CITY OF CRANSTON

COMMUNITY COMPREHENSIVE PLAN

UPDATE 2024

Date Adopted:

Draft for Public Hearing – August 29, 2024

1.0 INTRODUCTION

1.1 Purpose of the Comprehensive Plan

The Comprehensive Plan serves as a blueprint for the future development and growth of Cranston. It outlines the community's vision, goals, and policies that will shape the City over the next twenty years. The Plan is designed to be a living document, flexible enough to adapt to changing circumstances and robust enough to provide clear guidance for decision-making.

The development of the Comprehensive Plan is an important step in preparing Cranston for the future. This preparation for the future attempts to balance the needs of the residents while recognizing and protecting the City's important resources and character.

1.2 Legal Basis for the Plan

In 1988 the State of Rhode Island enacted the Comprehensive Planning and Land Use Regulation Act (the Act) requiring all 39 cities and towns in the state to prepare and adopt a local Comprehensive Plan. The Act, RIGL §45-22.2, was amended in 2011 and requires that all municipally adopted comprehensive plans be brought into conformance with the updated Act by June 1, 2016. This plan was prepared in response to that mandate and supersedes all previous Comprehensive Plans for the City of Cranston.

The Act sets forth the following goals, which are intended to guide both State and municipal decision making.

1. To promote orderly growth and development that recognizes the natural characteristics of the land, its suitability for use, the availability of existing and proposed public and/or private services and facilities and is consistent with available resources and the need to protect public health, including drinking water supply, drinking water safety, and environmental quality.
2. To promote an economic climate which increases quality job opportunities and the overall economic well-being of each municipality and the state.
3. To promote the production and rehabilitation of year-round housing and to preserve government subsidized housing for persons and families of low and moderate income in a manner that: considers local, regional, and statewide needs; that achieves a balance of housing choices for all income levels and age groups, recognizes the affordability of housing choices for all income levels and age groups, recognizes the affordability of housing as the responsibility of each municipality and the state; takes into account growth management and the need to phase and pace development in areas of rapid growth; and facilitates economic growth in the state.
4. To promote the protection of the natural, historic, and cultural resources of each municipality and the state.
5. To promote the preservation of open space and recreational resources of each municipality and the state.
6. To provide for the use of performance-based standards for development and to encourage the use of innovative development regulations and techniques that promote the development of land suitable for development while protecting our natural, cultural, historic, and recreational resources, and achieving a balanced pattern of land uses.

7. To promote consistency of state actions and programs with municipal comprehensive plans and provide for review procedures to ensure that state goals and policies are reflected in municipal comprehensive plans and state guide plans.
8. To ensure that adequate and uniform data are available to municipal and state government as the basis for comprehensive planning and land use regulation.
9. To ensure that municipal land use regulations and decisions are consistent with the comprehensive plan of the municipality, and to ensure state land use regulations and decisions are consistent with state guide plans.
10. To encourage the involvement of all citizens in the formulations, review, and adoptions or amendment of the comprehensive plan.

The Act was designed to create a reciprocal system, where State goals and policies are reflected locally, and local plans assist in guiding State actions. All local comprehensive plans are required to be submitted to the State of Rhode Island Division of Planning for review and approval. The Division of Planning is responsible for ensuring consistency with the goals and intent of the Act and the State Guide Plan. The State Guide Plan is Rhode Island's long-range planning document, assembled as a collection of plans that have been adopted and amended over many years. This collection covers a wide range of topics and provides an important connection between local municipal comprehensive plans and the State Guide Plan documents. This cohesive comprehensive planning structure ensures:

- That local discretion of land use decision-making is maintained.
- That each municipal comprehensive plan meets delineated minimum standards.
- That local zoning provisions are consistent with the municipality's comprehensive plan.
- Provides for a mandatory review and amendment process of local comprehensive plans no less than every ten years.

The purpose of the Cranston Comprehensive Plan is to set a vision and chart the future for the community by outlining long range goals and accompanying policies and actions required to achieve them. The City of Cranston first adopted a comprehensive plan in 1992 and completed and update of that plan in 2012. This re-write is part of an ongoing evolution of policy setting and decision making as the City continues to grow and move forward with each passing year.

1.3 Importance of Updating the Plan

Regular updates to the Comprehensive Plan are essential to ensure that the Plan remains relevant and reflective of the community's needs and aspirations. The current update builds upon the successes and lessons learned from previous plans, incorporating new data, public input, and emerging trends. This update is particularly significant as it addresses critical issues such as climate change, housing affordability, and sustainable development, which have become increasingly important for the well-being of Cranston's residents.

1.4 Structure of the Plan

This introduction section provides an overview of the comprehensive plan landscape in Rhode Island as well as a brief description of the history of Cranston and the overarching issues facing the community. This is followed by a brief discussion of the background of the comprehensive plan in Cranston. The plan then presents the planning horizon for the next 20 years, outlining major focus areas for the City over the course of that timeframe. A demographic profile for the community is presented to inform each of the 11 chapters that follow, as well as an overview of the process and the public participation approach that was implemented. The goals, policies, and actions associated with each element are presented at the front part of the document, as this provides the essential roadmap

that will guide policy decisions and actions the community will engage in moving forward. This section is followed by the following eleven chapters:

- Land Use
- Natural Resources
- Historic and Cultural Resources
- Recreation and Open Space
- Services and Facilities
- Transportation
- Economic Development
- Housing
- Natural Hazards and Climate Change
- Energy

Each chapter in the plan contains an overview of existing conditions and a summary of challenges and opportunities related to that chapters. The goals, policies, and actions for each chapter are not contained within the chapter but instead within the Implementation Plan at the front of the document. The placement of this Implementation Plan highlights that first and foremost, the City is focused on taking the necessary steps to move the City forward. The remainder of the plan plays an important role in supporting those efforts.

1.4.1 Existing Conditions

The foundation of the Comprehensive Plan is built on a thorough understanding of existing conditions. The current status of the City provides a snap shot in time that helps us understand what is currently working and where improvements need to be made. When we combine this information with public feedback from community engagement efforts, we are able to develop policy that will assist the City in achieving its goals for the future. For the development of existing conditions in this plan the following steps were taken:

- **Literature and Resources Review**: Analyzing current local and regional initiatives, relevant documents, and previous comprehensive plans.
- **Site Visits and GIS Analysis**: Conducting site visits and utilizing GIS technology to map current conditions and identify areas of opportunity and concern.
- **Stakeholder Interviews**: Engaging with City staff and key stakeholders to gather insights and validate data.
- **Demographic and Socio-economic Trends**: Documenting trends to inform actionable goals and policies, including updating existing data and assessing changes over the last decade.
- **Data Updates**: Updating data points through online research, census data, and staff interviews and inquiries.

1.4.2 Challenges and Opportunities

This section of each chapter draws on the findings of the existing conditions analysis as well as that from the public engagement feedback to identify where the City faces challenges that must be addressed and opportunities that should be capitalized on to advance the City.

The City of Cranston provides a variety of opportunities to enhance the quality of life of residents:

- **Scenic Resources**: From farmland to waterfront to urban core, the City has a diversity of scenic resources.
- **Economic Development**: The City has large areas zoned for nonresidential development, providing ample opportunity for businesses to locate.

While Cranston boasts many strengths, it also faces several challenges that need to be addressed:

- **Affordable Housing**: Ensuring a sufficient supply of affordable housing for all income levels.
- **Economic Disparities**: Reducing economic disparities and providing opportunities for all residents.
- **Aging Infrastructure**: Upgrading aging infrastructure to meet current and future needs.
- **Environmental Concerns**: Addressing environmental issues such as pollution, climate change, and natural resource preservation.
- **An Auto-Centric Transportation Network:** Though there are many sidewalks on the Eastern side of the city, most of them are either disconnected or are at various states of disrepair. For those seeking or who require the use of bicycles as either a primary or a supplementary mode of transportation, the City lacks any notable network of bicycle infrastructure. Public Transportation does service the City, but notably lacks meaningful east west connections.

1.4.3 Goals, Policies, and Actions

The goals, policies, and actions are contained within the Implementation Plan section of the plan. This is where the rubber meets the road and the City lays out the action plan to achieve its long-term goals for its future growth and development. See the Implementation Plan for a detailed description of the differences between goals, policies, and actions and how the Implementation Plan is organized.

1.5 Plan Approach

Due to changes in state enabling legislation adopted in 2023, the review, drafting, and adoption of this comprehensive plan took a unique approach. The change to enabling legislation mandated that any comprehensive plan that was older than twelve years old would not be permitted to be used to deny a land use decision. In September of 2024 the City's previous comprehensive plan, which was approved by the State in September of 2012, turned 12 years old. The City initiated work to completely update the 2012 comprehensive plan in the summer of 2023. Recognizing that they would not be able to conduct the level of public engagement desired for the full update of the plan by the September 2024 deadline, they developed a two phased approach to updating the plan. This document represents Phase I of that approach.

The approach adopted by the City was to conduct a full data update of the 2012 comprehensive plan, a review and update of the goals, policies, and actions, and to conduct an appropriate amount of public engagement to achieve these efforts within the short time-frame available for Phase 1. This was done with the understanding that Phase 2 of the update would continue after Phase 1 was adopted by the City Council. Phase 2 was designed to be public engagement heavy, ensuring that the citizens of Cranston were provided with ample opportunity to participate in the planning process and have their opinions on the future of the City incorporated into the plan.

This first phase of the comprehensive plan provides the City with an updated plan that represents current data and conditions, goals, policies, and actions that have been consolidated into a concise

Implementation Plan, and updated challenges and opportunities that are reflective of current conditions. During Phase 2 additional public engagement activities, such as a survey and multiple public workshops, will be conducted to further refine the goals, polies, and actions in the Implementation Plan to ensure that community input and public opinion are properly reflected.

1.6 Community Engagement

The City of Cranston recognizes that community engagement is a cornerstone of a successful planning process. Community engagement is critical to ensuring that the public supports the goals, policies, and actions of the Comprehensive Plan. The Comprehensive Plan should reflect the needs and desires of the citizens of Cranston. Their vision for the City is meant to be reflected in the development of those action items that guide City decision making over the 20-year life of the plan. This can only occur successfully when a robust public engagement process is conducted as part of the drafting of the plan.

Various techniques were employed to ensure broad and inclusive participation in the development of the Comprehensive Plan:

- **Public Forums and Workshops**: Hosting a series of public events to gather input on the community's vision, goals, and policies. The first public forum was held in September 2023, serving as a kick-off event for the public engagement process. The results of the public engagement event are contained within Appendix A. As part of the second phase of the plan update additional public workshops will be held as the goals, policies, and actions in the plan are further refined and updated.
- **Dedicated Project Website**: The project website serves as a central hub for project information, updates, and engagement tools. The website includes a project status board, timeline graphics, interactive maps, and tools for public feedback.

1.7 Acknowledgments

The preparation of this Comprehensive Plan would not have been possible without the dedication and hard work of many individuals and organizations. Special thanks go to the City Administration, City Council, City Plan Commission, Planning Department, and all the residents and stakeholders who contributed their time and insights throughout the planning process. Their commitment and collaboration have been instrumental in creating a Plan that truly reflects the aspirations and values of the Cranston community.

1.8 Plan Adoption and Amendments

The Comprehensive Plan must be formally adopted by the Cranston City Council. This adoption took place on DATE after a joint public hearing of the City Plan Commission and City Council. At the conclusion of that public hearing the plan was adopted by the City Council on a X-X vote.

The City is permitted to amend the Comprehensive Plan four times each year. Amendments to the Plan serve an important purpose, allowing the City to adapt to changing times, shifts in policy, and to be flexible in serving the needs and desires of the community. An amendment to the Plan is required to hold a public hearing by both the City Plan Commission and City Council and the consistency of the amendment with the remainder of the Plan should be a consideration when adopting the amendment. The Plan should be considered a living document that is adaptable to changing circumstances.

2.0 DEMOGRAPHIC AND COMMUNITY PROFILE

The characteristics of a population affect how the community's needs are identified and defined. A critical component of drafting a comprehensive plan that will appropriately address a community's future needs, is to first define and understand the characteristics of the people that live in that community. When planning for land use, housing, economic development—and all the other topics within a comprehensive plan—a fundamental understanding of the community, and who is it made up of, is necessary. This chapter provides information on recent and historic community characteristics that inform the goals and policies contained within each of the elements of the plan.

Many of the tables contained within this chapter are intended to provide baseline data that is relevant to multiple elements of the comprehensive plan. This baseline information includes data on population and population projections, race, ethnicity, education, income, and age.

2.1 Demographic Profile

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Many of the figures contained within this chapter are intended to provide baseline data that is relevant to multiple elements of the comprehensive plan. This baseline information includes data on population and population projections, race, ethnicity, education, income, and age.

Table 3-1 below indicates that Cranston's population has grown relatively steadily since 1910 up until around 1970, where the growth rate slowed, and the population declined in 1980. The growth resumed in 1990 but at a much slower rate than previously experienced. According to the U.S. Census Bureau, Cranston's estimated 2023 population is 82,635 residents[1]. This represents a slight decline in population since 2020, estimating only a .4% decrease in population since 2020.

The Rhode Island Division of Planning provides population projections for each community in Rhode Island. Table 3-2 presents the population projections for 2020 through 2040 for the City of Cranston. The projections provide for a much slower growth rate than experienced during a majority of the previous century, but the actual population of the City have exceeded expected population numbers. Table 3-2 shows a projected population of 82,162 people by the year 2030 and Figure 3-1 represents that number was surpassed (at 82,934) in 2020. So while the City is exceeding population projection numbers, its growth rate fluctuates between receding and a very moderate growth rate over the last 50 years.

[1] https://www.census.gov/quickfacts/cranstoncityrhodeisland

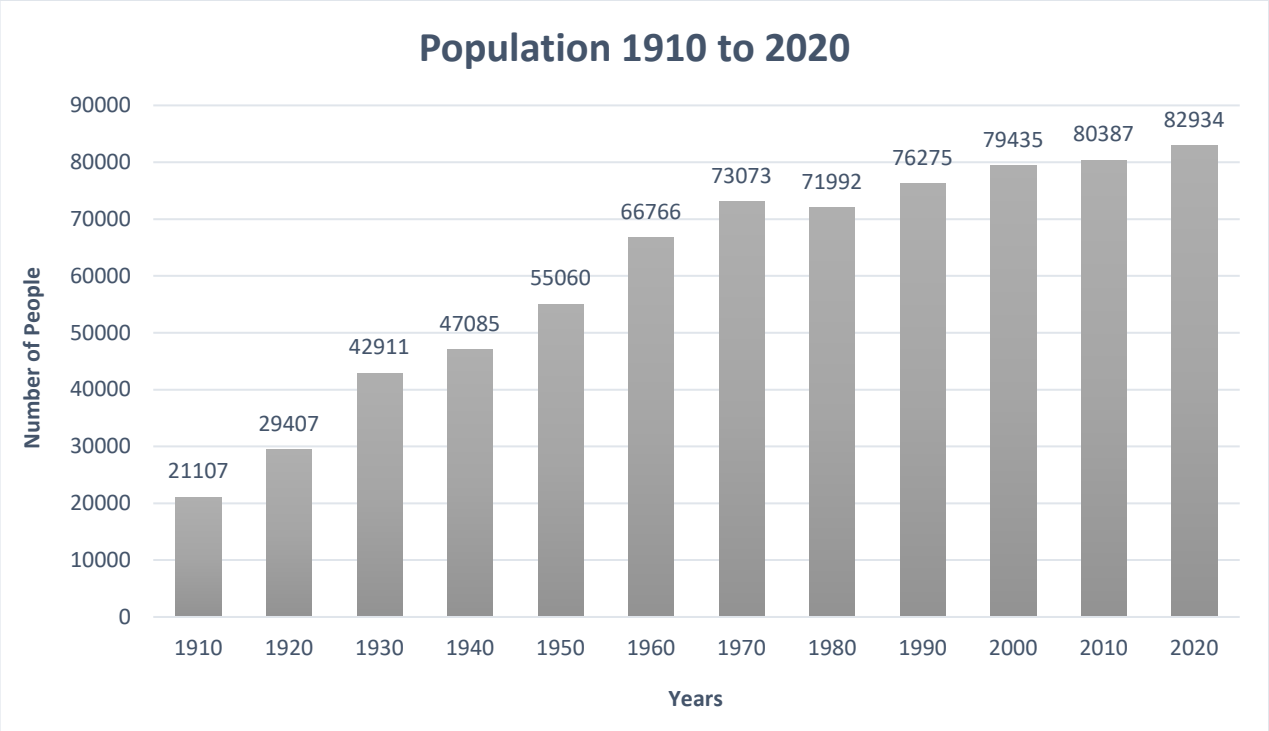


Figure 2-1: Cranston Historical Population Data
Source: https://usa.ipums.org/usa/voliii/tPublished.shtml

Table 2-1: Population Projection, 2020-40				
20-Year Population Projections				
2020	2025	2030	2035	2040
80,304	*81,382*	*82,162*	*82,486*	*82,271*

Source: Population Projections | Rhode Island Division of Statewide Planning. (2020). Ri.gov. https://planning.ri.gov/planning-areas/data-center/ri-data-center-census-data/population-projection

Tables 2-2 through 2-6 below provide further demographic information related to age, educational attainment, race and ethnicity, and household income.

Table 2-2: Population Age		
Age	Population	% of Population
Under 5	3888	4.7%
5 to 9 years	4197	5.1%
10 to 14 years	4646	5.6%
15 to 19 years	5186	6.3%
20 to 24 years	4971	6.0%
25 to 29 years	5517	6.7%
30 to 34 years	5848	7.1%
35 to 39 years	5794	7.0%
40 to 44 years	5123	6.2%

Table 2-2: Population Age		
Age	**Population**	**% of Population**
45 to 49 years	5096	6.1%
50 to 54 years	5685	6.9%
55 to 59 years	5897	7.1%
60 to 64	5999	7.2%
65 to 69	4939	6.0%
70 to 74	3780	4.6%
75 to 79	2578	3.1%
80 to 84	1639	2.0%
85 years and over	2151	2.6%
TOTAL	**82,934**	

Source: U.S. Census Bureau. "PROFILE OF GENERAL POPULATION AND HOUSING CHARACTERISTICS." Decennial Census, DEC Demographic Profile, Table DP1, 2020, https://data.census.gov/table/DECENNIALDP2020.DP1?q=demographic profile&g=160XX00US4419180. Accessed on June 28, 2024.

Table 2-3: Population Ethnicity		
Ethnicity	**Population**	**% of Population**
Hispanic or Latino (any race)	15,067	18.2%
Not Hispanic or Latino	67,867	81.8%
TOTAL	**82,934**	

Source: U.S. Census Bureau. "PROFILE OF GENERAL POPULATION AND HOUSING CHARACTERISTICS." Decennial Census, DEC Demographic Profile, Table DP1, 2020, https://data.census.gov/table/DECENNIALDP2020.DP1?q=demographic profile&g=160XX00US4419180. Accessed on June 28, 2024.

Table 2-4: Population Race		
Race	**Population**	**% of Population**
White	56,514	68.1%
Black or African American	46,83	5.6%
American Indian & Alaskan Native	485	0.6%
Asian	5,799	7%
Native Hawaiian & Other Pacific Islander	45	0.1%
Other	8,282	10%
Two or More Races	7,126	8.6%
TOTAL	**82,934**	

Source: U.S. Census Bureau. "PROFILE OF GENERAL POPULATION AND HOUSING CHARACTERISTICS." Decennial Census, DEC Demographic Profile, Table DP1, 2020, https://data.census.gov/table/DECENNIALDP2020.DP1?q=demographic profile&g=160XX00US4419180. Accessed on June 28, 2024.

Table 2-5: Population Educational Attainment	United States	Rhode Island	Cranston	
	Percent	Percent	Total	Percent
Less than 9th grade	4.7%	4.8%	2814	4.7%
9th to 12th grade, no diploma	6.1%	5.8%	3127	5.2%
High school graduate (includes equivalency)	26.4%	26.9%	15828	26.4%
Some college, no degree	19.7%	18.0%	11962	20.0%
Associate's degree	8.7%	8.2%	5793	9.7%
Bachelor's degree	20.9%	21.5%	11979	20.0%
Graduate or professional degree	13.4%	14.8%	8351	14.0%

Source: US Census Bureau. 2022 ACS 5-Year Estimates: Educational Attainment, Population Age 25 and Over

Table 2-6 Household Income in 2022 Inflation Adjusted Dollars	United States	Rhode Island	Cranston
Less than $10,000	4.9%	4.6%	4.3%
$10,000 to $14,999	3.8%	4.6%	5.6%
$15,000 to $24,999	7.0%	6.8%	5.7%
$25,000 to $34,999	7.4%	6.5%	5.8%
$35,000 to $49,999	10.7%	9.4%	9.0%
$50,000 to $74,999	16.1%	14.7%	14.8%
$75,000 to $99,999	12.8%	13.0%	13.5%
$100,000 to $149,999	17.1%	19.2%	21.1%
$150,000 to $199,999	8.8%	10.0%	9.4%
$200,000 or more	11.4%	11.3%	10.8%
Median income (2022 dollars)	75,149	81,370	83,123

Source: US Census Bureau. 2022 ACS 5-Year Estimates Subject Tables: Household Income in the past 12 months Table B19001 and Median Household Income Table B19013 (in 2022 inflation-adjusted dollars

2.2 Cranston's Development History

2.2.1 The Seventeenth Century

Most of the land that constitutes modern day Cranston was purchased by Roger Williams from the Narragansett Indians in 1638 as part of the Pawtuxet Purchase. The first settlers to the area built a gristmill on the Pawtuxet falls and laid out Arnold Road (modern day Broad Street) connecting it to the Pequot Trail leading to Connecticut. At this time the town was known as Pawtuxet and remained as such for decades until it was officially named Cranston by the General Assembly of Rhode Island in 1754.

2.2.2 The Eighteenth Century

During the 18th century, Cranston experienced gradual population growth and expansion of settlements as more colonists moved into the area. Agriculture became increasingly important, with farmers cultivating the land and establishing farms. Early industries also began to develop, likely

centered around the gristmill on the Pawtuxet falls and potentially including other small-scale manufacturing or processing operations. A significant milestone occurred in 1754 when the General Assembly of Rhode Island officially named the town Cranston, giving it a distinct identity separate from the earlier Pawtuxet settlement. This naming likely reflected the area's growing population and economic importance within the colony. Throughout this period, Cranston transitioned from a sparsely settled frontier area to a more established colonial town with a diversifying economy and expanding infrastructure.

2.2.3 The Nineteenth Century

Cranston experienced significant changes during the 19th century, typical of many New England towns. The City saw substantial industrialization, particularly along the Pawtuxet River, where numerous textile mills were established, including the Cranston Print Works Company founded in 1824. This industrial growth led to a marked increase in population and the expansion of residential areas. Transportation infrastructure also developed significantly, with the construction of new roads and the introduction of railways. The Providence, Hartford and Fishkill Railroad, later part of the New York and New England Railroad, began service through Cranston in 1854, further boosting economic development and population growth. By the end of the century, Cranston had transformed from a rural agricultural community to a bustling industrial town with a diverse economy and growing population.

2.2.4 The Twentieth Century

During the 20th century, Cranston experienced continued urbanization, and suburbanization, leading to the expansion of residential areas and the development of modern infrastructure and public services. This period saw significant improvements in transportation, utilities, and public amenities, which supported the growing population. Additionally, there was a notable shift in the economic focus from traditional industrial activities to more service-oriented sectors, reflecting broader economic trends and the city's adaptation to new economic realities. These developments collectively transformed Cranston into a more urbanized and economically diverse community, enhancing its appeal as a residential and commercial hub within the Providence metropolitan area.

3.0 IMPLEMENTATION PLAN

3.1 Implementation Overview

Cranston utilized an extensive public engagement process to develop this 2024 Comprehensive Plan. Input from the general public was gathered through multiple public meetings and workshops. Using this information, goals, policies, and actions were created to address the concerns of residents. The Plan outlines goals and policies with specific actions for the City to achieve its vision of the future. The implementation matrix is where the action items of each chapter come together to form a strategy to move Cranston forward in achieving both the short- and long-term goals outlined in the previous chapters of this plan.

3.2 Implementation Matrix

These stated goals, policies, and actions provide a roadmap for the City to move the plan forward. Goals provide overarching desired outcomes, while policies guide municipal decision making and actions provide measurable acts that achieve implementation. When all three initiatives work together the City can make considerable strides towards achieving the stated goals. The matrix provided in this element has several important functions. First it states each particular element's goals and policies. This is followed by actions. For each action a timeframe and responsible parties are identified. This is done to provide guidance to those involved in implementation in what time frame the action is anticipated to take place and who will be responsible for initiating and supporting each action item. These considerations will vary based on circumstances at the time and this information is provided as a guide. The following key should be used when reviewing the matrix:

Timeframe: Factors used to determine the timeframe for specific for specific actions include priority level, cost/budget, staff time, and overall length of time for a particular action item to be initiated and completed. Timeframes are categorized as follows:

- Short-term (S): (1-3 years)
- Medium-term (M): (4-7 years)
- Long-term (L): (8-10 years)
- Ongoing (O): Continuous

In some cases, the matrix indicates the timeframe of the action item(s) as "ongoing." This identifies action items that may span across time frames and once initiated, become a permanent fixture or service within the City, continuing beyond the long-term timeframe threshold. The implementation matrix is not intended to prioritize certain action items over others. In other words, short-term actions do not necessarily take priority over longer-term actions and vice versa.

Responsibility: The matrix also contains a "responsible party(ies)" column that lists acronyms to represent parties that will lead and support the implementation of a given action. In some cases, there may be multiple lead or support parties, which consist of government officials, agencies, organizations, and Cranston residents. Many of these action items will require an effort and an investment of time from multiple groups or organizations. These actions are subject to amendment and will need to be reviewed and possibly revised on an annual basis to account for changes in policy or circumstances within Cranston.

Those listed in bold in the matrix are the lead responsible party, with those listed beneath it identified as support parties. The lead responsible party should be those directly involved in conducting a study or implementing an action or policy. Those identified as support parties should be those that will play a role in the implementation or action, but are not leading the charge, only providing support to those that do.

3.3 Accomplishments from the 2010 Comprehensive Plan

This section outlines the action items that were identified in the 2010 Comprehensive Plan that the City has made significant progress in achieving, or has completed.

Table 3-1. Accomplishments from the 2010 Comprehensive Plan

REF. NO (2010 Plan)	Action	Explanation Of Accomplishments
Land Use		
LU-21	Continue efforts to implement a mixed-use development at the location of the former Trolley Barn site.	The former Trolly Barn site has been redeveloped as a mixed-commercial (non-residential site). Full build out is expected in 2025.
LU-23	Apply the district to the developed area of the Pastore complex, in place of the existing Open Space (S-1) district.	The city is not pursuing a rezone of the Pastore Center complex. The S-1 Open Space zone is irrelevant for land use purposes for state property.
Housing		
HA-7	Create a Housing Commission with special request to research, advocate, and coordinate affordable housing programs.	The City created the Cranston Housing Commission which monitors, and advocates for additional affordable housing creation within the City.
HA-11	Create a CDBG grant program to provide funding for correction of serious code violations that pose immediate health and safety concerns.	The CDBG program has been utilized to address these specific problems within the City.
HA-11	Create a CDBG grant program to provide rehabilitation loans for rental housing which is affordable to lower income families.	A CDBG program has been created to provide rehabilitation loans for rental housing units within the City.
HA-16	Develop an inventory of vacant city owned, tax title lots which would be suitable for development.	The inventory was created by the City's IT Department in 2023.
Economic Development		
ED-22	Redevelopment of neighborhood centers should continue to occur at Pawtuxet Village, Knightsville, and Rolfe Square.	The City continues to invest in new infrastructure and aesthetic improves in its established neighborhood village centers.
ED-24	Develop design guidelines for site development that address different conditions and smart growth goals and distinguishes between each type of commercial area; major commercial center, village center, highway or arterial	Design guidelines and special zones have been created for these different intensities of development throughout the City.

Table 3-1. Accomplishments from the 2010 Comprehensive Plan		
REF. NO (2010 Plan)	**Action**	**Explanation Of Accomplishments**
	commercial.	
ED-25	Improve relations with developers, businesses, and property owners to work with regulatory staff to proactively inform and assist developers in regulatory and approval processes.	Overall city operations and interface with the development community, business community and property owners has improved to make the process more approachable and predictable.
ED-26	Continue providing hands-on assistance to growing businesses with financing, permitting, and other needs.	The Economic Development Director works directly with various small business owners to help them locate, expand, and keep their businesses within the City.
Natural Resources		
NR-1	Identify and prioritize critical habitat areas in western Cranston and locate habitats of rare and endangered species.	The State has mapped areas of critical habitat of rare and endangered species. This information is available to Planning Staff in review of all new development proposals.
NR-2	Adopt watershed management plans (Adopt watershed management plans in accordance to RIDEM standards to address potential pollution in compliance with NPDES Phase II requirements and seek non-point source pollution mitigation funds from the state to assist in preparation).	The City's DPW has adopted watershed management plans in accordance with the NPDES Phase II.
NR-10	Require all subdivisions that propose on-site wells to include an analysis of groundwater and set standards suitable to verify conformance with RIDEM's Rules and Regulations relating to Drinking Water Wells.	New wells within subdivisions are created consistent with the RIDEM regulations.
NR-15	Implement Best Management Practices (BMP's) for stormwater and erosion controls, including requirements for all new subdivision and development projects and recommendations of the Fuss & O'Neill stormwater management study.	The City's DPW has implemented BMPs for stormwater and erosion controls for all new subdivisions consistent with RIDEM RIPDES and wetlands regulations.
NR-17	Ensure that municipal salt storage piles are adequately covered.	An enclosure for municipal salt storage has been created to prevent erosion and runoff.
NR-18	Establish Watershed Management Plans, where necessary in cooperation with adjacent communities.	DPW has coordinated with adjacent communities for watershed management plans.
NR-20	Create restoration plans for the banks of the Pocasset and Pawtuxet rivers where roadways and development have degraded the rivers.	Various areas of the Pocasset and Pawtuxet rivers have been restored in the last 15 years.
Historic Preservation		
HP-11	Continue to implement design review and procedural guidelines for historic district zoning in designated areas.	The City's Historic District Commission continues to review and permit various improvements in the districts. The City Council has expanded the jurisdiction of the HDC through ordinance to various historic properties
HP-12	Survey accurate locations of historic cemeteries using GPS and submit the coordinate data to the City's IT department in order to map the	Cemeteries have been identified on the City's GIS. Further surveying is warranted.

Table 3-1. Accomplishments from the 2010 Comprehensive Plan		
REF. NO (2010 Plan)	**Action**	**Explanation Of Accomplishments**
	cemeteries on GIS maps with plat and lot information.	
HP-15	Distribute information and guidance on preservation, based on the Secretary of Interiors Standards of Preservation, for public and private use.	The City's website has links to this information to aid the public.
Services and Facilities		
SF-1	Create a Pavement Maintenance Plan Program a regular series of improvements to the street system.	DPW has implemented a pavement maintenance program.
SF-2	Establish a signage program to replace signs, including a consistent design standard that defines the community and individual neighborhoods where the signs are erected.	DPW Traffic Safety Division has replaced signs as appropriate in various neighborhoods.
SF-3	Establish and maintain a Capital Sewer Fund.	DPW Sewer Division maintains a capital sewer account funded through user fees.
SF-4	Determine steps to resolve illegal connections to sewerage system.	DPW Sewer Division continually works to address illegal connections to the sewage system.
SF-5	Advance nutrient reduction for the wastewater treatment plant discharge to the Pawtuxet River: Set the goals to improve conditions and flows within the river.	DPW Sewer Division continues to address nutrient discharge at the treatment plant.
SF-9	Coordinate City Hall, High School, and School Administration building projects: Provide design and construction oversight for greater efficiency in use of existing space.	Ongoing
SF-10	Allow sewer and water tie-ins to the existing sewer and water lines in western Cranston where properties abut said lines.	This has since become a state mandate.
Open Space and Recreation		
OS-6	Acquire or improve public lands for pocket parks for all ages in Cranston's urban neighborhoods.	Itri Park in Knightsville was completed in 2023, the first new public space created in well over two decades.
OS-8	Continue to upgrade and expand recreational opportunities at existing sites to serve all segments of the population.	Ongoing. Reconstruction of the Budlong pool is intended to serve all segments of the population
OS-9	Ensure recreational facilities allow access to people of all ages and are American with Disabilities Act (ADA) compliant.	This policy is followed by the recreation and school departments.
OS-10	Continue to improve existing access to the waterfront by inventorying all points of public ownership and access.	Ongoing
OS-11	Transfer school recreation sites to the Recreation Department jurisdiction, as appropriate.	Ongoing and case by case basis
OS-13	Include controls within the subdivision regulations to protect and enhance water resources.	New subdivisions are subject to RIDEM RIPDES regulations to protect and enhance water resources.

Table 3-1. Accomplishments from the 2010 Comprehensive Plan		
REF. NO (2010 Plan)	**Action**	**Explanation Of Accomplishments**
OS-15	Adopt and encourage use of subdivision and zoning regulations that support conservation of open space in residential developments.	Cluster subdivision design is the preferred method of development to protect open space resources in all new subdivision proposals.
OS-17	Partner with local and regional non-profits to obtain and manage open space.	Ongoing
C-5	Identify potential east-west routes for through traffic.	Limited opportunities for new east-west routes for thru-traffic
C-6	Prioritize problems at intersections and investigate improvements.	Ongoing through the DPW / Traffic Safety Division
C-7	Establish a program of intersection improvements.	Ongoing through the DPW / Traffic Safety Division
C-14	Secure and preserve railroad rights-of-way for future transportation corridors.	Accomplished – Providence & Worcester Rail line has been reestablished for industrial purposes
C-23	Require provision of landscaping to delineate parking areas and provide buffers.	This has been incorporated into the City's Development Plan Review ordinances
C-24	Review and update parking standards in Zoning Ordinances.	Parking standards have been updated and incorporated into the City's Development Plan Review ordinances
C-26	Identify roadway improvements to eliminate safety and operational problems.	Ongoing through the DPW / Traffic Safety Division
C-27	Identify improvements to roadway links to safely accommodate increased traffic volume, especially existing deficiencies on Scituate Avenue (Route 12) and links to Route 37 corridor.	Ongoing through the DPW / Traffic Safety Division
C-31	Establish a program of improvements for specific roadway segments and intersections based on identified problems.	Ongoing through the DPW / Traffic Safety Division
C-32	Investigate appropriate improvements to eliminate safety and operational problems.	Ongoing through the DPW / Traffic Safety Division

3.4 Action Plan

This section represents the City's action plan moving forward. The action items outlined in the table below represent the effort of City staff, boards and commission, and public input to determine the actionable strategies the City will undertake to achieve the goals and policies set out in this plan.

3.4.1 Chapter 4: Natural Resources

Table 3-2. Natural Resources Action Plan
Goals, Policies, & Actions
Goals
Goal NR-1: Protect and enhance Cranston's natural environment and resources.
Goal NR-2: Establish a balance between natural resource protection and growth-related needs.
Goal NR-3: Protect and enhance the quality of Cranston's ground and surface water resources and supplies in order to meet, or where appropriate exceed, state and federal water quality standards.

Table 3-2. Natural Resources Action Plan			
Goals, Policies, & Actions			
Goal NR-4: Restore Brownfield sites back to productive and safe use.			
Goal NR-5: Require improved environmental design standards in new development.			
Policies			
Policy NR-1: Seek federal and state Brownfield program assistance to promote the redevelopment of industrial and commercial areas.			
Policy NR-2: Adopt a Transfer of Development Rights Program to better manage development in western Cranston.			
Policy NR-3: Target and preserve open spaces that have value as scenic, agricultural, recreational, wetland, water, and wildlife resources.			
Policy NR-4: Preserve and protect critical fish and wildlife habitat areas and areas containing rare and endangered species.			
Policy NR-5: Preserve and protect environmentally sensitive natural resource areas, including prime farmlands, steep slopes, floodplains, watersheds, aquifers, shorelines, and coastal and inland wetlands.			
Policy NR-6: Direct new growth away from environmentally- sensitive areas such as wetlands, steep slopes, and soils that have severe limitations for on-site waste water disposal.			
Policy NR-7: Establish Watershed Management Plans where necessary and in cooperation with adjacent communities.			
Policy NR-8: Create restoration plans for the banks of the Pocasset and Pawtuxet Rivers where they have been degraded by roadways and development.			
Policy NR-9: Protect and enhance water quality through informed land use policies, regulatory enforcement, and proper infrastructure maintenance and improvements.			
Policy NR-10: Require construction practices that minimize runoff, soil erosion, and sedimentation.			
Policy NR-11: Direct development to areas with the appropriate soil, slope and drainage conditions.			
Policy NR-12: In areas where no municipal sewer or water services are available, ensure that development is located on land that is capable of supporting on-site water and septic disposal systems.			
Policy NR-13: Ensure that land use activities within the Scituate Reservoir watershed does not contribute to the degradation of the reservoir.			
Policy NR-14: Promote environmentally sound wastewater management systems.			
Policy NR-15: Develop programs for the reduction of nonpoint source pollution affecting Cranston's streams, rivers and ponds, including storm water runoff and septic system failures.			
Policy NR-16: Catalogue known and suspected Brownfield sites, and identify the extent of threats to public health and safety.			
Policy NR-17: Work with federal and state agencies and private interests to achieve remediation and economically viable reuse of such sites that will support the costs of clean-up.			
Policy NR-18: Adopt a 'green' building program for all municipal construction.			
Policy NR-19: Upgrade environmental design standards in subdivision and site plan review regulations.			
Policy NR-20: Adopt standards, such as Low Impact Development techniques, that maintain and enhance watersheds to better manage stormwater and roads in new construction.			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
NR-1	Use local zoning and land use regulations to assess and mitigate development impacts on rare and endangered species.	S	**Planning Department** City Council Conservation Commission City Plan Commission RIDEM
NR-2	Promote a 'green' building program for all new construction - a LEED-type program to analyze energy efficiency and sustainability.	M	**Building and Zoning Dept.** City Council DPW City Plan Commission Planning Department
NR-3	Ensure that the State and Federal "brownfield" programs are identified as potential resources for redevelopment of industrial sites by continuing to work with state and federal agencies to	S	**Conservation Commission** City Council Economic Development Dept.

Table 3-2. Natural Resources Action Plan			
Goals, Policies, & Actions			
	complete the remediation activities at contaminated sites such as the former Ciba-Geigy plant.		EPA Planning Department City Plan Commission Public Works Department RIDEM
NR-5	Continue to implement the open space preservation strategy for Western Cranston by identifying high value agricultural sites and open space areas to be permanently preserved. Identify and implement strategies to protect the aforementioned property.	M	**Conservation Commission** City Council City Plan Commission Planning Department
NR-6	Amend the cluster development regulations to reflect conservation design standards (i.e. conservation subdivisions) and use programs that facilitate the preservation of significant areas of open space and environmentally sensitive areas. Require Conservation Subdivisions as the preferred form of land development.	S	**Planning Department** City Council City Plan Commission
NR-7	Adopt programs for improvement of the City's lakes and ponds based on the water quality data collected since the last Comprehensive Plan. Continue to support, and where possible further develop, the volunteer pond watching program for sampling of water quality.	M	**Conservation Commission** Public Works Department RIDEM University of Rhode Island
NR-8	Develop management programs for specific high-priority water bodies in order to improve water quality and foster increased recreational use.	M	**Conservation Commission** City Council City Plan Commission Planning Department Public Works Department
NR-9	Implement the watershed protection strategies recommended in the State's Scituate Reservoir Management Plan in order to ensure the future quality of this water supply,	M	**Conservation Commission** City Council City Plan Commission Planning Department Public Works Department
NR-10	Exclude the watershed area from future extension of utility services, except to service existing well contamination problems and septic system failures, after exhausting all other remedies.	M	**Conservation Commission** City Council City Plan Commission Planning Department Public Works Department
NR-11	Implement Best Management Practices (BMP's) for pesticides and fertilizers by working with local farms to implement the practices and work with local businesses to manage bulk storage and movement of the materials.	M	**Conservation Commission** Coop. Extension Service University of Rhode Island RIDEM
NR-12	Adopt an Underground Storage tank ordinance.	M	**Planning Department** City Council Conservation Commission Public Works Department
NR-13	Adopt standards, such as Low Impact Development techniques, to better manage stormwater from roadways in new construction.	M	**Planning Department** Conservation Commission City Plan Commission Public Works Department RIDEM
NR-14	Reduce impervious surfaces in new developments such as with porous pavements and reduced travel lane widths to reduce runoff.	M	**Planning Department** Conservation Commission City Plan Commission

Table 3-2. Natural Resources Action Plan			
Goals, Policies, & Actions			
			Public Works Department RIDEM
NR-15	Establish watershed management plans in accordance with RIDEM standards to address potential pollution and to comply with NPDES Phase II requirements. Seek non-point source mitigation funds from the state to assist.	M	**Conservation Commission** City Plan Commission Planning Department RIDEM

3.4.2 Chapter 5: Housing

Table 3-3. Housing Action Plan
Goals, Policies, & Actions
Goals
Goal H-1: Ensure that future residential development in western Cranston is consistent with the capacity of the area's natural resources and infrastructure, and preserves community character.
Goal H-2: Permit a variety of residential development types to achieve multiple community objectives.
Goal H-3: Achieve a balance between economic development and housing in the City.
Goal H-4: Promote housing opportunity for a wide range of household types and income levels.
Goal H-5: Conserve resources in new subdivisions.
Goal H-6: Enhance public education and outreach efforts on housing affordability.
Policies
Policy H-1: Maintain zoning densities that reflect planned municipal service levels and natural resource constraints.
Policy H-2: Maintain rural densities where desired regardless of availability of improvements to municipal infrastructure such as public water, sewer and roads.
Policy H-3: Enact flexible development standards that attain desired community objectives, but also provide a wide range of building types, uses, subdivisions, and site plans.
Policy H-4: Provide housing resources to support the range of jobs that reflects the City's economic base, and encourage the development of housing at levels that are consistent with household purchasing power.
Policy H-5: Maintain the stability of established neighborhoods in connection with continued economic development and revitalization: in particular, protect neighborhoods abutting the City's major commercial corridors from adverse impacts arising from incompatible uses. **Policy H-6:** Maintain a varied housing stock, with units of different age, size and type that are affordable to a wide range of incomes.
Policy H-7: Promote regulations that facilitate the development of affordable housing.
Policy H-8: Require that long-term affordability be a component of City-supported affordable housing development.
Policy H-9: Promote the development of new housing that is affordable to average first-time buyers living in the City.
Policy H-10: Promote the development of special housing alternatives for the elderly and handicapped.
Policy H-11: Reduce the burden of zoning and building regulations, to enable two- and three-family unit dwellings to be easily modified, maintained and improved within the existing neighborhoods.
Policy H-12: Encourage inclusion of affordable housing in projects that meet the Smart Growth goals of this Comprehensive Plan and the State Affordable Housing goals.
Policy H-13: Require conservation-type subdivisions on remaining undeveloped land to conserve natural resources, protect public resources, improve property values, and improve accessibility.
Policy H-14: Sponsor a citywide public education program on affordability, emerging trends, and housing affordability organized by the Housing Commission.
Policy H-15: Conserve housing resources, especially affordable housing units, to preserve the base housing stock as the costs of locating and constructing new housing units are significant.

Table 3-3. Housing Action Plan			
Goals, Policies, & Actions			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
H-1	Enact inclusionary zoning to increase affordable housing in most new subdivisions and development projects through incentives and bonuses.	M	City Council Planning Department City Plan Commission Housing Commission
H-2	Require a proportion of units as affordable housing (as defined by State regulations) in each new housing project over ten units in size.	M	City Council Planning Department City Plan Commission Housing Commission
H-3	Set a short-term, yearly goal of 30 new affordable housing units per year to produce 150 units during this next five-year period.	L	**Housing Commission** City Council Planning Department City Plan Commission
H-4	Encourage housing that is mixed into commercial projects.	M	**City Plan Commission** Planning Department City Council
H-5	Require conservation-type subdivisions that apply to remaining undeveloped land to conserve natural resources, protect public resources, improve property values, and improve accessibility.	S	**Planning Department** City Plan Commission Conservation Commission City Council
H-6	Enable existing nonconforming two and three-family unit dwellings to be modified, maintained and improved within the existing neighborhoods to reduce burden of zoning and building regulations.	M	**Planning Department** City Plan Commission Building and Zoning Dept. City Council
H-7	Review zoning in existing residential neighborhoods to ensure the zoning matches, as closely as possible, what has already been built. Revise in terms of dimensions and unit types, unless site constraints or specific needs determine otherwise	M	**Planning Department** City Council City Plan Commission Housing Commission
H-8	Create a Housing Trust Fund to generate revenue for local housing assistance program initiatives.	S	**Housing Commission** City Council City Plan Commission Planning Department
H-9	Ask the Housing Commission to organize a citywide public education program on affordability.	M	**Housing Commission** Community Dev. Office Mayor
H-10	Seek sponsorship for the Housing Commission by the administration.	M	**Mayor** City Council City Plan Commission Planning Department
H-11	Create a housing acquisition, rehabilitation, and resale program to purchase vacant and deteriorated structures, renovate them and offer them for resale to lower income families.	M	**Community Dev. Dept Office** Housing Inspections Housing Commission
H-12	Enact regulations that require that all development proposals, which envision relocation of lower income families, provide housing allowances and relocation payments equal to or greater than the levels required by the U.S. Housing and Urban Development agency.	M	City Council Community Dev. Office Planning Department City Plan Commission
H-13	Adopt an adaptive re-use ordinance to facilitate the creation of affordable housing.	M	City Council Community Dev. Office Housing Commission Planning Department

Table 3-3. Housing Action Plan			
Goals, Policies, & Actions			
			City Plan Commission
H-14	Partner with non-profit affordable housing organizations to create affordable housing.	O	**Housing Commission** **City Council** Community Dev. Office City Plan Commission Planning Department
H-15	Use the Comprehensive Housing Assistance Strategy as an opportunity to coordinate various City housing programs by recognizing the CHAS in the Comprehensive Plan.	S	**Housing Authority** Housing Commission Planning Department
H-16	Enact land use regulations, which encourage alternative group living arrangements, especially for elderly and handicapped.	S	**Planning Department** City Plan Commission City Council Community Dev. Office Housing Commission
H-17	Identify potential sites for redevelopment options for future residential use and mixed use.	M	**Community Dev. Office** City Plan Commission Planning Department City Council
H-18	Identify gaps in existing public and private financing programs for housing development, purchase and rental, and develop new mechanisms where necessary.	L	**Community Dev. Office** City Council Economic Development Dept. Housing Commission City Plan Commission Planning Department
H-19	Review zoning for existing residential neighborhoods to ensure the zoning matches, as closely as possible, the dimensions and unit types of what has already been built, unless site constraints or specific needs determine otherwise.	S	**Planning Department** City Plan Commission City Council
H-20	Use public resources to support and build new housing to meet the state affordability criteria. (See HG-6 from 2012 Comprehensive Plan)	L	**City Council** Housing Authority City Plan Commission Planning Department
H-21	Set attainable, short-term goals for new affordable housing units, including an annual goal of 30 new affordable housing units to produce 150 units over the next five-years. (See HG-8 and HP-8.1 from 2012 Comprehensive Plan)	S	**City Plan Commission** Planning Department City Council Housing Authority Housing Commission
H-22	Require inclusionary housing regulations that require affordable housing for new housing projects. (See HG-9 and HP-9.2 from 2012 Comprehensive Plan)	S	**Planning Department** City Council City Plan Commission

3.4.3 Chapter 6: Economic Development

Table 3-4. Economic Development Action Plan
Goals, Policies, & Actions
Goals
Goal ED-1: Maintain and increase the quality of job opportunities – in terms of wages, skill requirements, and working conditions – available to Cranston residents.
Goal ED-2: Attract capital into the Cranston area and expand the City's economic base.

Table 3-4. Economic Development Action Plan
Goals, Policies, & Actions
Goal ED-3: The City shall have an efficient and predictable development process throughout all departments of the City.
Policies
Policy ED-1: Maintain, enhance, and encourage diversification of the City's present manufacturing base.
Policy ED-2: Encourage tax policies that facilitate business growth.
Policy ED-3: Encourage the creation and growth of startup and early-stage business.
Policy ED-4: Provide assistance to socially and environmentally responsible enterprises, especially those that hire locally.
Policy ED-5: Provide technical, financial and regulatory assistance to job-creating enterprises to supplement and leverage resources for lenders and investors.
Policy ED-6: Encourage the location and expansion of businesses with wide regional, national or international markets.
Policy ED-7: Encourage existing businesses to develop export and/or Internet-based markets.
Policy ED-8: Maintain and enhance the growth of a diverse array of small, growth-oriented, value-adding business concerns.
Policy ED-9: Strengthen the standards for industrially zoned land to prevent the erosion of the City's supply of land suitable for these purposes.
Policy ED-10: Continue the City's active role in seeking the redevelopment of major industrial and institutional sites for economic development.
Policy ED-11: Target high-end business growth in professional, service-oriented businesses to create a market for office space.
Policy ED-12: Promote large-scale, smart growth redevelopment opportunities at strategic locations to accommodate mixed-use, transit- oriented development. Properties along I-95 in the Wellington/Elmwood industrial area offer the best opportunities.
Policy ED-13: Encourage redevelopment opportunities at locations near Garden City Center, Rolfe Square, Knightsville, and along Interstate 295.
Policy ED-14: Promote the development or redevelopment of neighborhood commercial centers to service local market areas to reduce cross- town traffic. New neighborhood village center developments should be focused at Phenix Avenue and Natick Avenue, and Scituate Avenue and Pippin Orchard Road. Redevelopment of neighborhood centers should continue to occur at Pawtuxet Village, Knightsville, and Rolfe Square.
Policy ED-15: Work with regulatory staff to proactively inform and assist developers in regulatory and approval processes and otherwise improve relations with developers, businesses, and property owners.
Policy ED-16: Continue providing hands-on assistance to businesses with financing, permitting, and other needs.
Policy ED-17: Promote job training and growth in professional, service-oriented businesses.
Policy ED-18: Consider the establishment of a marketing program, associated with the local and regional chambers of commerce, with participation of city funds and staff.
Policy ED-19: Create programs to match job seekers and businesses in cooperation with educational institutions in the area: URI, RIC, Johnson & Wales and other area colleges.
Policy ED-20: Promote leisure and/or entertainment-related businesses to compliment the Park Theater redevelopment in Rolfe Square.
Policy ED-21: Preserve and increase employment opportunities for Cranston residents.
Policy ED-22: Add to the City's taxable property base by constructing industrial and commercial structures which are properly designed and sited in keeping with environmental, planning and design considerations.
Policy ED-23: Revitalize underused areas of the City for uses that are in keeping with the needs and values of the community.
Policy ED-24: Ensure that new and expanded commercial development along major arterials exhibits a high standard of design quality and is compatible with existing roadway functions and adjacent residential neighborhoods.
Policy ED-25: Target development sites for Smart Growth projects
Policy ED-26: Improve and build neighborhood commercial areas at various sites through formulating and implementing revitalization projects.
Policy ED-27: Provide job training for new or relocated workers and match jobs and workers.
Policy ED-28: Target sites for industrial and commercial projects.

Table 3-4. Economic Development Action Plan			
Goals, Policies, & Actions			
Policy ED-29: Encourage new retailers to utilize existing sites, including the former Trolley Barn and Route 2 Corridor, to gain entry into the market.			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
ED-1	Establish a marketing program through coordination with RIEDC, local and regional chambers of commerce, municipal staff, and City funds.	M	**Economic Development Dept.**
ED-2	Create programs through institutions to match job seekers and businesses and seeking cooperation with educational institutions in the area; URI, RIC, CCRI, Johnson & Wales and other area colleges.	L	**Economic Development Dept.**
ED-3	Adopt a competitive ranking system for Revolving Loan Fund, provide other City assistance and encourage diversification in the local economy.	M	**Economic Development Dept.**
ED-4	Identify growth industries with national markets that complement Cranston's existing economic base	L	**Economic Development Dept.**
ED-5	Promote the location of specific businesses in the City through a targeted marketing effort.	L	**Economic Development Dept.**
ED-6	Continue funding and providing training programs for on-job readiness skills, English-language proficiency, and other programs that directly address perceived inadequacies of the available workforce in the area, primarily focusing on developing job sectors.	L	**Economic Development Dept.**
ED-7	Promote the development of an office/commercial incubator and provide spaces and services to startup and early- stage businesses.	L	**Economic Development Dept.**
ED-8	Develop a structured, publicized entrepreneurial assistance program in cooperation with other public and private entities, which provide entrepreneurs with networking opportunities and practical education in business management.	L	**Economic Development Dept.**
ED-9	Co-sponsor export seminars and trade missions for Cranston manufacturers and other prospective exporters by targeting sectors associated with the U.S. Department of Commerce, the State Economic Development Department, freight forwarders and customs brokers, and the City and Port of Providence.	M	**Economic Development Dept.** City Council City Administration City Mayor
ED-10	Identify Cranston-based manufacturers of such goods and alert them to sales opportunities.	L	**Economic Development Dept.**
ED-11	Maintain and regularly update a database of information on industrial space for lease, especially those suitable for start-up industries.	M	**Economic Development Dept.**
ED-12	Continue providing hands-on assistance to growing businesses with financing, permitting, and other needs.	S	**Economic Development Dept.**
ED-13	Target large-scale, smart growth redevelopment opportunities at strategic locations to accommodate mixed-use, transit-oriented development, including properties along I-95, such as the Wellington/Elmwood industrial area.	M	**Economic Development Dept.** Planning Department
ED-14	Target medium-scale, smart growth redevelopment opportunities. Consider additional locations near: Garden City Center, Rolfe Square, Knightsville, and areas along I-95 and I-295.	M	**Economic Development Dept.** Planning Department
ED-15	Target high-end business growth in professional, service-oriented businesses, and the markets for office space.	M	**Economic Development Dept.** Planning Department

Table 3-4. Economic Development Action Plan			
Goals, Policies, & Actions			
ED-16	Target leisure and/or entertainment-related businesses, particularly near the Park Theater in Rolfe Square as well as in the emerging retail destination around the Garden City Center.	M	**Economic Development Dept.** Planning Department
ED-17	Review sewer line extension and roadway acceptance policies that promote the type of development planned for western Cranston.	S	**Planning Department** City Plan Commission City Council
ED-18	Target improvement of neighborhood commercial centers to service their market area and to reduce congestion for cross-town traffic.	M	**Planning Department**
ED-19	Develop design guidelines for public properties, including signage, street furniture, landscaping, public parking areas, bicycle ways, and sidewalks.	M	**Planning Department** City Plan Commission
ED-20	Develop design guidelines for site development adjacent to transit.	M	**Planning Department** Economic Development Dept. City Plan Commission
ED-21	Encourage the Town of Johnston to rezone property on the north side of Plainfield Pike for industrial uses.	S	**Mayor** City Council
ED-22	Keep planning officials in Town of Johnston informed of changes in zoning requirements and encourage them to adopt similar changes.	S	**Planning Department** City Plan Commission City Council Mayor
ED-23	Adjust zoning map boundaries of commercial districts along major arterials, and refine use regulations applicable to such districts, to provide for adequate commercial services while minimizing impacts on adjoining residential neighborhoods.	S	City Council Mayor City Plan Commission Planning Department
ED-24	Distinguish between each commercial center by developing design guidelines for public properties which include signage, furniture, landscaping, public parking areas, bicycle ways and sidewalks.	M	City Council City Plan Commission Planning Department
ED-25	Develop design guidelines for site development which address different neighborhood conditions and smart growth goals. Distinguish between each type of commercial area: major commercial center, village center, highway or arterial commercial, and development adjacent to transit.	M	City Council City Plan Commission Planning Department

3.4.4 Chapter 7: Historic and Cultural Resources

Table 3-5. Historic and Cultural Resources Action Plan
Goals, Policies, & Actions
Goals
Goal HCR-1: Integrate historic preservation planning concerns with other areas of municipal planning and decision-making.
Goal HCR-2: Promote development policies which are sensitive to preservation concerns and goals.
Goal HCR-3: Survey, inventory, and designate local historic preservation districts.
Goal HCR-4: Expand historic preservation planning and development policies.
Goal HCR-5: Promote education and public awareness of historic preservation opportunities.
Policies
Policy HCR-1: Develop new city ordinances and programs to preserve individual historic properties.
Policy HCR-2: Designate the Pawtuxet Village as a Local Historic District.
Policy HCR-3: Designate the Edgewood Historic District as a Local Historic District.
Policy HCR-4: Designate the Norwood Avenue Historic District as a Local Historic District.

Table 3-5. Historic and Cultural Resources Action Plan

Goals, Policies, & Actions

Policy HCR-5: Designate the Fenner House as a Local Historic District.

Policy HP-6: Designate the Sprague Mansion as a Local Historic District.

Policy HCR-7: Explore the potential for promoting tourism geared to historic resources in the City.

Policy HCR-8: The Cranston Historic District Commission should target specific areas such as Pawtuxet Village to educate the neighborhood about the benefits of a local historic district designation.

Policy HCR-9: Educate public officials and City residents of the importance of preserving historic building and places.

