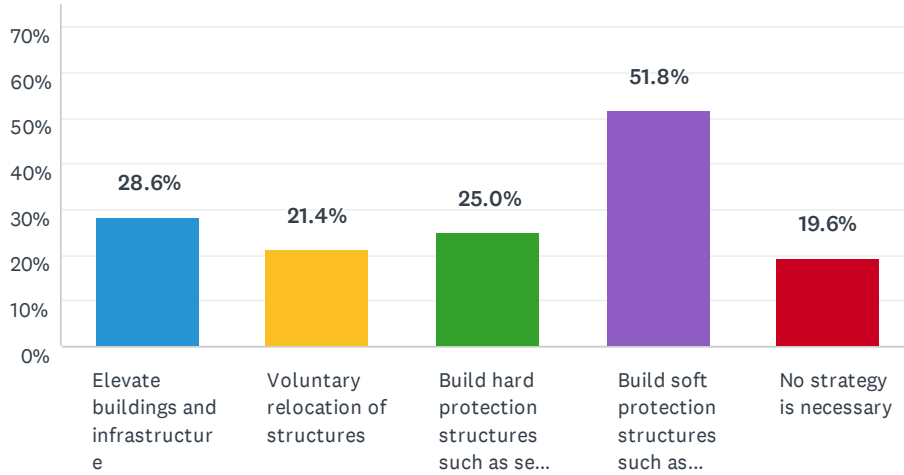
Answered: 57 Skipped: 44








	VERY IMPORTANT	IMPORTANT	MILDLY IMPORTANT	NOT IMPORTANT	NO OPINION	TOTAL	WEIGHTED AVERAGE
Reducing energy consumption	38.60% 22	35.09% 20	21.05% 12	1.75% 1	3.51% 2	57	1.85
Promoting sustainable energy sources, including solar and other sources of clean and renewable energy	43.86% 25	31.58% 18	17.54% 10	5.26% 3	1.75% 1	57	1.84
Protecting the community from environmental hazards and climate change	45.61% 26	31.58% 18	14.04% 8	1.75% 1	7.02% 4	57	1.70
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
Preserving the existing tree canopy	50.88% 29	28.07% 16	15.79% 9	0.00% 0	5.26% 3	57	1.63
Preserving existing wetlands	47.37% 27	31.58% 18	15.79% 9	3.51% 2	1.75% 1	57	1.75
Promoting access to natural environments in all neighborhoods	43.86% 25	35.09% 20	17.54% 10	0.00% 0	3.51% 2	57	1.73
Promoting greater public awareness of and education on environmental issues	31.58% 18	42.11% 24	17.54% 10	5.26% 3	3.51% 2	57	1.96

Q24 Which of the following strategies would you support to protect resources in {{ Q1 }} from hazards related to climate change? (Select all that apply.)

Answered: 56 Skipped: 45



ANSWER CHOICES	RESPONSES	
 Elevate buildings and infrastructure	28.6%	16
 Voluntary relocation of structures	21.4%	12
 Build hard protection structures such as sea walls	25.0%	14
 Build soft protection structures such as living shorelines	51.8%	29
 No strategy is necessary	19.6%	11
Total Respondents: 56		

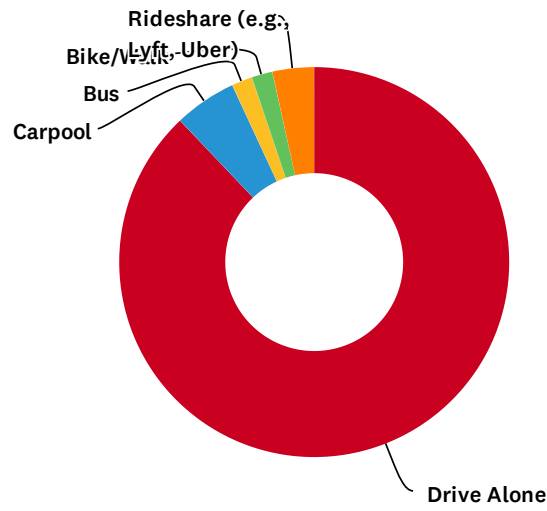
Q25 Do you have any additional comments about natural resources in {{ Q1 }}?