Policy HCR-10: Distribute information and guidance on preservation for public and private use, based on the Secretary of Interiors Standards of Preservation.

REF. NO	ACTION	TIMEFRAME	RESPONSIBLE PARTY(IES)
HCR-1	Nominate eligible individual properties and districts to the National Register of Historic Places and the State Register.	M	**Historic Commission** Planning Department
HCR-2	Continue to establish local historic overlay districts for areas and begin designation of individual structures, including making Pawtuxet Village Historic District, Edgewood/Taft Estate Historic District, Norwood Avenue Historic District, and Rolfe Street Commercial District into local historic districts.	M	**Planning Department** City Council Historic Commission City Plan Commission
HCR-3	Continue to identify and implement appropriate economic incentive programs to encourage historic preservation and rehabilitation.	M	**Historic Commission** City Council City Plan Commission Planning Department
HCR-4	Continue to include archeological review of development projects according to the state database.	L	**Planning Department** Historic Commission City Plan Commission
HCR-5	Continue to update and expand the survey of the historic properties on a citywide basis.	L	**Historic Commission** Planning Department
HCR-6	Continue to work with private property owners to encourage preservation of known archeological and historic sites on their land.	L	**Historic Commission** Planning Department City Council
HCR-7	Continue the role of the Historic Commission as the principle City agency for historic preservation.	L	**City Council** Historic Commission
HCR-8	Create a task force to look at the options and demands of tourism focused on the historic resources of the City.	M	**Economic Development Dept.** Historic Commission Planning Department
HCR-9	Establish study committee(s) for identified threatened historic properties to include representation from district and property when possible.	M	**City Council** Historic Commission Planning Department
HCR-10	Enact a demolition ordinance imposing a waiting period before demolition of historic buildings in order to provide an opportunity to consider alternatives to demolition.	M	**Planning Department** City Council Historic Commission City Plan Commission
HCR-11	The Historic Commission should target specific areas such as Pawtuxet Village to educate the neighborhood about the benefits of a Local Historic District designation.	S	**Historic Commission** Planning Department
HCR-12	Assist residents and city administration to understand and appreciate the importance of preserving historic buildings and places.	M	Historic Commission Planning Department
HCR-13	Protect and preserve properties of historic and architectural significance, as well as known and suspected archeological sites, cemeteries, engineering structures and city-owned properties.	S	**Historic Commission** City Plan Commission Planning Department

Table 3-5. Historic and Cultural Resources Action Plan			
Goals, Policies, & Actions			
HCR-14	Provide additional, formal mechanisms for the Historic District Commission to review and comment on development projects and work with property owners.	S	**Planning Department** Historic Commission City Plan Commission City Council

3.4.5 Chapter 8: Services and Facilities

Table 3-6, Services and Facilities Action Plan
Goals, Policies, & Actions
Goals
Goal SF-1: Upgrade the treatment capacity and technology of the existing Wastewater Treatment system to improve water quality in the Pawtuxet River.
Goal SF-2: Expand municipal sewerage to areas where service is essential for existing and planned development, while at the same time protecting the system from excessive demands.
Goal SF-3: Ensure an adequate supply of clean drinking water for all residents of the City.
Goal SF-4: Preserve a high-quality educational system, with adequate facilities to meet future needs.
Goal SF-5: Continue to provide quality safety services (police, fire, rescue, emergency response).
Goal SF-6: Continue to provide quality services and programs to meet the needs of Cranston's elderly population.
Goal SF-7: Maintain the existing high standards of public library facilities and services.
Goal SF-8: Provide sufficient facilities to meet the needs of the City's staff to continue to offer quality municipal services to the residents of Cranston.
Goal SF-9: Ensure environmentally appropriate and cost-effective solid waste management solutions.
Goal SF-10: Water and sewer service policies in Western Cranston should support conservation in addition to promoting human health and safety. Maintain restrictions against development that would impact valuable natural resources.
Goal SF-11: As a part of ongoing capital programs formulate and implement various improvement programs throughout the City.
Goal SF-12: Address administrative and management issues related to the process of making physical improvements.
Goal SF-13: Examine issues requiring further studies and provide allowance for required actions.
Policies
Policy SF-1: Continue to monitor plans for expansion of the Scituate Reservoir service area, to ensure that discharges from the Reservoir to the Pawtuxet River are maintained at the levels needed.
Policy SF-2: Ensure that sewer pumping stations (capacity and operation) are sufficient for their service areas and meet contemporary environmental standards.
Policy SF-3: Enact regulations to prevent secondary growth impacts from sewer trunk line extensions and to support land use policies of conservation development and open space preservation.
Policy SF-4: Discourage sewer extensions to areas where development can be adequately served by on- site wastewater treatment, in order to avoid undesirable secondary land-use impacts.
Policy SF-5: Promote land development practices which will protect the Scituate Reservoir from degradation.
Policy SF-6: Promote efficient use of the services and facilities provided by the City's public school system.
Policy SF-7: Where feasible and appropriate, design new or rehabilitated school facilities to incorporate multiple community uses, such as public recreational facilities, branch libraries, and other municipal services and facilities.
Policy SF-8: Maintain adequate service standards for police officers in order to maintain service ratios in proportion to population growth.
Policy SF-9: Implement changes to the Fire Department as changes in fire facilities occur.
Policy SF-10 Use sewer and water line connections in western Cranston to promote open space and agricultural preservation by limiting said connections only for the creation of conservation subdivision development when it is determined that on-site wells and wastewater disposal systems would not be feasible. Use connections to water and sewer lines to reduce lot sizes within conservation subdivisions.

Table 3-6, Services and Facilities Action Plan			
Goals, Policies, & Actions			
Policy SF-11: Continually monitor elderly service needs reflecting changes in elderly demographics, particularly in the oldest age categories; and provide programs and services to meet those needs.			
Policy SF-12: Maintain existing high standards of library capital facilities and holdings, in relation to changes in population.			
Policy SF-13: Provide new and expanded branch library facilities as needed to serve the needs to Cranston.			
Policy SF-14: Identify priority areas for program expansion and implement special services for teenagers and the homebound, and improve Internet access.			
Policy SF-15: Undertake an overall evaluation of the City's needs for space, in view of new state/federal records management and retention responsibilities and in response to service needs.			
Policy SF-16: Provide regular training programs to maintain City staff proficiency.			
Policy SF-17: Work with neighboring municipalities and the State of Rhode Island to pursue alternative approaches to solid waste management.			
Policy SF-18: Bolster recycling efforts to reduce total solid waste disposal costs.			
Policy SF-19: Use sewer and water line connections in western Cranston to promote open space and agricultural preservation.			
Policy SF-20: Continue to use septic and well systems and low-density zoning to protect surface and ground waters, and public health in western Cranston where utilities do not exist.			
Policy SF-21: Evaluate the need for a new municipal fire station in the southwestern part of the City.			
Policy SF-22: Create a Pavement Maintenance Plan that programs a regular series of improvements to the street system.			
Policy SF-23: Adopt energy conservation standards as a long-term means of lowering energy costs for the City.			
Policy SF-24: Continue the municipal signage program to replace signs, under consistent design standards.			
Policy SF-25: Adopt water conservation measures for residential and industrial users to discourage waste and encourage efficient use of the Scituate Reservoir water supply.			
Policy SF-26: Establish and maintain a Facilities Maintenance Fund for roadway pavement repairs and upgrades, sidewalks, street trees, signs, snow plowing and energy efficiency in public buildings.			
Policy SF-27: Determine steps to resolve illegal connections to sewerage system.			
Policy SF-28: Develop criteria for priority ranking of capital facilities as part of the City's Capital Improvement Program.			
Policy SF-29: Expand after school recreation programs.			
Policy SF-30: Assess the need for improvements in buildings on an as-needed basis and identify sites for new public amenities.			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
SF-1	Adopt energy conservation standards for City facilities by establishing a long-term program to reduce energy costs for the City.	S	**Public Works Department** Building Maintenance City Council
SF-2	Continue to evaluate the need for a new municipal fire station in the southwestern part of the City in accordance with the growth of Western Cranston.	S	**Fire Department** Planning Department City Council
SF-3	Develop criteria for priority ranking of capital facilities as part of the City's Capital Improvement Program.	L	**Planning Department** City Council City Plan Commission Public Works Department
SF-4	Establish and maintain a Facilities Maintenance Fund with funds, specifically for roadway pavement repairs and upgrades, sidewalks, street trees, signs, snow plowing, and energy efficiency in public buildings.	S	**City Council** Planning Department Public Works Department
SF-5	Continue to identify existing facilities to be used for records storage and, if no such space is available, construct additional vault space to meet records storage requirements.	M	**City Clerk** Public Works Department
SF-6	Continue to seek consolidation of municipal offices and services in the vicinity of City Hall and provide room for future expansion.	M	**Mayor** City Council
SF-7	Establish a program to reevaluate the fiscal impact fees on a	S	**Building Inspector**

Table 3-6, Services and Facilities Action Plan			
Goals, Policies, & Actions			
	regular basis.		City Council City Plan Commission Planning Department
SF-8	Adopt water conservation measures for residential and industrial users to discourage waste and encourage efficient use of the Scituate Reservoir water supply.	L	**City Council** Conservation Commission City Plan Commission Planning Department
SF-9	Work with the Providence Water Supply Board and the Kent County Water Authority to promote water conservation and to take appropriate actions during periods of drought.	L	**Conservation Commission** Planning Department Public Works Department
SF-10	Achieve, through the recycling program, a 50 percent reduction in volume of the disposable solid waste stream to reduce the overall cost of solid waste disposal.	L	**Public Works Department**
SF-11	Continue municipal curbside collection of residential solid waste and require commercial and industrial solid waste to be handled privately.	L	**Public Works Department** City Council
SF-12	Continue to enforce no bin no pickup policy.	L	**Public Works Department** City Council
SF-13	Review the sewer line extension and roadway acceptance policies to ensure that they promote the type of development planned for western Cranston.	M	**Planning Department** City Plan Commission Public Works Department

3.4.6 Chapter 9: Energy

Table 3-7. Energy Action Plan
Goals, Policies, & Actions
Goals
Goal E-1: Transition to Clean and Renewable Energy
Goal E-2: Enhance Energy Efficiency and Sustainability
Goal E-3: Foster Energy Resilience and Innovation
Goal E-4: Ensure Equitable Energy Access and Affordability
Goal E-5: Promote Energy-Conscious Urban Planning and Development
Policies
Policy E-1: Establish a Renewable Energy Target for municipal operations and community-wide energy use
Policy E-2: Develop and implement a comprehensive Energy Efficiency Program for municipal buildings and facilities
Policy E-3: Create incentives for residential and commercial energy efficiency upgrades
Policy E-4: Implement Green Building Standards for new construction and major renovations
Policy E-5: Develop an Energy Storage Incentive Program to support grid resilience
Policy E-6: Promote Sustainable Transportation through electric vehicle infrastructure and alternative transportation modes
Policy E-7: Develop a Microgrid Strategy to enhance energy resilience in critical areas
Policy E-8: Establish a Clean Energy Innovation Hub to foster local clean energy businesses and jobs
Policy E-9: Implement a Community Solar Program to increase access to renewable energy
Policy E-10: Create an Energy Assistance Program for low-income residents
Policy E-11: Integrate energy considerations into land use planning and zoning regulations
Policy E-12: Develop energy-efficient street lighting programs
Policy E-13: Promote energy education and awareness programs in schools and community centers

Table 3-7. Energy Action Plan			
Goals, Policies, & Actions			
Policy E-14: Establish partnerships with local utilities for energy efficiency and renewable energy programs			
Policy E-15: Develop a climate action plan that addresses energy use and greenhouse gas emissions			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
E-1	Set a specific percentage of renewable energy in the city's energy mix by a target year (e.g., 100% by 2033)	S	**City Council** Planning Department
E-2	Develop a roadmap for achieving the renewable energy target, including milestones and progress tracking	M	**Planning Department** Energy Task Force
E-3	Collaborate with utility companies to increase renewable energy procurement	O	**Mayor's Office** Utility Companies
E-4	Adopt stricter energy efficiency standards for new construction and major renovations	M	**City Council** Building Department Planning Department
E-5	Offer incentives for energy-efficient retrofits in existing buildings	S	**Community Dev. Office** Building Department Finance Department
E-6	Implement a building energy benchmarking and disclosure program	M	**Building Department** Planning Department
E-7	Offer tax incentives or rebates for residential and commercial energy storage installations	S	**City Council** Finance Department
E-8	Partner with utility companies to develop grid-scale storage projects	M	**Mayor's Office** Utility Companies Planning Department
E-9	Integrate storage requirements into renewable energy projects	L	**Planning Department** Building Department
E-10	Install public EV charging stations throughout the city	M	**Public Works Department** Planning Department
E-11	Offer incentives for residential and commercial EV charger installations	S	**Community Dev. Office** Finance Department
E-12	Transition municipal fleet vehicles to electric or hybrid models	L	**Public Works Department** Finance Department Mayor's Office
E-13	Identify critical facilities for potential microgrid implementation	S	**Emergency Management** Planning Department
E-14	Conduct feasibility studies for community microgrids	M	**Planning Department** Energy Task Force
E-15	Collaborate with utility companies to integrate microgrids into the broader grid system	L	**Mayor's Office** Utility Companies Planning Department
E-17	Develop workforce training programs for renewable energy and energy efficiency jobs	M	**Economic Dev. Office** Community Dev. Office Local Colleges
E-18	Offer grants or tax incentives for clean energy startups	S	**Economic Dev. Office** Finance Department City Council
E-19	Develop community solar projects accessible to low-income residents	M	**Community Dev. Office** Planning Department
E-20	Create an energy assistance program for vulnerable populations	S	**Community Dev. Office** Social Services Dept.

Table 3-7. Energy Action Plan			
Goals, Policies, & Actions			
E-21	Ensure equitable distribution of energy efficiency and renewable energy programs	O	**Community Dev. Office** Planning Department

3.4.7 Chapter 10: Open Space and Recreation

Table 3-8. Open Space and Recreation Action Plan
Goals, Policies, & Actions
Goals
Goal OS-1: Target specific properties for capital improvements, especially properties to acquire, or otherwise control, along the Historic Scenic Farm Loop and the rivers to create continuous greenways and waterways.
Goal OS-2: Improve existing facilities and expand active recreation facilities to serve current and projected needs.
Goal OS-3: Undertake administrative and management actions that support recreation and open space programs through partnerships.
Goal OS-4: Maintain the quality of the City's open space and recreation areas while minimizing the tax burden for the costs of maintenance.
Goal OS-5: Examine issues requiring further studies and provide allowance for the required actions.
Policies
Policy OS-1: Acquire lands along the rivers to ensure access to and protection of these natural resources.
Policy OS-2: Develop programs that will enhance the Farm Loop and promote it on a regional basis.
Policy OS-3: Designate new and expand protection of scenic roads in western Cranston.
Policy OS-4: Continue to upgrade and expand recreational opportunities at existing sites to serve all segments of the population.
Policy OS-5: Improve existing public access to the ponds, lakefronts, riverfronts and Narragansett Bay.
Policy OS-6: Ensure that recreational facilities allow access to people of all ages and are Americans with Disabilities Act (ADA) compliant.
Policy OS-7: Acquire or improve public lands for pocket parks with recreational facilities for all ages, in Cranston's urban neighborhoods.
Policy OS-8: Preserve, through purchase or other means, major open space areas which are subject to development pressures and which serve important environmental functions.
Policy OS-9: Ensure that parcels dedicated to the City or offered in lieu of impact fees for recreation use, in conjunction with subdivision activity, are linked to maximize their utility.
Policy OS-10: Develop standards which can be employed to evaluate the adequacy of recreational facilities and open space areas that are available and whether such facilities and areas meet the range of needs of Cranston's different population groups.
Policy OS-11: Expand the availability of passive recreation at various sites throughout the City. Effort should be made to create passive recreation programs which are coordinated with the Department of Senior Services and specifically designed for Cranston's growing elderly population.
Policy OS-12: Expand recreation programs and facilities to address unmet or growing needs, including facilities for walking and bicycling.
Policy OS-13: Adopt a River Corridor Overlay District that creates linear buffers and public access points along the major rivers.
Policy OS-14: Promote appropriate conservation, stewardship and recreation facilities at State- owned properties at Meshanticut Lake and Curran State Park.
Policy OS-15: Continue to partner with local and regional non-profits for obtaining and managing open space.
Policy OS-16: Adopt and encourage use of zoning regulations that support conservation of open space in residential development.
Policy OS-17: Consider imposing fees for the use of certain facilities. Such fees could be in the form of use costs or concession licensing.

Table 3-8. Open Space and Recreation Action Plan			
Goals, Policies, & Actions			
Policy OS-18: Investigate improving water quality in and access to Cranston ponds to increase recreational and natural resource value.			
Policy OS-19: Examine the potential of tourism to support local open space and recreational facilities and programs, similar to the 'Farm Loop.'			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
OS-1	Continue to acquire key potential open space parcels. Potential parcels are identified in the Open Space and Recreation Plan. Acquisition should be reserved for important parcels that cannot be protected by other means, including land along inland and coastal water bodies and waterways to ensure access to and protection of these natural resources, land which has scenic beauty or vistas, land within the Scituate Reservoir watershed, land which is important from a historical or cultural standpoint, land which create or expands connection for open space corridors, land for City parks and recreation, and land which is environmentally sensitive (i.e. wetlands).	S	City Council Conservation Commission Pawtuxet River Authority City Plan Commission Planning Department Recreation Department West Bay Land Trust
OS-2	Develop programs to enhance the Historic Scenic Farm Loop, and promote it on a regional basis.	L	Conservation Commission Planning Department Recreation Department West Bay Land Trust
OS-3	Identify other scenic routes that are similar to the HSFR.	L	Conservation Commission Planning Department
OS-4	Improve existing public access to the waterfront.	M	Pawtuxet River Authority Planning Department Recreation Department
OS-5	Expand greenways and watercourses that link with other recreational resources.	M	Pawtuxet River Authority Planning Department Recreation Department
OS-6	Employ a variety of tools to preserve environmentally sensitive land and open space as well as improve public recreation tools, including fee simple acquisition, conservation easements, purchase of development rights, tax incentive programs, and land donations.	L	City Council Conservation Commission City Plan Commission Planning Department Recreation Department
OS-7	Continue to improve existing access to the waterfront by improving access to riverfronts and to Narragansett Bay.	S	City Council Conservation Commission City Plan Commission Planning Department Recreation Department
OS-8	Continue to promote acquisition and management of open space through partnerships with local and regional non- profit agencies such as the West Bay Land Trust.	M	City Council Conservation Commission Land Trusts City Plan Commission Planning Department
OS-9	Protecting and improving the urbanized river corridors.	M	City Council Conservation Commission City Plan Commission Planning Department Recreation Department
OS-10	Continue to invest in the Cranston Bicycle Network to expand and improve its functionality and quality and consider	S	**City Council** Conservation Commission

Table 3-8. Open Space and Recreation Action Plan			
Goals, Policies, & Actions			
	establishing an East/West Bike Path utilizing the Providence Water Supply Board's aquifer right-of-way.		City Plan Commission Planning Department Recreation Department RIDOT Providence Water Supply Board
OS-11	After School Recreation Programs: Coordinate actions between the YMCA, Recreation Department, and School Department to provide expanded after school programs to meet growing needs.	S	**School Department** PTO Recreation Department YMCA
OS-12	Designate and protect scenic roads by establishing standards for their protection.	L	**City Plan Commission** Conservation Commission Planning Department West Bay Land Trust
OS-13	Provide adequate funding for maintenance and improvements of City recreation facilities and sites to explore user fees and other revenue generating measures and encourage the common user groups to participate in the field maintenance.	L	**City Council** Recreation Department
OS-14	Continue to seek State improvements at State-owned recreation facilities and sites.	L	**Planning Department** Recreation Department RIDEM City Council
OS-15	Investigate improving access to and water quality in Cranston ponds to increase recreational and natural resource value.	L	**Conservation Commission** Planning Department Recreation Department RIDEM
OS-16	Reestablish Community Garden Programs in both eastern and western Cranston where appropriate.	L	**Conservation Commission** Planning Department RIDEM

3.4.8 Chapter 11: Transportation

Table 3-9. Transportation Action Plan
Goals, Policies, & Actions
Goals
Goal TC-1: Improve and maintain an efficient flow of traffic, particularly in commercial centers and along major arterials.
Goal TC-2: Correct existing deficiencies in order to improve safety and reduce congestion throughout the City.
Goal TC-3: Provide sufficient off-street parking to serve the needs of businesses and residents.
Goal TC-4: Improve traffic flow along major roadways.
Goal TC-5: Continue traffic calming on residential streets to increase safety.
Goal TC-6: Address traffic congestion on the east-west arterials through improving traffic operations.
Goal TC-7: Plan for and enhance alternative transportation modes.
Goal TC-8: Examine the roadway network for western Cranston and propose specific actions for improving its functional efficiency.
Goal TC-9: Further develop bike paths to create a cross-city bicycle corridor.
Goal TC-10: Promote alternative modes of transportation to connect various parts of the community together.
Policies

Table 3-9. Transportation Action Plan
Goals, Policies, & Actions
Policy TC-1: Maintain the functional integrity of existing and planned roadways through appropriate land use and design standards.
Policy TC-2: Require interconnection of residential neighborhoods, in order to disperse traffic and provide alternate emergency access routes.
Policy TC-3: Provide adequate capacity on street networks in western Cranston to serve existing and projected development.
Policy TC-4: Review, and, where necessary, update off- street parking standards in the Zoning Ordinance to ensure that adequate parking facilities are provided for employees, customers, clients and residents.
Policy TC-5: Consider adopting landscaping standards to protect adjacent residential neighborhoods from adverse impacts from commercial parking areas, and to provide adequate differentiation between parking areas and roadways.
Policy TC-6: Address inadequacy and overspill of parking and increase the number of off-street parking spaces along commercial streets, such as Park Avenue.
Policy TC-7: Encourage off-street parking at existing developments.
Policy TC-8: Encourage shared parking where appropriate.
Policy TC-9: Require the provision of landscaping to delineate parking areas and provide buffers.
Policy TC-10: Restrict on-street parking where feasible to facilitate turning movements and traffic flow.
Policy TC-11: Reduce and consolidate the number of curb cuts.
Policy TC-12: Restrict access to new development from major arterials.
Policy TC-13: Regulate curb cuts through design standards.
Policy TC-14: Provide left-turn lanes, where feasible, on arterial roadways where curb cuts to new development are unavoidable.
Policy TC-15: Encourage collector driveways to limit the number of access points.
Policy TC-16: Reduce speeding and cut-through traffic and accidents.
Policy TC-17: Prioritize locations with accident problems and continue the program of remedial measures.
Policy TC-18: Give priority to pedestrian safety improvements at key locations.
Policy TC-19: Conduct analysis of local street sign controls in conjunction with east/west access studies.
Policy TC-20: Consider peak period restrictions on particular short-cut routes.
Policy TC-21: Investigate proposals to improve safety and the flow of traffic on arterials.
Policy TC-22: Reduce or eliminate on-street parking on arterial roadways where appropriate to improve roadway capacity.
Policy TC-23: Enforce on-street parking restrictions.
Policy TC-24: Provide left turn lanes to reduce conflicts at intersections.
Policy TC-25: Identify and designate east-west routes for through traffic.
Policy TC-26: Prioritize problems at intersections and investigate improvements.
Policy TC-27: Continue the program for intersection improvements.
Policy TC-28: Pursue options for a commuter rail or light rail station and supporting Transit Oriented Development (TOD)in the Elmwood/Wellington Avenues area.
Policy TC-29: Promote and support fixed-route bus services.
Policy TC-30: Make information on public transportation widely available.
Policy TC-31 Secure and preserve railroad rights-of-way for future transportation corridors.
Policy TC-32: Incorporate bicycle access in planning major developments.
Policy TC-33: Support and enhance public transportation and paratransit services.
Policy TC-34: Investigate appropriate improvements to eliminate problems of safety and operations.
Policy TC-35: Investigate improvements to roadway segments to support projected development.
Policy TC-36: Undertake detailed study and program of improvements for Pippin Orchard Road / Hope Road / Phenix Avenue / Wilbur Avenue / Natick Avenue corridor.

Table 3-9. Transportation Action Plan

Goals, Policies, & Actions			
Policy TC-37: Plan access to new development to limit access points to collector and arterial roadways. Restrict local streets connections to collector roads where possible.			
Policy TC-38: Establish a program of improvements to specific roadway segments and intersections based on identified problems.			
Policy TC-38: Pursue opportunities to develop additional and connected bicycle paths along public rights-of- way should be investigated, particularly the Pontiac Secondary, the Elmwood Spur and the Providence Water Supply Board viaduct.			
Policy TC-39: Pursue opportunities to develop additional and connected bicycle paths among private properties with connections to public rights-of-way should be investigated.			
Policy TC-40: Create greenway, bicycle, and pedestrian links that make connections between the City's historic sites, public buildings, open space, and natural resources.			
Policy TC-41: Continue to invest in the City's Bicycle Network to expand and improve its functionality and quality.			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
TC-1	Investigate proposals to improve safety and the flow of traffic on arterials.	M	**Public Works Department**
TC-2	Reduce or eliminate on-street parking on arterial roadways to improve roadway capacity.	M	Public Works Department
TC-3	Enforce on-street parking restrictions.	S	Police Department
TC-4	Provide left turn lanes to reduce conflicts at intersections.	L	Public Works Department
TC-5	Identify high accident locations and establish program of remedial measures.	S	**Police Department** Public Works Department
TC-6	Give priority to pedestrian safety improvements at key locations.	M	**Planning Department** Public Works Department
TC-7	Promote and support fixed-route bus services.	S	**Planning Department** RIPTA
TC-8	Make information on public transportation widely available.	S	**Planning Department** RIPTA
TC-9	Incorporate bicycle access in major developments.	S	**City Plan Commission** Planning Department
TC-10	Restrict access to new development from major arterials.	S	Planning Department
TC-11	Regulate curb cuts through design standards.	M	**Planning Department** City Plan Commission Public Works Department
TC-12	Provide left-turn lanes on arterial roadways where curb cuts to new development are unavoidable.	M	**City Plan Commission** Planning Department
TC-13	Encourage collector driveways to limit the number of access points.	M	**Planning Department** City Plan Commission Public Works Department
TC-14	Require compliance with parking standards in Zoning Ordinance and discourage on-street parking ensuring that developments provide an appropriate amount of parking.	S	Planning Department Police Department
TC-15	Undertake detailed study and program of improvements for the Pippin Orchard Road/ Hope Road / Phenix Avenue / Wilbur Avenue / Natick Avenue corridor.	M	**City Council** City Plan Commission Planning Department Public Works Department RIDOT
TC-16	Encourage roadway links between the Hill Side Farm Neighborhood and Pippin Orchard Road.	L	**City Plan Commission** Planning Department City Council Public Works Department

Table 3-9. Transportation Action Plan			
Goals, Policies, & Actions			
TC-17	Limit access points to collector and arterial roadways in new developments. Restrict local streets connections to collector roads where possible.	M	**City Plan Commission** Planning Department Public Works Department
TC-18	Divide study into segments to reflect the differing traffic situations and adjacent land uses such as: Wellington Avenue to Pontiac Avenue (including Rolfe Square); Pontiac Ave. to Reservoir Avenue (including City Hall and East High School); Reservoir Ave. to Gansett Ave.; Gansett Ave. to Cranston Street; and Phenix Ave. to Atwood Ave. Some of these segments may be combined.	S	**City Council** City Plan Commission Planning Department Public Works Department RIDOT
TC-19	Identify locations for off street parking or shared parking arrangements between cooperating and abutting businesses that have off street parking.	S	**Planning Department**
TC-20	Identify street beautification improvements such as sign design controls, street trees and other landscaping, public art, new sidewalks, trash receptacles, lighting and benches.	S	**Planning Department** Public Works Department
TC-21	Create special Park Avenue Study Advisory Committee representing merchants, City Hall, Cranston High School East and other major affected parties to advise on recommendations and monitor implementation.	S	**Planning Department** City Council
TC-22	Investigate a commuter rail station and support of a Transit-Oriented Development (TOD) in the Elmwood/Wellington Avenues area.	L	**City Council** Amtrak Planning Department RIDOT
TC-23	Adopt regulations that require inclusion of links that connect private developments with public ways.	M	City Plan Commission **Planning Department** City Council
TC-24	Consider 'adopt-a-park' programs that advertise private resources.	M	**Recreation Department** City Council City Plan Commission Planning Department

3.4.9 Chapter 12: Natural Hazards and Climate Chage

Table 3-10. Natural Hazards and Climate Change Action Plan
Goals, Policies, & Actions
Goals
Goal NH-1: Strengthen the City's ability to respond to climate change impacts by continually upgrading infrastructure systems, increasing public education, taking preventative actions, and ensuring disaster response plans are in place.
Goal NH-2: Ensure that vulnerable populations are prioritized for climate resilience strategies, including the elderly, disabled, populations with English as a second language, and low-income communities.
Goal NH-3: Make Cranston increasingly resilient to the natural hazards with the highest risks and levels of concern: storms, hurricanes, flooding, high winds, and extreme heat.
Policies
Policy NH-1: Continue to follow the mitigation actions of the 2022 Cranston Hazard Mitigation Plan Update, which highlight infrastructural, administrative, and public outreach opportunities. The HMP Update's mitigation actions are integrated into the Comprehensive Plan Update's actions.
Policy NH-2: Increase public education and preparedness around disaster response for different natural hazards.

Table 3-10. Natural Hazards and Climate Change Action Plan			
Goals, Policies, & Actions			
Policy NH-3: Improve the capacity of current locations that can serve as resilience hubs or emergency shelters during natural hazard events.			
Policy NH-4: Participate in the Community Rating System (CRS).			
Policy NH-5: Involve more interdepartmental collaboration to share expertise and efficiently distribute responsibilities.			
Policy NH-6: Fortify existing regulations in zoning and construction with the aim of protecting people, buildings, and infrastructure.			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
NH-1	Make necessary infrastructure upgrades to municipal facilities, including buildings and structures such as bridges and dams, to ensure they withstand extreme weather events.	M	Public Works Department
NH-2	Renew regulations for new development such as flood hazard overlay districts and building codes to ensure they are up to date with latest best practices.	M	**Planning Department** City Plan Commission
NH-3	Investigate capacity of the drainage system via hydraulic mapping and make repairs or expand as needed.	M	Public Works Department
NH-4	Develop a storm debris management plan, including public education around catch basin maintenance and stormwater management retrofit opportunities.	S	**Public Works Department** Planning Department
NH-5	Analyze the state of parks and open space to determine if land can be used for wetlands restoration or as green infrastructure through stormwater retention.	M	Planning Department
NH-6	Continue the conversion of land between I-295 and Warren Ave. to wetlands and floodplains.	S	Public Works Department
NH-7	Update the Emergency Operations Plan periodically and check that partnering municipal and aid organizations are aware of their responsibilities.	M	Cranston Emergency Management Official
NH-8	Conduct flood hazard districts training for municipal officials.	S	Cranston Emergency Management Official
NH-9	Conduct small business hazard mitigation training and establish a small business disaster outreach program.	S	**Cranston Emergency Management Official** Planning Department Economic Development Department
NH-10	Continue involvement in FEMA flood buyouts for flood-vulnerable residents along the Meshanticut Brook, Pocasset, and Pawtuxet Rivers.	M	Planning Department
NH-11	Continue the City's partnership with the Cranston Emergency Management Official and American Red Cross to develop public education resources around disaster response.	L	**Planning Department** Cranston Emergency Management Official
NH-12	Rebuild pump stations at risk of flooding and elevate their pump station generators.	M	Sewer Enterprise Department
NH-13	Conduct a progress update on the City's partnership with the local electric utility company to trim tree limbs near overhead powerlines.	S	Tree Warden
NH-14	Develop and implement an Urban Tree Management Plan.	M	**Tree Warden** Planning Department
NH-15	Elevate the utilities system of Rhodes-on-the-Pawtuxet recreation facility to prevent further flooding.	M	Engineering Department
NH-16	Investigate the status of urban heat islands and impervious	S	Planning Department

Table 3-10. Natural Hazards and Climate Change Action Plan			
Goals, Policies, & Actions			
	surfaces in Cranston, especially those that overlap with heat-vulnerable, lower income communities, and make a plan to mitigate extreme heat with buildout of the urban tree canopy and installations of white roof on municipal and interested private properties.		

3.4.10 Chapter 13: Land Use

Table 3-11. Land Use Action Plan
Goals, Policies, & Actions
Goals
Goal LU-1: Preserve the rural quality and critical resources of Western Cranston through appropriate land use controls.
Goal LU-2: Promote mixed use (commercial, industrial, and residential) development that will focus on a few key redevelopment sites, improve the quality of new development, and incorporate 'smart growth' principles.
Goal LU-3: Locate new commercial development in western Cranston in highly accessible, strategic locations.
Goal LU-4: Ensure that redevelopment of major sites for economic development incorporates the protection of environment and neighborhood character.
Goal LU-5: Ensure that the zoning map is consistent with the future land use map.
Goal LU-6: Protect and stabilize existing residential neighborhoods.
Goal LU-7: Enhance services and facilities in western Cranston that support future growth.
Policies
Policy LU-1: Promote residential land use patterns that concentrate and compact development and maintain significant percentage of open space.
Policy LU-2: Preserve, in significant tracts, 20 per cent of the remaining open space in western Cranston, or 500 acres (exclusive of wetlands), through restrictions associated with clustering of future development or through purchase.
Policy LU-3: Preserve existing farmland and recreational open space areas through land use regulation and taxation policies.
Policy LU-4: Preserve and enhance the quality of existing valuable resources including wetlands, surface water, ground water, wildlife habitats and migration corridors, historic sites, scenic views and unique cultural resources.
Policy LU-5: Improve architectural and site design standards to increase the quality of new development.
Policy LU-6: Apply Smart Growth principles to include standards for density, mixed use, accessibility and quality of design.
Policy LU-7: Implement policies that protect residential neighborhoods from commercial encroachment through regulation, appropriate buffers, development design standards, traffic planning, and site plan review.
Policy LU-8: Maintain a current inventory of existing industrial facilities that could accommodate expansion and redevelopment.
Policy LU-9: Identify barriers to economic growth and the public actions necessary to preserve the existing industrial base.
Policy LU-10: Protect the capacity and integrity of roads, sewers and water systems serving the Howard and Western Cranston Industrial Parks, in order to preserve these areas as resources for long-term industrial development.
Policy LU-11: Prevent the intrusion of commercial land retail activities into industrial zones, particularly those that might lead to strip commercial development. However, mixed-use commercial office and industrial parks and auxiliary commercial activities that serve the needs of an industrial park should not be discouraged.
Policy LU-12: Protect and stabilize existing residential neighborhoods by increasing open space, improving roadway conditions, and making the zoning conform to existing uses.
Policy LU-13: Continue to give attention to neighborhood revitalization through code enforcement and financing mechanisms, particularly in areas of aging housing stock and low median incomes.
Policy LU-14: Create greenway, bicycle, and pedestrian links that make connections between the City's historic sites, public buildings, open space, and natural resources.
Policy LU-15: Establish a scenic preservation program to preserve scenic landscapes and view sheds.

Table 3-11. Land Use Action Plan			
Goals, Policies, & Actions			
Policy LU-16: Identify roads for adoption as scenic roads.			
Policy LU-17: Ensure that sufficient land is properly zoned and provided with adequate infrastructure to provide for the City's future industrial development needs.			
Policy LU-18: Preserve the existing density of established neighborhoods.			
REF. NO	**ACTION**	**TIMEFRAME**	**RESPONSIBLE PARTY(IES)**
LU-1	Revise existing cluster (Residential Planned District) regulations to require the use of conservation development.	M	**Planning Department** City Council DPW City Plan Commission
LU-2	Mandate that new residential development in western Cranston conforms to conservation subdivision standards.	M	**Planning Department** City Council DPW City Plan Commission
LU-3	Use conservation development in concert with conservation easements and tax assessments tools to preserve valuable natural and historic resources.	M	**City Council** DPW City Plan Commission Planning Department
LU-4	Within the application of the development regulations and standards, encourage landscape diversity that creates an identity and sense of place.	M	**City Council** DPW City Plan Commission Planning Department
LU-5	Continue to amend subdivision regulations to promote land development patterns that minimize site disturbance, minimize visual impacts, and retain rural features and community character.	O	**City Plan Commission** Planning Department City Council
LU-6	Consider Low Impact Development standards to reduce the impacts of land development and stormwater runoff.	O	**City Plan Commission** Planning Department City Council
LU-7	Continue to identify areas that have special natural resources for protection through conservation design subdivisions, in order to ensure the preservation of major contiguous parcels and corridors.	O	**City Plan Commission** Planning Department City Council
LU-8	Secure authorization to allow public access on trails in private, dedicated open space.	O	**City Council** City Plan Commission Planning Department
LU-9	Consider conservation restriction or less-than-fee acquisition programs to limit the ultimate development potential of valuable parcels, in return for reductions in tax liabilities.	O	**City Council** City Plan Commission Planning Department
LU-10	Establish a heritage preservation program to preserve scenic landscapes and view sheds.	L	**City Plan Commission** Planning Department City Council Conservation Commission
LU-11	Make the Historic Farm Loop a special focus of the heritage program.	O	**Conservation Commission** City Plan Commission Planning Department City Council
LU-12	Implement a Scenic Road Overlay Zone to protect scenic aspects of the Historic Farm Loop.	L	**Conservation Commission** City Council

Table 3-11. Land Use Action Plan			
Goals, Policies, & Actions			
			City Plan Commission Planning Department
LU-13	Implement an Agricultural Preservation Program.	L	**Conservation Commission** City Council City Plan Commission Planning Department West Bay Land Trust
LU-14	Identify specific parcels for preservation and work with the land owners to explore purchase of fee simple or development rights, and state tax programs to accomplish the preservation.	L	**Conservation Commission** City Council City Plan Commission Planning Department West Bay Land Trust
LU-15	Support local farm products and alternative farm products to help ensure the continued viability of farming.	L	**Conservation Commission** City Council City Plan Commission Planning Department West Bay Land Trust
LU-16	Site a new public facilities and services center to support residents and businesses in the western portion of the City.	L	**City Council** Planning Department Public Works Department
LU-17	Continue to improve site design standards to increase the quality of new development and use new 'smart growth' zoning techniques to assist these approaches.	M	**Planning Department** City Council City Plan Commission
LU-18	Adopt architectural design standards to increase the aesthetic quality of new commercial development or redevelopment.	M	**City Plan Commission** Planning Department City Council
LU-19	Enhance streetscape design guidelines to apply to public construction projects and private construction projects that include public rights of way improvements.	M	**City Plan Commission** Planning Department
LU-20	Update development impact fees to ensure that new development contributes adequately and proportionately to the costs of improvements required by such development	M	**Building and Zoning Dept.** City Council City Plan Commission Planning Department
LU-21	Identify and prioritize commercial corridor segments for study, in order to provide guidance for appropriate regulatory changes and City economic development efforts such as marketing and financing programs. Identify specific development objectives, preferred commercial uses, circulation and safety improvements, and potential linkages among parcels.	L	**City Plan Commission** Planning Department
LU-22	Revise zoning districts along Plainfield Pike to eliminate incompatible land uses and consolidate the industrial zoning of the area.	L	**City Plan Commission** City Council Planning Department
LU-23	Include sustainability in drafting new regulations and review of new development projects.	L	**City Plan Commission** Planning Department Economic Development Dept.
LU-24	Investigate the feasibility of a mixed-use development plan for TOD development on industrial land between Elmwood and Wellington Avenue as suggested by conceptual illustration.	L	**City Plan Commission** City Council Economic Development Dept. Planning Department
LU-25	Amend Zoning Map and Zoning Ordinance to eliminate major	N/A	**Planning Department**

Table 3-11. Land Use Action Plan			
Goals, Policies, & Actions			
	inconsistencies between the Future Land Use Map and zoning.		City Plan Commission City Council
LU-26	Adopt smart growth policies after a series of public meetings geared to determine the appropriate standards for the City.	M	**City Council** Planning Department City Plan Commission
LU-27	Reduce minimum lot size required for open space zoning so that smaller parcels can be protected.	L	**Planning Department** City Plan Commission City Council
LU-28	Protect and stabilize existing residential neighborhoods by improving roadway conditions.	L	**City Council** DPW City Plan Commission Planning Department
LU-29	Protect and stabilize existing residential neighborhoods by making zoning conform to existing uses.	L	**City Plan Commission** Planning Department City Council
LU-30	Improve connections between the extensive supply of historic, open space, and natural resources.	L	**City Council** Mayor City Plan Commission Planning Department RIDOT
LU-31	Extend bicycle facilities to Western Cranston.	L	**City Council** Mayor City Plan Commission Planning Department RIDOT
LU-32	Adopt streetscape design guidelines to apply to all construction projects.	M	**City Plan Commission** Planning Department
LU-33	Amend commercial zoning along major arterial corridors to discourage “strip” development and to prevent adverse impacts on adjacent uses.	S	**City Plan Commission** Planning Department City Council
LU-34	Strengthen protection of open space corridors along major water bodies and wetlands by zoning them for Open Space.	M	**City Plan Commission** Planning Department City Council
LU-35	Review existing development in flood zones to determine proper mitigation of flood impacts.	M	**City Plan Commission** Planning Department City Council
LU-36	Adopt a ‘farm-based retail’ overlay district.	M	**City Plan Commission** Planning Department Local Farms City Council

4.0 NATURAL RESOURCES

4.1 Introduction

Natural resources are the city's environmental and ecological assets; the land, water, plants, and animals that sustain and enhance the community. Planning for natural resources includes planning for protection, preservation, restoration, and improvement of different types of resources. It also requires balancing natural resource preservation with development practices and human activities. Natural resources and a beautiful environment help to support a healthy and prosperous community. When natural resources are degraded, it threatens the safety and well-being of the City, as well as the economy, its visitors, and its neighbors.

Cranston's lands and waters support a variety of public benefits, recreational and economic activities, and many important species and habitats. This chapter describes the extent and condition of the City's natural resources, as well as the issues and opportunities associated with them. It ultimately articulates goals and actions for their protection and improvement that align with the city's broader vision for its future.

4.2 Existing Conditions

4.2.1 Surface Water

Surface waters, or bodies of water above ground, cover approximately 356 acres (1.9% of the City) within the City. Surface water includes streams, rivers, lakes, wetlands, reservoirs, and creeks. Surface water is critical to both human health and ecosystem health, as most organisms rely on surface waters for drinking water and habitat.

Cranston's drinking water comes from three suppliers: the Providence Water Supply Board, the Warwick Water Department, and the Kent County Water Authority. Most drinking water comes from the Providence Water Supply Board, which comes from the Scituate Reservoir, which is fed by five smaller tributary reservoirs: Barden, Moswansicut, Ponaganset, Regulating, and Westconnaug (Providence Water). Chapter 8, *Services and Facilities*, provides further details on the City's water systems and supply.

The City is located within five watersheds: the Woonasquatucket River Watershed, the Pawtuxet River Watershed, the North Branch Pawtuxet River Watershed, the Scituate Reservoir Watershed, and the Pocassett River Watershed. See Figure 4-1, Surface Water and Watershed Map, for the watershed boundaries and location of surface water bodies. The Woonasquatucket River Watershed and the Scituate Reservoir Watershed cover only small portions of the City.

Surface waters found within Cranston include:

- Dyer Pond
- Randall Pond
- Cranston Print Works Pond
- Tongue Pond
- Spectacle Pond
- Fenner Pond
- Bellfont Pond
- Ralph's Pond
- J.L. Curran Reservoir

- Blackamore Pond
- Meshanticut State Park
- Clarke Brook
- Lippitt Brook
- Furnace Hill Brook
- Meshanticut Brook
- Pawtuxet River
- Pocasset River

The quality of the state's freshwater supplies has been classified by RIDEM. See Figure 4-2 Water Quality Map for the locations of each water body classified by RIDEM. Table 4-2 lists the classifications and impairments for each major waterbody in the City.

When classifying a water body, RIDEM evaluates the potential of that water body to serve seven designated uses (RIDEM 2021) :

- Fish and Wildlife Habitat
- Drinking Water Supply
- Shellfish Consumption
- Shellfish Controlled Relay and Depuration
- Fish Consumption
- Primary Contact Recreation
- Secondary Contact Recreation

The highest quality surface waters in the City (of those that have been evaluated by RIDEM) are:

- Furnace Hill Brook
- Randall Pond
- Several unnamed brooks

The waters listed above are designated category 2, meaning that some, but not all of the designated uses are supported.

The category representing highest impairment is category 5, which indicates that at least one designated use is not being supported or is threatened, and a TMDL is needed. A TMDL assessment describes impairments and identifies measures needed to restore water quality. It is required by the Clean Water Act for all waters in this category. The category 5 water bodies and their impairments are listed in Table 4-1.

Table 4-1. Water Quality Classification

Water Body	Impairment
Blackamore Pont	Total phosphorus
Fenner Pond	Total phosphorus
Pawtuxet River	Lead Mercury in fish tissue
Pocasset River	Benthic macroinvertebrates Chloride

Table 4-1. Water Quality Classification	
Water Body	**Impairment**
	Copper Non-native aquatic plants Enterococcus
Print Works Pond	Chloride Lead Total suspended solids Fecal coliform

Impairments can occur for a variety of reasons. Impairments commonly come from stormwater runoff that contains pollutants. The most common pollutants coming from stormwater sources include sediment, pathogens, nutrients, and metals such as copper or lead (EPA). Stormwater runoff increases as impervious cover increases. Other impairments can include biodiversity impairments such as invasive species, nutrient impairments most commonly from phosphorus and nitrogen, pathogen impairments such as *Enterococcus* or *fecal coliform*, mercury impairments, or total toxics and unknown toxicity impairments (RIDEM 2021).

These waters are designated as a source of public drinking water supply or as tributary waters within a public drinking water supply, for primary and secondary contact recreational activities and for fish and wildlife habitat. These waters shall have excellent aesthetic value.

These waters are designated for primary and secondary contact recreational activities and for fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have excellent aesthetic value.

These waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value.

These waters are designated for primary and secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class B criteria must be met.

These waters are designated for secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value.

Source: RIDEM, Water Quality Regulations, 2009.

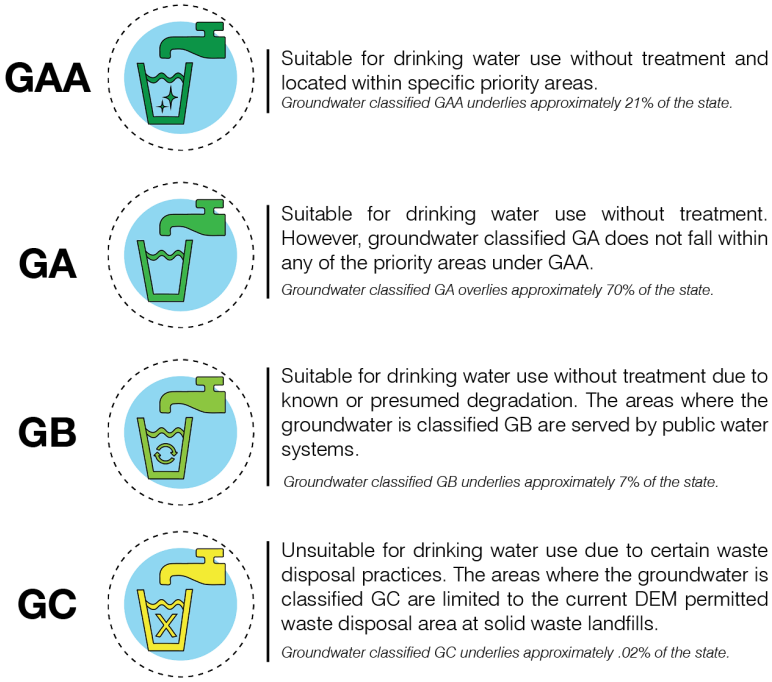
Table 4-2. Water Quality Classification

Waterbody	Classification	Impairment
Blackamore Pond	B	5
Clarke Brooke	B	3
Cranston Print Works Pond	B	5
Dyer Pond	B	3
Fenner Pond	B	5
Furnace Hill Brook	B	2
J.L. Curran Reservoir	B	4A
Lippitt Brook	B	3
Meshanticut Brook	B	4A

Table 4-2. Water Quality Classification		
Waterbody	**Classification**	**Impairment**
Meshanticut State Park	B	3
Pawtuxet River	B1	5
Pocasset River	B	5
Randall Pond	B	2
Spectacle Pond	B	4A
Tongue Pond	B	3

4.2.2 Groundwater

The Rhode Island Department of Environmental Management identifies and maps the state's groundwater reservoirs and groundwater reservoir recharge areas. See Figure 4-3 for the location of groundwater reservoirs and recharge areas. RIDEM classifies the state's groundwater as GAA, GA, GB, or GC, as defined below. The City of Cranston does not contain any groundwater recharge areas. It does contain two groundwater reservoirs, both classified as GB, not suitable for drinking water use without treatment. The City of Cranston has no sole source aquifers and does not rely on groundwater for its water supply.



Fortunately, the City of Cranston does not have any Superfund Sites within its boundaries. Superfund Sites are areas that have been contaminated by hazardous waste or pollutants that were improperly managed or disposed of (US EPA). These sites include manufacturing facilities, processing plants, landfills, or mining sites. Pollutants or hazardous waste that was disposed of improperly often ends up in waterways or seeping into the groundwater table. The Environmental Protection Agency aims to clean up these sites, hold the responsible parties accountable, and return the Superfund Sites to productive uses (US EPA). There are 13 Superfund Sites in Rhode Island (US EPA).

4.2.3 Soils

Cranston has a variety of soils that vary in their physical and chemical properties. Soils are classified in the NRCS National Engineering Handbook based on their infiltration rates and runoff potentials, as seen in Figure 4-4 (University of Rhode Island, 2016).

Group	Description
A	• Contains soils having a high infiltration rate when thoroughly wet and therefore have a low runoff potential.
B	• Has moderate infiltration a low runoff potential.
C	• Has slow infiltration and higher runoff potential.
D	• Lists soils having a very slow infiltration rate and thus the highest runoff

Figure 4-4: NRCS Soil Classifications
Source: University of Rhode Island, 2016

Soils with slower infiltration rates (Groups C and D) attenuate pollutants better than those with rapid infiltration rates. These groups comprise about 44% of the City's soils. However, soils in Groups C and D also have the highest runoff potential and may contribute more to stormwater runoff in areas where impervious surfaces are prevalent. Soils in Groups A and B have high infiltration rates and therefore contribute less to stormwater runoff because they are superior at percolation and absorption. These soils comprise about 49% of the soils in the City. The remaining 7% of soils were not classified. Table 4-3 and Figure 4-5 Soil Hydrologic Group Table and Map provide additional information on the extent of the soil hydrological groups found in Cranston.

Table 4-3. Hydrologic Group

Group	Acres	Percentage of Town
D	6,322	34%
A	5,750	31%
B	3,257	18%
C	1,768	10%

4.2.4 Soil Constraints

Soil constraints, shown in Table 4-4, are grouped by category. The Soil Constraints Map, Figure 4-6, depicts areas throughout the City where existing soil on specific sites would present a constraint to development. Approximately 50% of the City has moderate constraints to development due to soils, and over 1,127 acres (6%) within the City has constraints to development due to slopes of over 15% or bedrock. The seasonal high-water table covers a significant portion of the town. It occurs within a variety of developed areas, agricultural areas, and forested areas of the City. This seasonal high-water table could have a significant impact on development and agriculture.

Table 4-4. Soil Constraints

Category	Acres	Percentage of Town
Moderate constraints to development	9,253	50%
Constraints due to seasonal high water table (19" to 42" depth)	4,723	26%

Table 4-4. Soil Constraints		
Hydric soils- severe constraints (0" to 18" water table)	2,789	15%
Bedrock and/or slope constraints (>15% slope)	1,127	6%
All other severe constraints (rock, sand, etc.)	261	1%

Agricultural Soils

Approximately 4,241 acres, or 23%, of Cranston are in the prime farmland soil unit. In addition to the soils identified as prime farmland, the National Cooperative Soil Survey (NCSS) has designated 1,298 acres or 7% of Cranston's farmland as farmland of statewide importance. See Figure 4-7 for a map of active farms and important farmland soils in Cranston.

4.2.5 Geology

According to RIDEM and Rhode Island Geographic Information System (RIGIS), most of the surficial geology of Cranston is characterized as till and outwash plain soil. Figure 4-8 Surficial Geology Map depicts the parts of the City characterized as till and outwash.

Floodplains

A floodplain is defined as any land area that is susceptible to being inundated by floodwaters from any source. The Federal Emergency Management Agency (FEMA) designates the floodplain into three main zones: AE, VE, and X. Zones AE and VE are within the Special Flood Hazard Area (SFHA). The SFHA is defined as the area that will be inundated by the flood having a 1% chance of being equaled or exceeded in any given year (FEMA). These areas have a higher risk of flooding. VE zones have a higher risk than AE zones. X zones have a more moderate risk and are outside the SFHA. Most of the City is located outside the SFHA in an X zone, as shown in Table 4-5. Less than 7% of the City is located in an AE or VE zone. Figure 4-9 shows the FEMA designated flood hazard areas in Cranston.

Table 4-5. Flood Zones		
Zone	**Acres**	**Percentage of Town**
AE	1,198	6.5%
VE	48	0.2%
X	17,267	93.3%

Most of Cranston is prone to riverine flooding, especially the far east portion of Cranston which is located directly on the banks of the Pawtuxet River. Riverine flooding poses a risk to major highways such as Interstate 295 and Route 37, as well as to residences and businesses. Eastern Cranston is more densely developed than Western Cranston and contains a majority of the city's economic development. Riverine flooding could have major impacts both to the City's built environment and the City's economy. Major flooding events can disrupt daily life, paralyze transportation systems, and close or damage businesses.

4.2.6 Habitat

The City consists of deciduous woodlands, ruderal forests, fresh water, and forested wetlands, all of which provide habitat for a variety of terrestrial and aquatic plants and animals.

The Rhode Island Natural Heritage Program indicates that Cranston contains 1,026 acres of natural heritage areas (5.5% of the City), or important habitat areas for rare species and natural communities (RIGIS). Figure 4-10 Ecological Communities and Habitat Areas shows the locations of these natural

heritage areas. The program collects data to help identify and protect plan and animal species but does not provide details about protected species locations in public data sets.

The Rhode Island Ecological Community Classification (RIECC) was created in 2011 to support the development of a detailed ecological community map and database for the state (Enser 2011). The most common ecological community, other than developed land, in Cranston is Plantation and Ruderal Forest. Table 4-6 and Figure 4-10 provide information on ecological communities in Cranston.

Table 4-6. Ecological Communities

Description	Acres	Percentage of Town
Plantation and Ruderal Forest	2,427	13.1%
Open Uplands (Grassland and Shrubland)	666	3.6%
Open Mineral Soil Wetlands	138	0.75%
Mixed Deciduous/Coniferous Forests	35	0.19%
Fresh Water	351	1.9%
Forested Wetlands (Mineral and Peat Soils)	947	5.1%
Estuarine Intertidal	4	<0.1%
Deciduous Woodlands and Forests	1879	10.1%
Agricultural	728	3.9%
Developed Land	11,338	61.2%

Rhode Island has almost 112,000 acres of freshwater wetlands, covering approximately 16% of state surface area (RIEMC). Wetlands account for a small percentage of Cranston's land area (about 5.95%), but they provide a variety of community benefits. Cranston contains three types of wetlands: open mineral soil wetlands, forested wetlands, and estuarine intertidal wetlands. First and foremost, they provide essential fish and wildlife habitat and promote biodiversity. Wetlands are notably productive ecosystems. Their high capacity to hold water is beneficial in that they can soak up rainwater that might otherwise cause flooding (RIEMC). Water held in wetlands can seep into the ground and recharge streams and groundwater aquifers (RIEMC). Wetland vegetation filters out pollutants from the water as it flows through the wetland, resulting in improved water quality. Wetlands also support activities such as fishing, nature walks, photography, and bird watching. Wetlands are disappearing across the coastal United States due to development, coastal erosion, major storms, and sea level rise, making wetland conservation a task of the utmost importance. The remaining wetlands in the City should be conserved for their habitat, stormwater recharge and filtration, and recreational benefits.

Existing conservation lands in the City of Cranston cover 1,735 acres and are represented in green in Figure 4-11. There are approximately 1,088 acres (5.9% of City) preserved by the State of Rhode Island within the City. There are two state parks located within Cranston: Meshanticut State Park and John L. Curran State Park. Meshanticut Lake is a 12-acre lake that allows for activities such as paddling or canoeing. The John L. Curran Management Area is 332 acres and largely forested with deciduous hardwood trees, oaks, maples, and beeches. It has two ponds as well as agricultural land for public gardening.

There are an additional 647 acres that have been preserved either by the City or by a non-governmental organization, such as the Audubon Society of Rhode Island. Most of the conserved

areas are concentrated in the western portion of the City of Cranston. In the more developed eastern portion of the City, conservation areas are concentrated around rivers and smaller bodies of water. These undeveloped lands are valued and part of economic, recreational, and cultural activities.