Answered: 4 Skipped: 97

#	RESPONSES	DATE
1	Nope	1/15/2021 9:24 PM
2	I would like see flyers information commercials to get resident s to start recycling. I see alit of waste, I Believe residents would partake if you all would provide containers and programs to educate.	1/14/2021 6:13 PM
3	n/a	1/11/2021 12:19 PM
4	I'm not versed on what's best	12/10/2020 10:14 AM

Q26 What is your primary mode of travel?

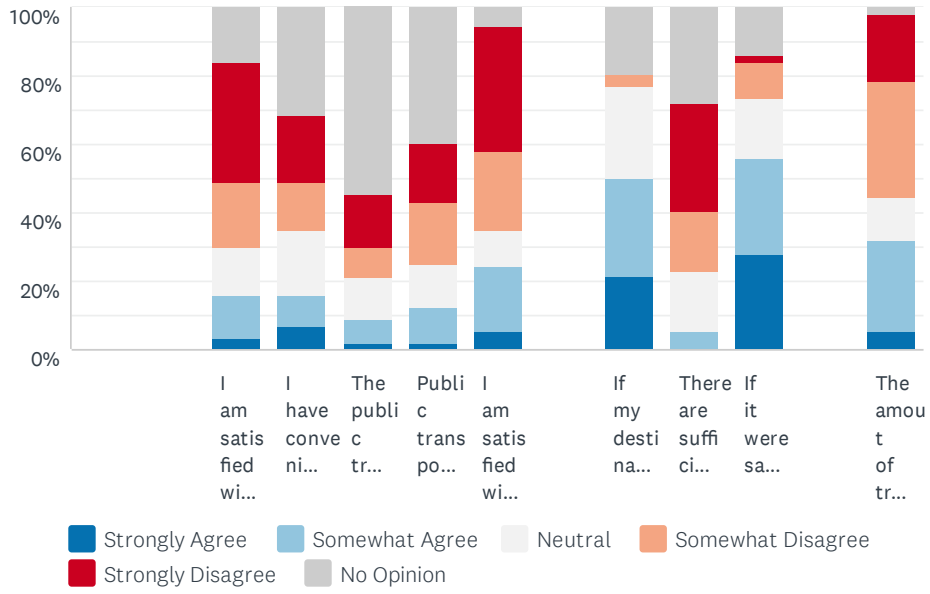
Answered: 58 Skipped: 43



ANSWER CHOICES	RESPONSES	
Drive Alone	87.93%	51
Carpool	5.17%	3
Bus	1.72%	1
Bike/Walk	1.72%	1
Rideshare (e.g., Lyft, Uber)	3.45%	2
Other	0.00%	0
TOTAL		58

Q27 How strongly do you agree with the following statements about transportation in {{ Q1 }}?

Answered: 57 Skipped: 44



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	STRONGLY AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
I am satisfied with the bicycling infrastructure such as bike lanes, sharrows, and bike racks in my community	3.51% 2	12.28% 7	14.04% 8	19.30% 11	35.09% 20	15.79% 9	57	3.83
I have convenient access to public transportation	7.02% 4	8.77% 5	19.30% 11	14.04% 8	19.30% 11	31.58% 18	57	3.44
The public transportation I use runs reliably and frequently	1.75% 1	7.02% 4	12.28% 7	8.77% 5	15.79% 9	54.39% 31	57	3.65
Public transportation routes match my desired/needed destinations	1.79% 1	10.71% 6	12.50% 7	17.86% 10	17.86% 10	39.29% 22	56	3.65
I am satisfied with the pedestrian infrastructure such as sidewalks, crosswalks, and signals in my community	5.26% 3	19.30% 11	10.53% 6	22.81% 13	36.84% 21	5.26% 3	57	3.70
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
If my destinations were more clustered together, I would make fewer trips	21.43% 12	28.57% 16	26.79% 15	3.57% 2	0.00% 0	19.64% 11	56	2.16
There are sufficient transportation options for people with disabilities in {{ Q1 }}	0.00% 0	5.26% 3	17.54% 10	17.54% 10	31.58% 18	28.07% 16	57	4.05
If it were safer, I would bike and/or walk to my frequent destinations more often	28.07% 16	28.07% 16	17.54% 10	10.53% 6	1.75% 1	14.04% 8	57	2.18
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
The amount of traffic in my daily commute is acceptable	5.36% 3	26.79% 15	12.50% 7	33.93% 19	19.64% 11	1.79% 1	56	3.36

Q28 Do you have any additional comments about transportation in {{ Q1 }}?