Cranston has a robust parks and recreation department that maintains outdoor facilities for citizens to enjoy. Facilities include trails, a botanical center, parks, playgrounds, and sports fields. These facilities allow for hiking, biking, walking, and many other outdoor activities. Such activities are socially and culturally important in Cranston. More information about these areas can be found in the Open Space and Recreation chapter.

4.3 Challenges and Opportunities

4.3.1 Challenges

Wetland Protection and Conservation

Wetlands in Cranston are at risk due to development pressures, coastal erosion, and impacts from climate change such as sea level rise. The diminishment of these resources adversely affects critical natural systems and quality of life for residents. Conservation of the remaining wetlands in the City is necessary to support biodiversity, stormwater recharge and filtration abilities, and recreational benefits.

Open Space Preservation and Development Pressure

There is ongoing pressure to develop Western Cranston, which threatens to reduce natural habitats, consume open land, and impact natural resources. The City currently struggles to balance the desire for new development with the conservation of open land. New growth should be guided to sensitively preserve open space, which is vital for maintaining the area's natural character.

Flooding and Floodplain Development

Riverine flooding is a challenge for the City, particularly in Eastern Cranston where development is denser and more vulnerable to stormwater flooding, which is being exacerbated by climate change. The increasing frequency of flooding events challenges the city's existing stormwater infrastructure and threatens the city's economic and social welfare. Development in low-lying, flood prone areas should be limited, and water management capacity should be increased by conserving and enhancing natural water storage, filtration, and drainage features.

Stormwater and Groundwater

The City faces challenges in managing stormwater runoff, which contributes to water pollution and flooding, particularly during heavy rainfall events. The seasonal high groundwater table, which is near grade throughout a large portion of Cranston, adds to the challenge by restricting groundwater recharge. These factors present a major constraint to development and requires careful consideration in land-use planning.

Water Quality and Contamination

Protecting rivers from contamination is an ongoing issue. Other factors such as invasive species and algae blooms also threaten rivers and riparian areas. Finally, the legacy of historical industrial contamination is also a major challenge to environmental remediation and redevelopment activities. Expansion of impervious surfaces should be limited to prevent increased runoff. Open space—especially along rivers—should be conserved to the greatest extent possible.

4.3.2 Opportunities

Collaboration with Local Land Trusts

Partnering with local land trusts can help the City identify and prioritize open and green spaces—especially in Western Cranston—for conservation. By working together, the City and land trusts can develop cooperative conservation strategies, engage community members through education and volunteer opportunities, and explore creative funding mechanisms to acquire and protect valuable natural areas.

FEMA Community Rating System (CRS) Participation

Cranston should subscribe to FEMA's Community Rating System (CRS) to enhance floodplain management efforts, implement CRS-recommended practices to improve flood resilience and reduce flood insurance premiums for residents, and utilize CRS resources and technical assistance to develop more effective flood mitigation strategies.

Strengthening Partnership with Pawtuxet River Authority

Collaboration with the Pawtuxet River Authority can support implementation of river restoration projects. Leveraging the Authority's expertise in watershed management can inform citywide water resource policies and lead to new joint policies for water quality improvement, habitat restoration, and recreational opportunities along the Pawtuxet River.

Enhancing Greenspace Conservation with Parks and Recreation Advisory Committee

Cranston can also work closely with the Parks and Recreation Advisory Committee to identify and prioritize greenspaces for conservation and recreational use, develop a comprehensive greenspace network plan that connects existing parks and natural areas, and create innovative programs to promote community engagement in greenspace stewardship and recreational activities.

Aligning Natural Resource Protection with Hazard Mitigation

Cranston can integrate natural resource protection strategies with the City's Hazard Mitigation Plan to create multi-benefit solutions, including nature-based strategies for flood mitigation that also enhance ecosystem services and biodiversity, and green infrastructure projects that address both natural resource conservation and hazard mitigation goals.

Sustainable Development Practices

Low-impact development techniques could be implemented to preserve natural features and minimize environmental impacts. Cranston can encourage these green building practices to create better energy efficiency, water conservation, and sustainable materials.

Environmental Education and Outreach

To thrive, environmental management and conservation require significant community support. Local residents will be most supportive of environmental management when they see its benefit directly and when they participate directly conservation and environmentally related activities. The City should seek to expand environmental education and outreach with schools and community groups. The City should consider highly visible opportunities such as creating interpretive trails and signage in natural areas to promote awareness and appreciation of local ecosystems. In particular, the City may wish to focus on collaborative opportunities and leverage partnerships.

Ecosystem Restoration Initiatives

Healthy ecosystems provide essential benefits like clean water and climate regulation. By restoring degraded ecosystems, we enhance these services, benefiting both people and the planet. Like most urbanized areas, the City has more restoration opportunities than resources and will want to prioritize efforts. The City may wish to consider implementing targeted restoration projects for

degraded habitats, focusing on native species and biodiversity enhancement. The City may also wish to develop a citywide invasive species management plan to protect and restore native ecosystems.

Water Resource Management

Watersheds contribute to the overall health of ecosystems. Careful watershed planning helps protect the physical, chemical, and biological components of your watershed, or restore those that have already been degraded. Unmanaged stormwater is a leading source of water resources degradation. Opportunities for improving watershed management in Cranston include implementing innovative stormwater management techniques, such as rain gardens and bioswales, to improve water quality and reduce flooding.

Climate Resilience Planning

Climate impacts, including extreme weather events, have shown that resilience is an essential component of our planning whether that planning is occurring at the global, regional, or local level. Opportunities for the City include incorporating climate change projections into natural resource management strategies and developing green corridors and urban forests to mitigate urban heat island effects and enhance carbon sequestration.

Community Gardens and Urban Agriculture

From an environmental standpoint, urban agriculture can improve watershed health by reducing stormwater runoff, enhance biodiversity and pollinator habitat, and foster connection to the outdoors. Community gardens and urban farms also offer training and job- skills programs for youth and other community members and promote local food production and green space utilization. Opportunities in the City include opening underutilized public spaces to community gardening and farming for food production and providing space for selling local agricultural products (e.g., farmers markets).

Figure 2-1. Surface Water and Watersheds

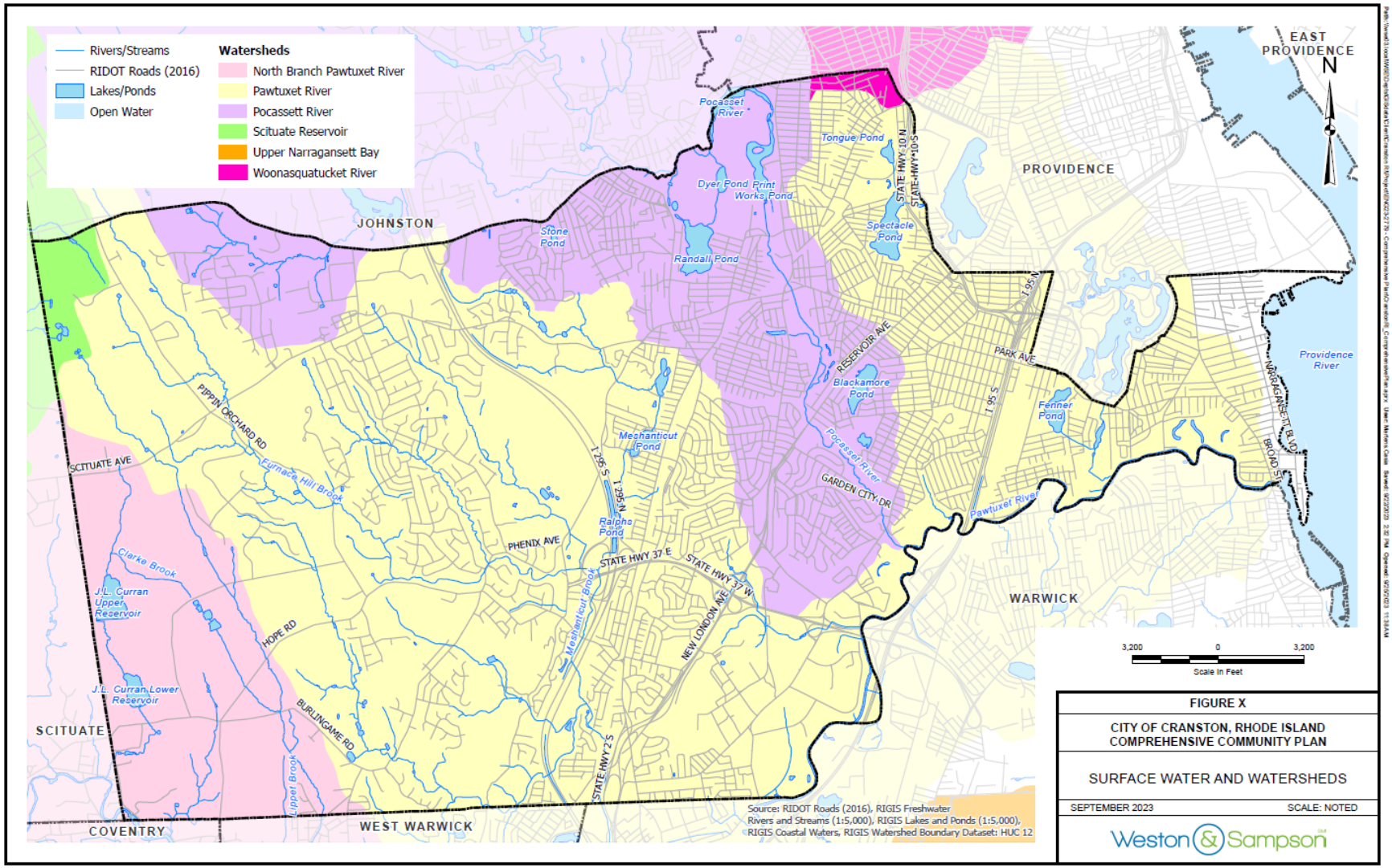


Figure 2-2. Water Quality

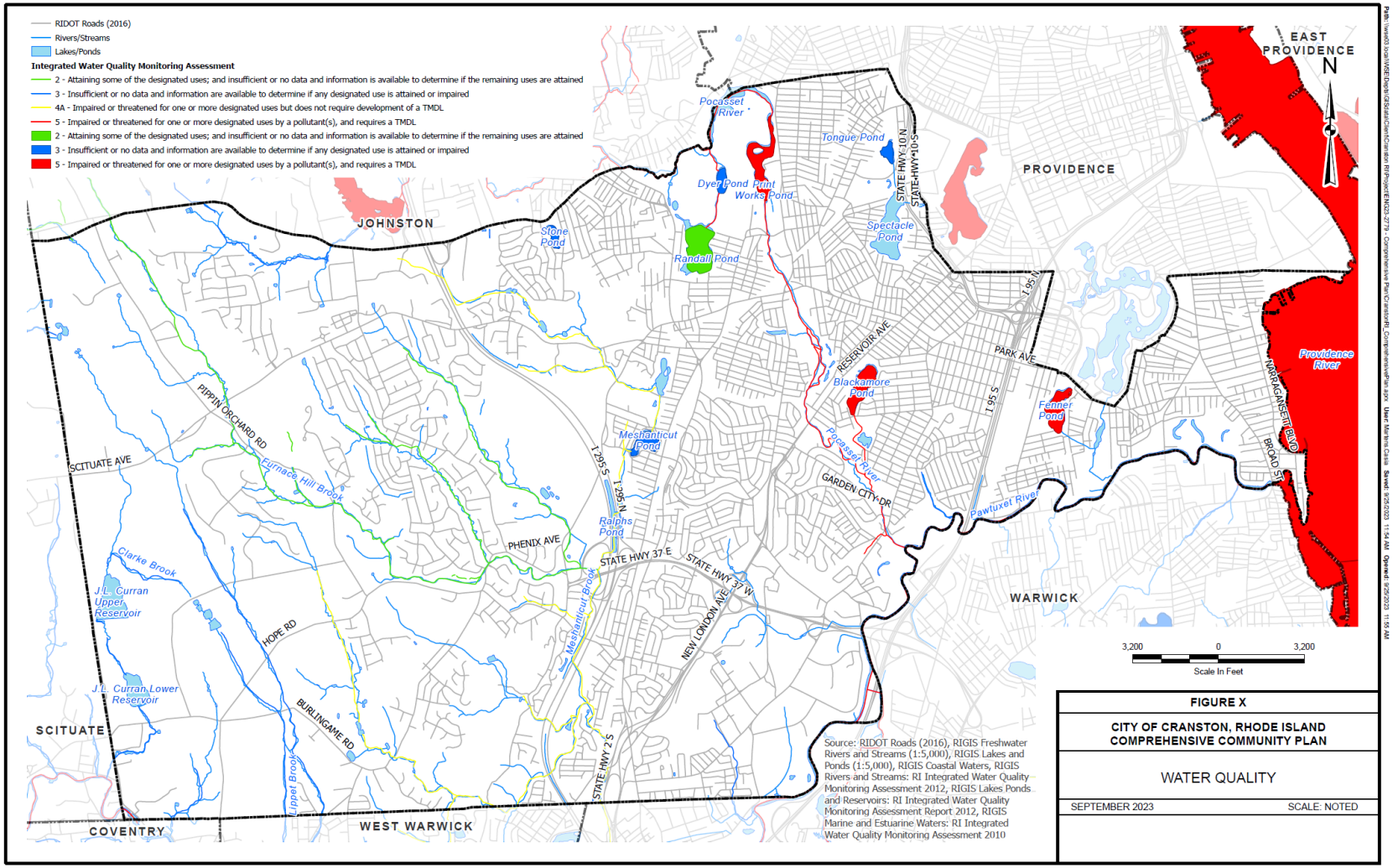


Figure 2-3. Groundwater Supply and Protection

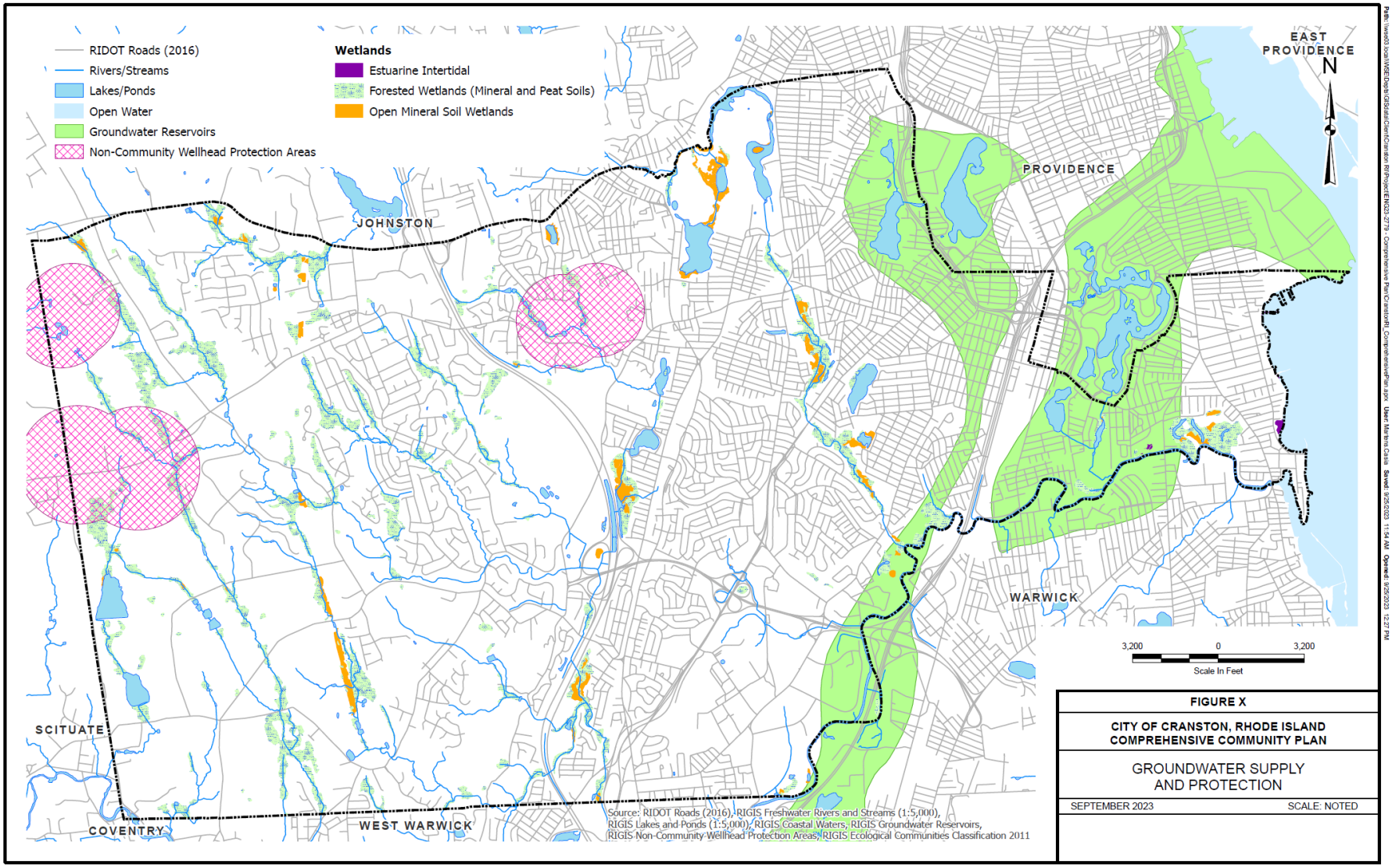

RIDOT Roads (2016)
Rivers/Streams
Lakes/Ponds
Open Water
Groundwater Reservoirs
Non-Community Wellhead Protection Areas
Wetlands
Estuarine Intertidal
Forested Wetlands (Mineral and Peat Soils)
Open Mineral Soil Wetlands
EAST PROVIDENCE
N
PROVIDENCE
JOHNSTON
WARWICK
SCITUATE
COVENTRY
WEST WARWICK
3,200
0
3,200
Scale In Feet
Source: RIDOT Roads (2016), RIGIS Freshwater Rivers and Streams (1:5,000), RIGIS Lakes and Ponds (1:5,000), RIGIS Coastal Waters, RIGIS Groundwater Reservoirs, RIGIS Non-Community Wellhead Protection Areas, RIGIS Ecological Communities Classification 2011
FIGURE X
CITY OF CRANSTON, RHODE ISLAND
COMPREHENSIVE COMMUNITY PLAN
GROUNDWATER SUPPLY AND PROTECTION
SEPTEMBER 2023
SCALE: NOTED

Figure 2-5. Soil Hydrologic Groups

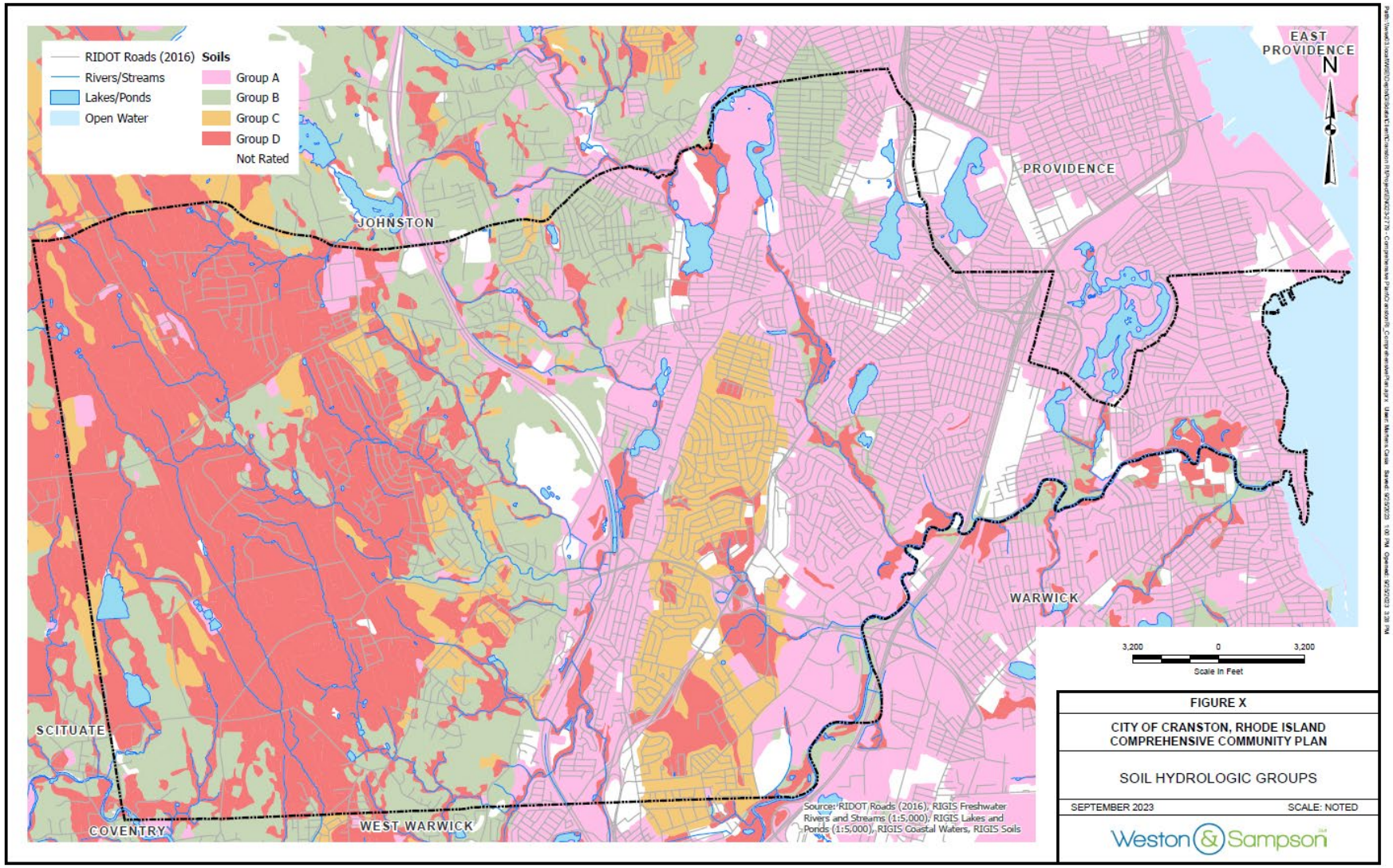


Figure 2-6. Soil Constraint

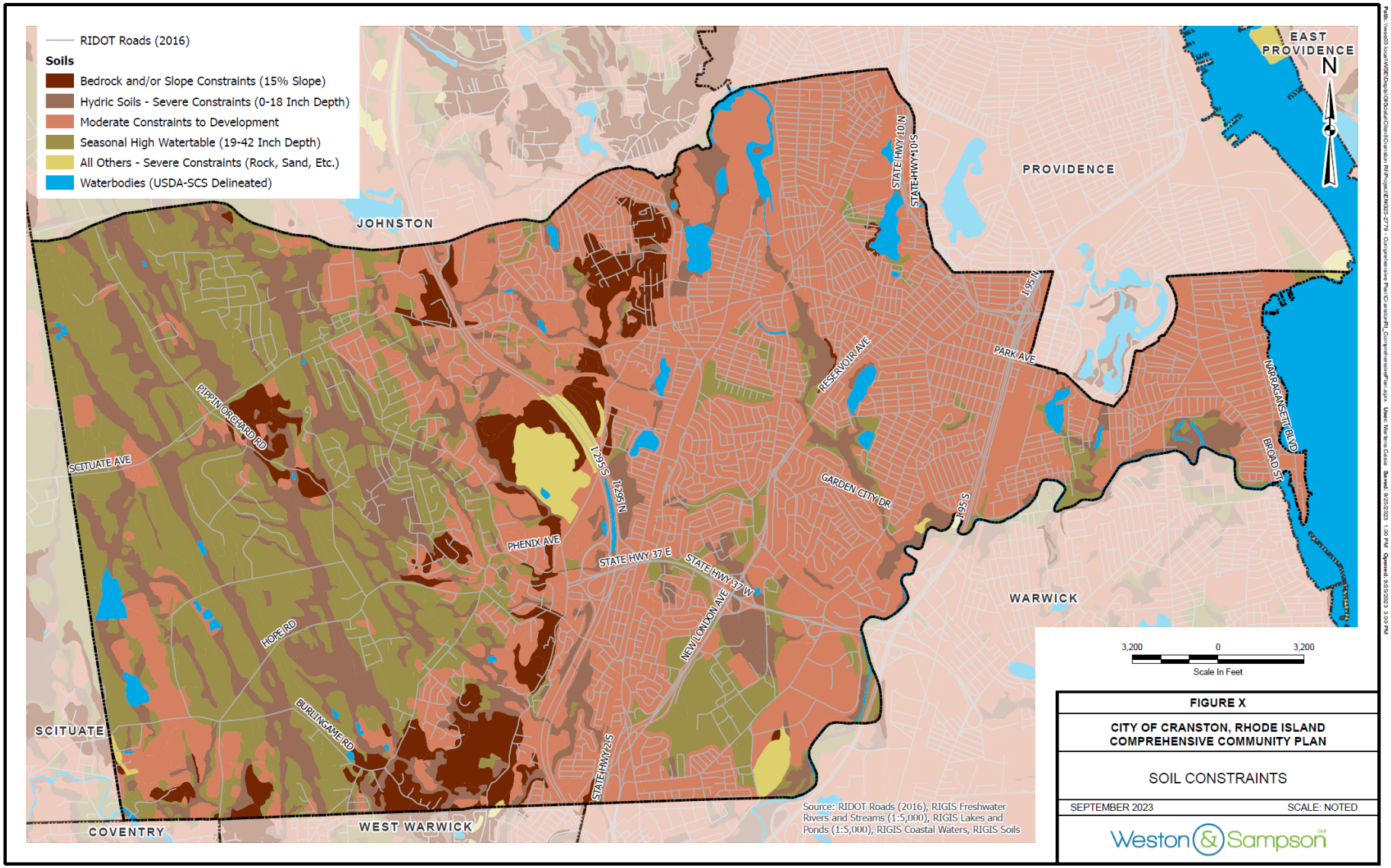


Figure 2-7. Surficial Geology

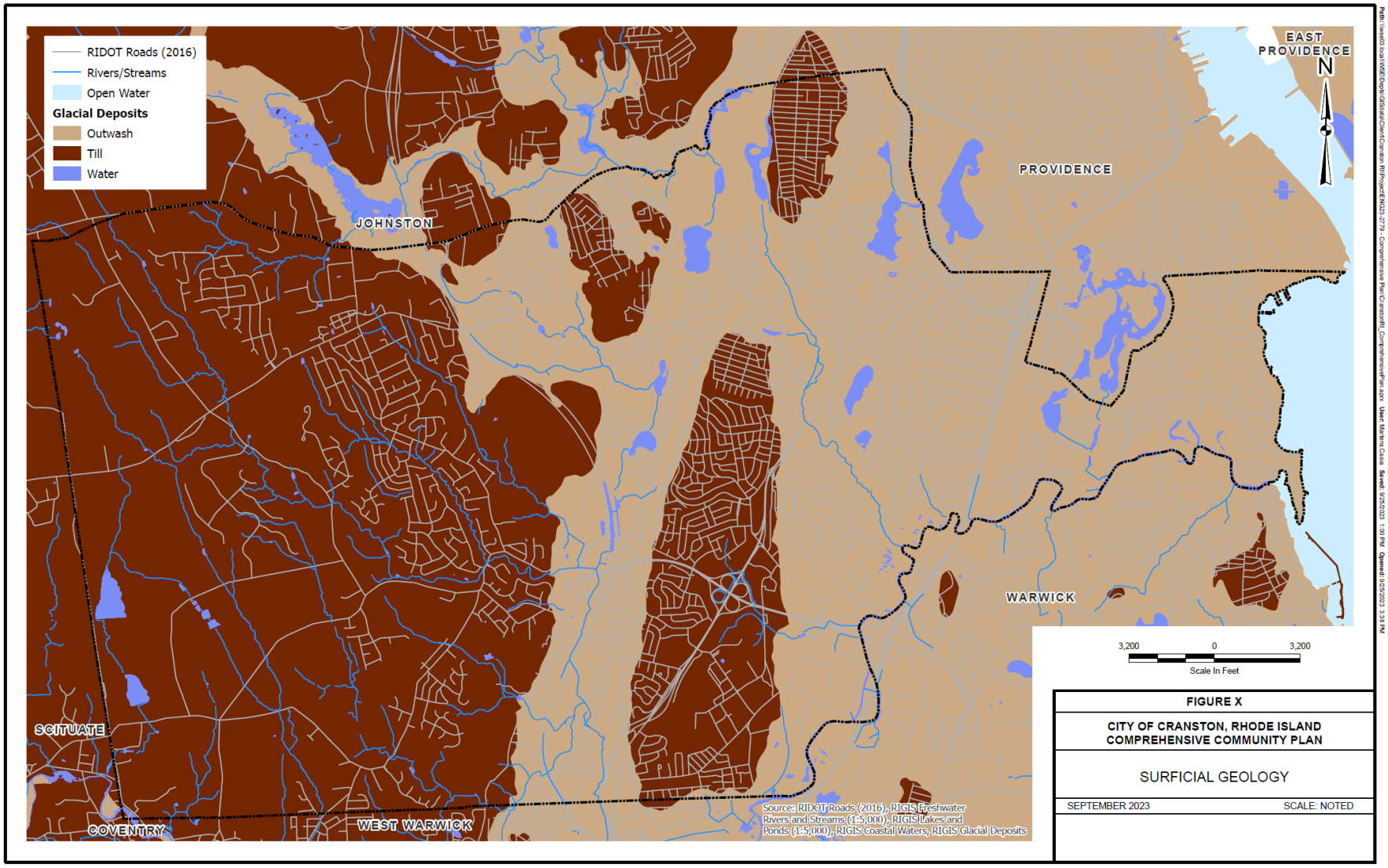


Figure 2-8. Flood Hazard Areas

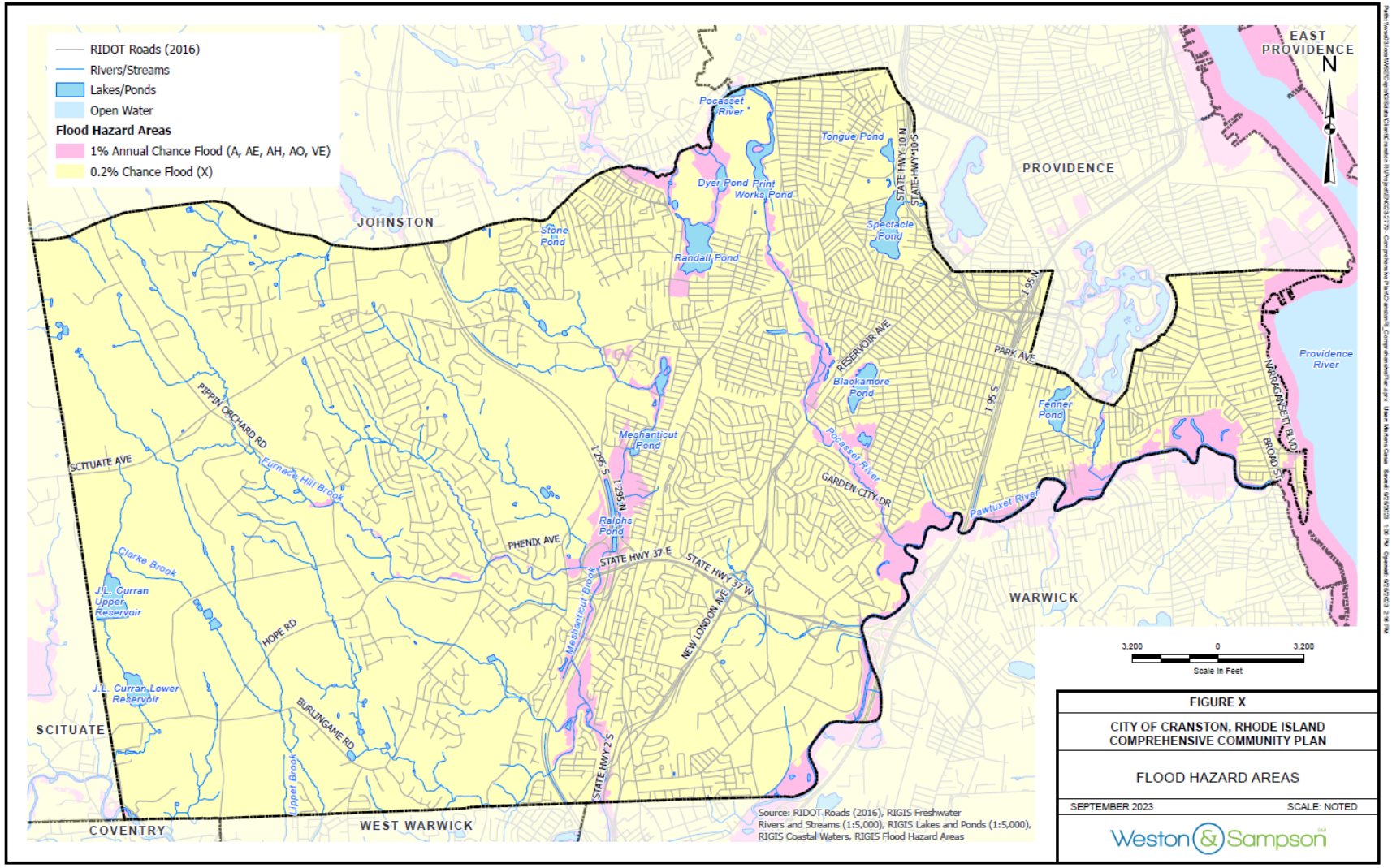


Figure 2-9. Ecological Communities and Habitat Area

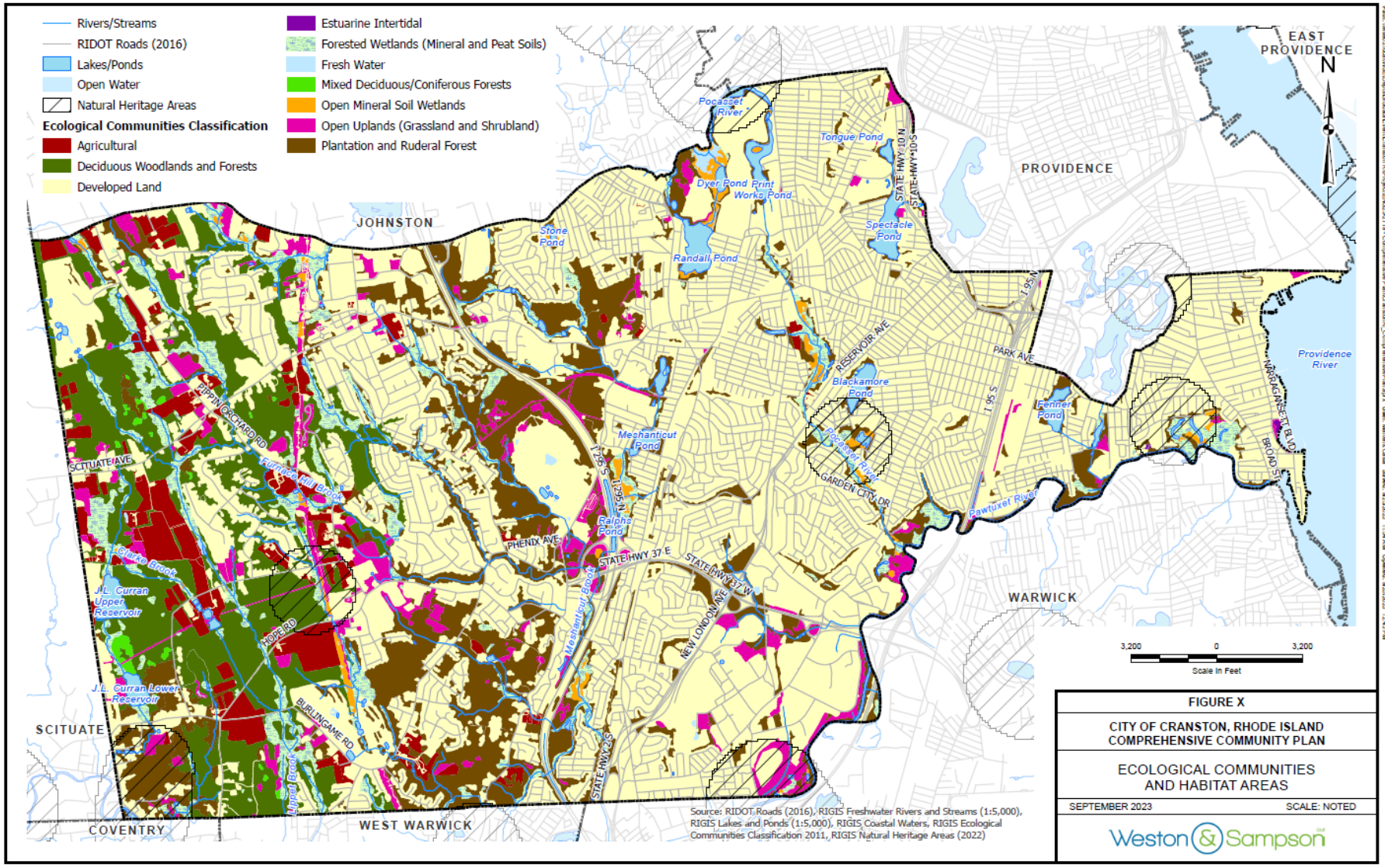
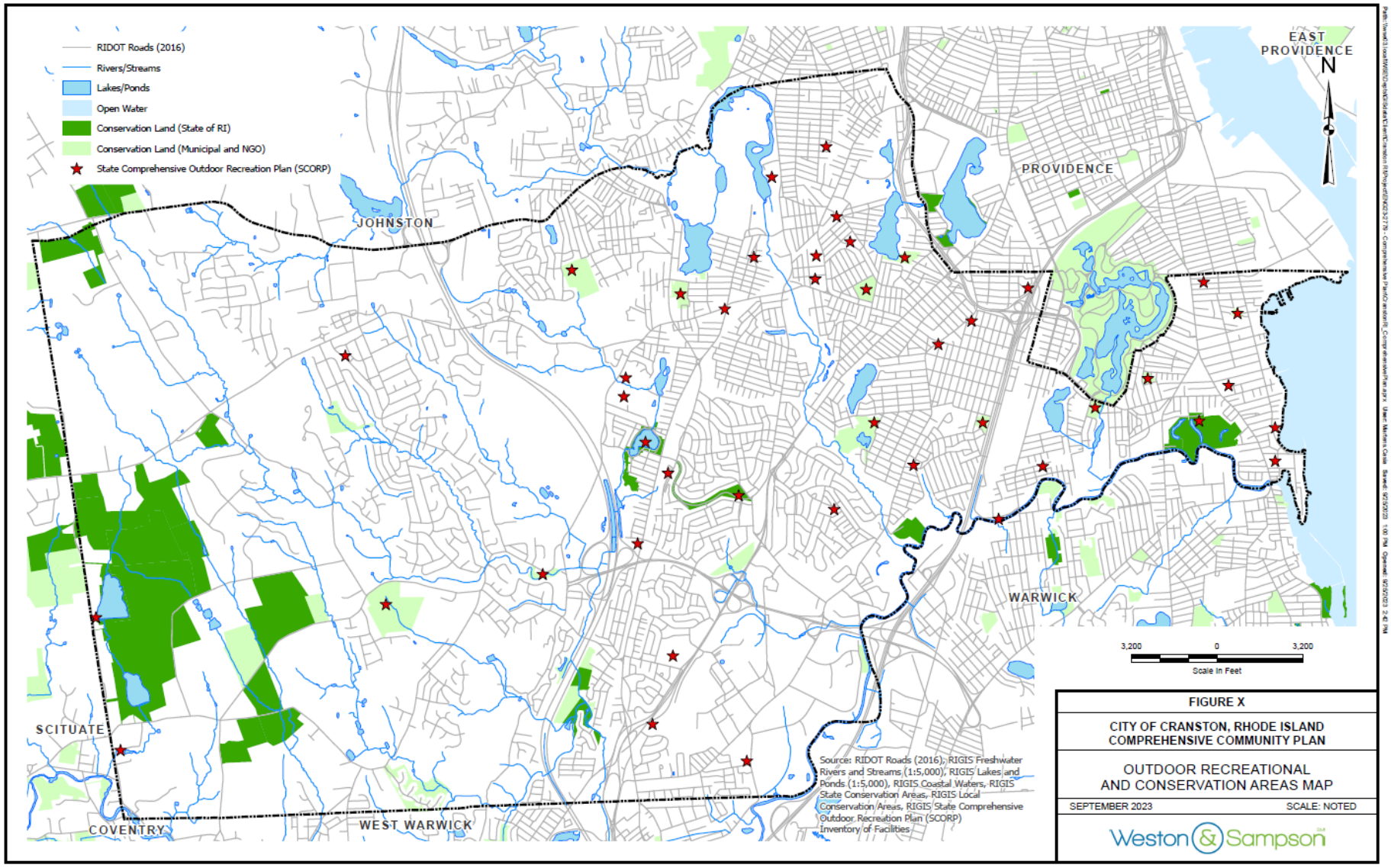


Figure 2-10. Outdoor Recreational and Conservation Areas Map


RIDOT Roads (2016)
Rivers/Streams
Lakes/Ponds
Open Water
Conservation Land (State of RI)
Conservation Land (Municipal and NGO)
State Comprehensive Outdoor Recreation Plan (SCORP)
EAST PROVIDENCE
N
PROVIDENCE
JOHNSTON
WARWICK
SCITUATE
COVENTRY
WEST WARWICK
3,200 0 3,200
Scale in Feet
Source: RIDOT Roads (2016), RIGIS Freshwater Rivers and Streams (1:5,000), RIGIS Lakes and Ponds (1:5,000), RIGIS Coastal Waters, RIGIS State Conservation Areas, RIGIS Local Conservation Areas, RIGIS State Comprehensive Outdoor Recreation Plan (SCORP) Inventory of Facilities
FIGURE X
CITY OF CRANSTON, RHODE ISLAND
COMPREHENSIVE COMMUNITY PLAN
OUTDOOR RECREATIONAL
AND CONSERVATION AREAS MAP
SEPTEMBER 2023
SCALE: NOTED
Weston & Sampson

5.0 HOUSING

5.1 Introduction

Housing is one of the most fundamental topics in a Comprehensive Plan as it is one of the essential elements of everyday life. A municipality's demographic and housing characteristics are deeply intertwined: the housing stock available can influence who is interested in living there and who can afford to. The existing demographics and demographic trends influence housing demand and the market response. Cranston's population and housing traits are no different; the evolution of the City's population over time in addition to local, state, and federal policy, have shaped the housing landscape, and likewise, the housing stock has shaped the population.

This Element includes a discussion of the existing conditions related to housing in Cranston. For comparison, demographic information for Providence County and Rhode Island is also provided. Of note, this data covers only one year of post 2020 COVID-19 pandemic trends so it is difficul to say at the time this was written the exact impacts and lasting effects of the pandemic on Cranston.

5.2 Existing Conditions

According to the US Census, Cranston's population was 82,654 in 2021. Since 2010, the population in Cranston has been slowly rising, growing by almost 2,000 residents over the past 10 years. Environmental Systems Research Institute (ESRI) projections predict that the population to continue to increase to an estimated 83,110 residents in 2028 (see Figure 5.1). It is expected that the future population increase in Cranston will translate into greater housing demand in the upcoming decade.

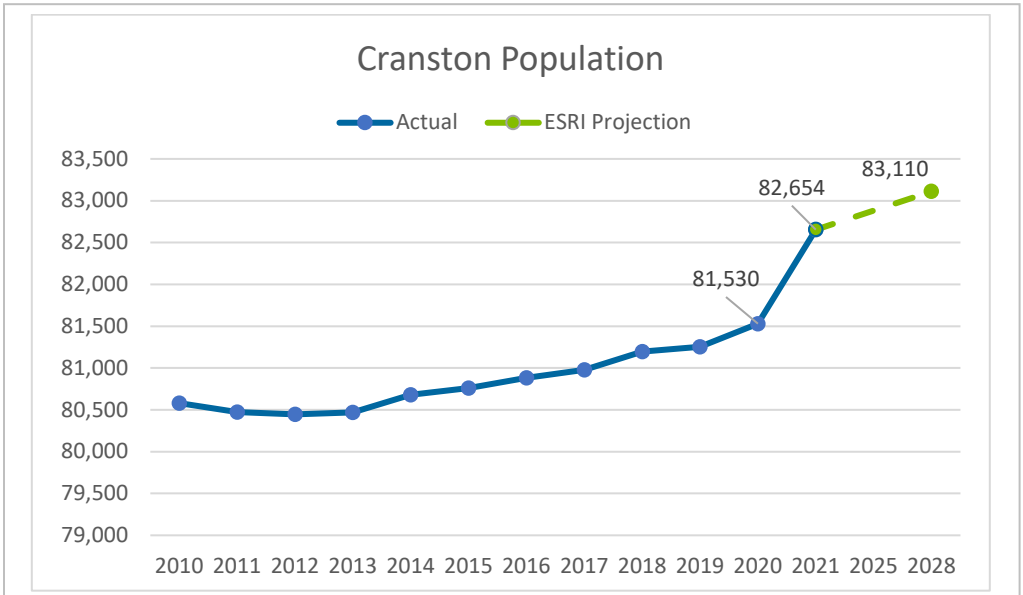


Figure 5-1. Cranston Population 2010-2028
Source: 5-yr ACS, Rhode Island Department of Administration, ESRI 2023

5.2.1 Population by Age

Table 5.1 and Figure 5.2 describe population by age. The current population of Cranston is distributed relatively evenly across Census-defined age groups. The exception to this is the lower proportion of residents aged 18-24 years old, compared to the county and state. There was a decrease of 1,521 residents aged 18- to 24-year-olds between 2016 and 2021 in Cranston.

Additionally, Cranston has a higher proportion of older adults (32%) in the 55+ year old range compared to both the county (28%) and the state (31%), increasing by 28% from 2016 to 2021. The median age in Cranston is 40, compared to 37.5 for Providence County. Alongside an increase in older adults, Cranston has also seen an increase in the share of residents under 18 (+2%), 25 to 34 years (+17%) and 35 to 44 years (+1%). Only Cranston had an increase in the age cohorts under 18 and 35 to 44 years when compared to the county and the state. Coupled, these age trends highlight the growing share of the population that is either a Millennial (hitting prime home-buying age), a family with children, or a Baby Boomer (typically seeking to downsize). Both trends signal shifts in housing demand.

Table 5.1 – Population Age Composition

	Cranston		Providence County		Rhode Island	
	2021	2016-2021 % Change	2021	2016-2021 % Change	2021	2016-2021 % Change
Under 18	21%	2%	21%	-2%	19%	-6%
18 to 24	8%	-15%	11%	-9%	10%	-5%
25 to 34	14%	17%	15%	18%	14%	18%
35 to 44	14%	1%	13%	-3%	12%	-8%
45 to 54	12%	-26%	13%	-8%	13%	-12%
55 to 64	16%	28%	13%	25%	14%	22%
65+	16%	13%	15%	19%	17%	25%

Source: 2016 and 2021 5-yr ACS

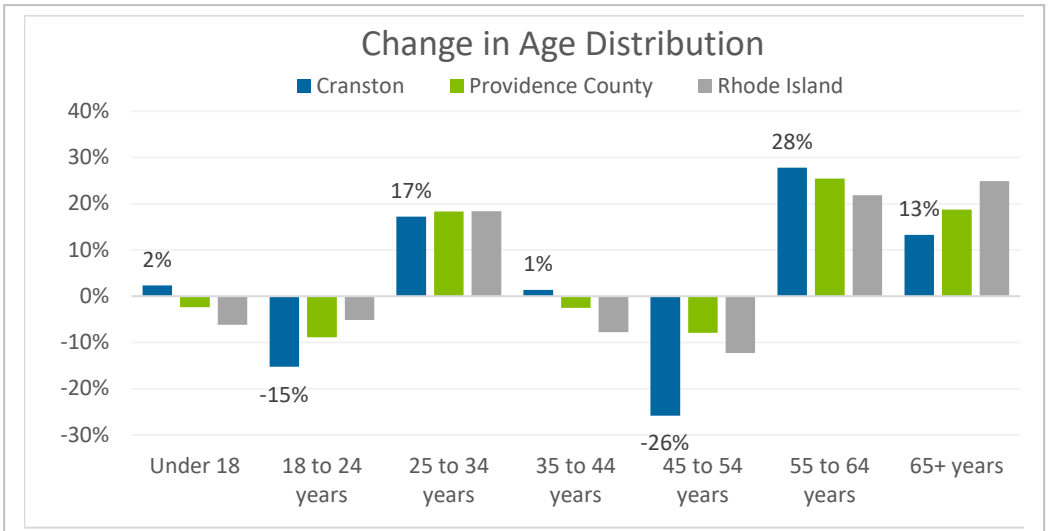


Figure 5.2: Change in Age Distribution
Source: 2016 and 2021 5-yr ACS

5.2.2 Race & Ethnicity

Cranston's population is predominantly White; 75% of the population who identify as one race are White and non-Hispanic/Latino (see Figure 5.3). Black or African American residents represent 6% of Cranston's population, while 7% of Cranston's residents identify as Asian. Cranston has grown more racially diverse since 2016, with increases in all non-White racial groups by 6%. Residents who identify as Hispanic or Latino comprise 16% of residents. Since these are identified as ethnicities in the Census data, not races, residents may have chosen to identify with one specific race as well as an ethnicity, therefore the percentages in Figure 5.3 do not add up to 100%.

Using the proportion of people of color as a measure of diversity, Cranston is less diverse than Providence County overall. About 32% of Providence County residents identify as such, compared to 25% of Cranston residents. The demographic composition of Cranston's population is important, as the discussion of housing affordability is intertwined with the makeup of the population. As many minority groups have historically had lower incomes and lower homeownership rates (according to US Census data), the demographic makeup of Cranston's population is important to the discussion of housing affordability.

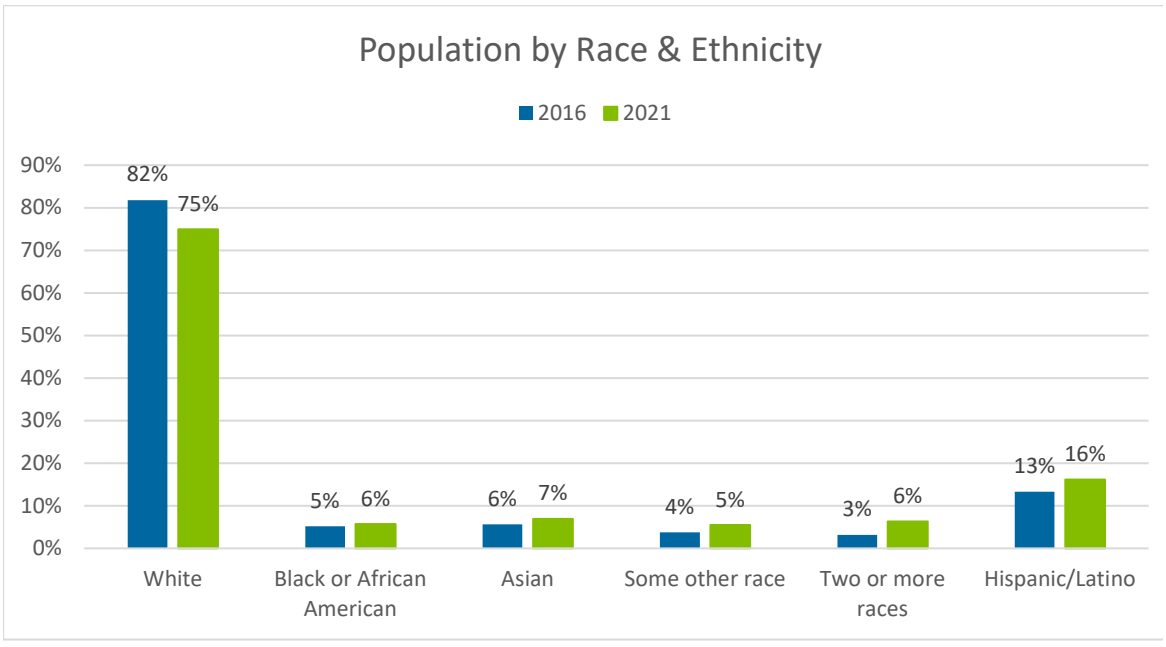


Figure 5.3: Population by Race & Ethnicity
Source: 2016 and 2021 5-yr ACS

5.2.3 Household Income

Table 5-2 summarizes the change in household income from 2016-2021 and Figure 5.4 illustrates the median household income in Cranston. The median household income in Cranston in 2021 was $77,145 which was an increase of over $15,000 since 2016. This figure is higher than Providence County's median income of $65,797 and the statewide median of $74,489. The percentage of households earning less than $75,000 a year in Cranston dropped significantly over the past decade. In 2016, the income range that contained the highest percentage of households was $25,000 to $49,999, comprising 22% of all households in the city. However, the number households in this income range also declined the most with 1,330 fewer households (-20%). This could be related to

lower income households moving out of Cranston, or some of these households earned more money in 2021 compared to ten years prior. Within Cranston, households with a household income of over $200,000 have increased by 1,333 households or 99% since 2016. In 2021, the largest proportion of Cranston residents (20%) have a household income of $100,000-$149,999.

Table 5-2 – Change by Household Income, 2016-2021

Household Income	Cranston	Providence County	Rhode Island
Less than $25,000	-11%	-21%	-20%
$25,000 - $49,999	-20%	-12%	-14%
$50,000 - $74,999	-11%	2%	-4%
$75,000 - $99,999	9%	16%	10%
$100,000 - $149,999	30%	42%	29%
$150,000 - $199,999	48%	49%	46%
$200,000+	99%	74%	71%

Source: 2016 and 2021 5yr-ACS

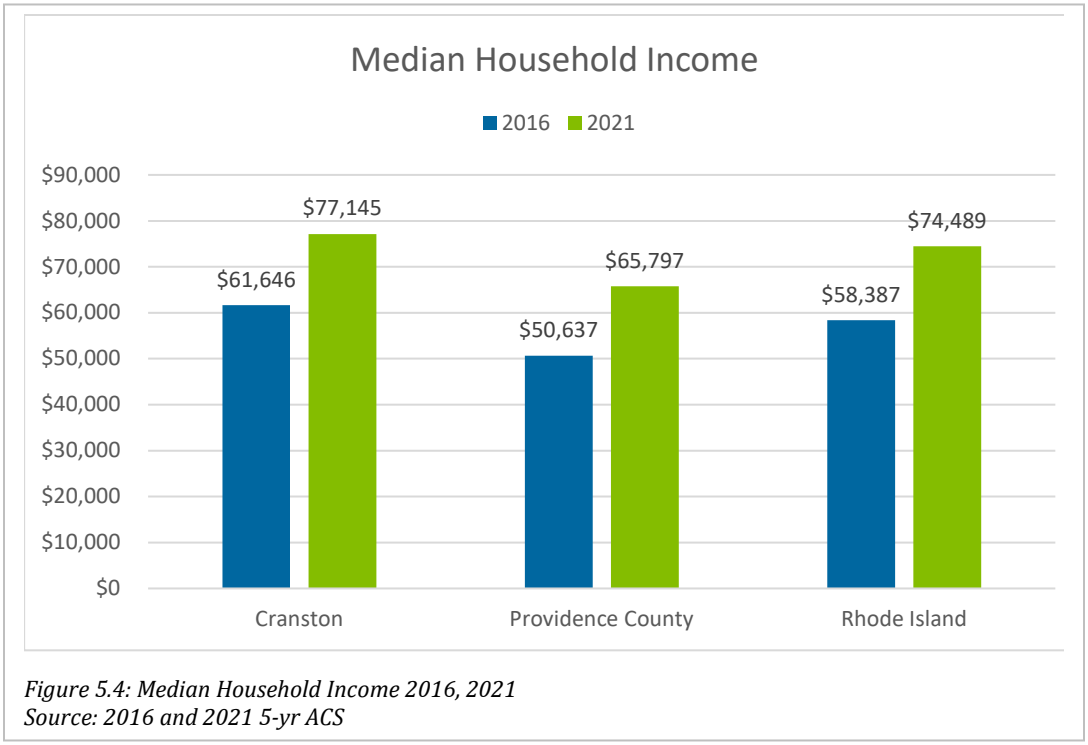


Figure 5.4: Median Household Income 2016, 2021
Source: 2016 and 2021 5-yr ACS

5.3 Household Characteristics

Changes in household types can have a significant impact on housing in a community. As of 2021, Cranston had 31,917 households. From 2012 to 2021, Cranston's population grew by 2.2%. Over this same period, the number of households increased by 1,476 or 4.8%. A higher growth rate in households than in the population suggests an increased demand for housing and smaller households. As is shown in Table 5.3 below, there was a growth of nearly 1,000 single person households while family sized households continued to increase as well. This growth may not

correlate directly with building permit data as some of these households may be occupying previously vacant housing units, and not newly built units.

5.3.1 Household Composition

While the total composition in Cranston has not shifted drastically, the number of nonfamily householders not living alone had the highest percentage change of 33.7%, with an increase of 518 householders not living alone. Most of the growth in this household type came from householders between the ages of 15 to 34 years old (993 householders). Two other types of households grew during that period: Married-couple families (+4%) and non-family householders living alone (+8%). Most of this growth for householders living alone came from householders between the ages of 35 to 64 years old (712 householders). The most significant decrease lies in male single householders with children (-18%).