Answered: 11 Skipped: 90

#	RESPONSES	DATE
1	Nope	1/15/2021 9:30 PM
2	Bus routes have only 2 pickup locations on highway 21 going into Savannah. Going northbound on 21 there are no stops. This shortage of bus stops have to be address.	1/14/2021 10:41 PM
3	I believe as the city grows and in surrounding areas. The planning committee will need add more accessible and covered bus stops. It rains here quite a bit all off them should be covered. And, with more frequency. They should connect to other modes of transportation be as well.	1/14/2021 6:19 PM
4	Public Transportation and better bus stops. Structure of the bus stops are not contusive to weather changes.	1/14/2021 3:13 PM
5	safety and protection is a concern	1/12/2021 10:15 PM
6	n/a	1/11/2021 12:20 PM
7	We need to do something about the trains on 21. They stop traffic at the busiest times for 20 minutes at times. The sidewalks along 21 are unappealing and nit safe.	1/5/2021 8:42 PM
8	We need sidewalks throughout the community. I would definitely use my bicycle or walk more if it were safer to do so with sidewalks. We also need businesses! I would love to be able to bike or walk to grab a coffee or lunch at a nearby place. We do not have ANYthing like that. We need some cute plazas. Well maintained, with newer designs and appealing businesses. Way too many warehouses and industrial. The owners of the plazas are not keeping up with maintenance which is not appealing to new businesses coming in.	1/5/2021 3:54 PM
9	No sidewalks for bicycles	12/17/2020 10:04 AM
10	Garden city neighborhoods are not interconnected by a walking r bike path network. A car is required to live here. OR a lot of extra time if you need to use the bus system where available.	11/23/2020 4:58 AM
11	Need more bus stops and routes	11/17/2020 8:54 AM

Q29 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 of {{ Q1 }} in the past 5 years?

Answered: 42 Skipped: 59

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	3	112	42
Total Respondents: 42			

BASIC STATISTICS					
	MINIMUM	MAXIMUM	MEDIAN	MEAN	STANDARD DEVIATION
	1.00	5.00	3.00	2.67	1.13

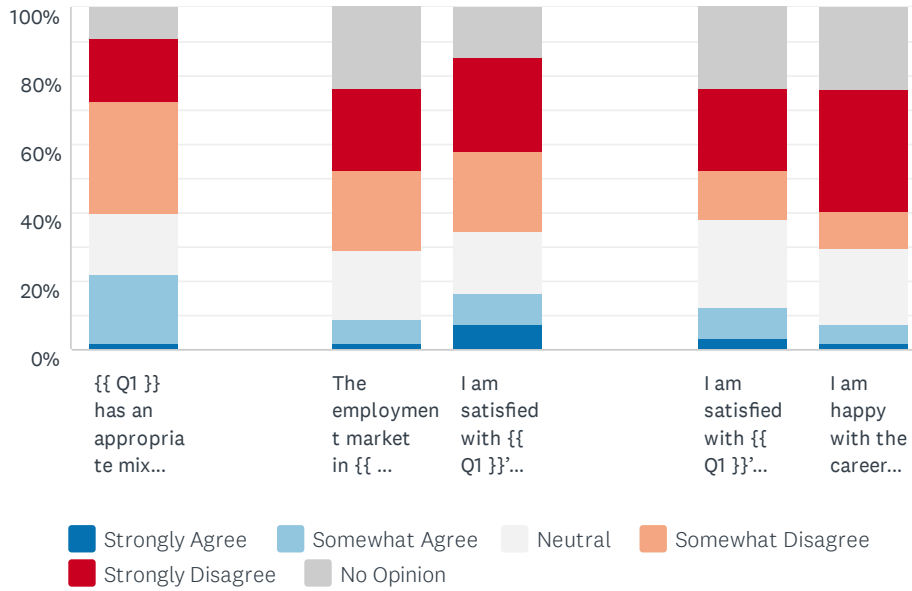
#		DATE
1	2	2/1/2021 5:43 PM
2	2	2/1/2021 10:06 AM
3	4	2/1/2021 5:32 AM
4	3	1/31/2021 11:12 PM
5	2	1/15/2021 9:34 PM
6	1	1/14/2021 10:44 PM
7	3	1/14/2021 6:24 PM
8	1	1/14/2021 3:14 PM
9	1	1/12/2021 10:16 PM
10	4	1/12/2021 12:55 AM
11	1	1/11/2021 12:23 PM
12	1	1/9/2021 2:15 PM
13	1	1/5/2021 8:43 PM
14	2	1/5/2021 5:26 PM
15	2	1/5/2021 3:57 PM
16	1	12/31/2020 11:27 AM
17	3	12/29/2020 7:32 PM
18	2	12/29/2020 11:20 AM
19	3	12/16/2020 7:03 AM
20	3	12/13/2020 9:20 AM
21	4	12/11/2020 10:46 PM
22	5	12/11/2020 6:52 PM
23	3	12/5/2020 7:16 PM
24	3	12/5/2020 12:36 PM
25	3	12/4/2020 8:37 PM
26	4	12/4/2020 7:51 PM
27	3	12/4/2020 6:18 PM
28	3	12/4/2020 3:11 PM
29	4	12/4/2020 1:19 PM
30	4	12/1/2020 9:54 PM
31	1	12/1/2020 7:41 PM
32	3	11/30/2020 10:36 AM
33	3	11/25/2020 2:15 PM
34	3	11/24/2020 10:19 AM
35	3	11/21/2020 10:04 AM
36	3	11/19/2020 3:50 PM
37	3	11/18/2020 3:56 AM
38	1	11/17/2020 8:56 AM
39	4	11/13/2020 5:04 PM