Table 5.3- Household Composition

	Cranston						Rhode Island		
Households by Type	**2016**	**2016 % of Total**	**2021**	**2021 % of Total**	**Change, 2016-2021**		**2016 % of Total**	**2021 % of Total**	**Change, 2016-2021**
Total	30,441		31,917		4.8%		410,240	414,730	4.0%
Family Households	19,482	64.0%	14,449	61.6%	0.8%		62.5%	62.0%	3.3%
Married-Couple	13,902	45.7%	14,499	45.4%	4.3%		44.0%	44.4%	5.1%
Other family	5,580	18.3%	5,147	16.1%	-7.8%		18.6%	17.6%	-1.4%
Non-family Households	10,959	36.0%	12,271	38.4%	12.0%		37.5%	38.0%	5.4%
Living alone	9,424	31.0%	10,218	32.0%	8.4%		30.4%	30.5%	4.2%
Not living alone	1,535	5.0%	2,053	6.4%	33.7%		7.0%	7.5%	10.6%
Average household size	2.69		2.64		-1.9%		2.62	2.61	-0.4%

Source: 2016 and 2021 5-yr ACS

Household composition in Cranston has shifted towards a higher percentage of married couples and nonfamily householders both living alone and not alone. Younger residents in Cranston have a growing need for roommates, while most householders living alone are older Millennials or Gen X[1]. This informs a demand for smaller housing units due to high housing costs and the shortcoming of affordable housing options for Millennials and Gen X.

Household size reflects the demand for types of housing, as smaller households can reflect shifts in affordability, housing costs, and housing availability. The average household size for owner households in Cranston has decreased from 2.69 to 2.64, which can be attributed to the increases in single-person households. For renter households, the average household size decreased from 2.18 to 2.13, which can be linked to decreases in larger renter households. The rise of smaller households may indicate a rising need for housing tailored to individuals and couples.

[1] Millennials are those born between 1981 and 1996. Generation X are those born between 1965 and 1980.

5.3.2 Overall Housing Tenure

Based on 2021 ACS 5-year estimates, Cranston's households are split into 67.2% owner households (21,454 households) and 32.8% renter households (10,463 households). Compared to the 2016 ACS-5-year estimate of 65.9% owner households and 34.1% renter households, the composition of Cranston's housing tenure has not shifted significantly. Owner-occupied households increased by 1,394 households, while renter-occupied households only increased by 92 households.

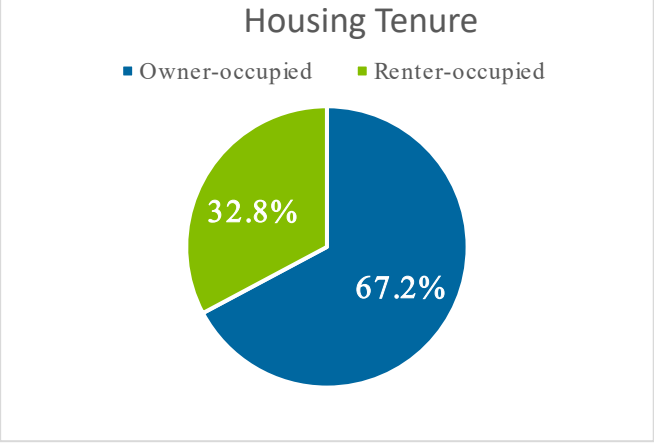


Figure 5.5: Housing Tenure
Source: 2021 5-yr ACS

As household composition in Cranston has shifted towards a higher percentage of non-family households and a slightly smaller average household size, across tenure the percentage of owner-occupied households increased slightly. This is similar to both Providence County and Rhode Island.

5.3.3 Household Tenure by Size and Age

Across household size and tenure, Cranston has seen a significant increase in 4-person renter households (21% or 186 households), with some growth in 2-person (+93 households) and 3-person (+72 households) renter households. Owner-households had the largest growth in 1-person households, which is in line with the increase in householders living alone and owning their homes. The only decrease for owner-households was seen in 4-person households (-746 households). The decrease in 4-person owner households may be related to older children moving out of the home.

Renters in Cranston tend to skew younger which is similar to trends seen nationwide, with the largest proportion of renter householders ages 25 to 34, while the largest proportion of owner householders are 65+. Figure 5.7 shows the age of householders by housing tenure (tenure refers to owner or renter households) illustrating the age difference between owners and renters in Cranston.

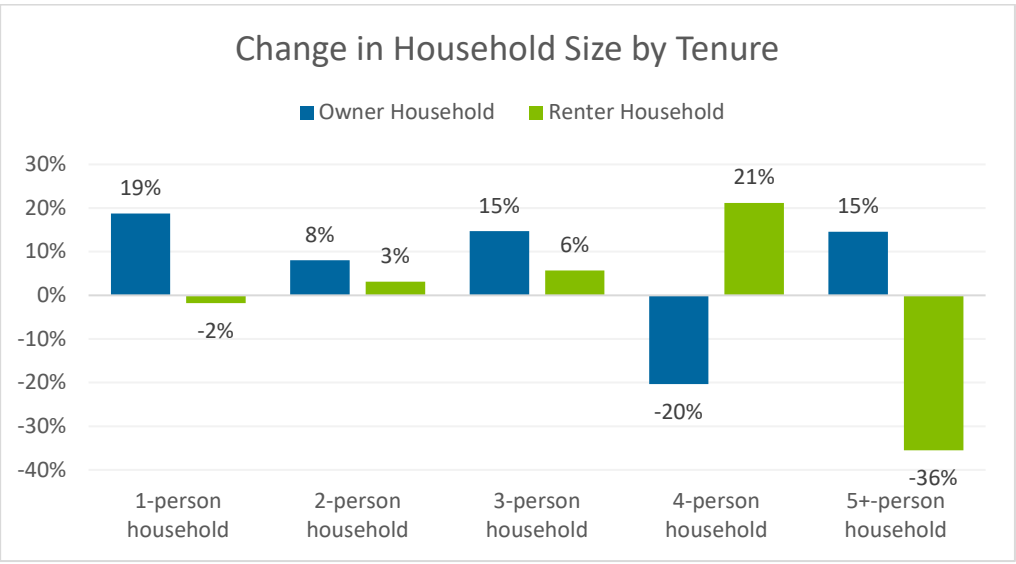


Figure 5.6: Change in Household Size by Tenure
Source: 2016 and 2021 5-yr ACS

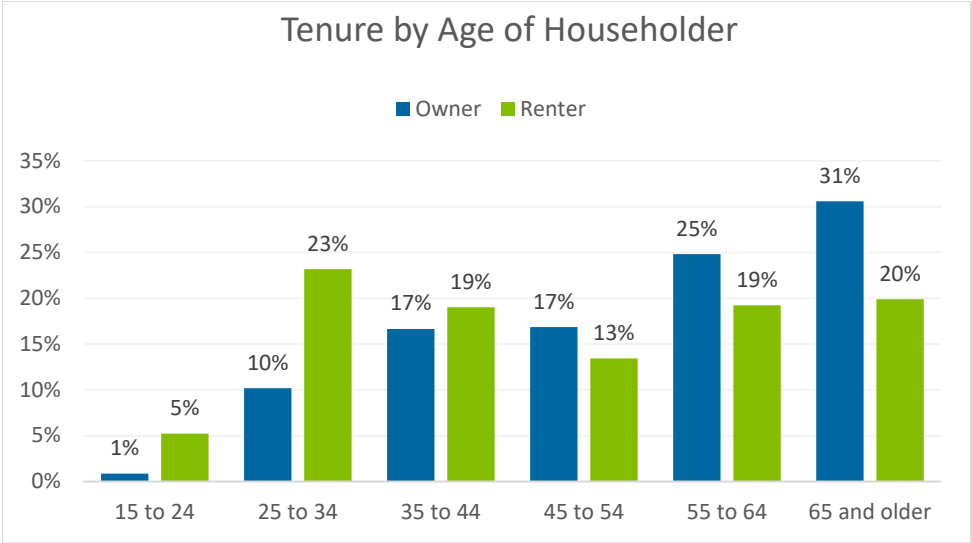


Figure 5.7: Tenure by Age of Householder
Source: 2021 5-yr ACS

5.4 Housing Stock

In addition to understanding the change in households and housing tenure in Cranston, it is also important to understand how the actual housing stock has changed over time. With an ever-tightening housing market and added competition for a limited stock of housing units, aligning housing supply with demand becomes important to try to balance housing within the local market. Layering on the complexities of the pandemic and its impact on housing prices and availability has created a sense of urgency both locally and regionally for addressing housing issues.

Cranston saw an increase in the total number of housing units between 2016 and 2021 from 32,716 to 33,648 units. The 2.8% increase in total housing units is below both the county and state growth (5% and 4% respectively). The number of single-family homes increased by 6.6% during this time to just over 22,000 units, going from 61.4% of the total housing stock to consisting of 65.6% of the total housing stock. This accounts for about 90% of all growth in housing between 2016 and 2021.

One-unit attached structures increased by 56.6% or 360 units and is the most significant housing structure typology growth. Additionally, 20–49-unit structures increased by 11%. or 124 units. The total number of 20-49 units is small, so any increase has a larger percentage increase, not necessarily a large increase in quantity. The largest decrease in total households was seen in multi-family housing, with housing in 5–9-unit buildings decreasing by 33%[2].

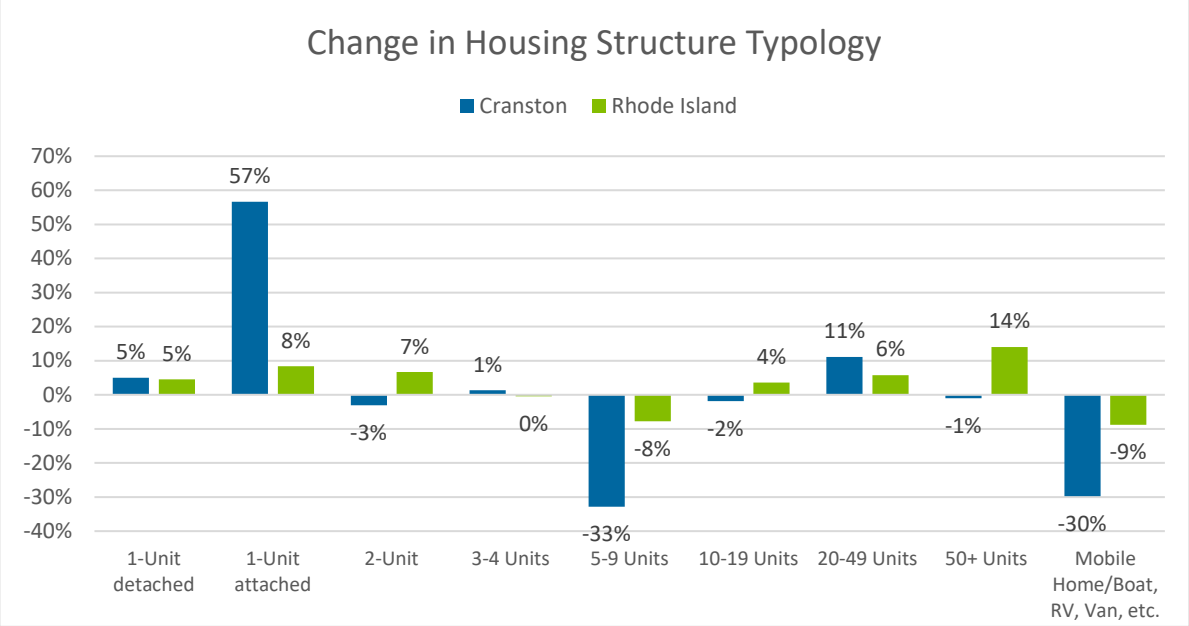


Figure 5.8: Change in Housing Structure Typology
Source: 2016 and 2021 5-yr ACS

Table 5.4- Range of Housing Size and Type				
	Cranston		Rhode Island	
	Estimate	Percent	Estimate	Percent
Units in Structure				
Total Housing Units	33,648	100%	265,713	100%
1-unit, detached	21,072	62.6%	265,713	55.2%
1-unit, attached	996	3.0%	16,857	3.5%
2 units	4,340	12.9%	55,312	11.5%
3 or 4 units	2,356	7.0%	57,809	12.0%

[2] The ACS provides an estimate of housing units across typologies for Cranston and while useful for evaluating trends, these data may not exactly align with the number of housing units or types of housing in the city today. All ACS data has a margin of error to account for this being a Census estimate.

Table 5.4- Range of Housing Size and Type				
	Cranston		Rhode Island	
	Estimate	Percent	Estimate	Percent
5 to 9 units	745	2.2%	21,930	4.6%
10 to 19 units	1,168	3.5%	17,577	3.7%
20 or more units	2,872	8.5%	41,443	8.6%
Mobile Home	99	0.3%	4,394	0.9%
Boat, RV, Van, etc.	0	0.0%	133	0.0%

Source: 2016 and 2021 5-yr ACS

5.4.1 Tenure by Units in Structure

Looking at the composition of units in owner-occupied structures, the majority (85%) of owner-occupied units are single-family structures with another 3% spread across 1-unit attached (e.g., row house, townhouse). This distribution suggests a prevalent preference for standalone homes among homeowners, possibly indicating a preference for more space, privacy, or a detached living arrangement. There are about 1,000 owner-occupied units spread across two-unit structures, or larger multi-family condominiums. Conversely, the renter-occupied housing stock is spread across several different residential structure types with 61% of all renter units in structures with fewer than five units and 39% in structures greater than five units. The overall growth in units in 20–49-unit structures is driven by renter-occupied units. However, single-unit attached units had the most significant proportional increase for renter-occupied units, by 53% or an increase of 95 units, becoming a more popular choice for renters. Two-unit structures are the largest category for renter-occupied units but have decreased since 2016, losing 131 units. This decrease might be attributed to a change in renter preferences, as there seems to be a growing demand for single-family homes to better meet the needs of renter households with families.

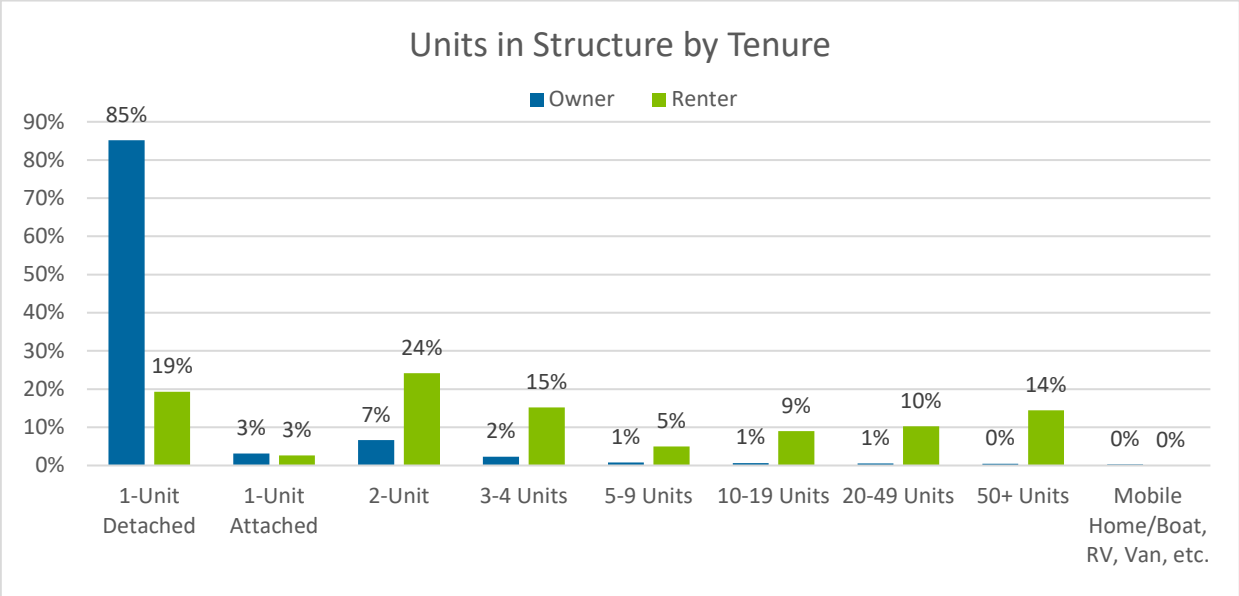


Figure 5.9: Units in Structure by Tenure
Source: 2021 5-yr ACS

5.4.2 Age of Housing Stock

The median year that a housing unit was built in Cranston is 1958, which is slightly older than Rhode Island's median year built of 1960. Most renter-occupied housing was built prior to 1979 (81%), compared to only 5% or 487 units built in 2000 or later. The prevalence of older rental housing stock poses challenges due to potential deferred maintenance issues and outdated layouts, diminishing the overall appeal of these units for present-day renters. Aging infrastructure may require significant investment for upkeep and modernization. Similarly, most owner-occupied housing units were built prior to 1979 (75%). However, there are more owner-occupied housing units built in 2000 or later, with 1,560 units built, about three times as many as renter-occupied units.

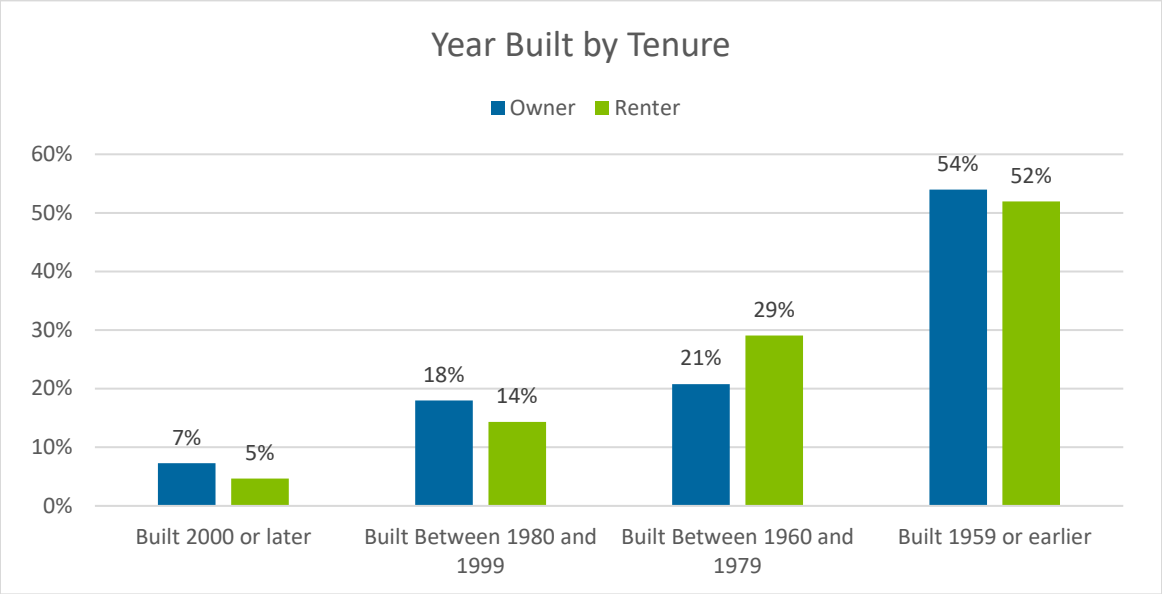


Figure 5.10: Year Built by Teure
Source: 2016 and 2021 5-yr ACS

5.4.3 Occupancy & Tenure

The Census records vacant units in a few different ways to comprise the total vacancy count for a particular geography. Housing vacancies are captured in four different categories by the Census, which includes: vacant available, vacant unavailable, seasonal, and vacant other.

- Vacant available refers to unoccupied units that are currently for sale or for rent.
- Vacant unavailable refers to off-market for sale and for rent units.
- Seasonal and recreational refer to housing units that are not occupied year-round such as second homes, summer cottages or lake houses, etc.
- Vacant other refers to units that are not available for rent or sale and are off the market for different reasons. These include undergoing substantial rehab, uninhabitable units, or foreclosure, among others.

Understanding housing vacancy is important because it allows the quantification of a portion of the housing stock that might otherwise be available to year-round renters and owners but for the fact that it is categorized as vacant. It is also important to note that maintaining a healthy level of vacant

units is important to allow households the ability to find other housing that may be more suitable for their needs.

Of the 33,648 total units in the City, 95% were occupied; this is an increase of about two percentage points since 2016, though the total number of occupied units increased from 30,441 to 31,917. Cranston has seen its vacancy rate drop from 7% to 5%. Lowering vacancy rates may be attributed to the general lack of new housing construction, particularly rental units, which coupled with rising prices and changes in demand have led to consistently low vacancy rates. The challenges in construction during the pandemic, marked by increased costs and disruptions, have further impeded efforts to construct new housing.

As of 2021, the percentage of vacant available units decreased significantly from 4% to 1% or by 909 units. Slightly over half of all vacant housing units in Cranston were classified as "other vacant", which describes properties that are involved in legal proceedings, foreclosures, currently under repair/renovation, abandoned, or vacant for personal reasons (including preparing to rent or sell or undecided). The low proportion of vacant units underscores the tightness in the housing supply within Cranston.

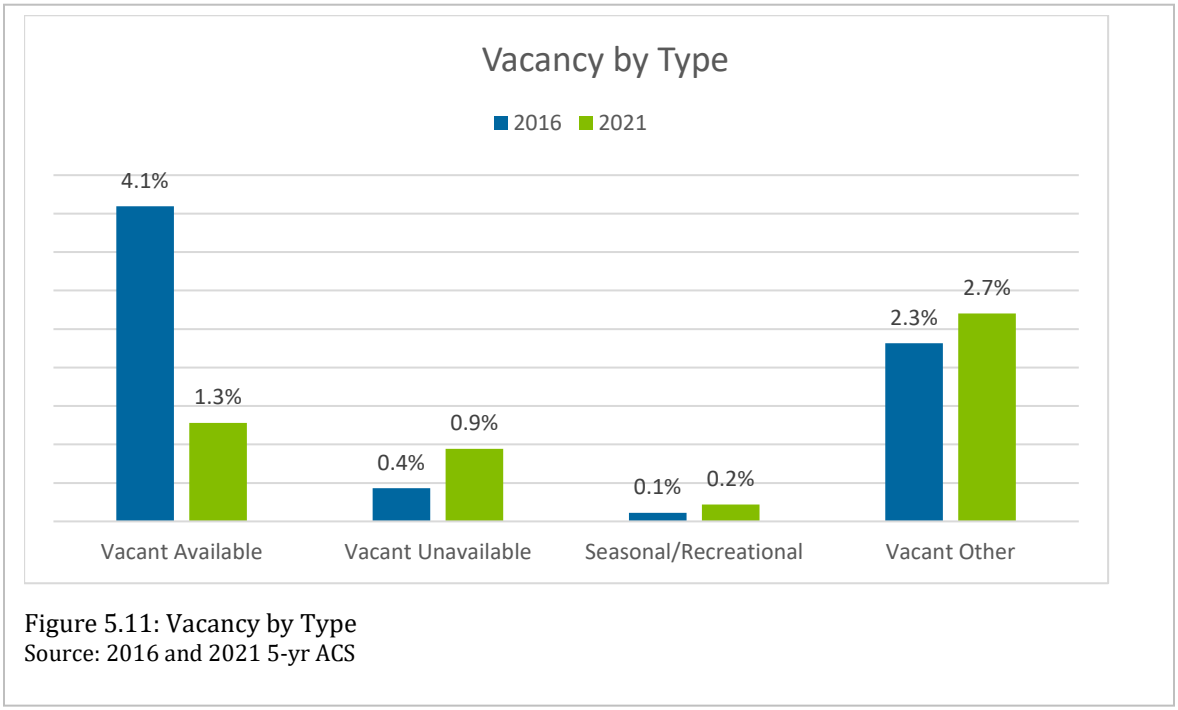


Figure 5.11: Vacancy by Type
Source: 2016 and 2021 5-yr ACS

5.5 Housing Market Dynamics

As the state of Rhode Island continues to experience and recover from the COVID-19 pandemic, shifting preferences are likely to impact Cranston's housing market. The housing market dynamics in Cranston are marked by an overall increase in housing prices, reflecting the evolving preferences and demands of residents amid the ongoing recovery from the COVID-19 pandemic. As in many other major metropolitan areas and regions influenced by these changes, demand for more space followed stay-at-home orders and the ability and necessity to work remotely for many workers.

5.5.1 Home Values

As of 2021, Cranston's median owner-occupied home value is $275,400 which is higher than Providence County ($266,700) by about $9,000 but lower than Rhode Island ($292,600) by about $17,000. Median home value has increased in Cranston by almost 13%, Approximately 60% of Cranston's owner-occupied housing stock is valued at or above $250,000. Over the past decade the number of homes valued at $250,000+ has increased by 83%, The most significant growth occurred for homes valued between $250,000 and $499,999 which increased by 4,907 homes. Homes valued above $500,000 increased by 999 homes or 143%.

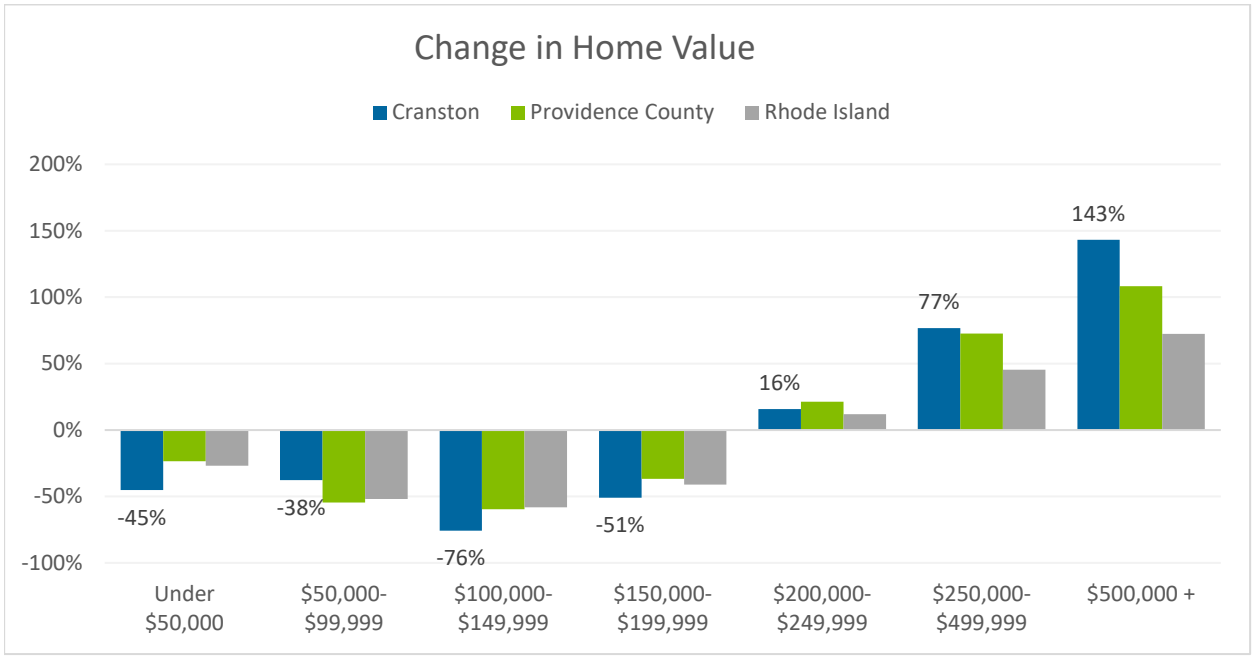


Figure 5.12: Change in Home Value
Source: 2016 and 2021 5-yr ACS

5.5.2 *Home Sale Prices*

Based on housing market data from Redfin, a real estate brokerage and analytics firm, the median home sale price of all homes in Cranston rose from $159,000 in 2013 to $355,000 in 2023. This is a $196,000 increase (123%) over a ten-year period. This is slightly lower than the median price increase in Rhode Island (+$235,000 or 135%) and Providence County (+$232,000 or 162%). The substantial increase underscores a discrepancy when compared to Cranston's median income increase of $18,703 over the same period. Cranston's median sale prices continued to increase to a peak in May 2023 at $411,000.

Over this same period, median days on market decreased from 75 days in 2013 to 43 days in 2023, with houses selling quicker in the past three years than the previous ten years. Additionally, Redfin's inventory (total number of active listings) has decreased through the past decade, with an average of less than 100 active listings in 2022. As inventory decreases, prices increase because of demand. Decreased inventory and low vacancy underscores the challenges in housing affordability and availability within the city, contributing to a broader issue of constrained supply and rising demand.

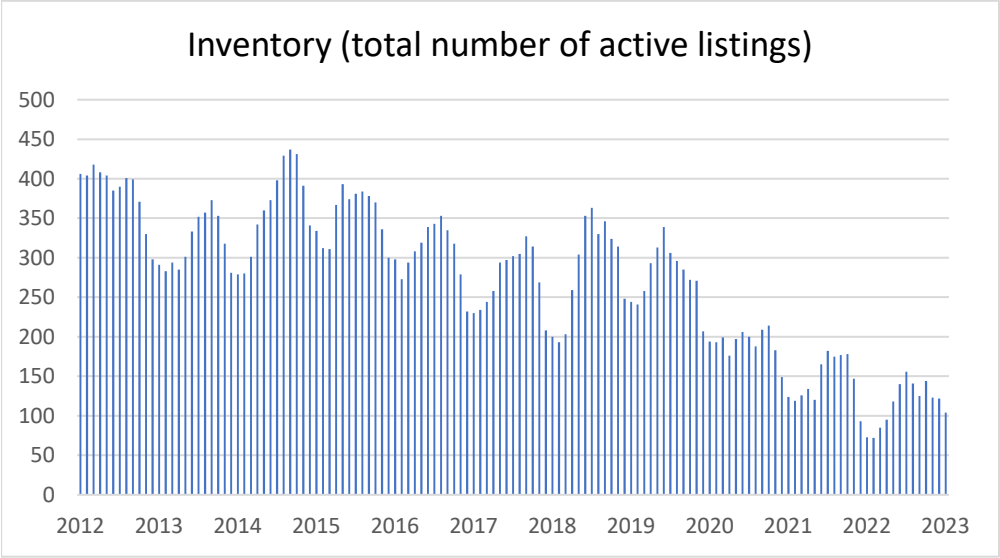


Figure 5.13: Inventory (Active Listings)
Source: Redfin, 2012-2023

The current market dynamics make Cranston's housing market very competitive. According to Redfin as of September 2023, homes in Cranston sell in about 14 days, with a median sale price of $415,000. Cranston's median home sale price in 2023 ($355,000) is below both Providence County ($382,500) and Rhode Island ($412,900). However, home prices in 2023 were up 10% compared to 2022, with 65% of homes sold above list price. Another challenge facing home buyers today are higher interest rates, which make it more difficult to afford the same priced home today compared to a year ago.

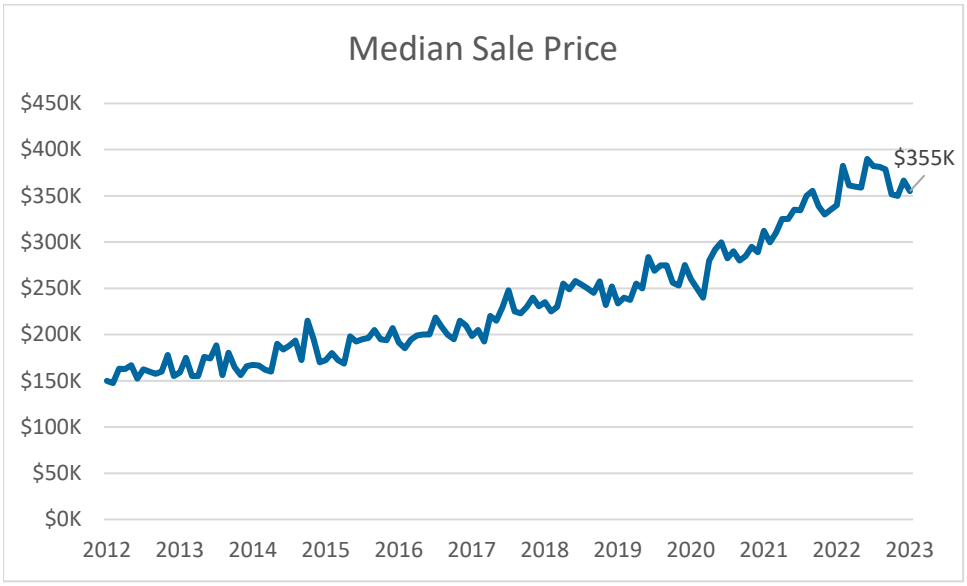


Figure 5.14: Median Sale Price
Source: Redfin, 2012-2023

5.5.3 Median Gross Rent

Gross rent is a measure of the monthly agreed-upon rent plus an estimate of monthly utility costs and fuels if they are paid by the tenant. This measure captures the true cost of renting a unit if utilities are not included in the monthly payment. It should be noted that ACS measures of gross rent include all rented units in Cranston, not just those that are recently listed on the market, which is why ACS gross rent estimates do not reach as high as recently listed rental units. What is important about gross rent estimates is that they provide a good indicator of how rents are trending across the entirety of the City's rental stock.

Over the past decade, the distribution of gross rents in Cranston has increased in the price ranges above $1,000 a month and has decreased in the price ranges below. Rental housing units priced between $1,500 and $1,999 increased the most by 1,004 units. This trend signals increasing rents across the City's rental market, meaning lower-income households are more likely to face cost burdening (spending greater than 30% of income on rent) or are being priced out of the City.

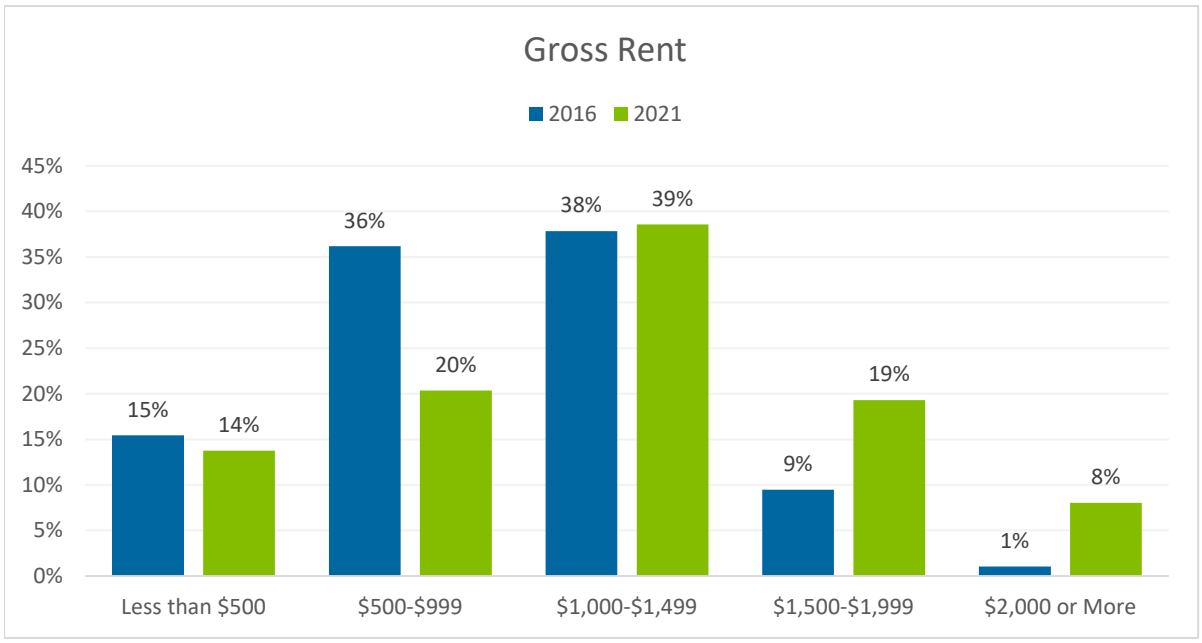


Figure 5.15: Gross Rent, 2016, 2021
Source: 2016 and 2021 5-yr ACS

Cranston's median gross rent from the 2021 5-year ACS is $1,185, which is higher than both Providence County ($1,062) and Rhode Island ($1,097). This could be due to the lower number of rental units in Cranston and low availability. As of October 2023, according to Zumper and Zillow, there were 69 units listed by online rental websites. Asking rents ranged from approximately $1,100 per month for smaller 1-bedroom units to $2,600 for 3-bedroom units across the market. These offerings were found across a variety of unit types including townhouses and duplexes, single-family homes, and apartments. According to Zumper, two-bedroom apartments are the most common to be listed for sale. As of August 2023, 2-bedroom apartments are listed for a median rent of $1,898.

Table 5.6- Median Rental Cost by Unit Size

Unit Size	Median Rent
Studio	$1,000
1-Bedroom	$1,493
2-Bedroom	$1,898
3-Bedroom	$2,225
4-Bedroom+	$4,000

Source: Zumper, August 2023

5.5.4 Housing Affordability

Cranston's housing market is influenced by several factors, some of which are within and some beyond the City's control. Cranston's proximity to the City of Providence provides a source of jobs for Cranston residents, but also affects its housing dynamics. The continued growth of rents and the rapid increase in home prices appears to have caused affordability challenges for many Cranston residents.

According to RI Housing's 2023 Fact Book, the annual income needed to affordably purchase a median priced home in Cranston is $118,356. Additionally, the annual income needed to affordably rent a 2-bedroom apartment is $78,422. The number of households below HUD 80% area median income is 12,590 households which is 40% of all households in the city.

One common measure of housing affordability is referred to as *housing cost burden*. Cost burdening data measures the number of households spending more than 30% of their household income on housing costs. In Cranston, 35% of all homeowners spend more than 30% of their income on housing costs. This is a slight decrease from 2016 when 37% of homeowners were considered cost burdened. Renters face even greater challenges. The latest ACS shows that 49% of all renter households in Cranston are housing cost-burdened, equating to approximately 4,800 households. The proportion of renters who are housing cost-burdened has dropped since 2016, with the total number of such renter households decreasing by about 20 households. The number of cost burdened owner households has decreased as well, from 32% in 2016 to 30%.

Though it is typical nationwide to see a higher percentage of renter households experiencing cost burdening compared to owner households, there are still affordability concerns for these households in Cranston.

Table 5.7- Cost-Burdened Households in Cranston, RI

	Number of Households	Percent of Total
Cost Burdened Households	11,144	35%

Source: 2021 5-yr ACS

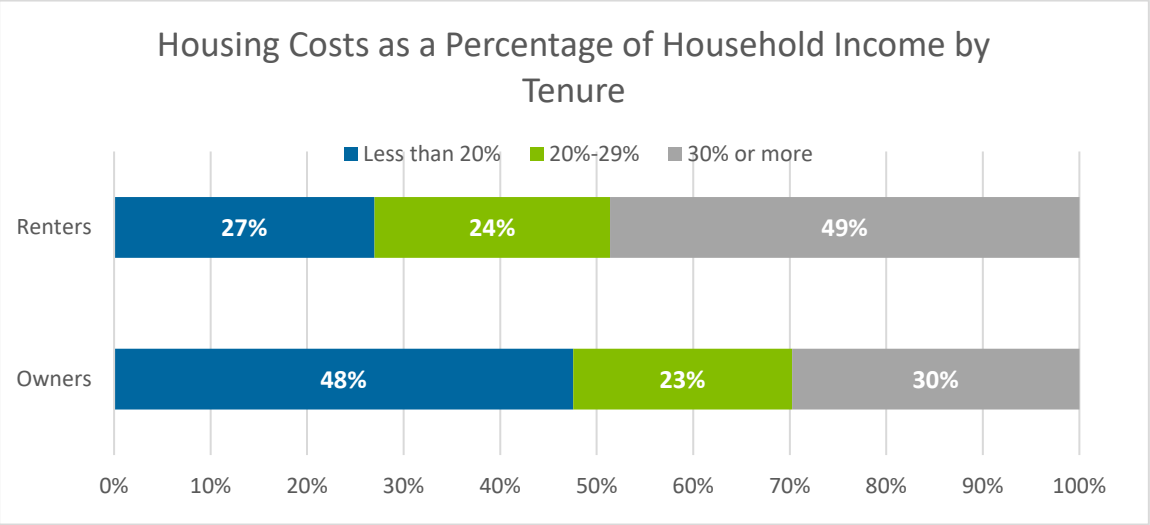


Figure 5.16: Housing Costs as a Percentage of Household Income by Tenure
Source: 2021 5-yr ACS

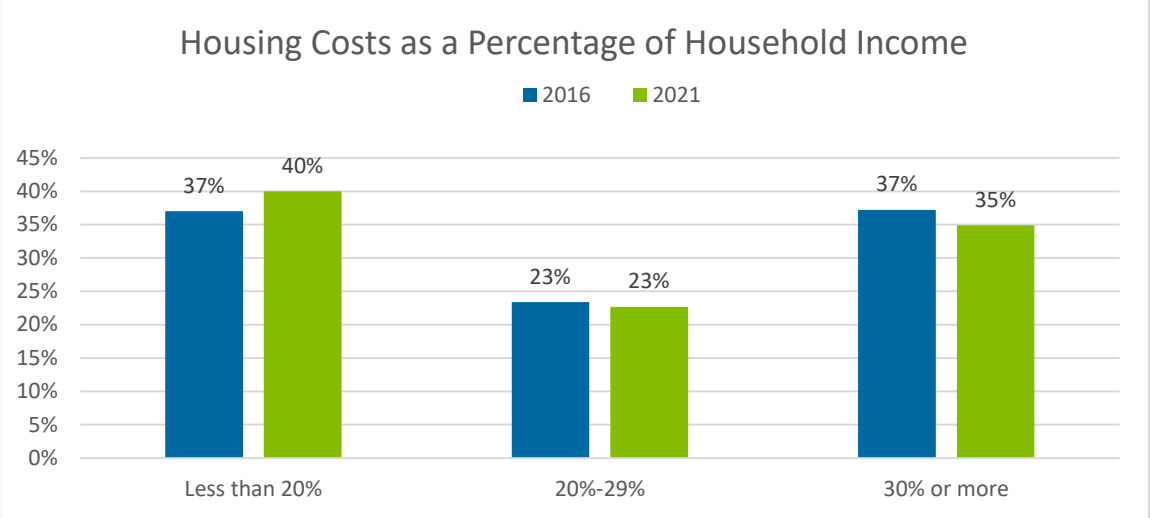


Figure 5.17: Housing Costs as a Percentage of Household Income
Source: 2016 and 2021 5-yr ACS

Severe housing problems can be any of the following: the housing unit lacks complete kitchen facilities, the housing unit lacks complete plumbing facilities, the household is overcrowded, and if the household is cost burdened. Low-income households and renter households are more likely to have one severe housing problem, with 72% of extremely low-income households and 62% of very low-income households having at least one housing problem. Renters, comprising 41% of households affected by at least one housing problem, are disproportionately affected compared to the 8% of homeowners facing similar issues. These trends are fueled by economic challenges and limited

affordable housing options. The consequences of severe housing problems are wide-ranging, impacting health, community well-being, and economic stability.

Table 5.8- Comprehensive Housing Affordability Strategy Data			
Income Category	**Households with at Least One Housing Problem**	**Total Households**	**Percent of Households**
Extremely low-income (<= 30% HAMFI)*	3,080	4,265	72%
Very low-income (>30% to <=50% HAMFI)	2,660	3,365	62%
Low Income (>50% to <=80% HAMFI)	2,445	5,035	57%
Low & middle-income (>80% to <=100% HAMFI)	650	3,235	15%
Total	10,115	31,360	32%

*Source: CHAS** 2016-2020*

*Household Area Median Family Income **Comprehensive Housing Affordability Strategy

Table 5.9- Comprehensive Housing Affordability Strategy Data			
Income Category	**Households with at Least 1 Housing Problem**	**Total Households**	**Percent of Households**
Renters			
Extremely low-income (<= 30% HAMFI)	1,600	2,520	63%
Very low-income (>30% to <=50% HAMFI)	1,335	1,630	82%
Low Income (>50% to <=80% HAMFI)	895	1,960	46%
Low & middle-income (>80% to <=100% HAMFI)	70	965	7%
Total	4,175	10,135	41%
Owners			
Extremely low-income (<= 30% HAMFI)	1,480	1,745	85%
Very low-income (>30% to <=50% HAMFI)	1,325	1,735	76%
Low Income (>50% to <=80% HAMFI)	1,550	3,075	50%
Low & middle-income (>80% to <=100% HAMFI)	580	2,270	26%
Total	5,940	12,400	8%

Source: CHAS 2016-2020

The Low- & Moderate-Income Housing Act (LMIH) (RIGL 45-53) requires municipalities to maintain 10% of their year-round housing stock as affordable housing (for Cranston, it is an aspirational goal,

as the City meets the State required affordable housing mark as discussed below). Based on data provided by RI Housing, as of 2022, 5.3% of the total housing units in Cranston are low-median income housing that count towards the 10% goal. There are 1,806 units of long-term affordable homes in Cranston. About 74% of these units are designated for the elderly population, 11% for families, and 14% for special needs residents. No units were added between 2022 and 2023, with a decrease of 7 units from 2022 to 2023. To hit 10%, Cranston needs to add 1,487 LMIH units.

Cranston meets RIGL 45-53-3(5)(i)

(i) Low- or moderate-income housing exists which is: (A) In the case of an urban city or town which has at least 5,000 occupied year-round rental units and the units, as reported in the latest decennial census of the city or town, comprise twenty-five percent (25%) or more of the year-round housing units, and is in excess of fifteen percent (15%) of the total occupied year-round rental units; or (B) In the case of all other cities or towns, is in excess of ten percent (10%) of the year-round housing units reported in the census.

According to the 2021 ACS 5-Year Estimates, 10,463 units (or 32.8%) of *all units* are renter-occupied. Furthermore, according to the 2020 Decennial Census, total housing units for the City equal 34,182. The City currently maintains 1,806 units or 17.8% of all total occupied year-round rental units. Thus, the City currently meets the State requirement for low- and moderate-income housing under RIGL §45-53-3(5)(i).

Ensuring an adequate supply of LMIH units in Cranston is crucial for providing essential housing options for a diverse range of residents, including the elderly, families, and residents with special needs. Fostering socioeconomic diversity and affordability within Cranston ensures residents aren't priced out of the City.

Table 5.10- Low & Moderate Income Housing

Community	Low-Medium Income Housing %	Total Units	LMIH Units	Elderly	Family	Special Needs
City of Cranston	5.3%	32,935	1,806	1,348	205	253

Source: RI Housing, 2023

5.6 Current Measures

Cranston offers various housing assistance programs to income-eligible residents through the CDBG program to improve their homes, address code violations, and support first-time homebuyers. These programs aim to enhance housing conditions and make homeownership more accessible.

For homeowners, Cranston provides low-interest or interest free loans to income eligible homeowners to assist in making repairs and improvements to their homes and to correct code violations. Typical improvements include roofs, vinyl siding, windows, doors, and gutters. The Housing Rehabilitation Loan program offers a 0% deferred or a 2% interest loan with a 15-year payback, depending on the applicant's household income.

Additionally, the Department of Community Development provides two programs for first-time, income-eligible homebuyers in Cranston. For both programs, the buyer must live in the purchased property for five years after the assistance is provided (closing date).

- Closing Cost Assistance Program: Assists with closing fees, offering a grant of up to $3,000.

- Down Payment Assistance Program: This program matches 50% of the required down payment, not exceeding $5,000. This cannot be combined with the Closing Cost Assistance Program.

Cranston is one of the four AARP Age-Friendly Communities in Rhode Island, agreeing upon "livability criteria". OneCranston Health Equity Zone (HEZ), one of Rhode Island's 15 HEZs, is a resident-led initiative supported by the Rhode Island Department of Health and managed by the Comprehensive Community Action Program (CCAP). HEZ works to enhance health access by addressing barriers like poverty, discrimination, and limited access to education, housing, safe environments, and healthcare, with a particular focus on physical health, trauma, and youth opportunity.

5.7 Issues and Opportunities

5.7.1 Issues

In Cranston, there has been a shift in the age composition of the population, with more Millennials entering prime home-buying age and an increase in older adults seeking to downsize. These age trends are impacting the type of housing demand in the City, and the housing stock will need to adapt to accommodate the changing needs of these demographic groups.

The median year of construction for housing units in Cranston is 1958, indicating that a significant portion of the housing stock is older. Aging housing can present challenges such as maintenance and energy efficiency issues, potentially reducing the number of safe and well-maintained units available in the City.

The last five years saw record growth in home prices and sales volumes, as well as increases in gross rent. About 35% of all homeowners are cost-burdened, spending over 30% of their income on housing costs. Affordability concerns are especially pronounced for renters, with 49% experiencing cost burdening, making this a pressing issue that needs to be addressed.

Cranston has experienced an increase in home values, with a significant proportion of owner-occupied homes valued at or above $250,000. This presents an opportunity for homeowners to build equity and for the City to continue attracting residents interested in investing in their homes. Rising house prices can also contribute to the displacement of lower-income residents, as the cost of living rises.

5.7.2 Opportunities

The population and number of households in Cranston has steadily grown, with projections indicating further increases. This presents an opportunity for the city to capitalize on the growing demand for housing, potentially by creating housing for all age groups and incomes.

While much of the housing stock consists of single-family homes, there is also growth in large structures containing 20–49 units. Diversifying the housing stock with more multi-unit buildings could provide opportunities for various housing options, including affordable housing, which can help address affordability concerns.

The City lacks inclusionary zoning, which means there is no requirement for developers to include affordable housing in new developments. However, since May 2022 the Cranston City Plan Commission has generally followed an inclusionary affordable housing policy when it comes to new apartment projects. When feasible, the City Plan Commission required new apartment projects to have at least 15% percent of their units to be "affordable" under state law. Cranston can continue this flexible policy. In the alternative, Cranston can work towards the establishment and enforcement of an inclusionary zoning ordinance. Recent changes to the inclusionary zoning law require that a

minimum of 15% (as of January 1, 2025) of units in an inclusionary zoning project must be designated as affordable housing and maintained as such for at least thirty years. The City will need to evaluate if the new requirements are appropriately applicable in all areas of the City. This endeavor can be fortified through the implementation of enforceable land leases and deed restrictions, overseen jointly by the municipality and the state of Rhode Island, ensuring enduring affordability.

The City may also look to infill development, where appropriate, to mirror housing types within existing neighborhoods if the density matches the existing neighborhood.

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6.0 ECONOMIC DEVELOPMENT

6.1 Introduction

Economic development is critical in providing opportunities for residents to work and businesses to thrive. A strong economy also helps ensure the stability of the tax base and fiscal health of the municipality. Economic development means job growth and supports businesses that directly contribute to the quality of life for the community. A comprehensive understanding of existing conditions in a community can pave the way for planning policies that support economic growth.

This chapter provides a detailed analysis of certain demographic, economic, and real estate trends that affect Cranston's economy. Since the city's local economy is influenced by the larger region and proximity to Providence, the analysis also compares the city to Providence County, which includes Cranston.

6.2 Context/Existing Conditions

Cranston is host to 35,000 jobs (RI LMI 2023) and enjoys a strategic position; it sits at the crossroads of opportunity and accessibility, making it an ideal hub for businesses and entrepreneurs in Rhode Island. The city benefits from a robust highway network, including Interstate 95, Interstate 295, Routes 10, and Routes 37, facilitating efficient regional and national market access.

Cranston's location advantages extend beyond road networks, with the T.F. Green International Airport and AMTRAK nearby in Warwick and Providence. Downtown Providence is just a few minutes away by car, enhancing economic vitality and granting access to a broader workforce, educational institutions, and cultural amenities.

The city's Economic Development Department collaborates with the Cranston Chamber of Commerce and the University of Rhode Island Small Business Development Center (RISBDC) to provide no-cost one-on-one counseling to small business owners. This support network covers various essential business aspects including technical assistance, marketing strategies, resource management, and capital access.

6.2.1 Population Trends

Age Distribution

The total population for the City of Cranston was 80,882 in the 2016 5-year ACS and grew to 82,654 people by April 1, 2021, according to the U.S Census Bureau; with a net increase in population of 1,772 persons (+2.2 percent). Both the county and the state grew more over the same time period, at 4.0 percent and 3.6 percent respectively.

The age distribution of Cranston's residents generally resembles that of Providence County and Rhode Island. Likewise, Cranston's median age matches across the state with a median age of 40 years, compared to Providence County's median age of 37.5 years. Showcased in Table 6-1, Cranston has a notable decrease in residents ages 18-24 years and 45-54 years; 18 to 24-year-olds are an important demographic because a portion of this group are just entering the workforce and thus represent an opportunity for income and spending growth, while 45- to 54-year-olds represent part of critical family household and workforce age groups.

The 45- to 54-year-old age cohort may be experiencing lifestyle changes such as empty nesting or retirement, leading them to relocate or downsize, while the decrease in the 18-24 age group might be influenced by factors such as young adults pursuing educational opportunities outside the city, entering the workforce in different regions, or following their parents in relocation. Overall, the median age in Cranston decreased by 0.8 years over that period. Despite the overall decrease in the median age in Cranston, the city still maintains a higher proportion of older adults compared to the

county. The slight skew towards a younger population is evident in the increased proportions of people under 18, 25-34, and 35-44 years, contributing to the lowered median age.

Table 6-1 Population Age Composition

Age	Cranston		Providence County		Rhode Island	
	2021	2016-2021 % Change	2021	2016-2021 % Change	2021	2016-2021 % Change
Under 18	21%	2%	21%	-2%	19%	-6%
18 to 24	8%	-15%	11%	-9%	10%	-5%
25 to 34	14%	17%	15%	18%	14%	18%
35 to 44	14%	1%	13%	-3%	12%	-8%
45 to 54	12%	-26%	13%	-8%	13%	-12%
55 to 64	16%	28%	13%	25%	14%	22%
65+	16%	13%	15%	19%	17%	25%

Source: 2016 and 2021 5-yr ACS

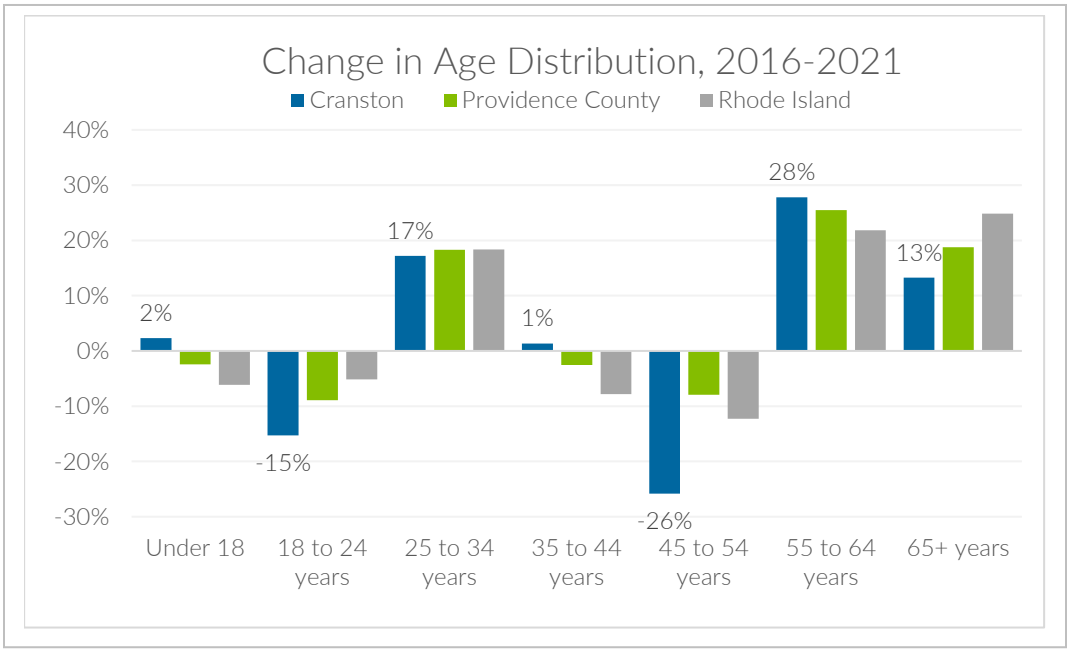

Figure 6-1. Change in Age Distribution
Source: 2016 and 2021 5-yr ACS

Educational Attainment

The educational attainment of the resident population is something businesses consider when choosing where to locate. The availability of a suitably skilled workforce is one factor, and for consumer-facing businesses the spending potential of the local population – heavily influenced by income and education – is important, too.

Reportedly 33.9 percent of Cranston residents aged 25 or older have a bachelor's degree or higher, which is a higher percentage than those in Providence County (30.6%), but lower than the state (35.3%). Cranston residents are also more likely to have at least a high school diploma than county and state residents. Similar to county and state trends, from 2016 to 2021 the number of residents with a bachelor's degree or graduate/professional degree increased significantly, with a decrease in residents with only a high school diploma/GED equivalency, as shown in Table 6-2.

Table 6-2 Educational Attainment Levels of Population Aged 25+				
	2016	2021	Actual Change	% Change
No High School Diploma	6,231	6,204	-27	-0.4%
H.S. Diploma or GED Equivalency	17,899	16,348	-1,551	-8.7%
Associates or Some College	15,620	16,655	1,035	6.6%
Bachelor's degree	10,686	12,172	1,486	13.9%
Graduate or Professional Degree	6,871	7,932	1,061	15.4%

Source: 2016 and 2021 5-yr ACS

Household Income

As mentioned above, many consumer-facing businesses such as retailers and restaurants may strongly consider local median incomes when deciding where to locate, particularly regional or national chains with specific site selection criteria. Cranston's households are more likely to have higher income than the county ($65,797) and the state ($74,489), with a higher median household income of $77,145. However, it is worth noting that income growth in Cranston was lower than both the county and the state between 2016 and 2021: median income grew by 25.1 percent locally versus 29.9 percent and 27.6 percent respectively. Additionally, the number of households in Cranston making $100,000 increased by 3,662 households, making up 36.5 percent of the total households. Households making $200,000+ have an especially significant increase of 99 percent, a higher growth rate than both the county and the state. Figure 6-2 shows the percent change by household income brackets for Cranston, Providence County, and Rhode Island between 2015 and 2020

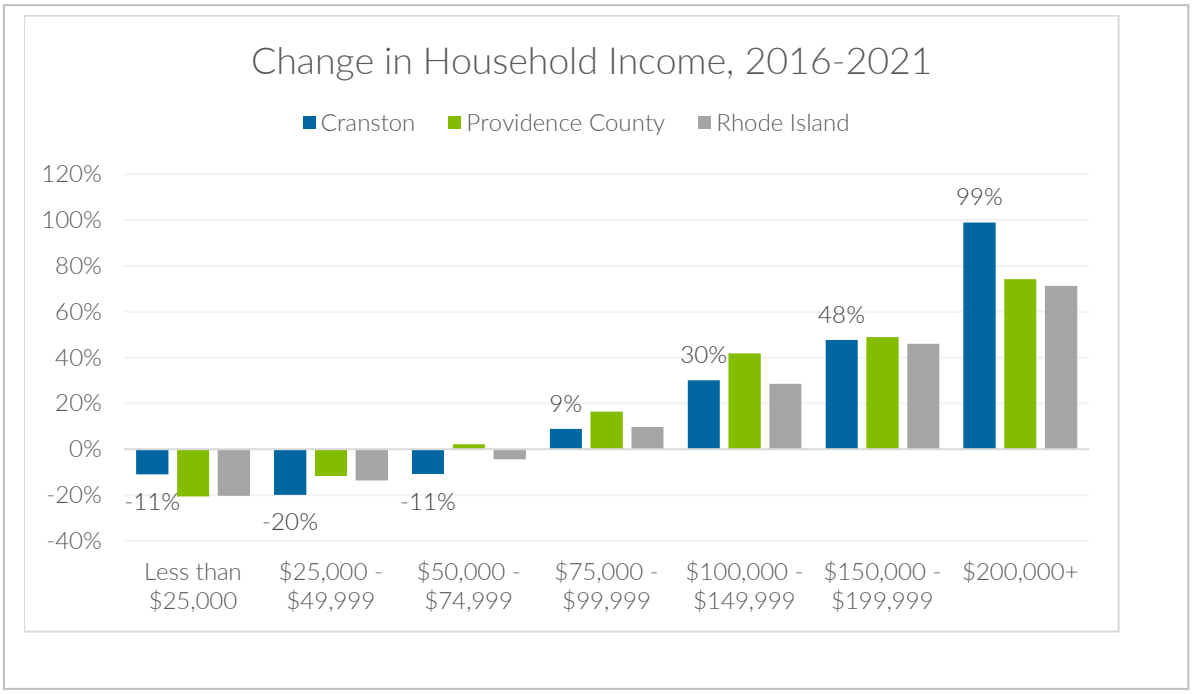

Figure 6-2. Change in Household Income
Source: 2016 and 2021 5-yr ACS

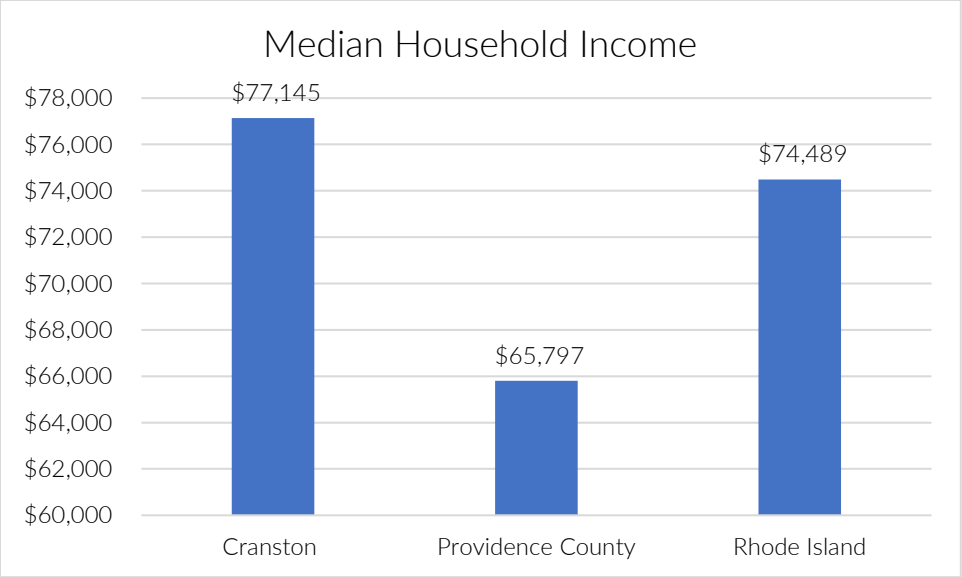

Figure 6-3. Median Household Income
Source: 2021 5-yr ACS

6.2.2 Labor Force

Two measures commonly examined when considering the engagement of workers in the local economy are labor-force participation and unemployment rates. The labor-force participation rate measures the percentage of the population aged 16 and over who are either employed or actively looking for employment. If the participation rate is low, it indicates the labor market may have some flexibility. In contrast, if the participation rate is already high, there might be limited flexibility, and employers could have fewer options when seeking to hire. Similarly, a notably low unemployment rate signals a robust labor market, which is positive for workers but could pose challenges for businesses in terms of hiring and growth.

According to the RIDLT, in 2022 Cranston had a labor force of 42,547, with 1,344 residents unemployed and an unemployment rate of 3.2 percent. Table 6-3 shows the 2022 annual average labor force and unemployment statistics of Cranston and Rhode Island. Figure 6-4 illustrates a relatively stable labor-force population from 2012-2023, with a visible increase in unemployment in 2020 during the onset of the COVID-19 pandemic. Cranston's labor-force participation rates have fully recovered to pre-pandemic levels, following county and state trends. Local and regional unemployment rates are at 3.2 percent; this is well within the range of what economists consider to be "full employment," which indicates that people who are actively looking for jobs have found them. This can lead to increased wages as employers compete for talent, but it is an indicator that there is very little slack in the labor market and hiring is likely a challenge. This highlights the need for strategic measures to address Cranston's potential challenges in hiring, foster workforce development, and sustain economic growth in a competitive environment with low unemployment rates.

Table 6-3 Labor Force & Employment

	Labor Force	Labor Force Participation	Labor Force, Employed	Labor Force, Unemployed	Unemployment Rate
Cranston	42,547	96.8%	41,203	1,344	3.2%
Rhode Island	569,455	96.8%	551,220	18,235	3.2%

Source: RIDLT, 2023

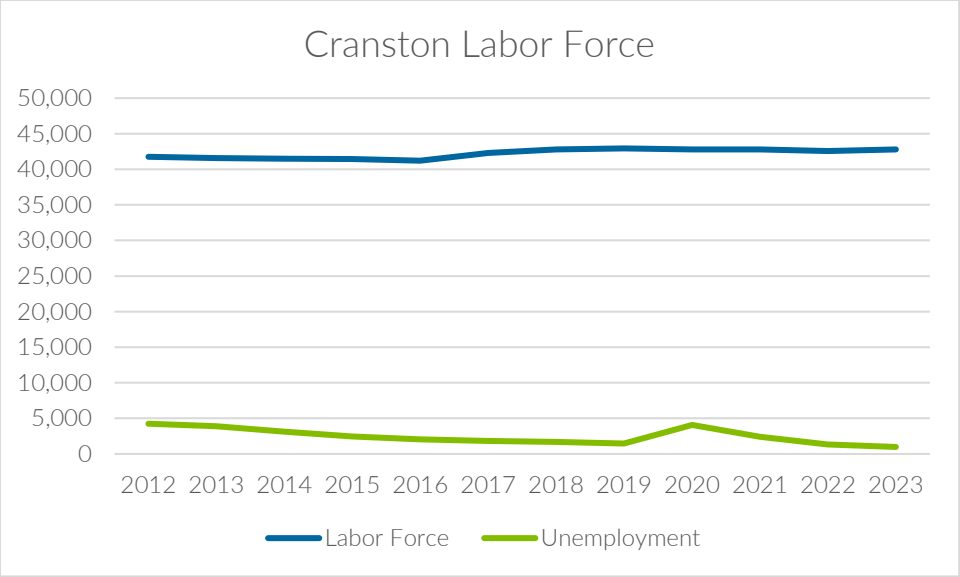

Figure 6-4. Cranston Labor Force
Source: RIDLT, 2023

6.2.3 Local Employment

Commuting Patterns

Commuting patterns have important implications for economic development. Changes in the daytime population related to the inflow and outflow of workers and residents impact the viability and types of retail and other amenities in a community. Furthermore, the sources and destinations of workers can suggest opportunities for filling gaps in Cranston workforce housing stock or to attract industries that align with locally available skills. The data alone does not determine the viability of these opportunities without additional context.

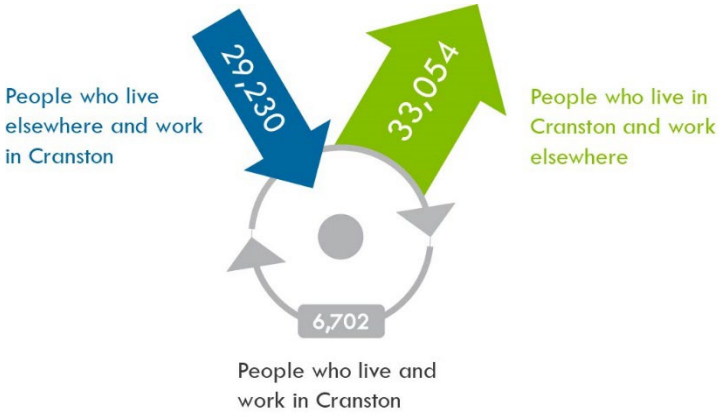

Figure 6-5. Commuting Inflow-Outflow.
Source: US Census LEHD, OnTheMap 2021

Overall, Cranston is a labor reservoir, with 3,824 more people leaving the city to head to work than entering on a given day. Commuting patterns for Cranston as a work destination and where Cranston residents are employed are displayed below in Figure 6-6. The most common work destinations for Cranston residents are Cranston itself, Providence, and Warwick. Reportedly 6,702 people both live and work in Cranston (18.7 percent of all local workers), while reportedly 5,601 people travel from Providence to Cranston to go to work, followed by 3,753 people from Warwick.

Where Cranston Workers Live	Count of Workers	Share
Cranston, RI	6,702	18.7%
Providence, RI	5,601	15.6%
Warwick, RI	3,753	10.4%
Pawtucket, RI	1,508	4.2%
Coventry , RI	1,501	4.2%
Johnston, RI	1,305	3.6%
West Warwick, RI	1,225	3.4%
North Providence, R	1,127	3.1%
East Providence, RI	1,066	3.0%
North Kingstown, RI	735	2.0%
Other	11,409	31.8%
Total	35,932	100.0%

Where Cranston Residents are Employed	Count of Workers	Share
Providence, RI	9,297	23.4%
Cranston, RI	6,702	16.9%
Warwick, RI	4,528	11.4%
Johnston, RI	1,638	4.1%
East Providence, RI	1,441	3.6%
North Kingston, RI	1,158	2.9%
Pawtucket, RI	1,041	2.6%
Lincoln, RI	918	2.3%
Smithfield, RI	818	2.1%
Boston, MA	657	1.7%
Other	11,558	29.1%
Total	39,756	100.0%

Figure 6-6. Commuting Patterns for Workers in Cranston and Cranston Residents
Source: US Census LEH; OnTheMap, 2021

Out of all Cranston's working residents, 23.4 percent commute to Providence as the major regional employment hub, followed by Cranston (16.9 percent of Cranston's labor force commutes within Cranston), and reportedly 4,528 residents, or 11.4 percent, commute to Warwick. The data indicates that Cranston is a preferred residential location for individuals working in neighboring communities, particularly Providence and Warwick. Furthermore, the commuting patterns highlight Cranston's integral role in the broader regional economy.

Employment by Industry

Based on EMSI 2023 estimates, which are based on QCEW 2022 Q3- 2023 Q2 data reports, (shown in table 6-4, below), Cranston businesses had 30,224 private jobs in 2023, which is a 10 percent increase from the 29,920 jobs reported for 2013. The largest industry by employment in the city is retail trade, with 5,260 jobs. Retail trade grew by 10.6 percent or 504 jobs. Health care & social assistance and manufacturing are also significant industries, respectively employing 4,534 and 3,484 people.

Health care & social assistance and manufacturing, the second and third largest, have shrunk (2.8 and 4.6 percent, respectively) since 2013. The other top industry, "Accommodation and Food Services," experienced an increase of 3.6 percent or 114 jobs over the last decade.

"Administrative and Support and Waste Management and Remediation Services" as well as "Professional, Scientific and Technical Services" have seen large percentage increases in employment since 2013, though each has a lower total employment count compared to the top industries. In 2013, information was ranked as Cranston's 16th largest industry; however, over the past decade, it has experienced a significant decline, losing 1,748 jobs, which accounts for an 88 percent reduction in the "Information" workforce in the city. Currently, the industry employs only 236 workers. Despite the declining share of the workforce, "Information" provides the highest mean annual income per worker.

Table 6-4 Employment by Industry for Private-Sector Jobs Based on 2-digit NAICS Codes							
NAICS	Description	2013 Jobs	2023 Jobs	2013 - 2023 Change	2013 - 2023 % Change	2023 Location Quotient	Avg. Annual Earnings Per Job
44-45	Retail Trade	4,757	5,260	504	11%	1.67	$45,177
62	Health Care and Social Assistance	4,665	4,534	-131	-3%	0.85	$60,867
31-33	Manufacturing	3,651	3,484	-167	-5%	1.32	$78,664
72	Accommodation and Food Services	3,214	3,329	114	4%	0.99	$30,674
56	Administrative and Support and Waste Management and Remediation Services	1,837	2,823	986	54%	1.34	$49,190
54	Professional, Scientific, and Technical Services	2,064	2,750	686	33%	1.19	$107,917
81	Other Services (except Public Administration)	1,509	1,874	365	24%	1.23	$48,342
23	Construction	1,412	1,450	38	3%	0.83	$82,604
42	Wholesale Trade	1,660	1,421	-239	-14%	1.31	$96,421
48-49	Transportation and Warehousing	692	873	181	26%	0.93	$60,960
52	Finance and Insurance	844	846	2	0%	0.46	$122,873
53	Real Estate and Rental and Leasing	435	457	22	5%	0.86	$75,695
61	Educational Services	459	365	-94	-21%	0.18	$52,945
71	Arts, Entertainment, and Recreation	228	288	59	26%	0.48	$34,257
51	Information	1,984	236	-1,748	-88%	0.61	$125,338
55	Management of Companies and Enterprises	466	140	-326	-70%	0.20	$180,380
11	Agriculture, Forestry, Fishing and Hunting	19	71	52	268%	0.50	$49,768
22	Utilities	<10	33	Insf. Data	0%	0.34	$161,427
21	Mining, Quarrying, and Oil and Gas Extraction	15	12	-3	-19%	0.94	$78,695
	Total	**29,920**	**30,244**	**324**	**1%**		

Source: EMSI Industry Report (Private Jobs,) Lightcast 2023.3 datarun

Location Quotients

Location quotients (LQs) are statistical measures of a region's industrial specialization relative to a larger geographic unit. For example, the discussion below provides LQs that compare the Cranston economy to the larger Rhode Island economy. For the purposes of the following discussion, if the ratio falls between 0.80 and 1.20, then the proportion of jobs is considered consistent in both geographies. If the ratio is less than 0.80, then the identified industry sector is considered to be less concentrated in the local economy. Conversely, a ratio greater than 1.20 can show a specialty within the local economy as compared to the larger geography, offering insights into the existing or potential export economy.

Location quotient can be useful in identifying opportunities for certain sectors to gain a larger share of the employment base or to indicate when a community may be heavily reliant on one or two industrial sectors. In some cases, a high location quotient may indicate a specialty area in the local economy. Figure 6-7 below illustrates the relationship between the location quotient and employment changes, highlighting stronger and emerging industries or weaker and declining industries.

Cranston has several industries that are specializations relative to Rhode Island. Retail trade leads in this category, with an LQ of 1.67, meaning that jobs in this industry are nearly 1.7 times as common in Cranston as in Rhode Island. Garden City shopping center significantly contributes to retail trade in Cranston, serving as a key hub of commercial activity. While a robust retail sector is beneficial for economic vitality, the city should strategically assess its overall composition to ensure long-term resilience. The pandemic has accelerated shifts in consumer behavior, with increased reliance on e-commerce. As the city navigates these changes, it becomes crucial to strategically reassess its economic specialization, exploring opportunities for resilience and adaptation.

Other industries experiencing a local competitive advantage include Manufacturing, Administrative and Support and Waste Management and Remediation Services," "Wholesale "Trade," and "Other Services." "Arts, Entertainment, and Recreation" is a weak but emerging sector that grew by 26% over the last decade and could continue to see growth in Cranston. To foster economic growth, Cranston might explore opportunities in emerging sectors like "Science, Technology, and Professional services." The majority of larger industries in Cranston are growing, and well-established industries are also experiencing solid growth.

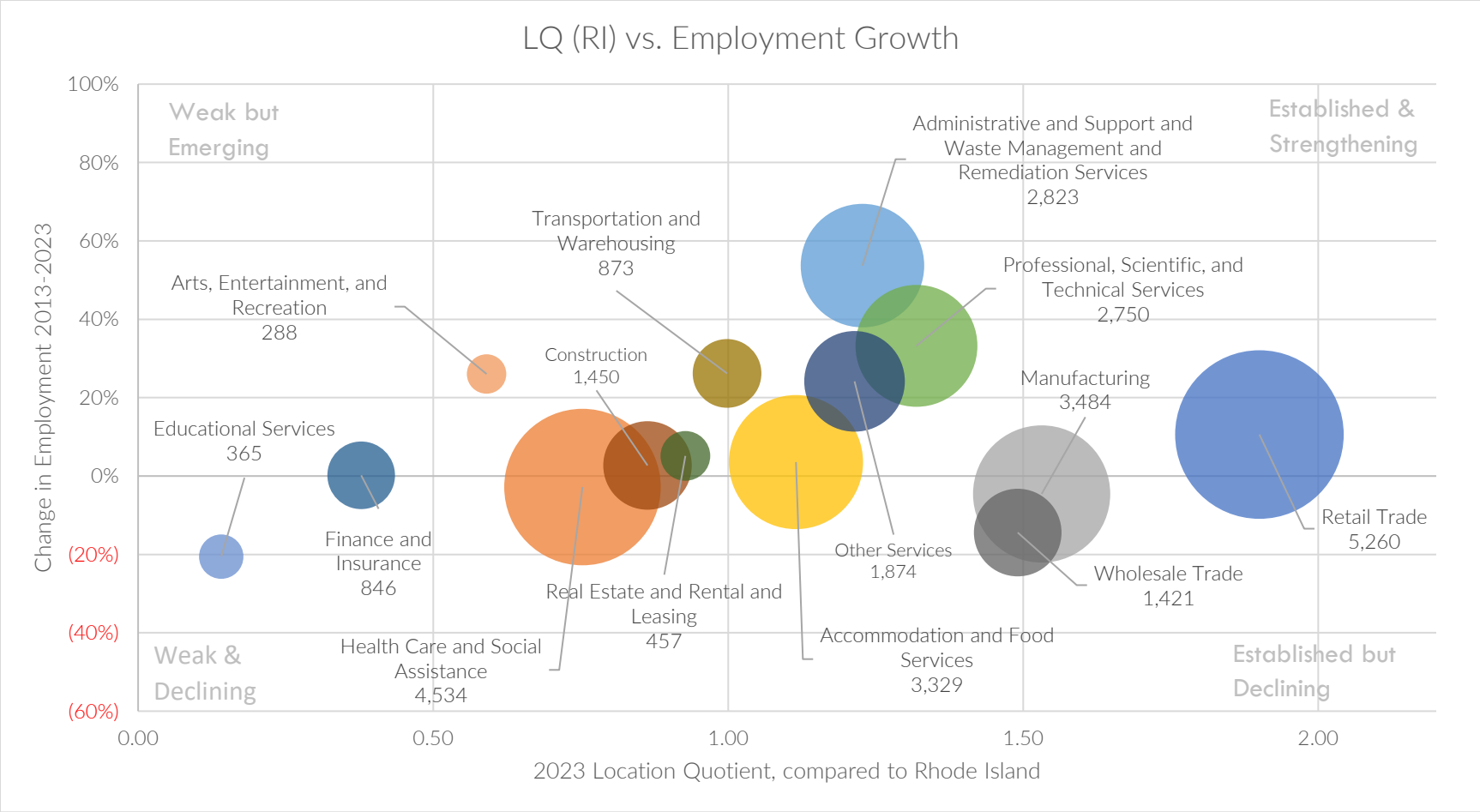

Figure 6-7. Change in Employment vs. Location Quotient (Compared to RI)
Source: Lightcast Industry Report, 2023.3 datarun

6.2.4 Largest Private-Sector Employers & Real Estate Market[1]

The largest employers in Cranston reflect the retail, manufacturing, and government-focused industries that operate in the city. According to the State Department of Labor from the City of Cranston's FY2022 Annual Comprehensive Financial Report, the largest private employer in Cranston is Thielsch Engineering, employing 436 people. Table 6-5 shows a full listing of the top eleven largest employers in Cranston.

Table 6-5 Largest Private-Sector Employers

Company	Industry Sector	Employment Range
Thielsch Engineering	54	436
Taco, Inc.	31	421
The Stop & Shop Co., Inc.	44	352
Tasca Motor Group	44	330
Access Point RI	62	300
Walmart	44	298
Swarovski Consumer Goods Ltd.	44	254
The Cedars	62	176
Cadence	31	176
Citizens Bank	52	36
Honeywell Safety Products	31	-

Source: Rhode Island Department of Labor and Training (Private Jobs), 2022

Reflecting employment trends from Lightcast, retail is the largest market within Cranston with a little above 600 retail properties according to Moody's Analytics REIS, seen in Table 6-6. In the past decade, the number of commercial buildings continued to increase with an additional 27 retail properties. Office properties have the most recent average year built (1976) but have not had any recent construction, with the most recent office property type built in 2007.

Table 6-6 Real Estate Markets

	Number of Properties	Average SF	Average Year Built	Rent /SF
Office	126	7,547	1976	14.62
Retail	609	7,085	1958	20.74
Warehouse /Distribution	45	12,636	1955	6.49
Flex/R&D	17	20,236	1971	7.13
Industrial	132	14,765	1963	-

Source: Moody's Analytics REIS, 2023

6.2.5 Property Tax Rates

The fiscal implications of tax rates are an important consideration that businesses—and even individuals—evaluate when making choices about where to locate. While low property taxes can help attract businesses and residents, limited funding can result in insufficient provision of public

[1] According to the State Department of Labor from the City of Cranston's FY2022 Annual Comprehensive Financial Report, the largest employer in Cranston is the State of Rhode Island, employing 5,500 people. The city may wish to consider how to leverage and public sector employment as an opportunity.

services, inhibiting a municipality's ability to remain competitive with its neighboring communities. In most communities, property taxes represent a sizable majority of municipal revenues.

The difference between its residential and commercial/industrial tax rates is similar to other adjacent communities, and both rates are comparable to those of neighboring towns and cities, with East Providence and Warwick having higher residential rates. The commercial tax rate is the second lowest compared to surrounding towns and cities but is significantly lower than the tax rate in Providence. These rates could serve as an appealing incentive for prospective businesses considering settling in Cranston.

Table 6-7 FY 2023 Municipal Tax Rates

Municipality	Real Estate	Commercial	Personal Property
Cranston	**$18.51** (13.61)*	**$27.77** (20.42)*	**$27.77** (28.25)*
Providence	$17.80	$35.40	$53.40
East Providence	$21.86	$26.89	$56.33
Pawtucket	$16.58	$29.02	$52.09
Warwick	$18.73	$28.10	$37.46

*Source: RI Division of Municipal Finance, FY2023 (*reflects most recent tax ordinance as of August 2024)*

6.2.6 Commercial/Industrial Districts & Corridors

The COVID-19 pandemic created challenges for commercial districts across the country due to the impact of quarantines, lockdowns, and a continued rise in the use of online shopping and online platforms for ordering goods, services, food, and beverage. These challenges have led to small business closures, altered consumer behavior with a preference for online shopping, and potential declines in community vibrancy. Recognizing and addressing these issues is vital for economic recovery, small business support, adapting to changing market dynamics, and preparing for future crises.

Cranston has a limited inventory of office buildings, with office tenants mainly occupying space in retail centers and residential home-to-office conversions. Additionally, it is recommended to explore adaptive reuse opportunities for old and underutilized warehouses.

Four village centers in Cranston include Pawtuxet Village, Knightsville, Rolfe Square, and Garden City Center.

The Garden City Center

Garden City Center, positioned between Highway 2 and Midway Road, is a prominent retail hub catering to the wider Cranston and Providence region, characterized by a significant presence of high-end retail establishments. Situated on the border with Providence, Garden City Center plays a central role in hosting a diverse array of retail outlets and shops for the city, with consistently high occupancy rates. With over 100 tenants, this commercial space includes national chains, office tenants, restaurants, grocers, and various miscellaneous services.

Plainfield Pike

Plainfield Pike was a focus in the economic development policies in Cranston's 2010 masterplan, as a developing strip commercial corridor. Near Highway 295, this commercial strip is centered around the Walmart Supercenter, but has several auto-focused businesses along the pike.

Knightsville

Around this urban center, there is a concentration of restaurants and automotive-focused services. Recently, Knightsville was highlighted as the city's restaurant district for economic development,

calling for new sidewalks, roads, and lighting. Itri Square hosts festivals for local vendors, food trucks, and entertainment.

Pawtuxet Village

As one of New England's oldest communities, the Pawtuxet Village is located in both Warwick and Cranston. With a seasonal farmer's market and several small businesses such as antique shops and clothing stores, Broad Street has a concentration of commercial activity and restaurants that service the Pawtuxet neighborhood and visitors.

Rolfe Square

Rolfe Square is another town center with a concentration of restaurants, nonprofits, and smaller-scale commercial businesses, such as beauty supply stores, spas, and barbershops. As phase one of a renovation plan across Cranston, business has picked up in Rolfe Square. Additionally, it is near Cranston High School East and Cranston City Hall, where several local employees work. Development in Rolfe Square is ongoing as New English Brewery Iron Stag Brewing plans to open in 2023.

6.3 Current Initiatives

6.3.1 Policies and Regulations

The City of Cranston has a tax incentive program for new or expansion construction of facilities located on industrial or commercially zoned properties. These tax incentives have different five-year increments depending on the construction cost.

Cranston established the Cranston Revolving Loan Fund (RLF)[2] as a fixed asset loan program that offers low-interest loans to new and existing businesses within the City of Cranston. This fund includes equipment, finance renovations, job training, and working capital. So far, the fund has distributed over $4 million to companies in Cranston, with over 18,000 jobs created. The average loan amount has been $110,000 and 70 percent of RLF loans have been to smaller companies (25 employees or fewer).

Cranston's Economic Development Department is working with the University of Rhode Island Small Business Development Center and the Cranston Chamber of Commerce to develop one-on-one counseling for small business owners. Assistance includes technical business planning, capital access, marketing strategies, e-commerce, how to purchase or sell a business, and managing personnel and resources.

6.4 Issues and Opportunities

6.4.1 Issues

There was a notable decrease in certain age groups (i.e.,18-24 and 45-54), which may affect the labor force and economic growth. Cranston should continue efforts to improve educational attainment and retain and attract recent graduates. The significant outflow of workers from Cranston to neighboring areas may indicate that some residents are seeking employment opportunities outside of the city, potentially impacting local businesses.

Some influential industries in Cranston are shrinking, such as manufacturing and healthcare & social assistance.

[2] Source: file:///C:/Users/riordanj/OneDrive%20-%20WESTON%20&%20SAMPSON%20ENGINEERS,%20Inc/Downloads/Revolving%20Loan%20Fund%20Program.pdf (Reviewed on February 6, 2024)

6.4.2 Opportunities

Cranston's proximity to Providence and Warwick enhances the value of local commercial and industrial real estate. These regional employment hubs have seen consistent growth in the preceding decade.

Additionally, Cranston has access to the entirety of New England through its highway connections and proximity to both Amtrak and MBTA lines through the Providence station, which can also be accessed by bus from Cranston. Residents and employees are connected to employment and population centers such as Providence, Warwick, Boston, and New Haven.

With a large variety of village centers, small business development is encouraged and seems to populate corridors outside of the Garden City Center. Cranston has refocused on economic development initiatives, the business community, and revitalizing village hubs. Effective promotion and communication strategies are crucial for highlighting the diverse commercial districts and villages within Cranston. Leveraging platforms, community events, and online channels can play a vital role in showcasing areas like Plainfield Pike, Knightsville, Pawtuxet Village, and Rolfe Square. By disseminating information about the unique offerings, festivals, and business developments in these districts, the city can attract attention and support for local businesses, fostering a sense of community engagement.

Despite low unemployment rates, there is potential to focus on workforce development programs to ensure residents have the skills required for the evolving job market, especially in growing manufacturing industries. Since more residents in Cranston commute out than in, businesses located in Cranston could have opportunities to find workers within the local population, lessening or eliminating their commute.

Cranston has a heavily retail-based economy. Recognizing the impact of e-commerce on traditional commercial districts and considering strategies to adapt, such as mixed-use development or unique in-person events and festivals, should be prioritized. Continuing to address infrastructure issues in commercial districts could encourage more visitors from the surrounding area.

According to the State Department of Labor from the City of Cranston's FY2022 Annual Comprehensive Financial Report, the largest employer in Cranston is the State of Rhode Island, employing 5,500 people. The city may wish to consider how to leverage and public sector employment as an opportunity.

7.0 HISTORIC AND CULTURAL PRESERVATION

7.1. Introduction

Cranston offers a rich architectural and community history. Historic structures, districts, cemeteries, and landscapes are important aspects of what makes the City unique. Historic and cultural resources provide a physical link to the past, and they also help to shape the identity of a community. An understanding of where a community came from—its heritage—is essential to plan for what it will become. The tangible evidence that represent this heritage tell us a story about the way that people lived, their values, and how the built environment changed over time. A sense of the past anchors us and helps to inform our collective vision for the future. This aesthetic translates to enjoyment and desirability that can benefit the property owners, businesses, and the residents of Cranston.

This section discusses Cranston's historic and cultural resources, and current historic preservation initiatives. It includes the following discussions:

- Recommendations from prior comprehensive plans and their current status.
- Existing conditions, including discussion of historic commissions, local historic districts and nationally designated properties, and historic landscapes.
- Historic preservation planning and education.
- Challenges and opportunities.

7.2. Recommendations from Prior Comprehensive Plans

Several actions from the 1992 and the 2010 comprehensive plans were implemented to protect Cranston's historic and cultural resources. The 1992 Comprehensive Plan focused on improving education about and awareness of historic resources through actions that focused on four themes.

1. Promoting traditional preservation techniques through
    - Surveys and inventories
    - Nominating properties to the nation register of historic places.
    - Creating and empowering local historic districts
    - Incorporating preservation tools within City guidelines and programs such as tax incentives, demolition delay ordinances and economic incentive programs for historic properties.
2. Addressing threats to Specific Historic Resources
3. Integrating Historic Preservation with the Comprehensive Plan
4. Providing education and citizen awareness

The 2010 Comprehensive Plan followed the four themes established in 1992 and addressed some specific areas in its examination and evaluation of Cranston's Historic and Cultural Preservation.

Traditional Preservation Techniques:

1. Creating and empowering local historic districts: The 2010 plan recommended that the following areas/neighborhoods be designated and adapted as Local Historic Districts.
   - Pawtuxet Village Historic District
   - Edgewood/Taft Estate Historic District
   - Norwood Avenue Historic District
2. Surveys and Inventories: The 2010 plan recommended an update and expansion of the Survey of Historic Properties, and they recommended that this survey also include prehistoric and historic archaeological assessments of historic properties.
3. Incorporating preservation tools within City resources: The 2010 recommended the creation of an Historic Resource Task Force.

Addressing Threats to Historic Resources

1. The 2010 plan recommended educating and encouraging private property owners regarding the value of their historic resources so that the historic value of the sites is not compromised.

Providing Education and Citizen Awareness

1. The 2010 plan proposed an education program to increase awareness of the benefits of Local Historic District designation as well as a broader program that provides residents of the City with information about historic preservation.
2. Distribute information and guidance on Preservation to residents and provide information for visitors using various media.

The Table showing the "Accomplishments of the 1992 Comprehensive Plan" has value in being repeated here with the addition of a column noting the Accomplishments of the 2010 Comprehensive Plan as this provides a starting point for future recommendations.

Table 7.2.1. List of Historic and Cultural Resources

Action	1992 Actions	1992 Accomplishments and Changes	2010 Accomplishments and Changes (to be filled in via review with City)
Survey, Inventory and Traditional Preservation Techniques			
HP-1	Update and expand the survey of the historic properties on a Citywide basis.	This action was not accomplished.	This action was accomplished in coordination with Rhode Island Historical Preservation & Heritage Commission (RIHPHC).
HP-2	Work with private property owners to encourage	The Cranston HDC accomplished this in the Oak Lawn Historic District. In non-	This action is ongoing.

Table 7.2.1. List of Historic and Cultural Resources			
Action	**1992 Actions**	**1992 Accomplishments and Changes**	**2010 Accomplishments and Changes (to be filled in via review with City)**
	preservation of known archeological and historic sites on their land.	Local Historic Districts and non-historic areas, a few sites were preserved including portions of the Sockanosset Boys Training School.	
HP-3	Nominate eligible individual properties and districts to the National Register of Historic Places and the State Register.	The Norwood Avenue and the former Taft Estate / Edgewood Historic District was nominated and designated on the Federal and State Historic Registers.	Garden City Neighborhood is being analyzed for consideration as a Nationally Registered Historic Neighborhood.
HP-4	Continue to establish local historic zoning overlay districts for areas and begin designation of individual structures.	The Pawtuxet Village Historic District was proposed in 1993 but not designated. Three other individual districts have been added: Joy Homestead, the Turgeon House and the Westcott House.	The Nathan Westcott House Local Historic District was added in 2019.
HP-5	Identify and implement appropriate economic incentive programs to encourage historic preservation and rehabilitation.	A local tax credit ordinance was drafted in 1993, but it was not passed by the City Council.	No action has been taken.
HP-6	Create a system for archeological review of development projects.	This action was implemented by using the State database. The Plan Commission requires Phase I analysis for all projects in identified 20-acre cells where roadway or other facilities will be dedicated to the public.	This action is ongoing.
HP-7	Expand the role of the Historic District Commission, as the primary historic preservation body in Cranston.	The HDC has expanded its role by reviewing and approving several projects that had potential impacts to historic properties including Pawtuxet Traffic Calming and Sockanosset Crossing (Chapel View).	HDC took a leading role in the historical rebuild of Park Theatre.
HP-8	Develop mechanisms for coordination of the activities of the Historic District Commission with other City boards and agencies through the City	New subdivision regulations that require all master plans to be reviewed by several agencies were approved in 1996. The Plan Commission has the option to send proposals with historic	This action is ongoing.

Table 7.2.1. List of Historic and Cultural Resources			
Action	**1992 Actions**	**1992 Accomplishments and Changes**	**2010 Accomplishments and Changes (to be filled in via review with City)**
	Planning Commission.	resources to the HDC for review.	
HP-9	Initiate study committee(s) for identified threatened historic properties.	This action was not accomplished.	No action has been taken.
Historic Preservation Planning and Development Policies			
HP-10	Enact a demolition ordinance imposing a waiting period before demolition of historic buildings, in order to provide an opportunity to consider alternatives to demolition.	This action was not accomplished.	No action has been taken.
HP-11	Adopt design review and procedural guidelines to implement historic district zoning in designated areas.	Design review and procedural guidelines were adopted.	This action is ongoing.
HP-12	Incorporate historic preservation concerns into actions and policies adopted pursuant to other elements of the Comprehensive Plan.	This action was completed.	This action is ongoing.
Education and Citizen Awareness			
HP-13	Develop and implement an expanded public education and awareness program.	An informational program flyer was created for select 3rd and 4th grades in the City school system.	This action is ongoing with readily available maps and information, which was not publicly accessible in 2012.

7.3. Existing Conditions

Existing conditions, in this section, include discussion of historic commissions, local historic districts and nationally designated properties, and historic landscapes.

7.3.1 Historic Commissions

Cranston has two historic commissions, the Historic District Commission (HDC) and the Historical Cemeteries Commission (HCC).

The Historic District Commission reviews changes to properties located in locally designated historic districts. The HDC also submits proposals to create additional local historic districts and provides opinions on State and National Register nominations. A Procedures and Standards Guidebook for Historic Rehabilitation has been developed to guide residents, professionals and Commission members on appropriate design and preservation approaches Development proposals for properties within a historic district require the property owner to file an application form with the HDC, who will review the proposed

scope of work for conformance with the rehabilitation standards and may approve a Certificate of Appropriateness for the project. There are seven members on the HDC who are appointed for 3-year staggered terms. Members must be residents of Cranston, have an interest in historic preservation and prefer to have some knowledge or experience relating to the field.

The Historical Cemeteries Commission, established by the City Council, is comprised of volunteers who are appointed by the City. They are charged with locating, assessing, documenting, and providing signage for Cranston's historic cemeteries. The documentation includes physical location, GPS coordinates, cemetery description and condition and gravestone information in photographic, electronic, and hard copy format. This data is consistent with the methods used by the Rhode Island Historical Cemeteries Commission. Currently there are 2 active members and 2 alternate members serving on this commission as well as one representative from the Cranston Historical Society.

In addition to the Historic District Commission and the Historical Cemeteries Commission, the Cranston Historical Society operates as a non-profit organization independent of City government jurisdiction. This group was formed in 1949 and its articles of incorporation state:

> The purpose of the Society shall be to revive and maintain a lively interest in the history of Cranston; to collect, store and on occasion exhibit books, papers, photographs and other incunabula relative to early Cranston; to foster in minds and heart of Cranston residents an appreciation and respect for the founds of the City in which they live and to work for the establishment of a museum in which those objects may be stored.

The Cranston Historical Society meets regularly at their headquarters in the Governor Sprague Mansion which they saved through a preservation effort in 1966. The Cranston Historical Society is also a part of the Western Rhode Island Civic Historical Society.

7.3.2 Local Historic Districts

A Local Historic District is a formally designated area with a concentration of buildings, structures, sites, and spaces that relate to one another historically, architecturally, and/or culturally. In Cranston, these districts are enacted by ordinance as special zoning areas, created to assist in the preservation of historic buildings and the preservation of the community special sense of place. There are a number of sites and areas in Cranston designated as local historic districts, including the Oaklawn Village Historic District and the Nationally Registered Historic District of Pawtuxet Village. The City monitors and guides development activity in its historic districts through the Historic District Commission (HDC).

7.3.3 Nationally Designated Historic and Cultural Resources

The National Register of Historic Places is the federal government's official list of properties that are significant in American history and deemed worthy of preservation. National Register properties include individual buildings, historic districts, historic landscapes, and archaeological sites. Rhode Island properties listed in the National Register include colonial houses, farms, Victorian neighborhoods, factory villages, diners, monuments, military bases, seacoast villages, suburban neighborhoods, and cemeteries.

The following is a list of Cranston's historic and cultural resources that are designated on the National Register of Historic Places. The resources in bold have also been designated local historic districts.

Table 7.3.1. List of Historic and Cultural Resources		
Name	**Location**	**Date Listed on National Register**
Arad Wood House	407 Pontiac Avenue	8/3/88
Arkwright Bridge	Hill Street	12/12/78
Edgewood Historic District – Aberdeen Plat	Berwick Lane, Chiswick, Road, Sefton Drive, Strathmore Place, Strathmore Road,	11/22/16
Edgewood Historic District – Anstis Greene Estate Plats	Anstis St, Birchfield Rd, Bluff Ave, Broad St, Hall Place, Kensington Rd, King Ave, Marion Ave, Narragansett Blvd, Rosewood Ave, Swift Street	8/3/15
Edgewood Historic District – Arnold Farm Plat	Arnold, Albert, Columbia Aves; parts of Broad St, Pawtuxet Ave, Narragansett Blvd	9/10/10
Edgewood Historic District – Salley Greene Homestead Plats	Fairview Avenue, Glen Avenue, Harbour Terrace, Hudson Place, Massasoit Avenue, and portions of Broad Street and Narragansett Boulevard	11/22/16
Edgewood Historic District – Shaw Plat	Shaw Ave., Marion Ave., portions of Broad Street and Narragansett Blvd.	3/27/13
Edgewood Historic District -Taft Estate Plat	Broad Street, Windsor Road, Circuit Drive, Narragansett Bay	10/24/03
Edgewood Yacht Club	3 Shaw Avenue	2/23/89
Furnace Hill Brook Historic and Archaeological District	Phenix Avenue and Hope Road	3/8/78 and 8/6/80
Governor Sprague Mansion /William Sprague House	1351 Cranston Street	2/18/71
Joy Homestead/Job Joy House	156 Scituate Avenue	12/12/78
Knightsville Meeting House /Knightsville-Franklin Congregational Church	67 Phenix Avenue	3/8/78
Lippitt Hill Historic District **Lippitt Hill Historic School District**	Burlingame and Hope Roads and Lippitt Avenue Hope Road	3/2/89
Nathan Westcott House	150 Scituate Avenue	1/5/89
Niles Westcott House/Westcote	101 Mountain Laurel Drive	8/3/88
Norwood Avenue Historic District	Norwood Avenue	4/26/02
Oak Lawn Village Historic District	Wilbur Avenue from Natick Road to Oaklawn Avenue	11/25/77
Pawtuxet Village Historic District	near Pawtuxet Cove	4/24/73
Potter Remington House	571 Natick Avenue	12/12/78
Rhodes-on-the-Pawtuxet Ballroom and Gazebo	Rhodes Place	12/12/78
Sheldon House	458 Scituate Avenue	1/5/89
Thomas Fenner House	43 Stony Acre Drive	3/2/90

7.3.4 Historic Landscapes and Cemeteries

Cranston contains several significant cultural landscapes, including historic cemeteries. An inventory of historic landscapes throughout the state has been published by the Rhode Island Historic Preservation and Heritage Commission in their 2001 monograph Historic Landscapes of Rhode Island, and the Rhode Island Historical Cemeteries website provides additional details on the state's cemeteries and gravesites.

The historic landscapes and cemeteries in the City of Cranston are as follows:

Table 7.3.2 List of Historic Landscapes and Cemeteries

Facility Name	Location	Significance
Oakland Cemetery	1569 Broad Street	Platted in 1848 by Cushing and Walling Engineers
St Ann's Roman Catholic Cemetery	Cranston Street	Former Randall Family burial plot purchased by Diocese of Providence in 1850
Dean Parkway	A residential roadway/parkway from Oaklawn Avenue to Sockanosset Hill.	A 1910 donation from John M. Dean to the Metropolitan District Commission. Designed by Olmsted Brothers and included in their 1906 Metropolitan District Plan.
Dyer Nursery and Farm/Pocasset Cemetery	417 Dyer Avenue	Rural Cemetery overlooking Dyer's Pond and historic Cranston Printworks. Started as Dyer Nursery it was platted in 1876 as Pocasset Cemetery by Niles Schubarth.
Hope Road Streetscape	Pippin Orchard Road area	Scenic woodlands near historic Lippitt Hill Farm.
Lippitt Hill Farm	1231 Hope Road	Early agricultural landscape.
State Institution Cemetery #2	Intersection of Pontiac Ave. and Knight St.	RI Historical Cemetery #61 used from 1933-1940.
State Institution Cemetery #3	East side of Pontiac Ave.	No longer extant. Graves were moved to State Institution Cemetery #2 to provide construction for the Cranston Industrial Park.
Ralph Winsor Residence	44 Marden Street	Ca 1935 for residence. Winsor deigned terraced gardens from house to Fenner's Pond.
Bethany Lutheran Swedish Cemetery	Hamilton Road/ Howland Road	First burial was 1961.
Peck Hill Road Streetscape	Intersection of Peck Hill Road, Plainfield Pike, and Pippin Orchard Road	Agricultural land use with corner store, 4 farms and one residence
Knight Farm	166 Scituate Road	Cited as one of the best extant complexes in western Cranston.
Seven Mile Road Streetscape	Seven Mile Road	Designated scenic road with views of the Scituate hills.
State Farm Cemetery	Route 37	Original 3.4-acre cemetery for the state institutions for residents who were not claimed by their families.

7.4 Historic Preservation Planning and Education

Preservation planning is a proactive way to provide for the protection of a community's historic resources and character. The preservation component of a comprehensive plan recognizes the importance of local heritage and the historic built and natural environment and provides a roadmap for future preservation endeavors.

The goals of a preservation plan as outlined by the National Alliance of Preservation Commissions should:

- Identify and articulate community preservation goals.
- Inform current and future property owners about the local preservation ordinances so as to eliminate confusion during application and review processes.
- Educate the public about the community's history and heritage.
- Create an agenda for future preservation work.
- Create a way to measure preservation's progress.

Cranston has an active Historic District Commission and historical society to help carry forward the city's preservation goals, which should be pursued in conjunction with the City Planning Department and the Town Council.

Preservation planning should also aim to strengthen the community's understanding of preservation policies. Educating the public about preservation is important because an informed public can better understand the benefits of regulations for historic resources and support the city's preservation planning functions. In particular, the neighborhood around Pawtuxet Village and other historic areas are being considered for Local Historic District Designation, and residents should be engaged in a community-driven preservation planning process.

Concerns within historic districts commonly revolve around out-of-scale and out-of-character new development that is inconsistent with the historic building patterns. Specifically, issues with incompatible building setbacks, height, and lot coverage are often at the core of what threatens a neighborhood's unique historic character. Oversight of development activity can be addressed through the establishment of Local Historic Overlay Districts and the assurance that the Historic District Commission has a strong role in the review of proposed projects.

7.5 Challenges and Opportunities

7.5.1.1 Challenges

Momentum for Progress

While Cranston has implemented important historic preservation initiatives in recent years, several recommendations from the 1992 and 2010 Plan have not yet been accomplished. Progress is still needed on several action items, including updating surveys, standards, and policies to better support and inform decision-making by the Historic Preservation Commission, and enhancing capacity for community awareness and involvement in preservation planning efforts.

At-Risk Historic Neighborhoods
The City enjoys the existence of several historic districts, however there are still many noteworthy historic neighborhoods in Cranston that are not locally designated. These areas are slowly losing their architectural character, due to development pressure and lack of oversight by the Historic Preservation Commission. The 2010 Plan identified several neighborhoods that would benefit from local historic district status to better preserve their historic resources and character for the future, including:

- Edgewood Historic District - The Taft Estates
- The Norwood Avenue Historic District
- Rolfe Street Commercial District
- Cranston Print Works District
- The Pawtuxet Village District

Visibility of Historic Buildings and Landscapes
It is challenging to rally support for resources that we cannot see. Many archaeological sites, historic buildings, and historic landscapes are obscured by new buildings or lost in their surrounds. Establishing the presence of these valuable resources is an ongoing challenge to ensure community awareness.

Public Awareness of Preservation Benefits
There is currently limited capacity to conduct outreach and education around historic preservation efforts in Cranston. There is a need to create better public awareness around the benefits of preservation planning, including how local historic districts and the Historic Preservation Commission act as important safeguards for community heritage. Similarly, owners within existing historic districts should be better informed about the purpose and function of local preservation policies and procedures.

7.5.1.2 Opportunities

Establish and Strengthen Local Historic Districts
The Historic District Commission should work closely with the Planning Department and Planning Board to explore the designation of new local historic districts to expand protections to other neighborhoods worthy of preservation. Priority should be placed on the potential areas identified in the 2010 Plan (Edgewood / Taft Estates, Norwood Avenue Historic District, Rolfe Street Commercial District, Cranston Print Works District and The Pawtuxet Village District).

Update and Expand the Survey of Historic Properties
Views on the importance of historic properties change with time. A periodic Citywide survey of historic resources is critical to ensure a complete inventory of historic properties and should be continually updated in accordance with current community values. The Citywide historic inventory update should also include a prehistoric and historic archeological assessment. This work should be coordinated with the RI Historic Preservation and Heritage Commission, the Cranston Historical Society and the RI Historical Cemeteries organization.

Create a Historic Resource Task Force
The establishment of an historic resource task force would provide the City with a group that focuses on assessing the existing demands of the tourist markets and identifying options to capitalize on these demands by promoting the City's historic resources. The task force should identify the measures needed to ensure that tourism does not adversely affect the historic resources. The task force should coordinate

their work with the City Planning Commission, the Historic District Commission, the Historical Cemeteries Commission, and the Conservation Commission.

Conduct Outreach to Local Historic District Property Owners
Enhanced outreach to historic property owners within local districts will help increase awareness of the implications and ultimate benefits of Local Historic District designations. This education program could focus on helping residents of areas with historic district potential to become more aware of the historic value of their districts and how their historic resources can help to create a unique local identity for their neighborhoods. This program can easily be implemented through the Cranston Public Library system.

Develop a Historic Preservation Education Program
Information and guidance on preservation can be distributed through an historic preservation education program. Such a program would help residents understand how historic resources contribute towards their community's unique identity. This information can be disseminated through various media such as online, through newspapers, and via brochures in schools and libraries. The information should help people understand what affects the historic character of a place and how those places with unique historic character can be protected. There is a wealth of existing resources that can be tapped into for an education and awareness program. These resources include the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Historic Preservation Education Foundation, and The Rhode Island Historical Preservation and Heritage Commission.

The 2010 Comprehensive Plan provided a table outlining a list of actions and responsible parties. This list should be updated for 2024, noting which actions have been completed.

Table 7.5.1. Summary of the Proposed Actions and Responsibilities for this Plan

Item	2010 Action	Responsibility	Status (work with City to add updates)
Survey, Inventory and Traditional Preservation Techniques			
HP-1	Nominate eligible individual properties and districts to the National Register of Historic Places, and the State Register.	Planning Department, Historic District Commission	This action is ongoing.
HP-2	Continue to establish local historic overlay districts for areas and begin designation of individual structures such as: • Make Pawtuxet Village a Local Historic District. • Make Edgewood / Taft Estate Historic District a Local Historic District. • Make Norwood Avenue Historic District a Local Historic District. • Make Rolfe Street Commercial District a Local Historic District	City Council, Planning Commission, Planning Department, Historic District Commission	This action is ongoing.
HP-3	Continue to identify and implement appropriate economic incentive programs to encourage historic preservation and rehabilitation.	City Council, Planning Commission, Planning Department, Historic District Commission	This action is ongoing.
HP-4	Continue to include archeological review of development projects according to the state database.	Planning Commission, Planning Department, Historic District Commission	This action is ongoing.

Item	2010 Action	Responsibility	Status (work with City to add updates)
HP-5	Continue to update and expand the survey of the historic properties on a Citywide basis.	Planning Department, Historic District Commission	This action was accomplished in coordination with RIHPHC.
HP-6	Continue to work with private property owners to encourage preservation of known archeological and historic sites on their land.	Planning Department, Historic District Commission	This action is ongoing.
HP-7	Continue the role of the Historic Commission as the principal City agency for historic preservation.	City Council, Historic District Commission	This action is ongoing.
Historic Preservation Planning and Development Policies			
HP-8	Create a task force to look at the options and demands of tourism focused on the historic resources of the City.	Planning Department, Historic District Commission, Economic Development	This action is ongoing.
HP-9	Establish study committee(s) for identified threatened historic properties to include representation from district and property when possible.	City Council, Planning Department Historic District Commission	This action is ongoing.
HP-10	Enact a demolition ordinance imposing a waiting period before demolition of historic buildings in order to provide an opportunity to consider alternatives to demolition.	City Council, Planning Commission, Planning Department, Historic District Commission	This action has not been implemented.
HP-11	Continue to implement design review and procedural guidelines for historic district zoning in designated areas.	Planning Department and the Historic District Commission	This action is ongoing.
HP -12	Survey accurate locations of historic cemeteries using GPS and submit the coordinate data to the City's IT department in order to map the cemeteries on GIS maps with plat and lot information.	Historic Cemetery Commission and the City IT Department	This action has been completed.
Education and Citizen Awareness			
HP-13	The Historic Commission should target specific areas such as Pawtuxet Village to educate the neighborhood about the benefits of a Local Historic District designation.	Planning Department, the Historic District Commission, Public Libraries	This action is ongoing.
HP-14	Assist residents and City administration to understand and appreciate the importance of preserving historic buildings and places.	Planning Department, the Historic District Commission, Public Libraries	This action is ongoing.
HP-15	Distribute information and guidance on preservation, based on the Secretary of Interiors Standards of Preservation, for public and private use.	Planning Department, the Historic District Commission, Public Libraries	This action is ongoing with readily available maps and information, which was not publicly accessible in 2012.

Resources:

- RI Historical Preservation and Heritage Commission: https://preservation.ri.gov/
- Cranston Historical Society: https://www.rihs.org/directory_item/cranston-historical-society/
- The Western Rhode Island Civic Historical Society: http://www.westernrihistory.org/history-of-cranston-historical-society/
- RI Historical Cemeteries: https://rihistoriccemeteries.org/newsearchcemetery.aspx

8.0 SERVICES AND FACILITIES

8.1 Introduction

The Services and Facilities Chapter of the Cranston Comprehensive Plan provides an in-depth examination of the City's essential services and facilities, focusing on their current state, historical context, and future needs. This chapter aims to give a comprehensive understanding of Cranston's public infrastructure and services, covering key aspects such as town administration, health and human services, library and community services, schools, public safety and emergency services, public works, solid waste and recycling, wastewater, and water supply. It also addresses the challenges and opportunities associated with maintaining and improving these services to support the community's growth and quality of life. This chapter outlines Cranston's public infrastructure, facilities, and services (shown in Figure 8.1) under the following categories:

- Town administration
- Health and Human Services
- Library and community services
- Schools
- Public safety and emergency services
- Public works
- Solid waste and recycling
- Wastewater
- Water supply

8.2 Existing Conditions

Cranston runs its major public services out of the City Hall, located at 869 Park Avenue. The City has 28 departments that ensure it runs effectively and that residents receive adequate services:

- Auditing
- Building Inspection
- Canvassing
- City Clerk
- Community Development
- Economic Development
- Engineering
- Finance
- Fire Department
- Fleet Management
- Harbormaster
- Highway Department
- Information Technology (IT)

- Law Department
- Libraries
- Mayor's Office
- Municipal Court
- Parks & Recreation
- Personnel
- Planning
- Police Department
- Public Works
- Purchasing
- School System
- Senior Services
- Tax Assessor
- Workforce Development
- Geographic Information Systems (GIS)

In addition to these aforementioned departments, the City has a variety of Boards and Commissions that meet regularly which can be found on the City's website[1]:

- Arts Commission
- Audit Committee
- Board of Canvassers
- Building Appeal Board
- Charter Review Commission (decennial)
- City Council
- Conservation Commission
- Contract and Purchase
- Cranston Housing Commission
- Diversity Commission
- Historic District Commission
- Historical Cemeteries Commission
- Housing Authority
- Investment Commission

[1] City of Cranston. (n.d.). Boards and commissions. Retrieved June 18, 2024, from https://www.cranstonri.gov/government/boards-and-commissions/

- Juvenile Hearing Board
- Parks and Recreation Advisory
- Personnel Appeal Board
- City Plan Commission
- Probate Judge Advisory
- Public Library Board of Trustees
- School Buildings Committee
- Small Business Advisory Committee
- Tax Assessment Board of Review
- Traffic Safety Board
- Zoning Board of Review

Many of the City's departments are housed in the City Hall. Boards and Commissions also meet at the City Hall.

The Cranston Fire Department, Police Department, Public Library, School Department, Department of Senior Services, Department of Community Development, and Department of Inspections and Zoning are housed at other locations, as noted in their respective sections within this Chapter.

8.2.1 Human Services

The City of Cranston offers some health and human services to its residents and relies on its neighboring communities to provide services not located within the City's limits. Senior services, recreational activities, and youth programs are currently funded by the City administration through various departmental budgets.

Health and Hospital Services

Due to Cranston's large area, access to hospitals can vary greatly. Though there are no hospitals located in Cranston, residents have access to hospitals in neighboring communities. Kent Hospital is closest for those living in the southern or western portion of the City while Rhode Island Hospital is closest for those to the north and east; however, these are at least a couple of miles from the Cranston border. The closest Trauma 1 Center, Rhode Island Hospital, is located in Providence, a couple of miles east of the Cranston border. Cranston does not have a health department housed within its local government. Therefore, the Town relies on the State of Rhode Island's Department of Health for guidance and funding. The State Department of Health website provides detailed information on important health updates specific to Cranston[2].