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40	3	11/13/2020 3:50 PM
41	5	11/10/2020 3:01 PM
42	2	10/28/2020 5:59 PM

Q30 How strongly would you agree with the following statements about economic development in {{ Q1 }}?

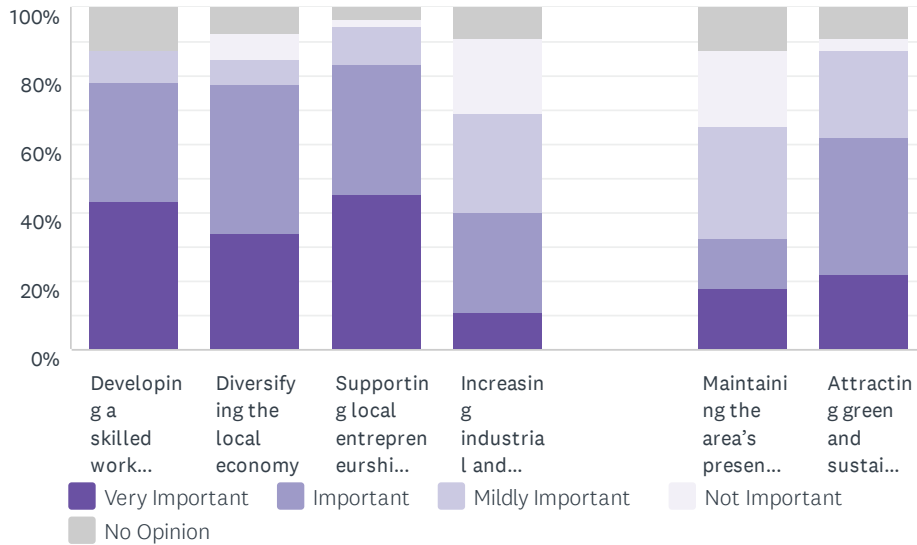
Answered: 55 Skipped: 46



	STRONGLY AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
{{ Q1 }} has an appropriate mix and quality of jobs	1.82% 1	20.00% 11	18.18% 10	32.73% 18	18.18% 10	9.09% 5	55	3.50
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
The employment market in {{ Q1 }} is well-suited to my skills and abilities	1.82% 1	7.27% 4	20.00% 11	23.64% 13	23.64% 13	23.64% 13	55	3.79
I am satisfied with {{ Q1 }}'s efforts to recruit new businesses and retain existing businesses	7.27% 4	9.09% 5	18.18% 10	23.64% 13	27.27% 15	14.55% 8	55	3.64
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
I am satisfied with {{ Q1 }}'s efforts to encourage business opportunities for members of minority groups	3.64% 2	9.09% 5	25.45% 14	14.55% 8	23.64% 13	23.64% 13	55	3.60
I am happy with the career and job training services available in {{ Q1 }}	1.85% 1	5.56% 3	22.22% 12	11.11% 6	35.19% 19	24.07% 13	54	3.95

Q31 How important are the following economic development objectives to you?