Senior Services

The Cranston Department of Senior Services provides a variety of services for the City's ageing population. Programs are intended to assist, inform, entertain, and enrich the lives of individuals at least fifty-five years of age. The Cranston Senior Enrichment Center is located at 1070 Cranston Street and houses the Department of Senior Services.

[2] Rhode Island Department of Health. (n.d.). Community health data: Cranston. Retrieved June 18, 2024, from https://health.ri.gov/communities/results.php?place=Cranston

Programs and offerings provided through the department of Senior Services are comprised of the following:

Adult Day Services

The Cranston Senior Enrichment Center runs daily adult services that are geared toward meeting the medical, social, and psychological needs of the health challenges that seniors and disabled populations face. A team of skilled staff, which include nurses, case managers, activities coordinators, and physical therapists provide participants with opportunities for physical therapy, art, music, book clubs, nutritional services, and physical exercise. Participants must attend at least twice per week and a minimum of five hours per day.

Nutrition

The Nutrition Division ensures that Cranston seniors receive consistent nutritious meals. Hot lunches are served Monday through Friday in addition to breakfast specials, food court items, and catering for non-profit organizations. Meals are run out of the Senior Enrichment Center's dining room.

Health and Wellness

Health and wellness are core to the Cranston Department of Senior Services mission. Health programs and screenings are conducted on a consistent basis. Health checkups and various support groups are available for Cranston residents in coordination with students and faculty from local colleges.

Social Services

The Social Services Division offers support to help seniors and their families navigate through challenging and often uncertain situations. Case managers are available Monday through Friday to discuss problems, provide support, assist with paperwork, and refer seniors to the agency or service that can best help with particular inquiries or requests. Other programs include support groups, counseling, case management, and advocacy services.

Transvan

The Center offers daily transportation as part of the Transvan program, which brings Cranston residents to various locations around Cranston. Reservations are necessary for all trips. Single round-trip rides cost $5 while monthly passes are available for $25. Rides are scheduled Monday through Friday from 8:00am to 2:00pm.

Table 8.1. Updates in Cranston Senior Services Budget

Program	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Administration	$423,189	$405,953	$400,270	$490,801	$472,312	$437,578	$437,578
Programs	$154,878	$106,737	$112,165	$156,013	$163,189	$132,625	$132,625
Adult Day Care	$520,847	$475,913	$446,714	$508,276	$503,455	$507,608	$507,608
Social Services	$229,156	$237,864	$252,709	$242,624	$281,272	$288,764	$288,764
Transvan	$504,492	$566,843	$496,253	$548,067	$544,096	$423,857	$423,857
Nutrition	$1,286,792	$1,101,267	$1,113,892	$1,340,999	$1,081,319	$569,293	$569,293
RSVP	$93,834	$94,890	$93,620	$206,465	$118,111	$123,563	$123,563
TOTAL	$3,213,188	$2,989,467	$2,915,623	$3,493,245	$3,163,754	$2,483,288	$2,483,288

Source: City of Cranston

8.2.2 Department of Parks and Recreation

Cranston's Department of Parks and Recreation plays a crucial role in maintaining and enhancing recreational facilities throughout the City, catering to school sports, youth athletics, and the public. The Department oversees 47 facilities across Cranston, which include:

Table 8.2. Count of Recreation Facilities	
Baseball Fields	25
Softball Fields	11
Basketball Courts	6
Bike Path	4.5 miles
Tennis Courts	24
Pickleball Courts	6
Playgrounds	33
Soccer Fields	7
Public Swimming Pools	1
Baseball Fields	25

Source: City of Cranston

Budlong Swimming Pool

Budlong Swimming Pool, once celebrated as one of the largest outdoor swimming pools in the nation, has become a focal point of community debate in recent years. As a historical and recreational landmark, the pool is now at the center of discussions regarding its future. Officials have developed a redesign to better align with contemporary usage patterns and financial sustainability. Many residents recall the pool as a significant part of their childhood and community life, sparking a robust dialogue on balancing its historical significance with practical considerations. The proposed redesign aims to create a sustainable and enjoyable recreational space that will continue to serve the community for years to come. The outcome of this process will ultimately reflect the community's values and vision for the future.

The Peter Pastore Youth Center

The Peter Pastore Youth Center, located at 155 Gansett Avenue, is a versatile venue that can be rented to groups or organizations for various activities. This facility supports a range of community events and initiatives, fostering engagement and social cohesion.

The Department offers a variety of programs to residents, including:

- Women's Fitness Program: Encouraging physical health and wellness among women in the community
- Pickleball Leagues: Catering to the growing popularity of this sport among all age groups.
- Saturday Morning Basketball: Designed for children in kindergarten through second grade, promoting early engagement in sports.
- Playground Program Summer Camp: Available for ages 6 to 12, held at four locations across Cranston, this program provides structured activities during the summer months.

Additionally, the Department creates summer employment opportunities for students, helping them gain work experience and get involved in the City's recreational initiatives. These programs and

facilities collectively enhance the quality of life in Cranston by promoting active lifestyles, community engagement, and social interaction.

8.2.3 Library

The Cranston Public Library system is a cornerstone of the community, with six locations serving the City's diverse needs. The Central Library, located at 140 Sockanosset Cross Road, is the hub of the system. Established by the Cranston City Council in 1966, the library system began with the Oaklawn Library in 1968 and has since expanded its reach and services.

Impact and Services:

The library's Impact Report 2023[3] highlights significant achievements, notably the restoration of core services to pre-pandemic levels. This reflects the library's resilience and commitment to providing high-quality services to the community.

The library boasts a collection of 139,231 items, including:

- Books: 119,414
- Videos: 10,663
- Audios: 7,135
- Periodicals and Specialty Items: 1,451 (including museum passes, Kindles, and hotspots)

This extensive collection ensures that the Cranston Public Library can meet the diverse informational and recreational needs of its patrons.

The library offers a wide array of services to the public, offering Cranston residents of all ages valuable opportunities for education, entertainment, technology access, community engagement, and personal growth. Below is a comprehensive list of all services offered by the Cranston Public Library:

- General Services:
    - Borrowing and Lending:
        - Books, DVDs, audiobooks, and other materials
        - eBooks and audiobooks through the Ocean State Libraries eZone, Hoopla, and Flipster
        - Access to TV shows and movies
    - Technology Services:
        - Public access computers and free Wi-Fi
            - Printing, copying, scanning, and faxing services
            - Mobile printing
            - C-Lab with 3D printing and media preservation
            - Video conferencing facilities
            - Technology education, including computer classes, open tech time, and one-on-one tech appointments

[3] Cranston Public Library. (2023). 2023 impact report. Retrieved June 18, 2024, from https://www.cranstonlibrary.org/_files/public/2023_ImpactReport_Print.pdf

    - Meeting Room Reservations:
        - Available for public use, with spaces for meetings and events
- Educational and Research Services:
    - Book Groups:
        - Various book clubs for adults, teens, and children, both in-person and virtual
    - Local History and Genealogy:
        - Access to local historical documents and genealogy resources
        - Research assistance and educational programs
    - Storytime Programs:
        - Sessions for babies, toddlers, and preschoolers, including virtual options
    - Educator Services:
        - Resources and support for teachers, including classroom collections and teacher library cards
        - Special programs and workshops for educators
    - Online Tutoring:
        - Free tutoring and homework help through Tutor.com for students in grades K-12
    - Museum Passes:
        - Borrow passes for discounted or free admission to local museums and attractions
- Community and Outreach Services:
    - Homebound Services:
        - Delivery of library materials to homebound individuals
    - ESL and Citizenship Programs:
        - English as a Second Language (ESL) and citizenship classes in partnership with the Rhode Island Family Literacy Initiative (RIFLI)
    - Healthy Families Program:
        - Programs and resources to support family health and wellness
    - Notary Services:
        - Free notary public services available at the Central Library
- Specialized Services:
    - Small Business Services:
        - Resources and support for small business owners and entrepreneurs, including business databases and workshops
    - Bilingual Services:

        - Materials and programs for Spanish-speaking patrons through "La Biblioteca"
    - Teen Services:
        - Programs, resources, and volunteer opportunities specifically for teenagers
    - Cool Tools:
        - Borrow non-traditional items like musical instruments, tools, and technology
- Accessibility and Inclusion:
    - ADA Accommodations:
        - Services and facilities designed to be accessible to individuals with disabilities

Overall, the Cranston Public Library remains a vital resource, fostering a love for reading, learning, and community engagement. Its ongoing efforts to adapt and expand services underscore its importance in the fabric of Cranston's community life.

8.2.4 Police Services

The Cranston Police Department provides comprehensive law enforcement services to the community, ensuring public safety and crime prevention. The department is headquartered at 5 Garfield Avenue and operates from several substations strategically located throughout the City to enhance response times and community engagement. These include substations at Cranston Street, Atwood Avenue, and Park Avenue.

Community Services and Activities

The Cranston Police Department is actively involved in various community services and activities aimed at building strong relationships with residents. These initiatives include youth outreach programs, neighborhood watch meetings, and participation in community events. The department also offers educational programs such as D.A.R.E. (Drug Abuse Resistance Education) and Citizens Police Academy to foster trust and cooperation between the police and the community.

Vehicle Inventory

The department maintains a robust vehicle inventory, including patrol cars, Sport Utility Vehicles (SUVs), motorcycles, and specialized units such as K-9 units and Special Weapons and Tactics (SWAT) vehicles. Recent investments have been made to upgrade the fleet with newer, more efficient vehicles to ensure the safety and reliability of the department's operations.

Recent Improvements

- Physical Improvements:
    - Renovation and modernization of the main police headquarters.
    - Upgrades to the communication and dispatch centers to improve emergency response efficiency
- Departmental Improvements:
    - Implementation of body-worn cameras for all patrol officers to enhance transparency and accountability
    - Adoption of advanced crime analysis software to better predict and prevent criminal activities

Costs and Operations

Over the past five years, the budget allocations for the police department have seen steady increases, reflecting the City's commitment to maintaining public safety. The spending covers salaries, equipment upgrades, training programs, and community outreach initiatives. The following table provides a detailed breakdown of spending for the police department over the last five years:

Table 8.2. Cranston Police Department Budget

Fiscal Year	Personnel Services	Equipment & Maintenance	Training & Development	Community Programs	Total Spending
2019	$18,318,566	$631,775	$126,659	$4,775,000	$24,381,636
2020	$19,504,534	$474,719	$118,758	$5,164,670	$25,262,681
2021	$19,839,237	$667,853	$101,640	$5,400,920	$26,009,650
2022	$20,796,315	$596,648	$104,413	$5,624,662	$27,122,038
2023	$21,377,193	$728,618	$81,404	$9,171,798	$31,359,013
2024	$21,994,388	$790,000	$82,000	$6,159,373	$29,025,761
2025	$22,334,537	$865,000	$102,000	$6,046,096	$29,247,633

Source: City of Cranston. (2024). FY25 adopted budget. Retrieved from https://www.cranstonri.gov/budgets-by-fiscal-year/

8.2.5 Fire Services

The Cranston Fire Department is dedicated to protecting the lives and property of the City's residents through fire prevention, education, and emergency response services. The department operates from multiple fire stations, ensuring comprehensive coverage across Cranston. The main fire station is located at 301 Pontiac Avenue, with additional stations situated at key points including Oaklawn Avenue, Scituate Avenue, and Cranston Street.

Community Services and Activities

The fire department engages in various community service activities, including fire safety education programs in schools, Cardiopulmonary Resuscitation (CPR) training sessions for residents, and participation in community health fairs. These initiatives aim to promote safety awareness and preparedness among the public.

Vehicle Inventory

The fire department's vehicle inventory includes fire engines, ladder trucks, rescue units, and specialized apparatus such as hazmat units and water tankers. The department has recently upgraded several vehicles to enhance their emergency response capabilities.

Recent Improvements

The City of Cranston has recently made several significant improvements to its Fire Services, focusing on both physical and departmental advancements to enhance overall safety and efficiency.

Physical Improvements:

- Construction of a new fire station in Western Cranston to improve response times in the area
- Major renovations and updates to existing fire stations to ensure they meet modern standards

Departmental Improvements:

- Introduction of advanced firefighting equipment and protective gear to enhance firefighter safety
- Implementation of a new fire incident reporting system to streamline operations and improve data accuracy
- In 2023, Cranston experienced severe flooding, prompting the City to declare a state of emergency and highlight the critical role of the fire department in disaster response and management

Costs and Operations

The fire department's budget reflects the City's prioritization of public safety, with significant investments in personnel, equipment, and infrastructure. The following table provides a detailed breakdown of spending for the fire department over the last five years:

Table 8.3. Cranston Fire Department Budget

Fiscal Year	Personnel Services	Equipment & Maintenance	Training & Development	Facility Upgrades	Total Spending
2019	$24,030,706	$2,004,695	$140,340	$7,030,878	$33,206,619
2020	$24,718,166	$2,517,662	$150,727	$7,213,461	$34,600,016
2021	$24,055,128	$2,556,834	$200,059	$8,738,601	$35,550,622
2022	$26,136,688	$2,676,020	$196,245	$7,666,722	$36,675,675
2023	$27,317,395	$3,348,197	$188,855	$8,854,742	$39,709,189
2024	$26,848,891	$2,992,993	$205,800	$7,268,026	$37,316,710
2025	$26,649,342	$2,938,500	$224,000	$6,031,580	$35,843,422

Source: City of Cranston

8.2.6 School Facilities

Cranston boasts a diverse array of educational institutions that serve the needs of its residents. The City is home to a mix of public and private schools, each contributing to the community's educational landscape. This section provides an overview of these facilities, including their locations, enrollment numbers, and recent updates.

Public Schools

Cranston Public Schools operates several primary, middle, and high schools across the City. These schools are strategically located to serve different neighborhoods, ensuring that students have access to education close to their homes. Table 8.4 shows the total number of students enrolled at each public school throughout the City during the 2023 - 2024 school year.

Table 8.4. 2023-2024 Enrollment by School

School	Grades Served	Enrollment
Arlington School	K-5	219
Eden Park School	K-5	244
Edgewood Highland School	K-5	285
Edward S. Rhodes School	K-5	303
Garden City School	K-5	510
George J. Peters School	K-5	260

Table 8.4. 2023-2024 Enrollment by School		
School	**Grades Served**	**Enrollment**
Gladstone Street School	K-5	399
Glen Hills School	K-5	284
Oak Lawn School	K-5	252
Orchard Farms Elementary School	K-5	465
Stadium School	K-5	241
Stone Hill School	K-5	234
William R. Dutemple School	K-5	276
Woodridge School	K-5	257
Hope Highlands Middle School	6-8	345
Hugh B. Bain Middle School	6-8	536
Park View Middle School	6-8	693
Western Hills Middle School	6-8	700
Cranston High School East	9-12	1,513
Cranston High School West	9-12	1,698
Cranston Early Learning Center	Pre-K	48
Apprenticeship Exploration School	Vocational/Technical	180
Cranston Public Schools	Vocational/Technical	184
Total		**10,126**

Source: RIDE, 2024

Distribution of Students by Grade Level

The data reveals an uneven distribution of students across various grade levels, from pre-kindergarten to high school and vocational/technical education. Notably, the highest enrollment is observed in the high schools, with Cranston High School West and Cranston High School East enrolling 1,698 and 1,513 students respectively.

Specialized and Vocational Education

The presence of specialized and vocational/technical schools, such as the Apprenticeship Exploration School and the Cranston Public Schools Vocational/Technical programs, indicates a commitment to providing diverse educational pathways. These institutions cater to students who are interested in pursuing technical skills and vocational training, preparing them for immediate entry into the workforce or further specialized education.

Enrollment Trends and Demographics

Over the past five school years, the enrollment in Cranston's schools has shown a slight but consistent decline, decreasing from 10,475 in the 2019 - 2020 school year to 10,126 in the 2023 - 2024 school year. This trend suggests a gradual decline in the student population, which could be attributed to demographic shifts or other factors such as families moving out of the district.

Table 8.5. Annual Enrollments by Race and Program										
Year	**Native American**	**Asian Pacific**	**Black**	**White**	**Hispanic**	**Multi-Race**	**IEP**	**FRL**	**LEP**	**Total**
2019-20	78	950	509	5217	3113	608	1619	4563	769	**10475**

Table 8.5. Annual Enrollments by Race and Program										
Year	Native American	Asian Pacific	Black	White	Hispanic	Multi-Race	IEP	FRL	LEP	Total
2020-21	78	974	493	4986	3230	640	1636	4337	830	**10403**
2021-22	81	922	491	4782	3345	631	1523	3429	932	**10258**
2022-23	81	900	493	4630	3500	612	1562	4338	1051	**10225**
2023-24	81	869	512	4456	3594	606	1628	4464	1148	**10126**

Source: RIDE, 2024

The racial composition of the student body has seen some changes over the last five school years:

- Native American Students: The number of Native American students has remained consistent at around 78 – 81 students each year.
- Asian Pacific Students: The Population of Asian Pacific students has slightly decreased from 950 in 2019 – 2020 to 869 in 2023 – 2024
- Black Students: The number of Black students has remained relatively stable, around 490 – 510 students each year.
- White Students: There has been a noticeable decline in the number of White students, from 5,217 in 2019 – 2020 to 4,456 in 2023 - 2024
- Hispanic Students: The Hispanic student population has increased from 3,113 in 2019 – 2020 to 3,594 in 2023 – 2024
- Multi-Race Students: The number of multi-race students has remained stable, around 600 – 640 students each year.

The increase in Hispanic students and the decrease in White students highlight the evolving demographics of Cranston, which could have implications for cultural and language support services within the schools.

Special Programs:

Special programs such as Individualized Education Programs (IEP), Free and Reduced Lunch (FRL), and Limited English Proficiency (LEP) have also shown varying trends:

- IEP: The number of students with IEPs has been stable, with slight fluctuations, reflecting a consistent need for special education services
- FRL: There has been a slight decrease in the number of students eligible for FRL, from 4,563 in 2019 – 2020 to 4,464 in 2023 – 2024, which may indicate improvement with some of the economic challenges within some areas of the community.
- LEP: The number of LEP students has significantly increased from 769 in 2019 – 2020 to 1,148 in 2023 – 2024, indicating a growing need for language support services as the student body becomes more diverse.

Grade-Level Enrollment

The distribution of students across different grades has remained relatively consistent, although there are minor variations each year. Kindergarten (KF) and primary grades (1-5) have seen stable enrollments, while middle school (6-8) and high school (9-12) enrollments reflect normal progression and graduation rates.

Table 8.6. Annual Enrollments by Grade Level															
Year	**PK**	**KF**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Total**
2019-20	67	673	762	727	754	735	780	818	856	810	862	890	847	873	**10475**
2020-21	108	703	675	746	736	757	727	781	827	858	808	885	880	892	**10403**
2021-22	77	659	714	695	742	732	742	739	795	804	859	798	864	981	**10258**
2022-23	97	649	699	710	701	749	720	774	753	817	847	868	800	993	**10225**
2023-24	104	585	672	705	723	706	766	755	796	757	850	875	874	900	**10126**

Source: RIDE

Cranston's schools are experiencing gradual demographic shifts and changes in student needs that necessitate adaptive strategies in services and facilities. By focusing on language support, special education, economic assistance, and community engagement, Cranston can continue to provide a high-quality educational experience for all its students. These efforts will ensure that the district remains responsive to the evolving needs of its diverse student body.

Transportation Services

Cranston provides a comprehensive bus service for students attending both public and private schools. The school bus network ensures that students can safely and reliably commute to and from school. The transportation system is managed by the Cranston Public School Transportation Department which operates all buses across the City, covering all major school routes.

Costs and Operations

The operational costs of Cranston's school facilities are a significant component of the municipal budget. The City's investment in education includes expenditures on salaries, benefits, transportation, and facility maintenance. For the 2023 - 2024 fiscal year, the Cranston Public Schools budget reflects a comprehensive allocation aimed at maintaining and enhancing the quality of education.

Budget Overview

The total budget for Cranston Public Schools for the 2023 - 2024 fiscal year is $179,167,952, representing an increase of 3.31% over the previous year. This increase addresses several critical areas:

- Salaries and Compensation
    - Total salary expenses amount to $111,453,175, an increase of $4,229,100 from the previous year. This includes teacher salaries, administrative staff, support staff, and substitutes. Specific increases were noted in teacher salaries and district-wide compensation adjustments.
- Employee Benefits
    - Employee benefits account for $42,701,223, reflecting a rise of $1,621,534. Key benefits include health and dental insurance, pension contributions, and other fringe benefits. Notably, there is a projected increase in health insurance costs by 3% annually.
- Purchased Services

  - Expenditures on purchased services total $20,361,581, with a notable increase of $1,334,180. This category covers special education services, charter school tuitions, and property insurance.

- Supplies and Materials
  - The budget allocates $4,605,760 for supplies and materials, marking a $449,722 increase. This includes expenditures on educational materials, utilities, and maintenance supplies
- Capital Outlay
  - Capital outlay expenditures are projected at $1,752,687, a slight decrease from the previous year. This budget covers the acquisition of new equipment and infrastructure improvements.
- Miscellaneous and Other Costs
  - Miscellaneous costs include dues, fees, and other operational expenses, with a notable reduction due to projected savings from teacher retirements and staff reductions, totaling $1,815,919.

Budget Changes Over Fiscal Years

Over the past several fiscal years, Cranston Public Schools' budget has seen various adjustments in response to evolving educational needs and financial conditions. Here's an overview of the budget changes from fiscal years 2019 - 2020 to 2023 - 2024[4]:

- 2019 - 2020 Fiscal Year
  - Total Budget: $160,480,093
  - Major expenditures included salaries ($99,197,224) and employee benefits ($37,784,417).
- 2020 - 2021 Fiscal Year
  - Total Budget: $166,692,482
  - The budget saw a moderate increase, with notable rises in salaries and purchased services.
- 2021 - 2022 Fiscal Year
  - Total Budget: $171,165,486
  - Continued growth in salary expenses and increased investment in purchased services and supplies.
- 2022 - 2023 Fiscal Year
  - Total Budget: $173,423,550
  - Additional increases in employee benefits and a slight rise in miscellaneous costs.
- 2023 - 2024 Fiscal Year

[4] Cranston Public Schools. (2024). FY25 adopted budget. Retrieved June 18th, 2024 from [https://www.cpsed.net/apps/pages/index.jsp?uREC_ID=1649283&type=d&pREC_ID=2205365].

    - Total Budget: $179,167,952
    - This year marks a significant rise in total budget, driven by increased state aid, Medicaid reimbursements, and City appropriations.
- 2024 - 2025 Fiscal Year
    - Total Budget: $181,712,717
    - The budget reflects further increases in salaries, employee benefits, and purchased services, continuing the trend of incremental growth to meet educational needs. Major revenue sources include an increase in state aid by $2,521,293, a $250,000 increase in Medicaid reimbursement for services, and a $1,890,005 increase in City appropriation.

Transportation Services

Cranston provides a comprehensive bus service for students, managed under the district's transportation budget. The total transportation budget is $3,614,104, which includes salaries for bus drivers, maintenance of the fleet, and fuel costs. Notably, there was a decrease of $235,813 in transportation expenditures due to efficiency improvements and route optimization.

Recent Financial Adjustments

The 2023 - 2024 budget reflects several strategic financial adjustments:

- **State Aid** increased by approximately $2,521,293.
- **Medicaid Reimbursement** for services saw an increase of $250,000.
- **City Appropriation** increased by $1,890,005, ensuring continued support from local government.
- **Reclassification of positions** previously funded by ESSER II & III grants, resulting in a $503,788 increase in salaries.

These adjustments are part of a broader strategy to enhance the educational environment and ensure financial sustainability.

Recent Updates

Cranston's educational landscape has seen significant changes over the past decade. Several schools have undergone closures, renovations, or new constructions to adapt to the growing and changing needs of the community.

- **Rebuilt and Redeveloped Schools:**
    - Cranston High School East underwent major renovations, including the addition of a new science wing and updated laboratory facilities to support advanced STEM education.
    - Gladstone Elementary School was rebuilt to modern standards, with state-of-the-art classrooms and improved accessibility features.
- **Closed Schools:**
    - Horton Elementary School was closed in 2013 due to declining enrollment and shifting population demographics. The building has since been repurposed for community use.

- **New Constructions:**
    - Garden City Elementary School saw reconstruction of the property and addition of a new wing to accommodate an increasing student population and to provide more specialized educational spaces.

Cranston's school facilities play a crucial role in the community, providing essential educational services to the City's youth. The combination of public and private institutions, supported by a robust transportation network and significant municipal investment, ensures that Cranston continues to offer high-quality education. As the City grows and evolves, continued attention to the needs of its schools will be vital in maintaining the high standards of education that residents have come to expect.

8.2.7 Public Works

The Department of Public Works (DPW) offices are at City Hall, located at 869 Park Ave., and the Public Works Garage is located at 929 Phenix Ave. Solid waste management, recycling, and sewer are the primary concerns of the DPW, but it is also in charge of the following divisions: Bureau of Traffic Safety, Highway Maintenance Division, Engineering, and Tree Maintenance. The department has 9 employees.

The DPW manages the City's snow removal, landscaping, street light repairs, traffic signs, City streets, sidewalk improvements, and stormwater permits. The City spends close to $2,000,000 per year paving and repairing over 320 miles of City streets, and almost $4,000,000 more per year for the remaining public works, maintenance, and engineering activities.[5]

8.2.8 Solid and Hazardous Waste Management

Waste Processing

The City of Cranston processes its waste through a comprehensive curbside refuse and recycling collection program managed by the Department of Public Works (DPW). This program is designed for residents in single-family homes and multi-family dwellings up to four units. The collection occurs once per week, with residents required to place their refuse, recyclables, and yard waste at the curb by 6:15 AM on collection day. The City uses an automated collection system with specially marked roll-out carts for rubbish and recyclables.

Cost and Operations

The budget for the Refuse Removal and Disposal Group for 2025 includes various expenditures that ensure efficient waste management. These costs cover salary schedules, payroll taxes, pension contributions, and refuse removal hauling and tipping fees. The total budget for refuse removal and disposal is approximately $7.65 million. The Clean City Program Coordinator oversees the administrative tasks, while Waste Management of Rhode Island handles the collection and maintenance of waste carts.

Recycling Programs

Cranston supports several recycling programs to promote sustainability and reduce landfill waste. The City participates in the Recycle Together RI initiative, which simplifies recycling by allowing residents to recycle a broader range of items. Residents can drop off household hazardous waste,

[5] City of Cranston. (2024). Public Works Department: Streets and Sidewalks. Retrieved June 18th, 2024, from https://www.cranstonri.gov/departments/building-and-public-works/public-works/streets-and-sidewalks/default.aspx; City of Cranston. (2024). Adopted 2024-2024 Municipal Budget.

such as propane tanks, oil-based paint, and rechargeable batteries, at designated locations. Additionally, items like books, waste oil, televisions, electronics, and scrap metal can be recycled at the Public Works Garage without any charge or appointment.

Table 8.7. Municipal Waste Management Data (2023)

Tons of Trash Landfilled per HH	MRF Recycling Rate	Mandatory Recycling Rate	Overall Diversion Rate	Pounds of Rejected Recycling per HH
0.89	6,382	31.7%	32%	131

Source: RIRRC

In 2023, Cranston managed 25,937 households, generating a total of 38,145 tons of waste[6]. Of this, 6,382 tons were solid waste, 5,550 tons were MRF (Materials Recycling Facility) recycling, and 49 tons were composted materials. The City also recycled 61 tons of scrap metal and 166 tons of other materials. The overall diversion rate for Cranston was 32.0%, with a mandatory recycling rate of 31.7% and an MRF recycling rate of 19.7%.

8.2.9 Water and Wastewater Resources and Facilities

Cranston's water supply and wastewater management are integral to the City's infrastructure, ensuring the health, safety, and well-being of its residents. This section outlines the current state and future projections of these essential services.

Water Supply

Most of Cranston receives its water from the Providence Water Supply Board (PWSB), which provides treated drinking water to approximately 60% of Rhode Island residents, including Cranston.[7] The water is sourced from the Scituate Reservoir, which is part of a larger system that includes several smaller reservoirs. The treatment process at the Scituate Reservoir involves aeration, coagulation-flocculation, sedimentation, rapid sand filtration, disinfection, and fluoridation, ensuring the water meets or exceeds all federal and state drinking water standards. A small portion of the City is serviced by the Kent County Water Authority, which supplies water from its own groundwater wells and treated water purchased from the Providence Water Supply Board (PWSB).[8]

To promote efficient use of the resource, the City maintains and updates the infrastructure connected to the PWSB system. Recent improvements include the implementation of a Supervisory Control and Data Acquisition (SCADA) system to monitor and control water distribution in real-time, and the replacement of old water meters with Automated Meter Reading (AMR) systems to enhance accuracy and operational efficiency. Figures 8.2, 8.3, and 8.4 show Cranston's water supply, quality and service area.

Wastewater Management

Cranston's wastewater is managed by a municipal system operated by Veolia Water. The City's wastewater treatment facility (WWTF) treats an average of 10 million gallons of wastewater per day,

[6] Rhode Island Resource Recovery Corporation. (2024). 2023 municipal summary detailed with charts. Retrieved June 18, 2024, from https://rirrc.org/sites/default/files/2023%20Municipal%20Summary%20Detailed%20with%20Charts%20 20240401.pdf

[7] Providence Water Supply Board. (2020). Water Supply System Management Plan Executive Summary. Retrieved from Providence Water Executive Summary.

[8] Kent County Water Authority. (2024). About KCWA. Retrieved from https://kentcountywater.org/about-kcwa.aspx.

servicing approximately 73,200 customers. The WWTF, which includes an incinerator capable of processing 66 dry tons of sludge per day, has received recognition for its exceptional operations and maintenance practices. In 2019, the facility was awarded the Regional Wastewater Treatment Plant Excellence Award by the U.S. Environmental Protection Agency.[9]

The wastewater system primarily serves the eastern section of Cranston, while developed parcels not connected to the sewer system rely on Onsite Wastewater Treatment Systems (OWTS). The City's comprehensive plan indicates that future development in western Cranston will generally rely on OWTS unless they can connect to a pressurized sewer line. Figure 8.5 shows the Sewer Service Area's within the City of Cranston.

The City is proactive in managing its sewer system, conducting regular inspections, pressure testing, and maintenance of sewer lines and manholes. Manhole pressure tests are conducted to check for leaks and ensure proper installation.

Stormwater Management

The Environmental Program Manager, housed within the DPW, manages the City's stormwater program and permit requirements. The City is required to submit an MS4 annual report to the Rhode Island Department of Environmental Management Office of Water Resources. The City conducts extensive public education and outreach to promote awareness and compliance with stormwater management practices. This includes the distribution of educational materials, public meetings, and partnerships with local organizations such as Save the Bay and the Stormwater Innovation Center.

In 2022, the City completed a significant project at the Speck Field recreation facility, which included the installation of an underground infiltration basin and a vegetated infiltration basin to reduce phosphorus levels in the Spectacle Pond watershed area. This project was partially funded through an EPA Southeast New England Program (SNEP) grant and is used as a showcase for the benefits of phosphorus reduction.[10]

The City proceeded with the design and engineering for an additional stormwater infiltration project at Pomham Street. This project, also partially funded through a SNEP grant, is scheduled for construction in Spring 2024, with associated outreach activities to educate the public on its potential benefits.[11]

The City has established best management practices (BMPs) for stormwater management to reduce runoff and improve water quality. These include retention basins, bioretention basins, Vortechnics[12] units, and underground infiltration basins. The retention basins and Vortechnics units are subject to annual inspections and maintenance to ensure their effectiveness.[13]

Cranston has also focused on retrofitting existing infrastructure to include BMPs. For instance, the Barrett Street project completed in 2022 involved installing an underground infiltration basin to reduce phosphorus runoff into Spectacle Pond**.** The City continues to identify and implement potential BMP locations to improve stormwater management and reduce pollutant loads, with plans outlined in the Spectacle Pond Phosphorus Reduction Plan.[14]

[9] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.
[10] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.
[11] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.
[12] Vortechnics is a manufacture and provider of stormwater treatment systems.
[13] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.
[14] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.

Public Education and Outreach

The City conducts a variety of outreach activities to educate the community about stormwater management. In October 2022, a public meeting was held at the Speck Field parking lot to discuss recent stormwater projects. The City also partners with local organizations for outreach activities, such as the Stormwater Innovation Center and Save the Bay.[15]

In addition to public meetings, the City uses its website and distributed flyers to inform residents about stormwater management practices and the importance of reducing pollutants like phosphorus. These materials are available on the City's stormwater webpage and through direct mailings.[16]

The City also participates in educational initiatives, such as painting sidewalk storm drain murals around catch basins with students from Eden Park Elementary School to raise awareness about the impacts of stormwater runoff on local waterbodies.

8.3 Challenges and Opportunities

8.3.1 Challenges

Budlong Pool Renovation

The debate about the size and scope of the new Budlong Pool was a significant challenge. Community expectations varied, with some advocating for a pool that matches the size of the original, while others supported a smaller, more cost-effective option. The closure of the pool was a contentious issue, but the final design balances community desires with financial feasibility.

Western Cranston Sewer and Water Policy

As development continues in Western Cranston, the existing infrastructure is increasingly burdened. The proposed establishment of a Septic System Management District, as mentioned in the 2012 Plan, remains unimplemented. This district would bring individual septic systems under City management, contracting private companies for monitoring and maintenance, thereby addressing the growing infrastructure demands.

Pawtuxet River Water Flow

Maintaining adequate water flow in the Pawtuxet River, as mandated by the EPA, continues to be a challenge. The river receives treated effluent from the City's wastewater treatment plant and stormwater runoff. Continuous monitoring by the City and the Providence Water Supply Board is necessary to ensure compliance with environmental standards.

Increasing Solid Waste Disposal Costs

The rising costs of municipal solid waste disposal necessitate exploring alternatives to decrease reliance on the Johnston landfill. Diversification into recycling and composting programs is essential to manage these costs effectively. The recent budget indicates a significant allocation towards refuse removal and disposal, highlighting the City's efforts to manage waste efficiently.

Municipal Building Maintenance

The 2010 Plan highlighted concerns about municipal building maintenance, including non-compliance with the latest fire codes and the lack of long-term maintenance plans. An update on these issues is required to ensure that City-owned buildings are safe and well-maintained, with structured criteria around capital improvement planning.

[15] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.
[16] City of Cranston. (2024). Public Works - Sewer Maintenance. Retrieved from Cranston RI Public Works.

Stormwater Management and Flooding

Stormwater management remains a critical challenge, with the need to retrofit existing infrastructure to include best management practices (BMPs). Recent projects have focused on installing permeable pavements (see Figure 8.6 to see total impervious cover within the City) and other BMPs to manage stormwater effectively. However, ongoing maintenance and additional projects are necessary to mitigate flooding risks and improve water quality.

Traffic and Road Maintenance

The maintenance of roads and traffic signs remains inadequate, as noted in the 2010 Plan. Many roads require resurfacing, and traffic signs need updating to meet current standards. With the City spending approximately $2,000,000 annually on paving and repairing streets, further analysis to pinpoint any operational or budgetary deficiencies, as well as identifying pro-active planning measures are needed to address these inadequacies comprehensively and efficiently.

School System Challenges:

- High Enrollment Schools: Schools with higher student enrollment require substantial resources (costs) for staffing, facility maintenance, and extracurricular programs.
- Cultural and Language Support: Increasing Hispanic and LEP student populations necessitate enhanced language support services and multicultural resources.
- Special Education: Consistent need for specialized staff and facilities for IEP students.
- Economic Assistance: Persistent economic challenges require ongoing support for low-income students.

8.3.2 Opportunities

Capital Sewer Fund Implementation

The proposal for a Capital Sewer Fund from the 2010 Plan should be revisited to better fund capital sewer projects. Implementing this fund would provide a dedicated revenue stream for necessary infrastructure improvements, ensuring sustainable management of the City's sewer system.

Leveraging Partnerships for Water Quality Improvements

Partnerships with local stakeholders, such as the Stormwater Innovation Center and Save the Bay, offer opportunities to improve water quality through both structural and non-structural BMPs. These collaborations can enhance the City's efforts in stormwater management, leveraging expertise and resources to implement effective water quality projects.

Green Infrastructure and Resilience Projects

The City's recent projects, such as the Barrett Street and Pomham Street stormwater infiltration basins, demonstrate the potential for green infrastructure to manage stormwater and reduce phosphorus levels. Expanding these projects citywide can improve resilience against extreme weather events and enhance overall infrastructure sustainability.

Public Engagement and Education

Increasing public awareness and engagement in stormwater management can lead to more effective community participation in environmental initiatives. Educational programs and public meetings, such as those conducted for the Spectacle Pond Phosphorus Reduction project, can foster a better understanding of the importance of stormwater management and encourage community involvement.

Utilizing State and Federal Funding

The City can take advantage of state and federal funding opportunities, such as the State Revolving Fund (SRF) Loan Program, to finance water quality and stormwater management projects. These funds can support watershed management, stormwater infrastructure, and green infrastructure initiatives, providing low-cost financing options for essential projects.

9.0 ENERGY

9.1 Introduction

This chapter includes a summary of existing conditions regarding current energy utilities, systems, usage, and renewable energy in Cranston. Energy, within the context of this chapter, refers to utility services which generate electricity, transmit, distribute, and meter energy usage. The existing conditions summary is intended to help develop meaningful actions that support and sustain adequate energy service, emergency back-up energy, and identify potential opportunities for the creation of renewable energy. Adequate energy services are a crucial component of everyday City functions to sustain essential facilities and services, economic activities, school system, and food supply systems. Energy service is also an essential aspect of emergency preparedness and responses as utilities are impacted by extreme weather events. Extreme weather events often cause service disruptions including extreme temperatures that cause outages due to brownouts. By understanding current energy usage, the City can better predict future needs and prepare for potential vulnerabilities. Comprehensive planning can help municipalities assess their energy expenditures to pinpoint ways to reduce spending, enhance access and redundancy, and meet net zero emissions goals.

9.2 Existing Conditions

The production and continuous supply of energy is critical for sustaining everyday activities. Understanding existing conditions as they relate to energy production and supply will help the City develop meaningful actions to support and sustain adequate energy service, enhance energy efficiency, and identify potential opportunities for the creation of renewable energy.

The Rhode Island Comprehensive Planning Handbook describes energy as: "three sectors - electricity, heating and cooling, and transportation - and the resources used to create the energy for those sectors." Within the context of comprehensive planning, those sectors can be described as follows.

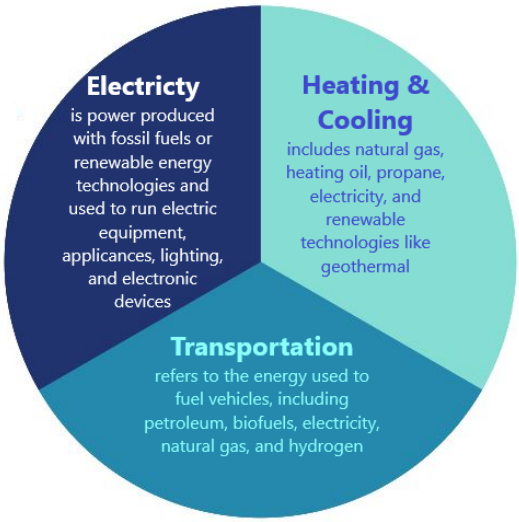

Figure 9-1. The three sectors of energy

- Electricity is power produced with fossil fuels, nuclear energy, hydro power or renewable energy technologies and used to run electric equipment, appliances, lighting, and electronic devices.
- Heating and Cooling includes natural gas, heating oil, propane, electricity, and renewable technologies, like geothermal, solar energy, wind energy.
- Transportation refers to the energy used to fuel vehicles, including petroleum, biofuels, electricity, natural gas, and hydrogen.

9.2.1 Energy Supply & Use

Rhode Island is a part of the New England power system managed by ISO New England that distributes power to Electric Distribution Companies (EDC)[1]. The major electric company in Cranston is Rhode Island Energy, the largest EDC in Rhode Island, which is owned by PPL Corp. National Grid was purchased by PPL Corp in June of 2023, ending their twenty-three-year reign as the largest EDC in the state. However, customers can also buy electricity from Pascoag Utility District, and Block Island Power Company in certain areas of the state. The Central Power Plant is located at 11 Power Road.

According to the U.S. Energy Information Administration, the residential sector has the highest energy usage in Rhode Island (2022).

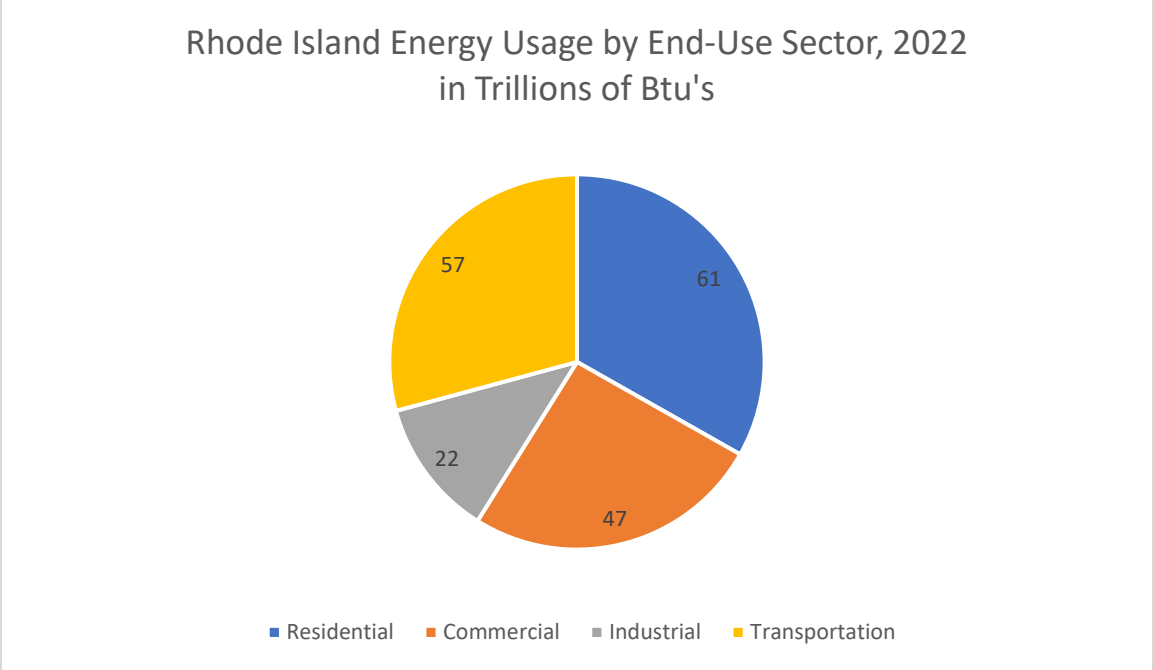

Figure 9-2. Rhode Island Energy Usage by End-Use Sector, 2022
Source: Energy Information Administration, State Profile and Energy Estimates

In June of 2022, the General Assembly passed historic legislation requiring that one hundred percent of electricity sold to Rhode Island consumers, with the exception of consumers of Block Island Power Company or Pascoag Utility District, shall originate from renewable energy by 2033. Renewable energy resources are defined by the state's Renewable Energy Standard (RIGL § 39-26-5) as the following:

1. Direct solar radiation
2. The wind
3. Movement or the latent heat of the ocean
4. The heat of the earth
5. Small hydro facilities
6. Biomass facilities using eligible biomass fuels and maintaining compliance with current air permits

[1] https://energy.ri.gov/sites/g/files/xkgbur741/files/documents/renewable/The-Road-to-100-Percent-Renewable-Electricity---Brattle-04Feb2021.pdf

7. Fuel cells using the renewable resources referenced above in this section

To help achieve this goal, the Rhode Island Department of Environmental Management completed a statewide greenhouse gas (GHG) emissions inventory for the years 1990-2019[2]. The 2019 inventory found that the majority of GHG emissions in the state were from the transportation sector (39.7%), followed by the residential heating sector (19.3%) and the electricity sector (18.9%). "GHG emissions inventories published by RIDEM provide the foundational information needed to develop and implement the Act on Climate's emission reduction mandates." Cranston has completed recent actions that support this mandate. An update to the emissions inventory will be published in December 2025.

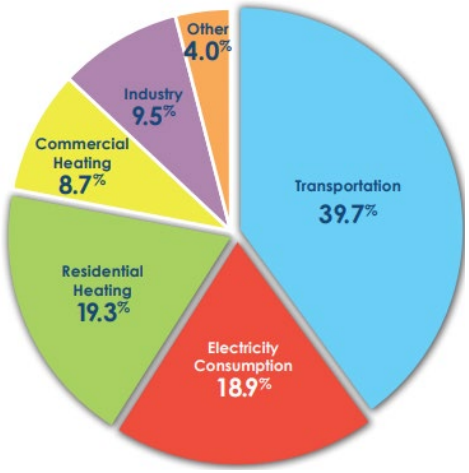

Figure 9-3. Rhode Island Emissions by Sector
Source: 2019 GHG Inventory

9.2.2 Energy Efficiency

Cranston is taking steps to conserve energy and use energy more efficiently. These steps will help reduce municipal energy expenditures and mitigate carbon emissions.

City's 2012 Comprehensive Plan recognized the importance of being strategic regarding energy production and consumption. and adopting energy conservation standards as a long-term means of lowering energy costs for the City. Strategies related to energy efficiency included the following:

1. Establish and maintain a Facilities Maintenance Fund for roadway pavement repairs and upgrades, including sidewalks, street trees, signs, snow plowing and improving energy efficiency in public buildings.
2. Promote a 'green' building program for all new construction: consider a LEED-type program to analyze energy efficiency and sustainability.
3. Create and continuously fund Ongoing Capital Programs for pavement maintenance, energy conservation and street signage.

State Wide Energy Efficiency Efforts

- State Office of Energy Resources (OER)

  The State of Rhode Island Office of Energy Resources is the state's hub for resources related to energy efficiency and renewable energy: "The Rhode Island Office of Energy Resources' (OER) mission is to lead the state toward a clean, affordable, reliable, and equitable energy future. OER develops policies and programs that respond to the state's evolving energy needs, while advancing environmental sustainability, energy security, and a vibrant clean energy economy. OER is committed to working with public- and private-sector stakeholders to ensure that all Rhode Islanders have access to cost-effective, resilient, and sustainable energy solutions."

- Rhode Island Energy Efficiency Program

  Cranston residents have access to Rhode Island Energy Efficiency, a state program that provides residents with no or low-cost energy saving measures. Rhode Island Energy offers

[2] https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-12/ridem-ghg-inventory-2019.pdf

many energy efficiency rebates, incentives, and services to help Rhode Island residents, businesses, and institutions manage their energy usage. These programs are funded by an energy efficiency charge on all customers' gas and electric bills, in accordance with Rhode Island law.

- Rhode Island Efficient Buildings Fund (RIEBF)

  The RIEBF is a revolving loan fund with low-interest loans for energy efficiency and renewable energy projects in which the annual energy savings achieved exceeds the annual debt service. This funding program is jointly administered by Rhode Island Infrastructure Bank (RIIB) and OER.

- Mayor's Emergency Fuel Program
  While the Mayor's Emergency Fuel Program helps continuity of critical services to those in dire situations. The Department of Community Development offers a one-time annual delivery of 100 gallons of oil or propane for emergency situations only. Oil tank must be below ¼ of a tank and meet household eligibility requirements.

9.2.3 Renewable Energy

Cranston is taking steps to enable the production of renewable energy, which enhances energy resilience and redundancy and reduces carbon emissions outputs. Many of these actions are initiated by the State's OER, but available to residents, businesses, and community-based organizations.

Solar Facility Along Pawtuxet River

Revity Energy is leasing a parcel from the Pawtuxet River Authority and Watershed Council to build a 0.4-megawatt solar development. The project funds are coming from the State's Renewable Energy Growth Program. The project received Master Plan approval from the City Plan Commission in July 2023.

Clean Heat Rhode Island

Clean Heat Rhode Island is a heat pump program for households, small to mid-sized businesses, and non-profit organizations. The program offers incentives for the installation of high efficiency heat pumps. The Clean Heat program is the largest energy rebate program for constituents offered by OER. According to the State Energy Commission (Figure 3), thermal emissions account for nearly one-third of Rhode Island's greenhouse gas emissions. Heat pumps are a mechanism for heating and cooling buildings.

Property Assessed Clean Energy (PACE)

PACE is a financing program that allows property owners to repay the costs of energy efficiency or renewable energy projects in conjunction with property tax payments.

9.2.4 Energy & Land Development

Solar Ordinance

In 2020, the City adopted a solar ordinance to help regulate solar energy systems (SESs) by providing standards for application requirements. These standards will help ensure that solar development is limited to certain locations, properly sited in relationship to project type and scale, and that the developments limit adverse impacts on scenic, natural, and historic resources. Additionally, the guidelines in the ordinance ensure that solar developments include screening or other measures to reduce the visual impact on the surrounding areas.

9.2.5 Transportation

The transportation sector plays a significant role in the City's energy consumption and overall environmental impact. There is an inherent link between transportation choices, energy consumption, and environmental impact. Although Cranston's transportation currently hinges heavily on personal vehicle use, there are many opportunities to improve public transit, increase non-motorized transport infrastructure, and adopt alternative energy sources for transportation throughout the City. Those opportunities would aid in the reduction of vehicle miles traveled, improving fuel efficiency, and reducing greenhouse gas emissions; both meeting the State's goals as outlined in the "State Guide Plan Element: Energy 2035" and improve the quality of life for the City's residents.

Car Usage & Commuting Trends

Most residents rely on cars for daily travel, which significantly contributes to the City's energy usage and emissions. This heavy reliance on cars has led to traffic congestion in some areas of the City, especially during peak hours, which in turn affects both fuel efficiency and emissions.

Public Transit

Public transit, when fully utilized and supported, is well known to be a more fuel-efficient method of transportation than cars. Cranston is served by the Rhode Island Public Transit Authority, (RIPTA) which provides bus services throughout the City. There is much potential to enhance these services to make them a more attractive alternative to driving for many of the City's residents.

Road Network & Infrastructure

Cranston's road network mainly caters to vehicular traffic. While there are bike lanes and sidewalks in certain areas, they are not spread across the City, highlighting a need for potentially more non-vehicle-friendly infrastructure.

Walking & Cycling

The City has been making improvements in accommodating cyclists and pedestrians, but the infrastructure still falls short of creating a fully accessible, City-wide network for non-motorized travel.

Energy Sources for Transportation

The predominant energy source for transportation is currently fossil fuels. Alternative energy sources, like electricity or biofuels, are not yet widely used.

Electric Vehicles (EVs)

Electric vehicle usage and the availability of EV charging stations is gradually increasing throughout the state and in Cranston; however, the availability of EV charging stations is still limited, indicating early stages of EV adoption in the City.

The State Guide Plan Element for energy policy, *Energy 2035,* was adopted by the State Planning Council in 2015. The *Energy 2035* guide provides strategies pertaining to energy efficiency that could be applied in Cranston. Specifically, there are two strategies listed relating to electric vehicles: 1. reduce vehicle miles traveled and 2. improve fuel efficiency and reduce vehicle emissions. To reduce the amount of vehicle miles traveled, practices that could be expanded for Cranston include Transit-Oriented Development (TOD), improving public transit, improving pedestrian and bicycle infrastructure, traffic calming measures, parking policies, remote work and flexible hours policies, and education and outreach. To improve fuel efficiency and reduce vehicle emissions practices that could be expanded for Cranston include reduction of vehicle miles traveled, smart traffic

management such as smart signaling systems for traffic, promoting fuel economy and efficient driving habits through outreach and educational programming, fleet efficiency, EV infrastructure, and sustainability community initiatives.

9.3 Current Measures, Policies, and Regulations:

- Solar Energy Regulations: Cranston has passed comprehensive solar regulations. The Planning Department and City Plan Commission rewrote the City's solar regulations following a 270-day solar moratorium. [3]
- Zoning and Land Use Policies: The City has been developing clearer zoning and land use policies specific to renewable energy projects, particularly focusing on large-scale solar installations. This is in response to conflicts arising from the use of forested or conservation areas for solar farms.
- Environmental Protection: Cranston has shown concern for environmental protection in relation to energy projects, particularly those near sensitive areas like the Pawtuxet River promoting City's effort to balance renewable energy development with environmental conservation.
- Alignment with State Policies: As part of Rhode Island, Cranston is subject to State-level energy policies and regulations, including:
    - The Renewable Energy Standard, which requires 100% of Rhode Island's electricity demand to originate from renewable energy by 2033.
    - The Act on Climate (2021), which establishes binding emissions targets leading to net-zero emissions for the state by 2050.
    - The Resilient Rhode Island Act (2014), which established the Executive Climate Change Coordinating Council.
- Energy Efficiency: Cranston likely participates in state-level energy efficiency programs, as Rhode Island law requires utility providers to invest in all cost-effective energy efficiency before acquiring additional supply.

Areas for Improvement:

- Consumer Protection: The City could implement stronger consumer protection measures and education programs for residents considering solar installations, given the rapid growth of the solar industry in Rhode Island.
- Infrastructure Planning: Cranston should assess its electrical infrastructure to ensure it can support increased renewable energy adoption and plan for necessary upgrades.
- Waste Management: The City could develop policies and regulations for the future disposal and recycling of solar panels and other renewable energy equipment.
- Energy Storage: Cranston could consider developing policies to encourage energy storage systems, aligning with recent state-level initiatives like the Energy Storage Systems Act.
- Transportation Electrification: The City could develop policies to support the transition to electric vehicles and the necessary charging infrastructure.

[3] Staff Memo for Ordinance #8-19-07 Entitled "Zoning" (Solar Energy Systems) Ordinance & 8-19-08 Entitled "Zoning" (Schedule of Uses). 2019. To City Planning Commission. From Joshua Berry, MURP, AICP - Senior Planner / Administrative Officer.

- Building Energy Codes: Cranston could consider adopting more stringent building energy codes to improve energy efficiency in new constructions and major renovations.

9.4 Challenges & Opportunities

Energy is a relatively new focus area for comprehensive plans. Cranston's 2012 plan did not specifically address energy issues. Specifically renewable energy has taken the focus as a primary challenge and opportunity but other challenges and opportunities around energy present themselves and are summarized below.

9.4.1 Challenges

- Solar Industry Growth and Regulation: The rapid growth of the solar industry in Rhode Island, including Cranston, has led to challenges in regulation and consumer protection. There is a need for improved oversight and education to prevent misleading sales practices and ensure consumers understand the costs and benefits of solar installations.[4]
- Land Use Conflicts: The development of large-scale solar projects has created conflicts with land use, particularly regarding the use of forested or conservation areas for solar farms.
- Environmental Concerns: There are concerns about the environmental impact of solar installations, particularly those near sensitive areas like the Pawtuxet River. The City needs to balance renewable energy development with environmental protection.[5]
- Infrastructure Updates: As more residents and businesses adopt solar energy and electric vehicles there may be a need to upgrade electrical infrastructure to accommodate the increased distributed generation and increased demand for electricity respectively.
- Waste Management: With the growing number of solar installations, the City should plan for the future disposal and recycling of solar panels to prevent potential hazardous waste issues.
- Renewable Energy Systems and Future Needs: While specific data for Cranston is not available, the growth of solar installations in Rhode Island suggests that renewable energy systems are increasing their contribution to meeting future energy needs. Rhode Island Energy reported about 4,400 new solar installations in 2022, up from 1,800 in 2018. According to the U.S. Energy Information Administration, solar energy contributed 11 percent of the state's total electric generation in 2022. The City could assess whether this growth is sufficient to meet future energy consumption needs and align with state renewable energy goals.

9.4.2 Opportunities

Cranston has several strengths and opportunities it can capitalize on to advance its energy sector:

- Leveraging State Programs: Cranston can take advantage of Rhode Island's ambitious renewable energy goals and associated programs. The state aims to achieve 100% renewable electricity by 2033, the most aggressive timeline in the nation.[6] The City can:
    - Participate in state-level incentive programs for renewable energy adoption
    - Align its local policies with the state's Renewable Energy Standard

[4] WPRI.com - "Growing solar industry causes headaches for some in RI" (2023)
[5] ecoRI News - "Cranston Planning Commission Gives Solar Project Along Pawtuxet River the OK" (2023)
[6] State of Rhode Island General Assembly. (2024). Rilegislature.gov. https://www.rilegislature.gov/pressrelease/_layouts/15/ril.pressrelease.inputform/DisplayForm.aspx?ID=372733&List=c8baae31-3c10-431c-8dcd-9dbbe21ce3e9

    - Seek state funding and technical assistance for clean energy projects
- Diverse Land Use for Varied Energy Strategies: Cranston's mix of urban, suburban, and rural areas provides opportunities for diverse renewable energy implementations:
    - Residential, commercial, and industrial areas have the potential for rooftop solar installations, energy efficiency upgrades, and potential microgrid development
- Community Solar Potential: Given Cranston's varied demographics, community solar projects could be particularly beneficial:
    - Provide clean energy access to residents who can't install their own solar panels
    - Utilize available land or large rooftops for shared solar installations
    - Partner with local businesses or institutions to host community solar projects
- Energy Efficiency in Municipal Buildings: Cranston can lead by example by:
    - Conducting energy audits of City-owned buildings
    - Implementing energy-efficient retrofits
    - Installing renewable energy systems on municipal properties
- Transportation Electrification: As a suburban City with commuter traffic, Cranston can
    - Expand electric vehicle (EV) charging infrastructure
    - Transition municipal fleet to EVs
    - Encourage businesses to install EV charging stations
- Workforce Development: Cranston can capitalize on the growing clean energy sector by:
    - Partnering with local educational institutions for renewable energy job training programs
    - Attracting clean energy businesses to boost local employment
    - Offering incentives for green job creation
- Resilience Through Microgrids: Given Rhode Island's coastal vulnerability, Cranston can enhance its energy resilience by:
    - Identifying critical facilities for potential microgrid development
    - Exploring partnerships with utility companies for microgrid implementation
    - Integrating energy storage systems to support grid stability
- Innovative Financing Mechanisms: Cranston can explore:
    - Property Assessed Clean Energy (PACE) financing for commercial properties
    - Green municipal bonds to fund clean energy projects
    - Partnerships with local financial institutions for preferential lending for clean energy initiatives

By capitalizing on these opportunities, Cranston can position itself as a leader in sustainable energy development, enhancing its environmental profile while potentially attracting green businesses and creating local jobs in the clean energy sector.

10.0 OPEN SPACE AND RECREATION

10.1 Introduction

Open space and recreation amenities are vital to the health and well-being of Cranston's community members, the local economy, and the City's natural resources. Many local businesses receive direct and indirect benefits from the recreation and open space assets within the City, therefore contributing to the economic health of Cranston. Recreation includes indoor and outdoor activities for health and fitness as well as general enjoyment, and it is the responsibility of local and state governments to provide places for recreation and open space amenities.

Having an effective recreation and open space management program provides both direct and indirect benefits to the community in that it contributes to a community's emotional, physical, social, and economic health. Land that is classified as open space or recreational land includes protected agricultural land, parks, playing fields, playgrounds, water-related recreation, land set aside for conservation and water resource protection, cemeteries, undeveloped land, and private recreation or conservation properties.

This chapter of the Comprehensive Plan provides an inventory of existing recreational facilities and open space assets, and an analysis of the adequacy of these assets for future projected growth.

10.2 Existing Conditions Inventory

This section provides an inventory of existing recreation and open space facilities and amenities. Because providing recreation and open space is such an important component of a healthy community it is important to understand the status of existing resources so that the City can assess if these facilities are meeting the needs of the community. An important factor to consider in the future planning of open space and recreation amenities is where projected future growth is likely to occur so that open space and recreation amenities can be planned for accordingly.

10.2.1 Recreation and Open Space Facility Inventory

Recreational areas and facilities within the City include publicly owned outdoor recreational areas, privately-owned outdoor recreational areas that are utilized by both City and state residents, and publicly operated indoor recreational sites. These sites support recreational activities for all ages and feature opportunities for passive and active recreation. The City has over 60 recreational sites, including playlots, playgrounds, golf courses, athletic fields, fishing and boating access, and a variety of parks, conservation areas, and other facilities such as bike trails and community gardens.

The following tables provide an inventory of the open space and recreation facilities in Cranston. The tables are organized by categories of recreation and open space facilities and include the following:

- Table 10-1. Total Number of Active Indoor and Outdoor Recreation Facilities
- Table 10-2. Recreation Facilities with Regional and City-Wide Attraction
- Table 10-3. Open Space Recreation and Conservation Lands
- Table 10-4. School Department Recreation Facilities

Table 10-1 provides a list of active indoor and outdoor recreation facilities by type of facility and the number of each type of facility within the City.

Table 10-1. Number of Active Indoor and Outdoor Recreation Facilities	
Facility/Amenity Type	**Number**
Playground/Tot Park	35
Tracks/Walking Paths	7 (2.64 miles total)
Tennis courts	24
Lighted Facilities	4
Basketball	6
Baseball - Little League	18
Baseball - Big League	7
Softball	11
Pickleball Courts	6
Football	2
Soccer	7
Bike Path	1 (4.5 miles total)

Source: Cranston Parks and Recreation Department

Table 10-2 lists recreational facilities that are used by both City and regional residents. This list includes both land-based and water-related facilities as well as facilities of private, state and City ownership.

Table 10-2. Recreation Facilities with Regional and City-wide Attraction		
Recreation Facility Name	**Size (Acres)**	**Ownership**
Alpine Country Club	210	Private
Aqueduct Park/Field	35.5	Municipal
Chafee Complex/Briggs Farm/Hope Highlands School	75	Municipal
Cranston Country Club	177	Private
Cranston Stadium/Stebbins Field	11.7	Municipal
John L Curran Management Area	334	State
Edgewood Yacht Club	65 slips/moorings	Private
Fay Field and Pawtuxet Oxboes Park	63.7	Municipal
Knight Farm Conservation Area	48.6	Private
Meshanticut State Park	32.5	State
Pawtuxet Cove Marina	98 slips	Private
Rhode Island Yacht Club	55 slips/moorings	Private
Stillhouse Cove	2.6	Municipal

Table 10-3 lists open space, recreation, and conservation lands. Some these properties have been purchased by the State of RI and are currently leased to NGO's such as the Southside Community Land Trust (SCLT) who continue to operate them as active farms.

Table 10-3. Open Space, Recreation, and Conservation Lands					
Facility Name	**Land Area (acres)**	**Service Type**	**Ownership**	**Public Access**	**Amenities**
Confreda Farms and Greenhouses	200	Commercial grower of vegetables and nursery plants	Private/easement	Limited	Public access to farm market and garden center

Table 10-3. Open Space, Recreation, and Conservation Lands					
Facility Name	**Land Area (acres)**	**Service Type**	**Ownership**	**Public Access**	**Amenities**
Pawtuxet Conservation Land at Marine Dr	66	Conservation	City/Pawtuxet River Authority/ Private w/easement	No	-
Dimuccio Farm	44.5	Farm conservation land	State/NGO/Confreda Farms	No	farmland
Domenicone Farm	89.2	Farm conservation land	State/NGO/Confreda Farms	No	-
Edgewood Community Garden at Cherry Woods	0.3	Community garden	City/ Managed by West Bay Land Trust	Yes	33 4x16 ft garden plots
Hurricane Hill Farm	40	Farm conservation land	private	No	farmland, shop
Furnace Hill Brook Historic and Archeological Site	8.36	Historic archaeological site	City	Yes	-
Holscher Farm/The Good Earth Farm	20	Conservation/Farming Food System Training	State/RIDEM Leased to SCLT	Yes, through programs	Community gardens
John H Chafee Athletic and Recreation Complex	75.6	Active recreation	City	Yes	5 full soccer fields, multiple clinic-sized fields, parking, 3 baseball fields, Marocco Playground, 2 T-ball fields, basketball, and tennis courts, 1 mile of walking trail
J. L. Curran Management Area	334	Outdoor passive recreation/Conservation Land	State	Yes	Forest, reservoirs. unmaintained trails ,boat ramp, fishing
Knight Parcels A, B & D	240	Farmland conservation	West Bay land Trust/Audubon Society of RI	Via fee	Limited access
Meshanticut State Park	0.8-mile loop trail	Conservation land	State	Yes	Hiking trail

Table 10-3. Open Space, Recreation, and Conservation Lands					
Facility Name	**Land Area (acres)**	**Service Type**	**Ownership**	**Public Access**	**Amenities**
Howard Conservation Area	49	Conservation land	Pawtuxet River Authority	Yes	wildlife, trails
Pocasset River Wetland	.75	Conservation land	City	Yes	Walking, birding
Clarke Brook, Seidel Pond	1	DEM trout stocked pond	Private	Yes	fishing
Stillhouse Cove	2.61	Outdoor passive recreation/Conservation Land	City	Yes	Shoreline access, concrete boat ramp
Randall Pond Conservation Area	0.4	Fishing pier, kayak launch	Pawtuxet River Authority	Yes	Fishing, kayaking
Stone Hill Elementary	27.72	Tot park, forest	City	Yes	tot park, forest with no public access
Urban Edge Farm	26.61*	Conservation/Farming Food System Training	State/RIDEM Leased to SCLT	Yes, through programs	Community gardens

- Notes: Only acres in Cranston are included in this table

Table 10-4 provides a list of recreation facilities available at schools within the City.

10-4. School Department Recreation Facilities	
School Name	**Amenities**
Arlington Elementary School	1 tot park
Dutemple, William Elementary School	1 tot park, 1 basketball court
Eden Park Elementary School	1 tot park
Edgewood Highland Elementary School	1 tot park
Orchard Farms Elementary School	1 tot park
Geroge J. Peters Elementary School	1 tot park, 1 basketball court
Edward S. Rhodes Elementary School	1 tot park
Stadium Elementary School	1 tot park
Hugh B. Bain Middle School	None at the school property but the school is located across the street from the Pastore Youth Center
Hope Highlands Middle School	1 tot park and 1 baseball field
Park View Middle School	School is across the street from Park View Park which has 4 tennis courts, 1 baseball field, 2 lighted softball fields, 1 basketball court and 1 tot park and an outdoor track.
Western Hills Middle School	3 tennis courts, 1 baseball field, 1 softball field
Cranston High School West	1 outdoor track, 6 tennis courts, 1 lighted field, 1 football field, 1 baseball field
CACTC High School	Shares facilities with Cranston High School West

Apprenticeship Exploration High School	none

10.2.2 Overview of Recreation and Conservation Areas by City Region.

Map Figure 10-1 provides a geographic representation of Cranston's recreation and conservation areas including those lands in state and private ownership. The map also provides information regarding waterfront access points that provide recreational opportunities to residents. The east side of Cranston is more densely developed than the west side, so the recreation areas in eastern Cranston consist of smaller parks, playgrounds, and facilities mostly adjacent to schools. One benefit of this pattern is that most residents in eastern Cranston live within a half-mile of a recreation or open space area. The open space conservation areas in eastern Cranston correlate to areas adjacent to ponds and riverfronts. Being less densely developed, western Cranston has a number of significantly large open space areas and natural landscapes that provide a variety of active and passive recreational activities.

Eastern Cranston

Eastern Cranston is more densely populated and developed. This part of the City has a number of recreational field complexes, including Cranston Stadium, which is used regionally as well as by City residents. Eastern Cranston also has open space and recreation areas along the waterfronts of the Pawtuxet and Providence rivers and some ponds. These areas include Fay Memorial Field/Pawtuxet Oxboes Park on the Pawtuxet River, Stillhouse Cove along the Providence River, Aqueduct Field/Blackmore Pond area, Meshanticut State Park, and Dyer and Randall Ponds in northern Cranston.

Western Cranston

Western Cranston has more undeveloped open space and farmland, with scattered low-density residential developments. Significant open space areas in western Cranston include the John H. Chafee Athletic and Recreation Complex, J. L. Curran State Management Area, the Knight Parcels, farmlands preserved along the Historic Scenic Loop, and two golf courses, Cranston Country Club and Alpine Country Club. These sites provide amenities for and benefits to the region. Trail Networks

Cranston has both bike and walking trails located throughout the City. A comprehensive list of trails in Cranston is provided in Table 10-5 below.

Table 10-5. Trails and Trail Networks

Dedicated Bike Trails	Length	Ownership
Washington Secondary Bike Path	18.8 miles	State
Cranston Bike Path Section of Washington Secondary Bike Path	5.6 miles	state
Historic Scenic Farm Route (scenic drive)	NA	City
South Elmwood Spur Bike Path	Proposed	state
Pontiac Secondary Bike Path	Proposed	state
Edgewood Park	2.2	Municipal
Walking Trails	**Length**	**Ownership**
Briggs Park, John H. Chaffee Athletic Complex	1.0 miles	City
Cooney/Tate trail – Tate Field, Gansett Avenue	0.5 miles	City
Curran Reservoir Trail, J. L. Curran State Management Area	2.3 miles	State
Howard Conservation Area	1.0 miles	City
Knight Farm Trail, Laten Knight Road	1.7 miles	West Bay Land Trust
Meshanticut Park Trails, Dean Street	0.75 miles	City

Table 10-5. Trails and Trail Networks		
Pawtuxet River- Stillhouse Cove Trails	1.5 miles	Friends of the Pawtuxet River
Spring Lake Trail, Laten Knight Road	1.2 miles	City
Tong Pond Trail, Garfield Avenue	0.6 miles	City

Source: https://trailsandwalksri.wordpress.com/category/cranston-ri/

10.2.3 Water Related Open Space and Recreation.

The Pocasset River and Pawtuxet River weave through the City, and the Pawtuxet River forms the southeastern boundary of the City. Most streams and water bodies within the City drain to the Pawtuxet River; a small area in northwest Cranston drains to the Scituate Reservoir.

The Narragansett Bay/Providence River frontage in the far eastern portion of Cranston is an asset, and has a few waterfront parks and access points, but most of the waterfront access is restricted by private land and not available to the public. In eastern Cranston, access points to shoreline areas include a number of rights of way that provide access to the Pawtuxet River and various small coves leading to Narragansett Bay and the Providence River. The few waterfront parks and access points provide important waterfront open space and access to water-related recreation for Cranston residents.

There are also shoreline access points to various ponds located throughout other parts of the City. In western Cranston, the Pocasset River is fed by Dyer and Randall Ponds and flows through the Cranston Print Works Pond southeast towards Blackamore Pond. Currently the only direct visual public access to the Pocasset River is through St. Anne's Catholic Cemetery. Table 10-6 lists the waterfront access points throughout the City.

Table 10-6. Waterfront Access Points	
Location	**Designation**
Aborn Street, south side, boat ramp	Public ROW[1] RISG Public Access Locations[2]
Aborn Street, westerly side	Public ROW[1]
Seaview Park Seaview Ave., west side DEM designated public ROW	RISG Public Access Locations[2] Public ROW[1]
Arnold Avenue	RISG Public Access Locations[2] City Proposed access[3]
Ocean Avenue	RISG Public Access Locations[2]
Stillhouse Cove	RISG Public Access Locations[2]
Blackamore Pond	City Proposed access[3]
Randall's Pond	City Proposed access[3]
Norwood Avenue	City Proposed access[3]
Ocean Avenue	City Proposed access[3]
Printworks Pond	City Proposed access[3]
Sheldon Street	City Proposed access[3]
Spectacle Pond	City Proposed access[3]

Table Notes:
1. Coastal Resources Management Council (CRMC) designated public rights-of-way (ROWs) to tidal waters (2014)
2. RI Sea Grant identified locations (2004)
3. Cranston 1992 Comprehensive Plan proposed public ROWs

10.2.4 Recent Additions for Recreational Areas and Open Space Areas

The City of Cranston has recently added the following recreational and open space areas, some of which are privately operated.

Itri Park – In July of 2023, Cranston celebrated the grand opening of Itri Park which is a small park in the Italian- American neighborhood of Knightsville. The park location is original from the 1930's and included a bandstand. The new park expanded on the current site and added amenities.

Edgewood Community Garden at Cherry Woods – Established in 2011 by the Friends of the Pawtuxet and The Pawtuxet Village Farmer's Market. These are community garden plots located at the reclaimed parking lot at Edgewood Highland Elementary School. https://westbaylandtrust.org/edgewood-community-garden/

Public Access to Waterfronts – The City of Cranston is planning for a public access point on the River near the industrial park off of Wellington Avenue. Other potential river access points include sites at Howard Industrial Park and Fay Field.

TopGolf – A privately owned facility that opened in November 2023 as a sports bar, restaurant, and recreational destination. TopGolf is located in eastern Cranston and provides year-round climate-controlled bays for a variety of golf related activities.

10.2.6 Parks and Recreation Department

The City of Cranston's Recreation Department is staffed by a Director, a Recreation Program Coordinator, a clerk, and a General Foreperson. Their responsibilities include organizing and running recreational programs and providing maintenance of recreational facilities for school sports, youth athletics and residents. The Recreation Departments posts special rules and regulations at each site to ensure a safe and enjoyable environment for everyone.

Their revenues for 2023 were $375,000 and they have $3,081,064 budgeted for expenses for FY2024. Their programs include the following:

- Saturday Morning Basketball is an instructional program for K-2.
- Playground Program summer camp
- Pickleball
- Women's Fitness Programs
- Summer Camps for youths

They also employ youth during the summer months to assist with recreation programs and parks and recreation maintenance. A complete overview of the Parks and Recreation Department can be found in Chapter 8.

10.2.6 Open Space Inventory

Open space areas in Cranston include active agricultural farmlands, state conservation lands, Municipal/NGO conservation lands, cemeteries and a variety of parks and fields. Active Agricultural farmlands include the following properties:

- Confreda Farm - protected (not public access)
- Domenicone Farm
- DiMuccio Farm

State conservation lands comprise a total of 984.3 acres throughout the City and include:

- J. L. Curran State Management Area
- Meshanticut State Park.

Municipal/NGO-owned conservation lands include a total of 428.5 acres and includes several properties in western Cranston owned by the West Bay Land Trust.

Cemeteries in Cranston are considered open space and include the following:

- St Ann's Catholic Cemetery, CR001
- Pocasset Cemetery CR002 417 Dyer Avenue, Cranston
- RI Historical Cemetery Cranston No 34
- Mt. Saint Mary's Cemetery, 80 Saint Mary's Drive
- Bethany Lutheran Swedish Cemetery
- RI State Institution Cemetery CR061 – 3.4 acres

Refer to Chapter 7 for more information on cemeteries. In addition, the Rhode Island Historic Cemeteries Commission provides a database on their website with detailed cemetery information (https://rihistoriccemeteries.org/webdatabase.aspx).

The West Bay Land Trust maintains the Cranston Historic Farm Loop. This route is in western Cranston and is bounded by Hope Road, Seven Mile Road, Scituate Avenue, and Pippin Orchard Road. It incorporates the Knight Farm Conservation Area, several active farms, and the John L. Curran State Management Area as well as the western leg of the Cranston Bicycle Network. The Lippitt Hill Historic District is in the northwest corner of this loop. This Farm Route Loop was established in 2004 by the West Bay Land Trust to formally recognize the contributions of historic farms[1].

Since the 2010 Comprehensive Plan, the West Bay Land Trust has been involved in several land and natural resource preservation efforts in the City of Cranston. The acquisition of the 240-acre Knight Farm property in western Cranston, Ringrose Farm, Cloverdale Farm, and Good Earth Farm were all completed in collaboration with the West Bay Land Trust. As most of these farm sites are engaged in active farming, public access is either not allowed or public access is limited to marked trails Refer to Figure 10-3 which provides a graphic representation of open space conservation areas. Table 10-7 provides a list of open space areas with restricted public access.

Table 10-7. Open Space with Restricted Access

Significant Natural Landscape Areas	Acres	Owner	Protection	Public Access
Fenners Pond	0.59	Audubon Society of Rhode Island	Fee	Limited
Margaret Robinson Knight Wildlife Refuge	48.60	Audubon Society of Rhode Island	Fee	Limited
Zaino Swamp	14.77	Audubon Society of Rhode Island	Fee	No
Confreda Farm	89.13	Confreda	Easement	No
DiMuccio Farm	44.46	Confreda	Easement	No
Domenicone Farm	44.12	Confreda	Easement	No
Walden Woods	26.81	Walden Woods Homeowner Association	HOA	No

[1] https://westbaylandtrust.org/cranston-historic-farm-route-loop/

Table 10-7. Open Space with Restricted Access				
Significant Natural Landscape Areas	Acres	Owner	Protection	Public Access
TOTAL	**273.77**			

10.3 Analysis of Need

According to the National Recreation and Parks Association (NRPA) metrics, a typical park and recreation agency provides one park for every 2,287 residents with 10.8 acres of park land per 1,000 residents. Using standards by NRPA (https://www.nrpa.org/publications-research/ParkMetrics/) Table 10-8 provides an assessment of the adequacy of the City's park and recreation facilities using the NRPA standards by population and shows that the City exceeds the recommended number of facilities and amenities for all types.

Table 10-8. Number of Active Indoor and Outdoor Recreation Facilities Compared to NRPA Guides:			
Facility/Amenity Type	Number of Facilities/Amenities in Cranston	NRPA Recommended Guidelines Based on Population	Recommended Number of Facilities Based on Total Population in 2021 (82,566)
Playground/Tot Park	35	3,779 residents per facility	21
Tracks/Walking Paths	7	NA	NA
Tennis courts	24	5,577 residents per facility	15
Lighted Facilities	4	NA	NA
Basketball	18	8,790 residents per facility	10
Baseball- Little League	18	7,237 residents per facility	12
Baseball – Big League	7	27,566 residents per facility	3
Softball	11	12,716 residents per facility	6
Pickleball Courts	6	11,150 residents per facility	7
Football	2	29,374 residents per facility	3
Soccer	7	7,207 residents per facility	11

10.4 Current Measures/Practices

10.4.1 Existing Regulations

The City has a Parks and Recreation Advisory Committee. The Committee is a nine-member advisory committee that consists of one City Council member, one School Committee member, one Planning Commission member, and six qualified electors appointed by the Mayor. This Committee had been inactive for many years, though in 2024 it has been reactivated. The School Department and the Recreation Department coordinate facilities maintenance for the City's recreational resources.

10.4.2 Existing Policy

In recent years, the City has placed a higher priority on its recreational facilities and has invested millions in expansion and upkeep of its amenities. The City has doubled its average capital investment over the past four years.

10.5 Issues and Opportunities

The 2010 Comprehensive Plan addressed issues voiced by residents concerning the loss of open space to residential land uses. The City addressed this issue through a variety of planning and zoning

actions that include using land use and development tools to protect open space as well as programs that created greenways and blueways for connection open space and recreational areas.

The 2024 Comprehensive plan looks to continue its support of those earlier programs and capitalize on current opportunities while also recommending actions that address the issues and challenges that the City currently faces.

10.5.1 Issues

Access and Equity

Cranston faces challenges in providing equitable access to open spaces and recreational facilities. Western Cranston is car-dependent to access open spaces, with several neighborhoods more than half a mile from designated areas, creating barriers for residents without vehicles. The limited riverfront public access restricts opportunities for water-based recreation and enjoyment of natural resources. Additionally, the lack of clear information about ADA compliance at recreation facilities potentially hinders access for individuals with disabilities. These issues collectively highlight the need for improved connectivity, increased access points, and better communication about facility accessibility to ensure all residents can enjoy Cranston's open spaces and recreational offerings.

Preservation and Development

Open spaces and agricultural lands in Cranston, particularly in the western part of the City, face preservation challenges. Broader development pressures, especially in western Cranston, could lead to the loss of open spaces and recreational areas. The tension between land preservation and development highlights the need for a balanced approach to land use planning that protects valuable open spaces and farmland while accommodating necessary growth. Addressing these challenges will be crucial for maintaining Cranston's forested lands, preserving its agricultural heritage, and ensuring adequate open spaces for future generations.

Information and Wayfinding

Lack of information and wayfinding hinder the ability to fully utilize available facilities. It would be beneficial to have City websites updated with information about recreation facilities, and on-site information. This is compounded by poor wayfinding and insufficient signage at the facilities themselves, making it difficult for residents to locate and navigate these spaces effectively.

10.5.2 Opportunities

Connectivity and Green Networks

Capitalize on the large, protected areas of open space in western Cranston by creating a network of greenways and blueways to connect farmland, trails, and other natural areas. This could enhance recreational opportunities and improve access to nature for residents.

Waterfront Access

Implement a River Corridor Overlay District to increase public access to the waterfront, particularly along the Pawtuxet River. This could create new recreational opportunities and enhance the City's connection to its water resources.

Diverse Recreational Facilities

Consider strategic additions to recreation opportunities, such as dog parks and outdoor skate parks. These facilities could cater to diverse interests and age groups within the community.

Walkability

Leverage the walkable communities in eastern Cranston to promote pedestrian-friendly recreation and improve quality of life for residents.

Educational Partnerships

Utilize the city's quality educational system and associated facilities to benefit the community and region. This could involve shared-use agreements for recreational spaces or educational programs related to nature and conservation.

Collaborative Conservation

Forge partnerships with allied organizations to enhance open space conservation and increase recreation opportunities. Potential partners include:

- Pawtuxet River Authority
- Catholic Cemeteries
- Audubon Society
- Edgewood Waterfront Preservation Association
- West Bay Land Trust

Regional Cooperation

Develop partnerships with nearby cities and towns that share interests in conservation and recreation, such as Johnston, Providence, Scituate, and Warwick. This could lead to regional trail networks or shared recreational facilities.

Cultural Integration

Incorporate cultural events, such as the Festival of St. Ann in Knightsville, into open space and recreation planning to create multi-use spaces that serve both recreational and cultural purposes.

Sustainable Development

Balance open space preservation with development needs, particularly in western Cranston, by implementing conservation subdivisions.

Improved Information and Access

Enhance the Recreation Department's website and on-site information to improve awareness and utilization of existing recreational facilities.

11.0 TRANSPORTATION AND CIRCULATION

11.1 Introduction

The Transportation and Circulation Chapter of the Cranston Comprehensive Plan outlines the City's transportation infrastructure, examining its current state, historical context, and future needs. This chapter aims to provide a comprehensive understanding of Cranston's transportation network, highlighting key elements such as roadways, public transit, pedestrian pathways, and freight movement, while addressing the challenges and opportunities associated with each mode of transport.

11.2 Existing Conditions

11.2.1 Historical Context and Evolution

Cranston, Rhode Island, has a rich history that dates to its founding in 1754. Over the centuries, the City's transportation network has significantly transformed to adapt to the changing needs of its residents and the broader economic landscape.

In the early days, Cranston's transportation was dominated by horse-drawn carriages and foot traffic, with primary routes linking agricultural areas to nearby markets. The arrival of the railroad in the 19th century marked a turning point, fostering industrial growth and facilitating the movement of goods and people. The Providence and Worcester Railroad, still in operation today, played a pivotal role in shaping Cranston's industrial base.

In the late 19th century, and early 20th century, the electric trolley emerged, and suburban neighborhoods developed in Cranston. During the 20th century the emergence of the automobile profoundly influenced Cranston's urban development. Interstate 95 (I-95) and Interstate 295 (I-295) were constructed, providing critical north-south and circumferential routes, respectively. These highways, along with principal arterials like Route 10 (Huntington Expressway) and Route 37, cemented Cranston's position as a key node in Rhode Island's transportation network. The auto-centric development that followed led to sprawling suburban growth, especially in the western parts of the City, while the eastern part retained a denser, more urban character.

11.2.2 Current Transportation Infrastructure

Auto-Centricity and Its Implications

Cranston's transportation network, being heavily reliant on automobiles, has shaped both its built environment and the quality of life for its residents. While the extensive road infrastructure supports economic activity by facilitating the movement of goods and services, it also presents challenges.

Economic Prospects and Quality of Life

While the automobile gives individuals more flexibility, freedom and autonomy in their daily lives, residents' reliance on the automobile contributes to congestion and longer commute times, at certain locations, which can deter potential businesses and residents. More transportation options could assist in economic competitiveness, and address congestion. Improved public transit and alternative transportation options will benefit Cranston's future growth.

Heavy reliance on automobiles impacts the environment and public health, contributing to air pollution and sedentary lifestyles. Expanding public transit, bike paths, and pedestrian-friendly infrastructure can mitigate these effects and promote a healthier, more sustainable community.

Urban Density and Demographic Diversity

Cranston exhibits distinct differences between its eastern and western parts, reflecting varying urban densities and demographic profiles.

Eastern Cranston:

- Population Density and Urbanization: The eastern part of Cranston is characterized by higher population density and a more urbanized environment. This area benefits from its proximity to Providence, providing residents with better access to employment opportunities, public transit, and a higher concentration of services and amenities.
- Land Use and Zoning: Eastern Cranston has a diverse mix of land uses, including high-density residential areas, commercial zones, and industrial sites. The significant commercial presence along major corridors such as Reservoir Avenue and Park Avenue, coupled with industrial zones near I-95 supports a vibrant urban economy.

Western Cranston:

- Suburban and Low-Density Character: Western Cranston is predominantly suburban, with larger residential lots and lower population density. This area is marked by its expansive open spaces, including significant forested lands and agricultural areas, which contribute to its suburban charm and lower density.
- Land Use and Zoning: The land use in western Cranston is primarily residential, with a substantial portion dedicated to low-density housing. Agricultural lands, forested areas, and undeveloped open spaces dominate the landscape, making it a more tranquil and less congested part of the City. It also includes some multi-family dwellings, commercial zones, and an industrial zone near I-295.
- The reliance on automobiles is more pronounced here due to the lower density and fewer public transit options. The suburban development model historically prioritized road infrastructure over public transit, creating a barrier for those without access to private vehicles.

Implications for Transportation Planning

The distinct urban and suburban densities of eastern and western Cranston have significant implications for transportation planning and the overall transportation chapter. Understanding these differences is crucial for developing targeted strategies that address the unique needs of each area, ensuring an efficient, sustainable, and equitable transportation network across the City.

Eastern Cranston:

- Public Transit Expansion: The higher density and urban characteristics of eastern Cranston support the expansion and enhancement of public transit services. Investment in frequent and reliable bus services, improved transit facilities, and better integration with regional rail networks can reduce car dependency and traffic congestion.
- Pedestrian and Bicycle Infrastructure: Developing comprehensive pedestrian and bicycle infrastructure in this area can further promote alternative modes of transportation, reducing

environmental impacts and improving public health. This includes expanding bike lanes, enhancing sidewalk networks, and ensuring safe crosswalks and pedestrian pathways.

Western Cranston:

- Maintaining Suburban Character While Reducing Economic Barriers: Improving transportation options, such as increasing the availability of public transit routes and ensuring safe, accessible pedestrian and bicycle paths, can enhance mobility and reduce dependence on personal vehicles.
- Mixed-Use Developments: Encouraging small-scale, mixed-use developments can integrate residential, retail, and office spaces, reducing the need for long commutes and fostering local economic growth. These developments should be designed to blend seamlessly with the existing suburban landscape.
- Enhanced Connectivity: Improving connectivity within Western Cranston through the development of safe pedestrian and bicycle paths can reduce reliance on automobiles. Creating greenways and multi-use trails that link residential areas to parks, schools, and local amenities will enhance accessibility and promote active transportation.
- Public Transit Accessibility: Developing park-and-ride facilities at strategic locations can connect residents to regional transit services, reducing the need for daily car use. Ensuring that these facilities are well-integrated with public transportation networks will make commuting more convenient and sustainable.
- Traffic Management: Implementing traffic calming measures and optimizing traffic signal timings can improve road safety and reduce congestion. Measures such as roundabouts, speed humps, and better signage can enhance the suburban experience while addressing traffic issues.

Commute to work by Mode of Transportation

Cranston has a total of 40,734 commuters, reflecting a diverse array of transportation habits and needs. The City's transportation network is designed to accommodate a wide range of commuting preferences, from private vehicles to public transit and active transportation. Table 11.1 illustrates the number of commuters utilizing various transportation modes to commute to work.

Table 11.1. Means of Transportation to Work

Transportation Mode	Number of Commuters	% of Total
Car, truck, or van:	35,222	86%
Drove alone	31,067	76%
Carpooled:	4,155	10%
In 2-person carpool	2,655	7%
In 3-person carpool	878	2%
In 4-person carpool	27	0%
In 5- or 6-person carpool	572	1%
In 7-or-more-person carpool	23	0%
Public transportation (excluding taxicab):	835	2%
Bus	650	2%
Subway or elevated rail	0	0%
Long-distance train or commuter rail	185	0%

Table 11.1. Means of Transportation to Work		
Transportation Mode	**Number of Commuters**	**% of Total**
Light rail, streetcar or trolley	0	0%
Ferryboat	0	0%
Taxicab	0	0%
Motorcycle	20	0%
Bicycle	74	0%
Walked	658	2%
Other means	590	1%
Worked from home	3,335	8%

Source: Census Bureau. (2022). Means of transportation to work (American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B08301).

Car, Truck, or Van:

- The vast majority of Cranston's commuters (86%) rely on cars, trucks, or vans for their daily travel. Notably, 76% of these individuals drive alone, underscoring the City's auto-centric culture. This reliance on single-occupancy vehicles contributes to traffic congestion, especially during peak hours, and highlights the need for more robust public transit options to alleviate road congestion and reduce environmental impact.
- Carpooling: Although less common, carpooling still plays a significant role, with 4,155 commuters participating in shared rides. The data reveals a breakdown within carpooling habits:
    - 2,655 in 2-person carpools
    - 878 in 3-person carpools
    - 27 in 4-person carpools
    - 572 in 5- or 6-person carpools
    - 23 in carpools with 7 or more people

Public Transportation:

- A smaller yet crucial segment of the population (835 commuters) relies on public transportation. The majority of these commuters (650) use the bus system, which indicates that buses are a vital component of Cranston's public transportation infrastructure. Additionally, 185 commuters use long-distance trains or commuter rail, emphasizing the importance of regional connections that link Cranston to major employment hubs in the region. This highlights the need for efficient bus services that provide access to these rail stations in neighboring communities.

Other Modes of Transportation:

- Diverse transportation options are essential for a resilient urban mobility system. In Cranston:
    - 20 commuters use motorcycles
    - 74 use bicycles
    - 658 walk to work
    - 590 use other means

The variety in commuting methods underscores the importance of investing in comprehensive transportation infrastructure that supports all modes of travel. Enhancing bicycle lanes, pedestrian pathways, and safety measures can make these alternatives more viable and attractive, contributing to reduced traffic congestion and improved public health.

Work from Home

A significant number of residents (3,335) work from home, reflecting a growing trend that has been accelerated by recent global events. This shift not only reduces the overall demand on transportation infrastructure but also highlights the need for robust digital infrastructure to support remote work. The significant number of residents working from home suggests that the City should also consider supporting remote work infrastructure, such as high-speed internet access and coworking spaces. Facilitating remote work can reduce peak-hour traffic, lower emissions, and support a more flexible workforce.

Commuting Time to Work

The ACS data on travel time to work found in Table 11.2 provides insights into the commuting experiences of Cranston residents:

Table 11.2. Travel Time to Work

Commuting Times	Total number of Commuters by Commute Time	Percentage
Less than 5 minutes	340	0.89
5 to 9 minutes	4,650	12.19
10 to 14 minutes	3,630	9.51
15 to 19 minutes	9,019	53.64
20 to 24 minutes	7,542	19.77
25 to 29 minutes	1,432	3.75
30 to 34 minutes	4,607	12.07
35 to 39 minutes	1,764	4.62
40 to 44 minutes	910	2.38
45 to 59 minutes	1,934	5.07
60 to 89 minutes	2,019	5.29
90 minutes or more	309	0.81
TOTAL	38,156	100

Source: U.S. Census Bureau. (2022). Travel time to work (American Community Survey, ACS 1-Year Estimates Detailed Tables, Table B08303).

The data in Table 11.2 indicate that a significant portion of the population (approximately 54%) commute for 15 to 19 minutes, suggesting that many residents work relatively close to their homes. However, there is also a notable number of longer commutes, with over 4,000 residents traveling 45 minutes or more. This highlights the importance of reliable and efficient public transportation options that can serve these longer-distance commuters and the opportunity to reduce overall vehicle miles traveled by way of offering a wider range of multi-modal transportation options throughout the City. By offering such options many of Cranston's residents, who's daily commute is 15 minutes or less, the City would greatly increase the likelihood that those residents would walk, ride bicycles, or utilize other forms of transportation to get to and from work. This change could have

many compounding effects on the overall quality of life for the City's residents, by reducing congestion, decreasing travel time for all other commuters, improving air quality, and more.

11.2.3 Roadways

Cranston's transportation infrastructure is a vital component of its urban and suburban fabric, facilitating the movement of people and goods within the City and to neighboring regions. The City's roadways, categorized by their function and capacity, serve diverse transportation needs, from local commutes to regional travel. The City itself, the state, and federal entities are all responsible for maintaining various roadways throughout the City. Major highways such as I-95 and I-295 fall under state maintenance, while local roads and collectors are primarily maintained by the City. This division of responsibilities ensures that road maintenance and improvements are managed effectively across different levels of governance.

Major Roadways

Several major roadways service Cranston, providing essential links to other parts of Rhode Island and beyond:

- Interstate 95 (I-95): A primary north-south corridor that runs along Cranston's eastern edge, offering direct access to Providence and other major cities along the East Coast.
- Interstate 295 (I-295): This highway loops around Cranston's western side, functioning as a bypass for I-95 and connecting to suburban and rural areas.
- Route 10 (Huntington Expressway): A crucial route connecting Cranston to downtown Providence and facilitating intra-city travel.
- Route 37: An east-west connector that links I-95 to I-295, serving as a major artery for commuters and commercial traffic.

Other Arterials and Collector Roads[1]

Cranston's transportation network includes several other arterial and collector roads that play vital roles in connecting neighborhoods and facilitating local traffic flow, The following is an exhaustive list including a description of each of these roads:

Other Principal Arterials

- Reservoir Avenue (Route 2): This major arterial road runs north-south through Cranston, serving as a key commercial corridor. It connects residential areas with numerous retail establishments, services, and schools, making it an essential route for daily commutes and local traffic.
- Scituate Avenue (Route 12): Connecting the western parts of Cranston, this road serves both residential and commercial areas, facilitating access to the more suburban and rural regions.
- Pontiac Avenue: Running parallel to I-95, this arterial provides an alternative route for local traffic and access to residential and commercial areas. It connects to several important intersections and serves as a feeder to larger highways.

[1] Rhode Island Department of Transportation. (2016). RIDOT Roads (2016) [vector digital data]. Rhode Island Geographic Information System (RIGIS) Data Distribution System. Environmental Data Center, University of Rhode Island, Kingston, Rhode Island.

- Park Avenue (Route 12): Another significant east-west arterial, Park Avenue connects multiple neighborhoods and provides access to key City landmarks, including Cranston High School East and several parks. Its strategic location helps distribute traffic efficiently across the City.
- Dyer Avenue: Serving the central part of Cranston, Dyer Avenue links residential neighborhoods with commercial zones and local institutions.
- Cranston Street: As one of the primary east-west connectors, Cranston Street links various neighborhoods and provides access to local businesses, schools, and recreational facilities. Its role as a collector road is crucial for distributing traffic from major highways to local streets.
- Narragansett Boulevard (Route 1A): A major north-south route along the eastern edge of Cranston, providing access to the waterfront and neighboring communities.

Minor Arterials

- Atwood Avenue (Route 5): Serving the western part of Cranston, Atwood Avenue is a vital north-south route that connects residential areas with commercial zones and industrial sites. It also provides access to nearby Johnston and serves as a critical link for local traffic.
- Plainfield Pike (Route 14): An east-west route that connects the central part of Cranston to the neighboring towns of Johnston and Providence, facilitating both local and regional traffic.
- Phenix Avenue: This minor arterial connects residential areas with local parks and commercial establishments, playing a crucial role in local traffic distribution.
- Scituate Avenue: Scituate Avenue serves local traffic in western Cranston, connecting residential areas with suburban and rural parts of the City.

Major Collectors

- Garfield Avenue: A key collector road that facilitates local traffic within Cranston, connecting residential neighborhoods with schools, parks, and commercial areas.
- Meshanticut Valley Parkway: This scenic route serves as a collector for the surrounding residential areas, providing access to local parks and amenities.
- Oaklawn Avenue (Route 5): Connecting residential neighborhoods with commercial zones, this road plays a crucial role in local traffic management.
- Fletcher Avenue: Serving the northern part of Cranston, this road links residential areas with local businesses and amenities.

Minor Collectors

- Homestead Avenue: A typical local roadway that runs through residential neighborhoods, providing access to homes, local parks, and schools. It is representative of many similar streets in Cranston that form the backbone of the City's local transportation network.
- Puritan Avenue: This local road serves residential areas, connecting them to nearby arterials and collector roads. It plays a crucial role in the local circulation of traffic and provides access to neighborhood amenities.

- Carlsbad Street: Another example of a local roadway, Carlsbad Street supports residential access and local traffic flow. It connects with other local streets and helps distribute traffic within neighborhoods.
- Garrison Street: Serving a similar purpose, Garrison Street is part of the local network that provides essential connectivity for residents. It ensures easy access to local facilities and other parts of the City.

Local Roadways

Cranston's extensive network of local roadways ensures that all neighborhoods are accessible and well-connected. These roads are essential for facilitating daily commutes, local travel, and access to services. The local roads form the backbone of the City's transportation network, ensuring that all residential areas are well-connected to the broader transportation infrastructure. These roads are typically maintained by the City and play a crucial role in the daily lives of Cranston residents, providing essential connectivity and access to local amenities.

Roadway Classification and Mileage

Cranston's roadways are classified based on their function and capacity, as outlined in the following table:

Table 11.3. FHWA Roadway Classification

FHWA Classification	Description	Total Length (miles)
1	Principal Arterial	22.09
2	Minor Arterial	13.18
3	Major Collector	27.02
4	Minor Collector	23.16
5	Local Road	32.40
7	Other Roads	281.74

Source: Rhode Island Department of Transportation. (2016). RIDOT Roads (2016) [vector digital data]. Rhode Island Geographic Information System (RIGIS) Data Distribution System. Environmental Data Center, University of Rhode Island, Kingston, Rhode Island.

Traffic Patterns and Street Network Capacities

Traffic patterns in Cranston vary significantly between the eastern and western parts of the\. The eastern region, being more densely populated and urbanized, may experience higher traffic volumes, especially during peak hours. This area benefits from a more access to public transit and a greater concentration of services and amenities, which can help to mitigate traffic congestion.

In contrast, the western part of Cranston, with its suburban character, may see less traffic congestion on most roadways but relies heavily on automobiles for daily commuting. This can influence particular roadways which a majority of commuters rely upon for access to highways and other parts of the City. The street network capacities in this area are generally sufficient to handle current traffic volumes, but ongoing monitoring and improvements are necessary to address future growth and development.

Problem Spots and Projected Traffic Volumes

Key problem spots in Cranston's transportation network include intersections with high congestion rates and areas with frequent traffic accidents. Efforts are underway to address these issues through traffic calming measures, signal improvements, and road maintenance projects. For example, the Route 37 improvement project, which includes the rehabilitation of bridges and congestion improvements, is a significant ongoing effort to address these issues (RIDOT).

Projected traffic volumes indicate a need for continued investment in the transportation infrastructure to accommodate future growth. Enhancements in public transit, bicycle paths, and pedestrian facilities are essential to provide alternative transportation options and reduce reliance on automobiles.

Accessibility to Major City Centers

Cranston is conveniently situated between both Providence and Warwick with direct access to multiple highways and roads which offer relatively short travel times to several major City centers in Rhode Island and beyond:

- Providence, RI: Approximately 15-20 minutes via I-95.
- Warwick, RI: About 10-15 minutes via Route 37 or I-295.
- Newport, RI: Roughly 40-45 minutes via I-95 and Route 138.
- Boston, MA: Between 1 hour and 15 minutes via I-95 North.

Cranston's roadways form a critical component of its transportation network, supporting both local and regional travel. By addressing current challenges and planning for future growth, Cranston can enhance its transportation infrastructure to better serve its residents and support economic development.

11.2.4 Major Traffic Generators

Cranston's transportation network supports various key destinations that generate significant traffic volumes. Identifying these major traffic generators is crucial for understanding traffic patterns, planning infrastructure improvements, and managing congestion effectively.

Key Commercial Areas

- Garden City Center: This premier shopping destination features numerous retail stores, restaurants, and entertainment options, attracting both local residents and visitors from neighboring communities. The influx of shoppers, particularly during weekends and holidays, significantly contributes to traffic congestion in the area.
- Chapel View: Adjacent to Garden City Center, Chapel View is a mixed-use development with retail, office spaces, and residential units. The combination of these uses creates a high volume of traffic throughout the day.
- Reservoir Avenue Commercial Corridor: This major arterial road is lined with various businesses, including supermarkets, service centers, and small shops, generating constant traffic. Its central location within the City makes it a vital commercial hub.

Educational Institutions

- Cranston High School East: Located on Park Avenue, this high school generates substantial traffic, especially during morning arrival and afternoon dismissal times. The surrounding streets experience increased congestion from student drop-offs and pick-ups.
- Cranston High School West: This high school also contributes to peak traffic volumes. The proximity to major roadways like Route 37 and I-295 exacerbates traffic during school hours.

Industrial and Business Parks

- Cranston Industrial Park (Amflex & Comstock, Comstock Parkway south of Route 14) This industrial area generates significant freight and employee traffic, affecting nearby roadways. The movement of goods and services to and from this area is crucial for local businesses but adds to congestion.

Recreational Areas

- John L. Curran State Park: Popular for outdoor activities such as hiking, fishing, and picnicking, this state park draws numerous visitors, especially on weekends and holidays. The increased traffic impacts nearby residential streets and major access routes.
- The John H. Chafee Athletic and Recreation Complex: Serves as a major hub for sports and community events, significantly increasing traffic volume during peak usage times during the weekends and potentially causing congestion in the surrounding residential and commercial areas.
- Dorsey Field: Dorsey Field is a well-known outdoor recreational facility in Cranston, offering spacious grounds and various sports amenities. Its use, especially during sports events and community activities, can lead to increased traffic and potential congestion on Hope Road and nearby residential streets.
- Cooney Playground: Located on Gansett Avenue, Cooney Playground provides a variety of amenities including playground equipment, sports fields, and picnic areas. The high volume of visitors, particularly families and youth sports teams, may result in increased traffic and parking challenges in the surrounding neighborhood during peak hours.
- Meshanticut State Park: This park, with its scenic lake and walking paths, attracts numerous visitors for recreational activities such as walking, jogging, and picnicking. The influx of park-goers, especially on weekends and holidays, may cause traffic buildup along Reservoir Avenue and Dean Parkway, impacting the flow of traffic and parking availability in adjacent areas.
- Roger Williams Park: Despite being located in Providence, there are several entrances to Roger Williams Park from Cranston, most notably from Park Ave. This expansive park offers a wide array of recreational activities, including boating, walking trails, and zoo visits. The park's popularity can lead to increased traffic on Park Avenue and surrounding roads, particularly during weekends and events, affecting both Providence and Cranston neighborhoods with congestion and parking demands.

11.2.5 Bridges[2]

Cranston's bridges are integral to the City's transportation network, facilitating the movement of people and goods while connecting various parts of the City. The City features a mix of state and municipally owned bridges, many of which are in good condition, but some are in need of attention due to structural concerns.

Key Bridges and Infrastructure Improvements:

The Route 37 corridor is a critical area for Cranston, encompassing multiple bridges that support significant traffic volumes and connect key commercial and residential zones. Projects are underway

[2] National Bridge Inventory. (2018). Bts.gov. https://geodata.bts.gov/datasets/national-bridge-inventory/about

to rehabilitate or replace 22 bridges along this route, addressing both safety and congestion issues. These improvements are vital for maintaining efficient east-west travel and ensuring the longevity of the infrastructure. Among these, approximately half of the Route 37 bridges are classified as being in poor condition, highlighting the urgency of these projects (RIDOT).

Bridges in Poor Condition:

Several bridges in Cranston have been identified as being in poor condition and require urgent attention. For instance, the Dean Parkway bridge over the Washington Secondary Bike Path and the Phenix Avenue bridge over Furnace Hill Brook have been flagged for structural deficiencies. The City has initiated inspections of these bridges to assess their current state and determine necessary repair and rehabilitation plans. Notably, six of the bridges along the Route 37 corridor are considered structurally deficient and are part of the current rehabilitation efforts (Rhode Island news) (RIDOT) . Based on the information from Rhode Island Bridges[3] there are a total of 69 bridges in Cranston. Out of which, 15 are in poor condition (shown below in Table 11.4), 39 are in fair condition, and the rest of the 15 bridges are in good condition.

Table 11.4. Bridges in Poor Condition

Bridge Name	Bridge Location	AADT (as of 2023)	Year Built	Structure	Bridge Condition	Inspection Date
WELLINGTON AV & AMTRAK	I-95 RAMP CB	15200	1965	Steel	Poor	8/2/2021
I-95 NB & SB	AMTRAK RI 10 HUNTNGTN EXP	34,764	1965	Steel	Poor	9/2/2021
WELLINGTON AV	I-95 NB & SB	134,500	1964	Steel	Poor	5/2/2021
PAWTUXET RIVER	RI 37 EB	36,090	1963	Steel	Poor	2/2/2022
RI 10 HUNTINGTON EXPRESS	PONTIAC AV	9,191	1966	Steel	Poor	10/2/2022
RI 2 NEW LONDON AV	RI 37 EB & WB	47,871	1965	Steel	Poor	6/2/2021
Wash Sec Bike Path	RI 37 EB & WB	30,529	1968	Steel	Poor	9/2/2021
CRANSTON ST	RI 37 EB & WB	30,528	1968	Steel	Poor	6/2/2021
CRANSTON ST	RI 37 RAMP	14,390	1968	Steel	Poor	9/2/2022

[3] Experience. (2024). Arcgis.com. https://experience.arcgis.com/experience/9e4e6fb1f2d848b68808c1ece9e2db0b#data_s=id%3A045e9cc84c1c414097a19af1f029a56e-18cb559a44c-layer-2%3A938

Table 11.4. Bridges in Poor Condition						
Bridge Name	**Bridge Location**	**AADT (as of 2023)**	**Year Built**	**Structure**	**Bridge Condition**	**Inspection Date**
WASH SEC BIKE PATH	DEAN PKWY	2,102	1984	Prestressed Concrete	Poor	7/2/2021
I-295 NB	RI 37 EB & WB	27,900	1968	Steel	Poor	6/2/2021
WASH SEC BIKE PATH	RI 5 OAKLAWN AV	16,551	1940	Steel	Poor	8/2/2021
I-295 SB	RI 37 EB & WB	27,900	1969	Steel	Poor	7/2/2021
I-295 NB	RI 51 PHENIX AV	11,658	1968	Steel	Poor	9/2/2022
FURNACE HILL BROOK	KIMBERLY LANE	2,502	1980	Concrete	Poor	9/2/2022
I-295 NB & SB	RI 12 SCITUATE AV	9,841	1969	Steel Continuous	Poor	9/2/2022

Ongoing Bridge Inspections:

In March 2024, Cranston began comprehensive inspections of seven bridges and seven culverts within the City, conducted by the Pare Corporation[4]. This initiative aims to review the structural conditions and develop a list of suggested repairs or rehabilitation needs. Bridges under inspection include Gansett Avenue over the Washington Secondary Bike Path and Garden City Drive over the Pocasset River. These inspections are a proactive measure to ensure public safety and extend the lifespan of these critical structures.

11.2.6 Public Transportation Services

An effective public transportation network is a cornerstone of any thriving City. For Cranston, a robust public transit system not only provides essential mobility options for residents but also promotes sustainable urban development, reduces traffic congestion, and enhances the overall quality of life. As Cranston continues to grow and evolve, enhancing public transportation services will be critical in meeting the needs of its diverse population. This vision aligns closely with the goals outlined in the Transit Forward RI 2040 plan, which emphasizes the development of high-capacity transit services and the expansion of transit access to underserved areas.

Public Transportation Routes and Services

The Rhode Island Public Transit Authority (RIPTA) operates several bus routes in Cranston, providing essential service for those who rely on public transportation. Key routes include:

- Route 1 (Eddy/Hope/Benefit):
    - Weekday service from 5:08 AM to 11:44 PM
    - Frequency: 12 to 23 minutes

[4] RI News Today. (n.d.). Cranston begins its own inspection of 7 bridges and 7 culverts. Retrieved June 18, 2024, from https://rinewstoday.com/cranston-begins-its-own-inspection-of-7-bridges-and-7-culverts/

    - Saturday service from 6:38 AM to 10:38 PM
    - Sunday service from 6:44 AM to 9:19 PM
- Route 3 (Warwick Ave):
    - Weekday service from 5:13 AM to 8:48 PM
    - Frequency: 20 to 45 minutes
    - Saturday service from 5:59 AM to 9:38 PM
    - Sunday service from 6:50 AM to 8:34 PM
- Route 21 (Reservoir Ave):
    - Weekday service from 5:10 AM to 11:01 PM
    - Frequency: 30 to 37 minutes
    - Saturday service from 6:47 AM to 11:34 PM
    - Sunday service from 7:00 AM to 9:56 PM
- Express Routes:
    - Route 8 (Jefferson Blvd Express) and Route 65 (Wakefield Express) provide limited peak and off-peak services for commuters traveling to key business districts. These routes are crucial for connecting residents to employment centers efficiently, reducing the need for personal vehicle use and easing traffic congestion.

Transvan Services

In addition to regular bus services, Cranston offers the Transvan program[5], a shared-ride, door-to-door transportation service for residents 60 years of age or older and/or disabled. This service is designed to enhance mobility for seniors and disabled residents, ensuring they can access essential services and activities within the City. Key features of the Transvan service include:

- Transportation to personal appointments such as banking, hairdresser, and shopping within Cranston.
- Access to medical appointments, including labs and physical therapy, within Cranston.
- Rides to exercise and fitness facilities, as well as health, educational, and nutritional programs at the Cranston Senior Center.
- Monthly passes are available for a fee of $25.
- The Transvan service operates five vehicles daily, offering a cost-effective and reliable transportation option that fosters independence and social engagement among senior residents.

With 650 commuters relying on bus services, ensuring that routes are efficient, reliable, and well-connected to key areas of the City and neighboring regions is crucial. Enhancing bus frequency, especially during peak hours, and ensuring timely connections to other transit modes can improve

[5] Cranston Senior Center. (n.d.). Transvan. Retrieved June 18, 2024, from https://cranstonseniorcenter.com/transvan/

the overall public transportation experience. Addressing concerns about limited availability and reliability will be essential to increasing ridership.

Access to Rail Services:

Although Cranston does not have its own rail infrastructure, 185 commuters travel to nearby communities to access long-distance trains and commuter rail services. This underscores the need for reliable and frequent bus services that can efficiently connect residents to these regional rail stations. Improving these connections can help alleviate road traffic and support a more sustainable urban environment.

Active Transportation:

Encouraging the use of bicycles, walking, and other means of transportation can help reduce traffic congestion and promote a healthier lifestyle. Investing in bike lanes, pedestrian pathways, and safety measures can make these options more attractive and accessible. Developing infrastructure that supports these active transportation modes can significantly enhance urban mobility and quality of life.

Transit-Oriented Development

Transit-Oriented Development (TOD) is a crucial strategy for integrating land use and transportation planning, promoting higher density development near public transit hubs. Reservoir Avenue may be a possibility for TOD due to its strategic location and existing infrastructure. This corridor connects Cranston to both Providence and Warwick and features robust commercial areas near Park Avenue and prominent shopping plazas such as Garden City and Chapel View.

Reservoir Avenue's accessibility and existing commercial vitality make it an ideal candidate for TOD initiatives. The area already supports a mix of multifamily and single-family residential zones, making it well-suited for higher density residential developments. By focusing TOD efforts on Reservoir Avenue, Cranston can enhance public transit usage, reduce reliance on personal vehicles, and foster sustainable urban growth.

Key Benefits of TOD along Reservoir Avenue:

- *Increased Public Transit Use:* Higher density residential and commercial developments near transit stops can boost ridership, making public transportation more viable and sustainable. By concentrating development along Reservoir Avenue, Cranston can create a more transit-friendly environment that encourages residents to opt for public transit over personal vehicles.
- *Economic Growth:* TOD can attract new businesses and residents, contributing to local economic development. The commercial vitality of Reservoir Avenue, with its proximity to key shopping plazas like Garden City and Chapel View, presents an opportunity for mixed-use developments that combine retail, office space, and housing. This integration can stimulate economic activity and create vibrant, walkable communities.
- *Sustainable Urban Growth:* TOD promotes sustainable development practices by reducing urban sprawl and preserving open spaces. By focusing growth around transit hubs, Cranston can minimize the environmental impact of new developments, reduce greenhouse gas emissions, and promote energy-efficient living.
- *Enhanced Quality of Life:* TOD can improve the quality of life for residents by providing easy access to amenities and services. Developments along Reservoir Avenue can offer a variety of

housing options, retail establishments, and recreational facilities within walking distance, reducing the need for long commutes and enhancing community connectivity.

- *Improved Infrastructure Efficiency:* Concentrating development in designated TOD areas can lead to more efficient use of infrastructure and public services. This can result in cost savings for the City and better service delivery to residents.

11.2.7 Sidewalks and Bicycle Infrastructure

Sidewalks

Sidewalks play a crucial role in ensuring the safety, accessibility, and mobility for all residents of Cranston. While the City currently lacks a formal sidewalk inventory, several sources of public input and existing policies provide insight into the existing conditions and highlight areas for improvement.

Public Opinion on Sidewalks in Cranston

Public feedback regarding sidewalks in Cranston reveals several key concerns and opportunities for improvement. Residents have expressed a range of concerns and opportunities, primarily focused on maintenance, safety, and accessibility.