Answered: 55 Skipped: 46



	VERY IMPORTANT	IMPORTANT	MILDLY IMPORTANT	NOT IMPORTANT	NO OPINION	TOTAL	WEIGHTED AVERAGE
Developing a skilled work force through training programs, recruitment, and continuing education	43.64% 24	34.55% 19	9.09% 5	0.00% 0	12.73% 7	55	1.60
Diversifying the local economy	33.96% 18	43.40% 23	7.55% 4	7.55% 4	7.55% 4	53	1.88
Supporting local entrepreneurship, especially small businesses and home businesses	45.45% 25	38.18% 21	10.91% 6	1.82% 1	3.64% 2	55	1.68
Increasing industrial and manufacturing jobs	10.91% 6	29.09% 16	29.09% 16	21.82% 12	9.09% 5	55	2.68
	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00
Maintaining the area's presence as a tourist destination	18.18% 10	14.55% 8	32.73% 18	21.82% 12	12.73% 7	55	2.67
Attracting green and sustainable industries	21.82% 12	40.00% 22	25.45% 14	3.64% 2	9.09% 5	55	2.12

Q32 Do you have any additional comments about economic development in {{ Q1 }}?

Answered: 9 Skipped: 92

#	RESPONSES	DATE
1	Nope	1/15/2021 9:34 PM
2	I'm a huge believer in diversity. I would like to see more STEM programs being offered to our K-12 students in low in areas.	1/14/2021 6:24 PM
3	We need to pay our employees more and have more choices in the job market to suit the up and coming job markets.	1/14/2021 3:14 PM
4	n/a	1/11/2021 12:23 PM
5	We need less industrial business.	1/5/2021 8:43 PM
6	We need businesses and need to do better to recruit them. Tax incentives to restaurants, grocery stores, small shops (coffee, boutiques, etc.) fines to current developers or owners of plazas and other building who do not maintain properly. There should be a building code or something similar like Hilton Head, Bluffton and other places require that the plazas need to fit with the look of the area - color and general architecture. We need to increase the perceived value of our area.	1/5/2021 3:57 PM
7	Garden City is NOT a tourist destination.	11/30/2020 9:12 PM
8	We need another grocery store that we feel safe to go to at night	11/30/2020 11:15 AM
9	One of the best things about being in GC is the lack of tourists. If I wanted to deal with tourism, I'd live in Savannah.	11/18/2020 3:56 AM

Q33 Are there other priorities or issues not covered in this survey that you think are important for {{ Q1 }} to consider as part of the Comprehensive Plan?

Answered: 13 Skipped: 88

#	RESPONSES	DATE
1	Less fast food and more family dining restaurants and better grocery stores are needed	1/31/2021 11:14 PM
2	Nope	1/15/2021 9:34 PM
3	Just to recap. A robust Recycling program More sidewalks for more accessibility especially for those with disabilities. Improve the current sidewalks as well. More parks and paths for bikes and walking. Invest in more and better lights for evening driving.	1/14/2021 6:29 PM
4	Parks Recreation Centers Beautification projects Better signage coming in and out of Garden City Businesses need to be better structured a long the highways for a better look and feel for the city.	1/14/2021 3:16 PM
5	crime and safety is an issue that is not being appropriately addressed. its out of hand and is intentionally being ignored.	1/12/2021 10:19 PM
6	n/a	1/11/2021 12:24 PM
7	More housing, restaurants, grocery store and shopping centers	1/9/2021 2:16 PM
8	Biking trails, sidewalks, parks with community events (farmers market, gfestivals, etc.), businesses like restaurants, grocery stores and small shops.	1/5/2021 3:58 PM
9	More lighting, sidewalks, retail, attractive storefronts	12/17/2020 10:10 AM
10	Yards in single family homes are flooding and we get no help with this. We are old and cannot handle all of this.	11/30/2020 11:15 AM
11	We need a proper grocery store with a bakery, produce department and deli.	11/23/2020 5:02 AM
12	With the exception of Food Lion, GC is basically a food swamp. FL is awesome but if there were more options here we'd spend less time in Pooler traffic.	11/18/2020 3:58 AM
13	No.	11/10/2020 3:02 PM

Q34 What is your zip code?

Answered: 55 Skipped: 46

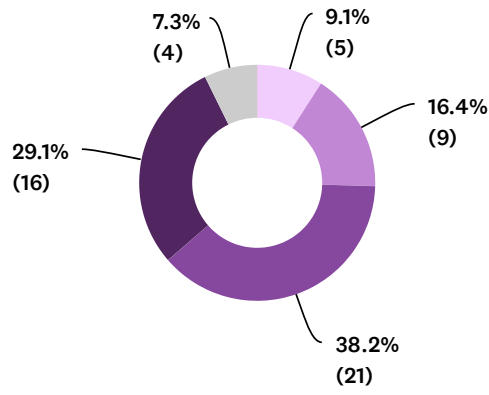
#	RESPONSES	DATE
1	31408	2/1/2021 9:31 PM
2	31408	2/1/2021 5:44 PM
3	31408	2/1/2021 10:07 AM
4	31408	2/1/2021 5:33 AM
5	31408	1/31/2021 11:14 PM
6	31408	1/15/2021 9:35 PM
7	31408	1/14/2021 10:58 PM
8	31408	1/14/2021 6:29 PM
9	31408	1/14/2021 3:17 PM
10	31408	1/12/2021 10:20 PM
11	31408	1/12/2021 12:56 AM
12	31408	1/11/2021 12:25 PM
13	31408	1/9/2021 2:16 PM
14	31408	1/5/2021 8:44 PM
15	31408	1/5/2021 5:27 PM
16	31408	1/5/2021 3:58 PM
17	31408	12/31/2020 11:27 AM
18	31408	12/29/2020 7:32 PM
19	31408	12/29/2020 11:21 AM
20	31408	12/17/2020 10:10 AM
21	31408	12/16/2020 7:05 AM
22	31408	12/13/2020 9:21 AM
23	31408	12/11/2020 10:47 PM
24	31408	12/11/2020 6:53 PM
25	31408	12/10/2020 10:17 AM
26	31408	12/5/2020 7:16 PM
27	31408	12/5/2020 12:37 PM
28	31405	12/4/2020 8:37 PM
29	31408	12/4/2020 7:52 PM
30	31405	12/4/2020 6:19 PM
31	31408	12/4/2020 3:12 PM
32	31408	12/4/2020 1:20 PM
33	31408	12/1/2020 9:55 PM
34	31408	12/1/2020 7:41 PM
35	31408	11/30/2020 9:12 PM
36	31408	11/30/2020 11:49 AM
37	31408	11/30/2020 11:35 AM
38	31408	11/30/2020 11:15 AM
39	31408	11/30/2020 10:37 AM
40	31408	11/25/2020 2:15 PM
41	31408	11/25/2020 2:03 PM
42	31408	11/25/2020 1:19 PM
43	31408	11/25/2020 12:57 PM
44	31408	11/24/2020 10:20 AM
45	31408	11/23/2020 10:02 PM
46	31408	11/23/2020 5:03 AM
47	31408	11/21/2020 10:05 AM

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48	31408	11/19/2020 3:51 PM
49	31408	11/18/2020 3:58 AM
50	31408	11/17/2020 8:56 AM
51	31408	11/13/2020 5:05 PM
52	31408	11/13/2020 3:52 PM
53	31408	11/10/2020 3:03 PM
54	31408	10/28/2020 6:00 PM
55	31408	10/28/2020 3:23 PM

Q35 What is your age?

Answered: 55 Skipped: 46



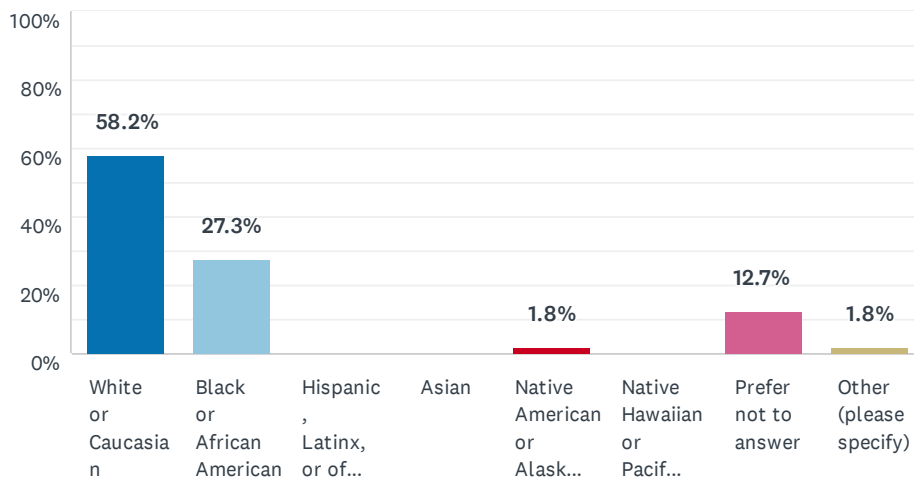
■ Under 18
 ■ 18-34
 ■ 35-49
 ■ 50-64
 ■ 65 and older
 ■ Prefer not to answer
 ■ Other (please specify)

ANSWER CHOICES	RESPONSES	
Under 18	0.0%	0
18-34	9.1%	5
35-49	16.4%	9
50-64	38.2%	21
65 and older	29.1%	16
Prefer not to answer	7.3%	4
Other (please specify)	0.0%	0
TOTAL		55

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q36 What is your race/ethnicity? (Select all that apply.)

Answered: 55 Skipped: 46

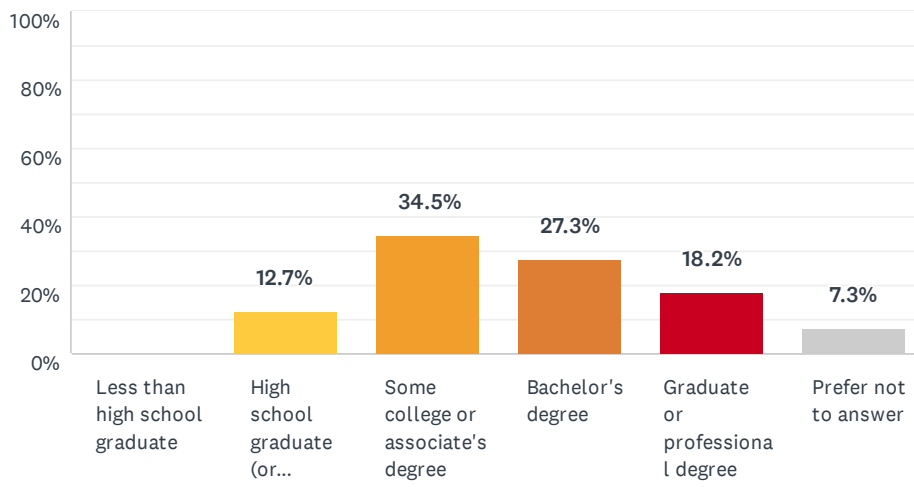


ANSWER CHOICES	RESPONSES	
White or Caucasian	58.2%	32
Black or African American	27.3%	15
Hispanic, Latinx, or of Spanish origin	0.0%	0
Asian	0.0%	0
Native American or Alaska Native	1.8%	1
Native Hawaiian or Pacific Islander	0.0%	0
Prefer not to answer	12.7%	7
Other (please specify)	1.8%	1
Total Respondents: 55		

#	OTHER (PLEASE SPECIFY)	DATE
1	Earthling	11/13/2020 5:05 PM

Q37 What is the highest level of education you have completed?

Answered: 55 Skipped: 46



ANSWER CHOICES	RESPONSES	
Less than high school graduate	0.0%	0
High school graduate (or equivalent)	12.7%	7
Some college or associate's degree	34.5%	19
Bachelor's degree	27.3%	15
Graduate or professional degree	18.2%	10
Prefer not to answer	7.3%	4
TOTAL		55