- **Maintenance and Condition:** A significant portion of the public feedback reviewed for this chapter highlights the poor condition of many sidewalks throughout the City. Residents have reported that numerous sidewalks are in need of repair, with some areas requiring complete replacement. The deterioration of sidewalks poses a safety risk and hinders the overall pedestrian experience.
- **Safety:** Safety concerns are a prevalent theme in the feedback. Inadequate lighting on sidewalks has been identified as a critical issue, particularly in making evening travel unsafe for pedestrians. Additionally, residents have called for more traffic calming measures to enhance pedestrian safety on sidewalks and at crosswalks.
- **Accessibility:** There are considerable challenges related to accessibility for pedestrians. Inadequate pedestrian facilities make it difficult for residents to travel safely to various locations within the City. The need for more and safer crosswalks has also been emphasized to ensure better accessibility for all pedestrians, including those with disabilities.
- **Improvements:** Residents see substantial opportunities for improving the City's pedestrian infrastructure. Expanding and maintaining sidewalks to ensure they are safe and accessible is a priority. Suggestions include implementing better pedestrian pathways and connections to promote walkability across the City with a focus on connecting residential areas to parks, local businesses, and schools.
- **Community Involvement:** Encouraging community involvement in maintaining and improving pedestrian facilities is another opportunity identified by residents. Engaging the community can foster a sense of ownership and responsibility towards the upkeep of sidewalks and pedestrian pathways.

Overview of Sidewalk, Curb, and Driveway Construction Regulations in Cranston

Chapter 12.08: Sidewalk, Curb, and Driveway Construction[6] of Cranston's code of ordinances requires property owners to apply for permits and bear the costs for changes to curbing for driveway

[6] City of Cranston. (n.d.). Sidewalks, curbs, and driveway cuts (Code of Ordinances, Title 12, Chapter 12.08). Retrieved June 18, 2024, from https://library.municode.com/ri/cranston/codes/code_of_ordinances?nodeId=CO_TIT12STSIPUPL_CH12.08SICUDRCO

access. Sidewalk repairs are mandated for property owners when notified by the City, with a cost-sharing program available for residential properties near schools. The program provides reimbursement for repairs, with higher rates for low-income residents.

Evaluation Against Best Planning Practices
Distributing maintenance costs to property owners can align well with best practices by reducing the financial burden on the City, allowing municipal resources to be allocated to other critical areas. This approach promotes accountability, as property owners who directly benefit from well-maintained sidewalks are responsible for their upkeep. Such a system ensures that those who use and benefit from the infrastructure contribute to its maintenance, fostering a sense of responsibility and community involvement.

From a safety and accessibility perspective, regulations that mandate timely repairs and high standards for sidewalk installations are crucial. These regulations ensure that sidewalks are safe and accessible for all residents, aligning with best practices in urban planning. The cost-sharing program further promotes equity and accessibility by providing reimbursement for repairs, especially with higher rates for low-income residents. This approach ensures that financial constraints do not prevent necessary repairs, thus maintaining safe and accessible pedestrian pathways across the City.

However, there are notable challenges and criticisms associated with this approach. One significant concern is equity. The requirement for property owners to cover repair costs can disproportionately affect low-income residents, potentially leading to inequities in sidewalk conditions across different neighborhoods. This misalignment with best practices can result in inconsistent quality and maintenance, as property owners with varying financial capabilities may not be able to afford the same level of repairs. Consequently, sidewalks in wealthier areas may be better maintained than those in less affluent neighborhoods, exacerbating social and economic disparities.

Another challenge is the inconsistency in the quality of repairs. When different contractors perform repairs, the standards can vary significantly, potentially compromising overall safety and uniformity of the sidewalk network. This variability can pose safety risks and undermine the effectiveness of the sidewalk maintenance program.

Enforcing these regulations requires substantial administrative resources. Ensuring compliance involves inspecting sidewalks, issuing notices, and following up on repairs, which can strain City departments. The administrative burden can divert resources from other essential services and complicate the management of the sidewalk maintenance program. While distributing maintenance costs to property owners can reduce the financial burden on the City and promote accountability, it also presents significant challenges. Ensuring equity, consistent quality, and efficient enforcement are critical issues that need to be addressed to align with best planning practices fully.

Aligning with Transit Forward RI 2040

The feedback provided by Cranston residents on sidewalk conditions throughout the City aligns with the goals of the Transit Forward RI 2040 plan, which emphasizes the importance of creating safe and accessible pedestrian pathways to support public transit usage. Addressing the concerns of Cranston residents by enhancing sidewalks will facilitate better access to bus stops and other transit services, contributing to a more integrated and efficient transportation network across the City.

Bicycle Infrastructure

Overview

Bicycle infrastructure is an essential component of Cranston's transportation network, contributing to overall mobility, public health, and environmental sustainability. Currently, Cranston's bicycle infrastructure is minimal, primarily consisting of a segment of the Washington Secondary Bike Path and a limited number of on-road bicycle facilities. This section examines the existing conditions of bicycle infrastructure in Cranston, public feedback, and alignment with state-level plans, particularly the Rhode Island Bicycle Mobility Plan[7] (BMP).

Existing Bicycle Infrastructure

Washington Secondary Bike Path:

The Washington Secondary Bike Path is the most significant bicycle facility in Cranston, running from Cranston Street in Cranston to Log Bridge Road in Coventry. This path follows a former rail corridor and is mostly flat, making it accessible for cyclists of all skill levels. The path spans 19 miles and features scenic views, including sections parallel to the Pawtuxet River, offering a pleasant and safe route for both recreational and commuting cyclists.

On-Road Bicycle Facilities:

Cranston hosts a few on-road bicycle facilities, though they are not extensive. The City has some signed bike routes intended to guide cyclists along safer, lower-traffic streets. However, these routes are not well-documented or widely promoted, leading to limited usage and awareness among residents.

Public Feedback on Bicycle Infrastructure

Maintenance and Safety:

Residents have expressed concerns about the maintenance of existing bike lanes and paths. Common issues include poor pavement quality, debris, and inadequate lighting, all of which can detract from the safety and usability of these facilities. There is a strong call for more protected bike lanes, better lighting, and traffic calming measures to improve safety for cyclists (Rhode Island news).

Connectivity and Accessibility:

Public input highlights the need for better connectivity between existing bike paths and major destinations such as schools, parks, and commercial centers. Improving these connections can encourage more residents to use bicycles for their daily commutes and errands. Additionally, infrastructure improvements should consider the needs of young cyclists, seniors, and individuals with disabilities to create an inclusive network.

[7] Rhode Island Division of Statewide Planning. (n.d.). Bicycle mobility plan. Retrieved June 18, 2024, from https://planning.ri.gov/sites/g/files/xkgbur826/files/documents/LRTP/Bicycle-Mobility-Plan.pdf

Alignment with Statewide Plans

The Rhode Island Bicycle Mobility Plan (BMP) outlines a comprehensive vision for expanding and improving the state's bicycle infrastructure. Cranston's current efforts, though limited, align with several key goals of the BMP:

Connectivity:

The BMP emphasizes the importance of connecting existing bike paths to create a seamless network. Enhancing connectivity within Cranston, particularly linking the Washington Secondary Bike Path with other local routes, is crucial for achieving this goal

Safety:

The BMP prioritizes enhancing safety through infrastructure improvements such as protected bike lanes and better signage. Addressing public concerns about maintenance and safety in Cranston's bicycle infrastructure will support this objective and help reduce bicycle-related accidents.

Equity:

Ensuring equitable access to bicycle infrastructure across all communities is a key focus of the BMP. Expanding and maintaining bike facilities in underserved areas of Cranston will help ensure that all residents have access to safe and convenient cycling options.

11.2.8 Specific Unsafe Areas for Pedestrians and Cyclists

Ensuring the safety of pedestrians and cyclists is a critical component of Cranston's transportation planning. Identifying specific areas that pose risks can help prioritize improvements and reduce accidents.

High-Risk Intersections

- Reservoir Avenue and Park Avenue: This busy intersection sees a high volume of both vehicular and pedestrian traffic. The lack of adequate pedestrian crossings and the high speed of vehicles make it a dangerous area for pedestrians and cyclists.
- Cranston Street and Dyer Avenue: Frequent accidents and close calls have been reported at this intersection, highlighting the need for better signage, traffic calming measures, and dedicated bike lanes.
- Atwood Avenue and Phenix Avenue: The intersection's complex layout and heavy traffic create challenges for safe pedestrian and cyclist crossings. Improved crosswalks and signal timing adjustments are necessary to enhance safety.

School Zones

- Cranston High School East: The area around the school, particularly on Park Avenue, poses significant risks during school hours. High traffic volumes combined with inadequate pedestrian infrastructure necessitate the implementation of traffic calming measures and safer crosswalks.
- Garden City Elementary School: Located near busy shopping areas, the streets surrounding this school require enhanced safety measures to protect children walking or biking to school.

Bicycle Path and Roadway Conflicts

- Washington Secondary Bike Path Crossings: Where the bike path intersects with major roads like Cranston Street, there are significant safety concerns. Improved signage, better lighting, and more visible crosswalks can mitigate risks at these crossings.
- Dyer Avenue: The lack of dedicated bike lanes and the high speed of traffic make this road particularly unsafe for cyclists. Introducing protected bike lanes and reducing speed limits can improve safety.

Commercial Corridors

- Reservoir Avenue: This major commercial corridor is heavily trafficked, and the lack of sufficient pedestrian infrastructure makes it hazardous for non-motorized users. Enhanced sidewalks, pedestrian signals, and bike lanes are essential improvements needed in this area.

11.2.9 Complete Streets

"Complete Streets" is an urban planning concept that emphasizes designing and operating streets to provide safe and accessible transportation options for all users, regardless of their mode of transportation. In Cranston, the City Council passed a resolution in 2023 supporting the incorporation of Complete Streets principles into the Comprehensive Plan and City Code of Ordinances. This section examines the existing conditions of Cranston's public transit, sidewalks, and bicycle infrastructure, and outlines how these can be integrated into a Complete Streets framework.

Public Transit

Cranston's public transportation system, managed by the Rhode Island Public Transit Authority (RIPTA), includes several bus routes that connect residents to key destinations within the City and neighboring areas. However, public feedback indicates a need for more frequent and reliable services, better communication of schedules, and improved access to transit stops. Enhancing public transit services is essential for providing equitable transportation options, particularly for the 7.7% of households without an automobile and the 35% of households with only one vehicle available.

Sidewalks

Sidewalks in Cranston are vital for ensuring pedestrian safety, accessibility, and mobility. Public input has highlighted several concerns, including the poor condition of many sidewalks, inadequate lighting, and the need for more and safer crosswalks. Maintenance and safety improvements are necessary to make sidewalks more accessible for all residents, including children, seniors, and individuals with disabilities. Current regulations require property owners to maintain sidewalks, but this approach can lead to inconsistencies in sidewalk quality and safety.

Bicycle Infrastructure

Cranston's bicycle infrastructure is limited, with the Washington Secondary Bike Path being the most significant facility. There are a few on-road bicycle lanes and signed routes, but these are insufficient for creating a connected and safe network for cyclists. Public feedback has called for better maintenance, improved connectivity, and enhanced safety measures such as protected bike lanes.

Complete Streets Principles

The Complete Streets resolution passed by the Cranston City Council underscores the importance of designing streets that provide safe and convenient access for all users. Key elements of Complete Streets include:

- Sidewalks and Shared-Use Paths: Ensuring sidewalks are well-maintained, well-lit, and accessible. Developing more shared-use paths that accommodate both pedestrians and cyclists.
- Bicycle Lanes and Routes: Expanding the network of protected bike lanes and clearly marked routes to improve safety and connectivity for cyclists.
- Public Transit Infrastructure: Enhancing bus stops with shelters, benches, and lighting to improve the transit user experience. Increasing the frequency and reliability of public transit services.
- Pedestrian Safety Features: Implementing traffic calming measures such as bump-outs, center islands, pedestrian signals, and crosswalks to make streets safer for all users.
- Green Infrastructure and Aesthetics: Incorporating street trees, landscaping, and other green infrastructure to enhance the urban environment and promote environmental sustainability.

11.2.10 Freight Movement

Freight transportation is a critical component of Cranston's transportation infrastructure, supporting the local economy and connecting the City to regional, national, and global markets. Effective freight movement is essential for the City's businesses, particularly those in manufacturing, retail, and logistics sectors. This section provides an overview of the current state of freight transportation in Cranston, including key modes of transport, recent trends, and future needs.

Modes of Freight Transport

Cranston's freight transportation system comprises multiple modes, including road, rail, water, and air. Each mode plays a specific role in the overall freight network, contributing to the efficient movement of goods[8].

Truck Freight:
Trucks are the dominant mode of freight transportation in Cranston, handling the majority of goods transported to and from the City. The main freight corridors for trucks in Rhode Island include Interstate 95, Interstate 295, Route 4, and Route 146. These routes facilitate significant freight movement and (Interstates 95 and 295 in particular) connect Cranston to the rest of the state and regional distribution centers.

Rail Freight:
Rail freight plays a significant role, particularly for bulk goods and long-distance transportation. Cranston benefits from connections to the Amtrak Northeast Corridor, which links the City to the broader national rail network. Rail freight provides an efficient means of transporting heavy and bulk commodities such as raw materials and manufactured goods.

Water Freight:
Although less dominant than truck and rail, water freight is crucial for transporting large volumes of goods. Cranston's proximity to the Port of Davisville within the Quonset Business Park and the Port of Providence allows for the efficient movement of goods via Narragansett Bay.

[8] Rhode Island Division of Statewide Planning. (2023). Rhode Island statewide freight and goods movement plan 2022. Retrieved June 18, 2024, from https://planning.ri.gov/sites/g/files/xkgbur826/files/2023-06/Rhode%20Island%20Statewide%20Freight%20and%20Goods%20Movement%20Plan%202022.pdf

Air Freight:
Air freight is essential for high-value and time-sensitive goods. Cranston is served by nearby airports that handle air cargo operations. Air freight volume has seen significant growth, with Rhode Island experiencing an increase in air cargo volume, especially during the COVID-19 pandemic when passenger air traffic declined sharply.

11.3 Community Engagement

11.3.1 Public Input and Community Concerns

Public input gathered from surveys and workshops highlights several key concerns and opportunities for Cranston's transportation network:

- Roads and Traffic:
    - Residents expressed concerns about the maintenance and condition of roads, issues with traffic control, and poor street lighting. They emphasized the need for more traffic calming measures and better infrastructure improvements.
- Public Transit:
    - There is a desire for more frequent and reliable public transit services. Improved communication about transit schedules and expanded transit network coverage were common themes.
    - There is a need for better communication of public transportation schedules.
    - Residents desire more frequent and reliable public transit services.
    - Expanding and improving the transit network to better serve the community.
    - Promoting public transportation as a viable option for daily commutes.
- Bicycle and Pedestrian Facilities:
    - Maintenance and safety of existing bike paths were significant concerns, with calls for better lighting and security. Opportunities exist for expanding and connecting bike paths to encourage their use.
    - Sidewalks need repair and better maintenance, with specific requests for improved lighting, more crosswalks, and traffic calming measures to ensure pedestrian safety.
- Environmental Sustainability:
    - Concerns about stormwater management, forest land degradation, and invasive species were prevalent. Residents see opportunities in promoting renewable energy, green infrastructure projects, and conservation efforts.

11.4 Challenges and Opportunities

11.4.1 Challenges

High Car Ownership and Reliance on Car Infrastructure:
While the automobile gives individuals more flexibility, freedom and autonomy in their daily lives, Cranston's transportation system is heavily dependent on automobiles, leading, at certain locations at certain times, to congestion, longer commute times, traffic accidents, air pollution, and safety

concerns for pedestrians and bicyclists. This auto-centric approach also contributes to the fragmentation of urban spaces.

Sidewalks in Need of Repair and Maintenance:
Many sidewalks in Cranston are in poor condition, with issues such as cracks, disrepair, and inadequate lighting. These conditions pose safety risks and hinder accessibility, particularly for individuals with disabilities. There is a significant need for more traffic calming measures to enhance pedestrian safety.

Inadequate Bicycle Infrastructure:
The existing bicycle infrastructure in Cranston is minimal and insufficient to connect major destinations such as schools, parks, and commercial centers. Existing bike lanes require repairs and better lighting to ensure the safety and usability for cyclists.

Public Transit Limitations:
Public transit services need improvement in terms of frequency, reliability, and coverage. Better communication about transit schedules and expanded transit network coverage are essential to make public transportation a viable option for more residents.

Environmental Sustainability:
Concerns about stormwater management, forest land degradation, and invasive species are prevalent. The transportation infrastructure must incorporate environmentally sustainable practices to mitigate these issues and promote green infrastructure projects and conservation efforts.

11.4.2 Opportunities

Promotion of Multimodal Transportation System
To shift commuters away from car dependence, investments in expanded bike networks, pedestrian connectivity, and bus services can encourage the use of alternative transportation modes, leading to a more interconnected and healthier community.

Transit-Oriented Development (TOD)
Areas such as Reservoir Avenue are ideal candidates for TOD initiatives. By concentrating development around transit hubs, Cranston can enhance public transit usage, reduce reliance on personal vehicles, and foster sustainable urban growth. This approach can attract new businesses and residents, stimulate economic activity, and create vibrant, walkable communities.

Improvement of Sidewalk and Pedestrian Infrastructure
Enhancing sidewalks and pedestrian pathways is crucial. Implementing a City-managed maintenance program and encouraging community involvement in maintaining pedestrian facilities can ensure consistent quality and safety. Expanding and maintaining sidewalks, particularly near parks, schools, and local businesses, can significantly improve walkability.

Enhanced Bicycle Infrastructure
Developing a connected network of bicycle lanes and routes, prioritizing protected bike lanes on high-traffic streets, and improving signage and pavement markings can make cycling a safer and more attractive option for residents. Addressing public concerns about maintenance and safety in bicycle infrastructure aligns with state goals for expanding and improving the bicycle network

Green Infrastructure and Environmental Initiatives

Integrating green infrastructure elements, such as street trees, bioswales, and other sustainable practices, into street designs can enhance the urban environment and promote environmental sustainability. These initiatives can help manage stormwater, reduce urban heat islands, and improve air quality.

Public Transit Enhancements

Working with RIPTA to enhance the frequency and reliability of bus services and upgrading bus stops with shelters, seating, and lighting can improve the public transit experience. Efficient connections to regional rail stations and ensuring that new and existing bus routes serve residents without vehicles can support a more sustainable transportation system.

Support for Remote Work

The significant number of residents working from home highlights the need for robust digital infrastructure to support remote work. Facilitating remote work can reduce peak-hour traffic, lower emissions, and support a more flexible workforce. The City should consider investments in high-speed internet access and coworking spaces to support this trend.

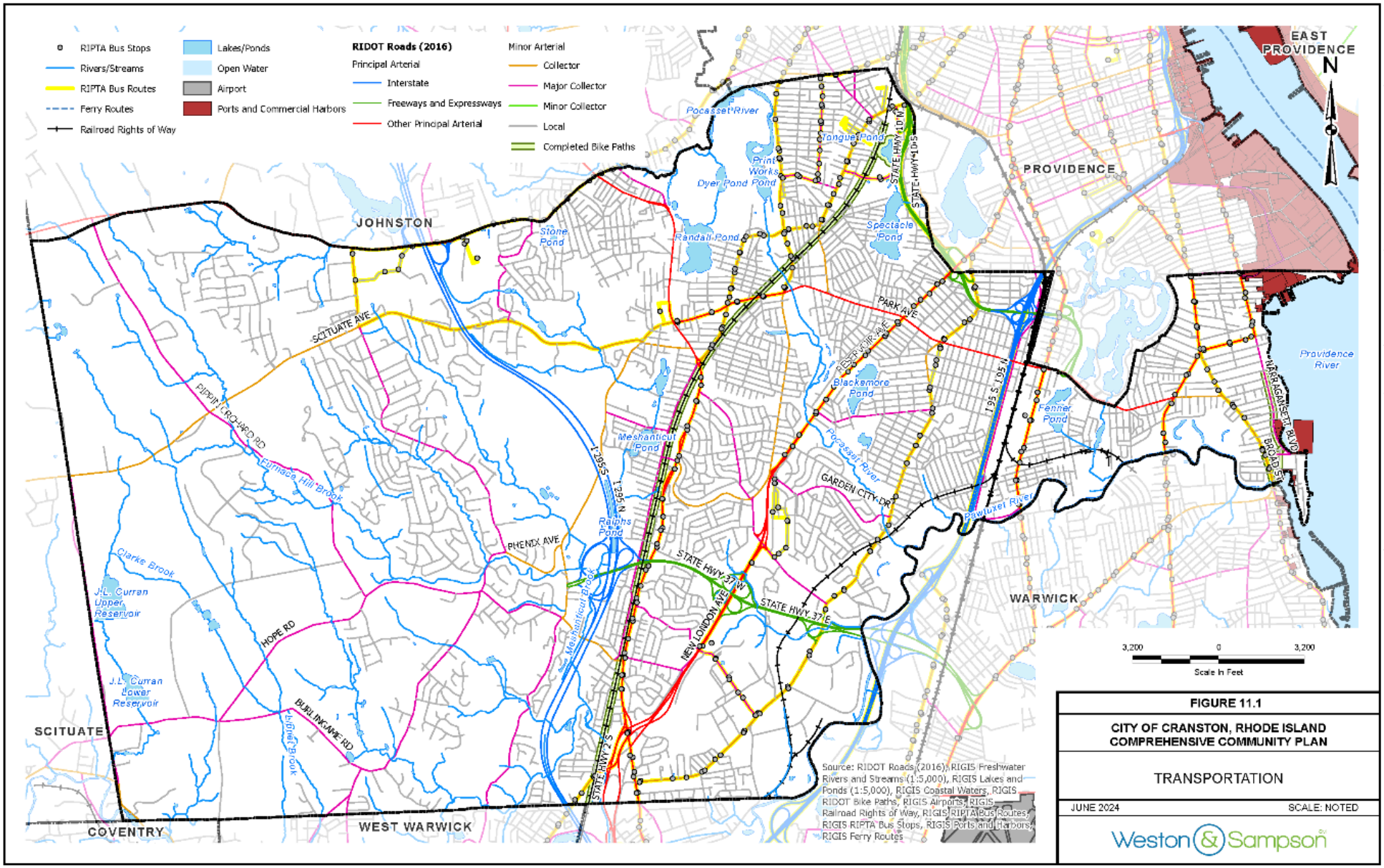

Figure 11-1. Transportation Network - Cranston, RI

12.0 NATURAL HAZARDS AND CLIMATE CHANGE

12.1 Introduction

Natural hazards are environmental phenomena that have the potential to impact societies and the human environment (FEMA, 2024). These events are referred to as natural disasters, and they have intensified and become more frequent because of climate change. Climate-related events often refer to natural hazards and disasters that are becoming more prevalent, frequent, severe, or erratic, because of global warming. Current hazard mitigation efforts are aimed at protecting the City's resources, property, infrastructure, and general welfare from future disasters. This element of the comprehensive plan addresses Cranston's management of natural hazards and mitigation of climate change impacts.

12.2 Ways the City Can Prepare for Climate Change

Climate mitigation, climate adaptation, and climate resilience are three approaches for addressing climate change impacts.

> **Climate change mitigation** refers to activities that help reduce the impacts of climate change by reducing carbon emissions, creating renewable energy sources, storing carbon, and supporting energy efficiency. See Chapter 9, Energy, for additional information on climate change mitigation.
>
> **Climate adaptation** refers to actions that can be taken to adjust and evolve the way we live, build, and operate to sustain a safe and productive quality of life despite climate change.
>
> **Climate resilience** refers to the ability of the community to prepare, respond, and recover from climate impacts and climate-related events.

Climate resilience is a newer state-wide initiative in Rhode Island. The first comprehensive climate preparedness strategy, *Resilient Rhody*, was released in July 2018. This strategy identifies critical actions for state agencies, municipalities, and statewide organizations to take in the face of climate change.

How the City currently responds to natural hazards will have to be adapted as events become more frequent and severe. This element of the Plan addresses Cranston's management of natural hazards and climate change under the following categories:

- Existing conditions including current threats from natural hazards and potential impacts caused by climate change **(Section 12.3).**
- Challenges and opportunities **(Section 12.4)**.
- Current measures **(Section 12.5)**.
- Community Engagement **(Section 12.6)**.

These are the City's priorities when considering how natural hazards and climate change influence decision making, based on the concerns and preferences of residents and stakeholders.

12.3 Future Effects of Climate Change

Because climate change is projected to intensify, this chapter provides a "Future Climate Change Projections" overview rather than an "Existing Conditions" overview. Data on projected climate impacts is provided by *Resilient Rhody* (2018) and NOAA National Centers for Environmental Information's State Climate Summary for Rhode Island (2022). Cranston's 2022 Hazard Mitigation Plan Update provides a thorough description of each natural hazard that has impacted or may impact Cranston. These descriptions are included below along with considerations for how each natural hazard may change or increase due to climate change.

12.3.1. High Risk Hazards

The 2022 Hazard Mitigation Plan Update for Cranston provides a ranked list of natural hazards likely to be experienced in Cranston; these rankings were determined based on a public survey issued by the Cranston Hazard Mitigation Committee (HMC). Table 12-1 includes the natural hazard rankings and potential impacts from this HMP update.

Table 12-1. Natural Hazard Risk Ranking and Potential Impacts

Hazard Type	Level of Concern/Risk Rank	Potential Impacts
Nor'easters	High	Damage to utilities, roads, stormwater infrastructure, buildings, trees, and roofs.
Hurricanes	High	Damage to utilities, roads, stormwater infrastructure, buildings, trees, and roofs.
Flooding	High	Damage to roads, stormwater infrastructure, buildings, dams, water supply lines, and wastewater infrastructure.
Winter Storms	High	Damage to roofs, roads, and buildings. Potential for power outages, emergency services, and local economy.
Ice Storm	High	Potential for automobile accidents, power outages, personal injury, and emergency services.
High Winds	Medium	Damage to trees and buildings. Potential for power outages and emergency services.
Extreme Temperatures	Medium	Damage to utility infrastructure. Concern for power outages and health effects for vulnerable populations.
Lightning/Thunderstorms	Medium	Damage to buildings, accessory structures, and utilities. Potential for power outages and personal injury.
Microbursts	Medium	Damage to trees and buildings. Potential for power outages, emergency services, and personal injury. Flooding of roadways and stress to stormwater system.
Hail	Low	Damage to buildings and structures. Potential for agriculture/ crop damage.
Drought	Low	Potential for water supply, personal health, fire danger, and agriculture.
Earthquake	Low	Damage to buildings, utility infrastructure, dam failures, gas leaks, and fires. Potential for personal injury.
Tornadoes	Low	Damage to trees, buildings, and utilities. Potential for personal injury from flying debris.
Wildfire/ Brushfire	Low	Damage to buildings. Potential for open fields, forested areas, and grassy areas.

Source: City of Cranston Hazard Mitigation Plan, 2022

12.3.2 Natural Hazards Overview

City of Cranston's 2022 Hazard Mitigation Plan Update provides a thorough description of each natural hazard that has impacted or may impact Cranston and the climate impacts, trend of natural hazards to worsen. Elements of these descriptions are included in the following section along with

additional information from NOAA, FEMA, and the statewide climate resilience action strategy *Resilient Rhody.*

Nor'easters

Nor'easters are storms along the East Coast that bring precipitation of heavy rain or snow, intense winds, rough seas, and coastal flooding (NOAA, 2024).

Historical Events

Cranston has experienced or is threatened by Nor'easters one or twice a year on average. The Blizzard of 1978 was the largest Nor'easter to date in Cranston and left many people without heat and electricity for over a week (City of Cranston, 2022).

Impact and Damage Extent

In the past, Nor'easters have created severe economic, transportation, and human disruption (NOAA, 2024). Nor'easters can damage utilities, roads, stormwater systems, basements or roofs, and natural resources.

Climate Change Impacts

Research has suggested an increase in rainfall volume from more frequent and intense Nor'easters (State of Rhode Island, 2018). Increase in sea level rise will likely increase coastal flooding and erosion during Nor'easters (NOAA, 2022).

Hurricanes

Hurricanes, also referred to as tropical cyclones, are rotating low-pressure weather systems that can reach 74 miles per hours (mph) or above. Storms less than 39 mph are tropical depressions and between 39 and 74 mph are tropical storms (NOAA, 2024). Hurricanes can cause high winds, heavy rain, lightning, tornadoes, and storm surge.

Historical Events

Hurricanes have impacted coastal Rhode Island in the past. In October 2012, Hurricane Sandy impacted coastal Rhode Island, but Cranston suffered very few impacts (City of Cranston, 2022).

Impact and Damage Extent

Because of Cranston's coastal location, it could be at risk of damages resulting from hurricanes. Hurricanes have the potential to impact roads, buildings, utilities, infrastructure, and natural resources.

Climate Change Impacts

The impact of climate change on frequency of storms in the Atlantic Basin is uncertain. However, globally, modeling studies are predicting an increase in hurricane intensity of 2% to 11% (State of Rhode Island, 2018). Increase in sea level rise will likely increase coastal flooding and erosion during hurricanes (NOAA, 2022).

Flooding

There are two main types of flood related hazards that have occurred in Cranston: 1) stormwater flooding and 2) riverine flooding. Stormwater flooding occurs from heavy rain and affects the more urbanized, developed, or impervious coverage of Cranston. Riverine flooding occurs when heavy rainfall or snow melt causes riverbanks and streams to overflow and occurs mostly in the late summer and early spring (City of Cranston, 2022). A portion of Cranston boarders the Narragansett Bay and could be vulnerable to coastal flooding.

FEMA designates riverine flooding by the zones identified in Table 12-2 based on level of risk and recurrence interval. A 100-year flood has a 1% annual chance of recurring, while a 500-year flood has a 0.2% chance of recurring. The geographic boundaries of the flood zone describe what areas may be at risk of experiencing flooding.

Table 12-2. FEMA Riverine Flood Zones

Flood Zones	Risk	Floodplain	Annual Chance of Recurrence
Zone VE	High	100-year	1%
Zone A	High	100-year	1%
Zone AE	High	100-year	1%
Zone X	Moderate/Low	500-year	0.2%

Source: FEMA National Flood Hazard, 2024

The FEMA Flood Insurance Rate Map (FIRM) below in Figure 12-1 illustrates a select area of Cranston. The hatched areas in blue indicate 'Zone AE' and 'Zone A', high flood risk, 1% annual chance, with base flood elevations determined for this area. The dotted areas in blue indicate 'Zone VE,' high flood risk equivalent to the 1% annual chance flood event, with base floods elevations determined for this area.

Figure 12-1. FEMA Flood Insurance Rate Map for a portion of Cranston
Source: FEMA, 2015

Historical Events

Rhode Island alongside southern New England has experienced a significant increase in both flood frequency and flood severity over the past 80 years (State of Rhode Island, 2018). The Great Flood of 2010 was a heavy rainfall event over a five-week period in March that led to I-95 being shut down and damage to hundreds of homes and businesses, including the Warwick Mall. The Pawtuxet River crested at nearly 21 feet (State of Rhode Island, 2018).

Impact and Damage Extent

Flooding can damage roads, stormwater infrastructure, buildings, dams, water supply lines, and wastewater infrastructure.

Climate Change Impacts

Many climate change models suggest that increases in greenhouse gases will result in precipitation increases (State of Rhode Island, 2018). With sea level rise impacts, the Narragansett Bay has seen sea level rise approximately one foot and water temperatures have increased 3°F (Jarbeau, 2024).

Increase in sea level rise will likely the probability for major flooding events and an increase in tidal flooding (NOAA, 2022).

Winter Storms

Winter storms are defined as a combination of heavy snow, blowing snow and/or dangerous wind chills. Blizzards are winter storms that are the combination of blowing snow and wind (NOAA, 2024).

Historical Events

Cranston has experienced annual snowstorms. As mentioned under Nor'easters, the Blizzard of 1978 is regarded as the winter storm of the century (City of Cranston, 2022). Another strong winter storm that impacted Cranston was the Blizzard of 2013, that occurred in February, leading to extensive power outages and related injuries. 17 to 21 inches of snow fell across southeastern Providence County (NOAA, 2024).

Impact and Damage Extent

Heavy snowfall can stress rooftops and slow plowing efforts, as well as cause power outages meaning residents go without heat, and frozen pipes and pipe bursts which impact access to potable water.

Climate Change Impacts

Increase in sea level rise will likely increase coastal flooding and erosion during winter storms (NOAA, 2022).

Ice Storms

Ice storms are storms that result in the accumulation of at least .25' of ice on exposed surfaces (NOAA, 2024).

Historical Events

Commonly in New England, ice storms are a part of larger snow events (City of Cranston, 2022).

Impact and Damage Extent

Ice storms can down trees, which can damage homes and infrastructure, and storms can lead to automobile accidents, power and communication system outages, personal injury, and death. These storms also impact the delivery of emergency services.

Climate Change Impacts

Ice storms are commonly a part of winter storm or nor'easter events. Both of these events are expected increase in intensity (Feuerstein, 2022).

High Winds

High winds can occur during a severe thunderstorm, with a strong weather system, or flow through geographic features such as mountains (NOAA, 2024).

Historical Events

High wind events have been recorded in Providence County (City of Cranston, 2022).

Impact and Damage Extent

Strong gusts of wind have led to power outages, downed trees, and damage to vehicles and buildings (City of Cranston, 2022).

Climate Change Impacts

The predicted change in storm activity may lead to a change and frequency and intensity of high wind events (State of Rhode Island, 2018).

Extreme Temperatures

Extreme temperatures are broken into extreme heat and extreme cold and have associated warnings, watches, and advisories. Extreme (or excessive) heat warnings are issued within 12 hours of the onset when the expected heat index is expected to be 105 degrees Fahrenheit for at least 2 consecutive days and nighttime air temperatures not expected to fall below 75 degrees Fahrenheit. An excessive heat watch is issued when conditions are favorable for excessive heat in the next 24 to 72 hours. An advisory is issued within 12 hours of the onset and when the maximum heat index temperature is expected to be 100 degrees Fahrenheit or higher for at least two days (NOAA, 2024). Wind chill warnings are issued when temperatures are forecasted to go below 32 degrees Fahrenheit for a long period of time. A wind chill watch is when this forecasted cold reaches 36 hours or more. A wind chill advisory is issued when areas of frost are expected or occurring (NOAA, 2024).

Historical Events

NOAA's National Weather Service has issued wind chill advisories, watches, and warnings, as well as excessive heat warnings, watches, and advisories for Cranston (City of Cranston, 2022).

Impact and Damage Extent

Temperatures below freezing require more intense heating loads to sustain livable indoor temperatures and emergency assistance to those who are most vulnerable to health impacts caused by cold weather. Both extreme cold and heat can have impact on structures and human health and safety and can cause stress to the power grid.

Climate Change Impacts

Carbon dioxide and greenhouse gas emissions are driving up the temperatures, especially nighttime lows (State of Rhode Island, 2018). Heat waves are projected to increase in intensity while cold waves are projected to become less intense (NOAA, 2022).

Lightning/Thunderstorms

Thunderstorms are rain showers that contain lightning. In severe thunderstorms, hail, strong wind gusts, or tornadoes occur. Lightning is a spark of electricity generated from differences between positive and negative charges in the cloud and ground. Thunder is a shock wave and sound wave that is caused by lightning (NOAA, 2024).

Historical Events

Cranston has experienced lightning and thunderstorms as they are a common occurrence in the summer (City of Cranston, 2022).

Impact and Damage Extent

Objects that are most vulnerable to the impacts of thunderstorms are nearby trees and tall structures.

Climate Change Impacts

There is less clarity on how climate change will affect thunderstorms intensity and frequency in Rhode Island.

Microbursts

Microbursts are localized columns of sinking air within a thunderstorm that are less than or equal to 2.5 miles in diameter. There are two primary types of microbursts: 1) wet microbursts and 2) dry

microbursts. Wet microbursts are accompanied by a significant amount of precipitation (NOAA, 2024).

Historical Events

Cranston has experienced microbursts in the past (City of Cranston, 2022).

Impact and Damage Extent

Microbursts can reach up to 100 miles per hour in wind speed and can damage buildings and trees (NOAA, 2024).

Climate Change Impacts

Because microbursts are associated with thunderstorms, more severe thunderstorms may contain microbursts (City of Cranston, 2022).

Hail

Hail is a form of precipitation that consists of solid ice that forms within thunderstorm updrafts. Hail falls when it becomes heavier than the strength of the thunderstorm updraft (NOAA, 2024).

Historical Events

Hailstorms have occurred in Cranston. The hail in Cranston is usually 1 inch or smaller (City of Cranston, 2022).

Impact and Damage Extent

Hail can impact aircrafts, buildings, vehicles, and can be deadly to livestock and people (NOAA, 2024).

Climate Change Impacts

The impact of climate change on hailstorms is highly uncertain. It is generally anticipated that hailstorm frequency and damage potential will decrease in the eastern region of North America (Brimelow, Burrows, & Hanesiak, 2017).

Drought

Drought is the absence of water. It is a complex phenomenon that is difficult to monitor and define as is slowly creeps. There are four types of droughts: 1) meteorologic drought, 2) hydrological drought, 3) agricultural drought, and 4) socioeconomic drought. Indices created to assess drought include the Palmer Drought Index and Standardized Precipitation Index [SPI]. The U.S. Drought Monitor tracks conditions in Rhode Island and other time scales (NOAA, 2024).

Historical Events

Rhode Island has experienced droughts in the past, approximately once every 11 years (City of Cranston, 2022).

Impact and Damage Extent

Droughts decrease the availability of drinking and irrigation water and adversely affect water resources, flora, and fauna. Those who use private wells are especially at risk for temporary or permanent loss of water supply.

Climate Change Impacts

Changing precipitation patterns, such as an increase in precipitation, may mask risks related to episodic and severe drought (City of Cranston, 2022). Despite this projected increase in precipitation, naturally occurring droughts are projected to be more intense because higher temperatures will increase evaporation rates (NOAA, 2022).

Earthquakes

An earthquake is caused by slowly moving tectonic plates overcoming friction with one another, shaking the earth's surface (FEMA, 2024).

Historical Events

Rhode Island is located in an area of "moderate" seismicity and "high" risk. Seismic risk applies to the seismic hazard, location demographics, and regional economics to the vulnerability of the structure of lifeline of the site (City of Cranston, 2022).

Impact and Damage Extent

The most vulnerable structures to earthquakes are those built prior to current seismic building standard and masonry structures. Cranston has many older structures were built prior to current building code standards and many nationally and locally recognized historic preservation districts (City of Cranston, 2022).

Climate Change Impacts

It is uncertain how climate change will affect earthquake magnitude in Cranston and the surrounding region (City of Cranston, 2022).

Tornadoes

Tornadoes are narrow, violently rotating columns of air that extend from a thunderstorm to the ground. A tornado watch is issued by the NOAA Storm Prediction Center when weather conditions are favorable for tornadoes and severe weather. A tornado warning is issued when a tornado has been reported by spotters or indicated by radar (NOAA, 2024).

Historical Events

There are no historical records of tornadoes in Cranston, but there have been occurrences in Rhode Island (City of Cranston, 2022).

Impact and Damage Extent

Tornadoes can bring damage to buildings, trees, and above ground utility lines. Flying debris can be injurious to residents (NOAA, 2024).

Climate Change Impacts

It is uncertain how climate change will affect tornado outbreaks for region (City of Cranston, 2022).

Wildfire/Brushfire

Wildfires are an uncontrolled fire that burns in wildland vegetation. Wildfires can start with a natural occurrence such as lightning or a human-made spark. Weather conditions and the available source of fuel determine how much a wildfire grows (National Geographic Society, 2023). Brushfires are fires fueled by natural cover, including native and non-native species of trees, brush and grasses, and crops along with weather conditions and topography (City of Cranston, 2022).

Historical Events

Rhode Island does not typically experience wildfires but does more commonly experience brushfires. Cranston does not experience a significant number of brushfires, but the potential exists given the large areas of forested land in the City (City of Cranston, 2022).

Impact and Damage Extent

Wildfires and brushfires can impact buildings and other structures. The timber and forest ecosystems are more susceptible.

Climate Change Impacts

Longer dry periods and drought conditions may increase the probability of brushfires (City of Cranston, 2022).

12.3.3 Preliminary Natural Hazard and Climate Change Vulnerability Assessment

Assessing the vulnerability of critical assets to natural hazards and climate impacts can help prioritize future City initiatives, projects, and spending for mitigation actions. Table 12-3 provides a preliminary community vulnerability assessment based on the 2022 HMP Risk Assessment, NOAA, FEMA, and the statewide climate resilience action strategy, *Resilient Rhody*. This assessment looks at *potential* impacts to critical assets based on citywide knowledge of natural hazards. It is not a comprehensive vulnerability assessment. In a comprehensive vulnerability assessment, vulnerability is measured by the exposure, sensitivity, or adaptative capacity of critical assets. For this chart, vulnerability did not consider the potential geographic exposure or adaptative capacity of the asset; rather, critical assets were rated based on how sensitive they may be to an event caused by the natural hazard. The assessment assumes a severe event.

A tiered system of vulnerability is used in this preliminary assessment based on the following scale:

1. the critical asset is not very sensitive to the impacts of the natural hazard.
2. the critical asset may be somewhat sensitive to the impacts of the natural hazard.
3. the critical asset is notably or very sensitive to the impacts of the natural hazard

Although populations are included as critical assets in this chart, it is important to note that priority populations may be more vulnerable. This difference in vulnerability is not reflected in this assessment.

Table 12-3. Preliminary Vulnerability Assessment for Critical Assets

	Nor'easters	Hurricanes	Flooding	Winter Storms	Ice Storm	High Winds	Extreme Temperatures	Lightning/ Thunderstorms	Microbursts	Hail	Drought	Earthquakes	Tornadoes	Brushfires
Critical Assets														
Flood prone drainage systems, streets, or infrastructure	2	2	3	2	2	1	1	1	1	1	1	3	1	1
Bridges	2	2	3	2	2	1	1	1	2	1	1	3	2	1
Wastewater facilities	1	1	3	1	1	1	1	1	1	1	2	2	2	1

Table 12-3. Preliminary Vulnerability Assessment for Critical Assets														
	Nor'easters	Hurricanes	Flooding	Winter Storms	Ice Storm	High Winds	Extreme Temperatures	Lightning/ Thunderstorms	Microbursts	Hail	Drought	Earthquakes	Tornadoes	Brushfires
Water supply systems	1	1	3	1	1	1	1	1	1	1	3	3	2	1
Other services/utilities	2	2	2	2	2	2	3	2	2	2	1	3	2	1
Dams	1	1	3	2	1	1	1	1	1	1	3	3	2	1
Critical municipal hazard response facilities	1	1	2	2	1	1	1	2	1	2	2	2	2	1
Populations	2	2	2	2	2	1	3	2	2	1	3	3	3	2
High density residential properties within the floodplain	2	2	3	2	1	2	1	1	2	2	1	3	2	2
Businesses	2	2	2	2	1	2	1	1	1	2	2	2	2	1
State facilities	2	2	2	2	1	2	1	1	1	2	2	2	2	1
Schools within the floodplain	2	2	2	2	1	2	1	1	1	2	2	2	2	1
Natural resources	1	1	2	1	1	2	1	2	1	3	3	1	1	3
Historic resources	2	2	2	1	1	2	1	1	1	1	1	1	2	1

12.4 Current Measures

The City currently has several measures in place to protect itself from natural hazards and the impacts of climate change. Those efforts are described in this section.

12.4.1. Building Codes

Municipalities within the State of Rhode Island share a single building code (RIGL 23-27.3-100 et. al). Last amended in 2018, the code, which incorporates the International Building Code, takes into account scientific and engineering knowledge and allows for the utilization of modern materials and methods of construction to provide comprehensive construction requirements designed to mitigate the impacts from natural hazards such as high wind events and snow loading. The Department of Inspections enforces The City of Cranston Zoning Code and other related City Ordinances.

12.4.2. Zoning Ordinance

Enabled by state legislation and intended to provide consistency with the Comprehensive Plan, Cranston's Zoning Ordinance is designed to address a variety of purposes, first and foremost the promotion of public health, safety, and general welfare. Purpose's specific to natural hazards and climate change include:

- Providing for the control, protection and/or abatement of air, water, groundwater, and noise pollution, soil erosion, and sedimentation.
- Providing for the protection of the natural, historic, cultural, and scenic character of the city or areas therein.
- Providing for the protection of public investment in transportation, water, stormwater management systems, sewage treatment and disposal, solid waste treatment and disposal, schools, recreation, public facilities, open space, and other public requirements.
- Promoting safety from fire, flood, and other natural or manmade disasters.

Cranston's zoning ordinance and subdivision regulations also help to mitigate the impacts of natural hazards on new and redevelopment projects. The subdivision regulations contain standards to prevent soil erosion, sediment control, stormwater management, and site designs to avoid impacting groundwater and aquifer recharge areas. Measures are required to reduce impervious cover and cut and fill on a site which can alter the natural hydrology of the site and ultimately the watershed. These measures take on critical and heightened importance as natural events intensify. They are integral to protecting public health, safety, general welfare and the protection of property.

11.4.3 Emergency Operations Plan

Cranston has developed a Cranston Emergency Operations Plan (CEOP) in 2018 that provides a plan of action for the City's response to extraordinary emergency situations related to natural, technological, and human-caused hazards. This plan is considered a preparedness document that is meant to be utilized before emergencies and is updated every few years.

11.4.4 National Flood Insurance Program

Cranston has participated in the National Flood Insurance Program (NFIP) since 1984. This program qualifies property owners to purchase insurance against flood losses and requires state and community floodplain management regulations to be adopted and followed to reduce flood-related damages in the City. This plan helps mitigate the effects of flooding on new and improved structures. Overall, the program reduces the economic and societal impacts of natural hazards and climate change by promoting the purchase and retention of general risk insurance, but also of flood insurance specifically. The City of Cranston has adopted the most recent (October 2014) Flood Insurance Rate Maps (FIRM) and Flood Insurance Study (FIS).

11.4.5 Rhode Island Coastline Coastal Storm Risk Management

The U.S. Army Corps of Engineers (USACE), New England District conducted a feasibility study for the Rhode Island coastline, as well as a Coastal Storm Risk Management (CRSM) Feasibility Study. The result was an Integrated Feasibility Report and Environmental Assessment that documented the study process and provided a recommended plan of action to address flood risk along the shoreline and coastal tributaries of Rhode Island with the purpose of reducing risk from and making the state more resilient to future storms and impacts of seal level rise. Cranston participated in this valuable assessment, with Pawtuxet Village being one of the focus areas of the study. The final report made specific recommendations related to elevating and floodproofing structures in Cranston.

12.5 Challenges and Opportunities

11.5.1 Challenges

Increased storm intensity and/or frequency coupled with rising sea level may put considerable stress on infrastructure and geographic populations in Cranston. Drainage infrastructure may be overwhelmed more often during intense rain events and shoreline communities lack the necessary preparation to mitigate sea level rise impacts. The eastern side of the City is more urbanized and has more impervious surface. This is also the portion of the City that abuts Narragansett Bay and will be impacted by rising sea levels.

Longer periods of elevated heat during the summer will cause increased stress on vulnerable populations including the elderly, disabled, and those who do not have access to cooling either within their homes or to centers provided during heat waves. The City will need to work with the community to target assistance to vulnerable populations during extreme heat events.

There is a need for a more comprehensive approach to climate action and climate resilience planning for the City of Cranston. Outside of the 2022 Hazard Mitigation Plan Update and Emergency Operations Plan, there are no separate policy action plans that the municipality has adopted aimed at improving resilience related to natural hazards. The 2022 Hazard Mitigation Plan Update has a proposed mitigation action section as identified by the Cranston Hazard Mitigation Plan Committee. The actions proposed relate to flooding and stormwater management areas and storm damage but action items beyond those specific types of hazards are limited.

11.5.2 Opportunities

Although the City participates in the National Flood Insurance Program (NFIP), there is an opportunity for the City to participate in the Community Rating System (CRS). It previously participated at the lowest classification in this program. If the City was to receive credit for current and additional efforts, flood insurance premiums for the City would be available to property owners.

The City should thoroughly evaluate the specific recommendations made in the Rhode Island Coastline Coastal Storm Risk Management Final Integrated Feasibility Report and Environmental Assessment to determine if the floodproofing and/or elevation of structures within the areas identified is feasible. The City should prioritize each structure and consider securing funding to conduct such work.

The City should seek assistance from, and partner with, the University of Rhode Island and other non-profit institutions and organizations to draft and implement climate adaptation and resiliency plans specific to the needs of the City's shoreline and eastern areas and seek grant funding to implement such plans.

13.0 LAND USE

13.1 Introduction

The Land Use Chapter's purpose is to help shape a plan for land use in the City over the next 20 years. This involves updating current, and developing new, land use controls and regulations designed to implement this plan. This section outlines the current status of land use in Cranston while also providing insight into future development trends and defining goals and policies for long-term prosperity.

As defined by the State Planning Council's Guidance Handbook #13, Planning for Land Use, "planning for land use implies creating a balance of uses that is appropriate for achieving the community's goals and is reflective of the natural characteristics of the land, its suitability for use, and the availability of existing and proposed public and/or private services and facilities. Land use planning must be consistent with available resources and the need to protect public health, safety, and welfare" (Division of Statewide Planning, 2021).

Cranston's developed land uses consist of residential, commercial, industrial, developed recreation, institutional, and transportation areas. Undeveloped areas include agriculture, utilities, vacant land, cemeteries, forested lands, water, wetlands, and barren land which includes beaches, mines, quarries and gravel pits. This Chapter is the centerpiece of comprehensive planning, connecting all other elements of the plan, and serving as a guide for thoughtful municipal decision-making on how to best manage land in the City.

13.2 Existing Conditions

The first step in establishing a vision for the City of Cranston involves understanding current conditions. This section includes an overview of the land use existing conditions, and current zoning, along with a discussion of recent development trends. Many of the primary land use concerns were discussed during public workshops with City residents.

Cranston is Rhode Island's third largest City stretching from the coastal village of Pawtuxet to the Historic Farm Loop in the west. Cranston's nearly 83,000 people live in diverse neighborhoods representing many eras of neighborhood design and intensity. Cranston hosts prominent industrial, commercial, retail and government employment centers employing 35,000 within city limits. Although it is a city, Cranston is a suburb of Providence, and retains a distinctly suburban character.

13.2.1 Existing Land Use

The City's existing land area of 18,494 acres consists of a variety of uses. Table 13-1, *Existing Land Use*, provides a breakdown of land use and landcover based on Rhode Island Geographic Information System (RIGIS) data. This dataset documents land area covered by residential, commercial, industrial, transportation, utilities and communication, developed recreation, vacant lands, cemeteries, institutional, agricultural lands, forested lands, barren land, water, wetlands, and ground-mounted solar energy systems. The top seven land uses in the City consist of residential land (40%), forested (29%), commercial (6%), agriculture (5%), institutional (4%), industrial (4%), and roadways and utilities (3%) (RIGIS, 2020). Table 13-1, *Existing Land Use*, illustrates the distribution of land uses across Cranston with the majority of commercial uses clustered along Reservoir Avenue and industrial sites to the southeastern and northwestern portions of the City. Residential uses

continue to be built upon previously agriculture and open space to the west of I-295 to the Scituate border. Additional information can be found in Figure 13-1, *Existing Land Use*.

Table 13-1. Existing Land Use

Land Use	RIGIS LULC Code 2020	RIGIS LULC Description (2020)	City Land Area (Acres)	% of City Land Area
Residential	111	High Density Residential (<1/8 acre lots)	2,556	14%
	112	Medium High Density (1/4 to 1/8 acre lots)	2,498	14%
	113	Medium Density Residential (1 to 1/4 acre lots)	2,099	11%
	114	Medium Low Density Residential (1 to 2 acre lots)	166	<1%
	115	Low Density Residential (>2 acre lots)	90	<1%
		Total Residential	**7,409**	**40%**
Commercial	120	Commercial (sale of products and services)	854	5%
	152	Commercial/Industrial Mixed	187	1%
		Total Commercial	**1,041**	**6%**
Industrial	130	Industrial (manufacturing, design, assembly, etc.)	641	3%
	144	Water and Sewage Treatment	25	<1%
		Total Industrial	**666**	**4%**
Roads and Utilities	143	Railroads	22	<1%
	144	Roads (divided highways >200' plus related facilities)	445	2%
	146	Power Lines (100' or more width)	115	<1%
	147	Other Transportation (terminals, docks, etc.)	41	<1%
		Total Roads and Utilities	**623**	**3%**
Vacant land (open land with no evident purpose) and urban open (transitional land use areas)	162	Vacant Land	75	<1%
	750	Transitional Areas (urban open)	118	<1%
		Total Vacant Land and Urban Open	**193**	**1%**
Undeveloped Open Land	145	Waste Disposal (landfills, junkyards, etc.)	74	<1%
	163	Cemeteries	193	1%
	740	Mines, Quarries and Gravel Pits	183	<1%
		Total Undeveloped Open Land	**450**	**2%**
Institutional/Public Other	170	Institutional (schools, hospitals, churches, etc.)	669	4%
		Total Institutional/Public Other	**669**	**4%**
Agriculture	210	Pasture (agricultural not suitable for tillage	213	1%
	220	Cropland (tillable)	470	3%
	230	Orchards, Groves, Nurseries	122	1%
	250	Idle Agriculture (abandoned fields and orchards)	92	<1%

Table 13-1. Existing Land Use				
Land Use	**RIGIS LULC Code 2020**	**RIGIS LULC Description (2020)**	**City Land Area (Acres)**	**% of City Land Area**
		Total Agriculture	**897**	**5%**
Forested and Vegetated Areas	300	Brushland (shrub and brush areas, reforestation)	190	1%
	410	Deciduous Forest (>80% hardwood)	4,335	23%
	420	Softwood Forest (>80 softwood)	116	<1%
	430	Mixed Forest	805	4%
		Total Forested and Vegetated	**5,446**	**29%**
Water	500	Water	369	2%
		Total Water	**369**	**2%**
Developed Recreation	161	Developed Recreation (all recreation)	545	3%
		Total Developed Recreation	**545**	**3%**
Wetlands	600	Wetland	68	<1%
		Total Wetland	**68**	**<1%**
Ground-Mounted Solar Energy Systems	148	Ground-Mounted Solar Energy Systems	118	<1%
		Total Ground-Mounted Solar Energy Systems	**118**	**<1%**
		TOTAL	**18,494**	**100%**

Source: City of Cranston, RIGIS, 2024

Land use changes that occurred between 2011 and 2020 are summarized in Table 13-2, *Land Use Over Time*. Cranston continues to expand its residential options to account for economic growth within the City as well as commuters who work in Providence. According to the Rhode Island Statewide Planning program, a municipality is classified as urban if it has a population density of at least 2,500 persons per square mile and 50% or more of the land area is classified as developed (RI Statewide Planning Program, 1999). The City has seen new development on land that was once occupied by agriculture uses. Conversion of agricultural land to urban and highly developed land use has been ongoing over the past two decades (Farms Under Threat, 2001-2016). The American Farmland Trust (AFT) has analyzed land development under a business-as-usual scenario and estimates that Rhode Island would lose about 8,100 acres of farmland between now and 2040 due to new development (RI Food Policy Council, 2017). Meanwhile, over the past decade, the City has experienced a significant loss of forests, agriculture, and vacant lands, including 78 acres of agricultural land, 226 acres of forest coverage, and 13 acres of vacant and transitional lands. However, the City has gained 118 acres of ground-mounted solar to the land area. Additionally, 141 acres of residential land have been developed within the City.

Table 13-2. Land Use Over Time				
Land Use	**2011 (acres)**	**2021 (acres)**	**Change 2011-2021 (acres)**	**% Change Over Time**
Agriculture	975	897	-78	-8%
Commercial	1,024	1,041	17	2%
Developed Recreation (all recreation)	538	545	7	1%
Industrial (manufacturing, design, assembly, etc.)	664	666	2	<1%
Institutional (schools, hospitals, churches, etc.)	666	669	3	<1%
Forest	5,672	5,446	-226	-4%

Table 13-2. Land Use Over Time				
Land Use	**2011 (acres)**	**2021 (acres)**	**Change 2011-2021 (acres)**	**% Change Over Time**
Residential	7,268	7,409	141	2%
Roads and Utilities	613	623	10	2%
Undeveloped Open Land	436	450	14	3%
Vacant Land and Transitional Areas	206	193	-13	-6%
Water	366	369	3	<1%
Wetlands	67	68	1	1%
Ground-Mounted Solar Energy Systems	0	118	118	N/A
TOTAL	**18,495**	**18,494**	**-1**	**-1%**

Source: City of Cranston, RIGIS, 2024

The physical landscape of Cranston provides a wide variety of experiences for residents and visitors including John L. Curran State Park, Furnace Brook Wetland, William J. Flanders Park, Meshanticut State Park, Pawtuxet Oxboes Park, and several ponds throughout the area. Areas west of I-295 are particularly important for the City's developed recreational areas and protected open space. Additional information on recreational services is detailed in Chapter 10, *Open Space and Recreation.*

Land uses should continue to follow central policies from the 2012 Comprehensive plan, including expanding "smart growth" policies, maintaining links between land uses, and retaining the agricultural and open space landscapes (City of Cranston, 2010). The City's existing industrial and commercial areas consist of a mix of manufacturing and retail businesses concentrated along Reservoir Avenue, Park Avenue, I-95, State Highway 37 West, State Highway 2 South and New London Avenue. The industrial uses have long played an essential part of the City. Today, industrial parks are located primarily in the southern and eastern part of Cranston, but there are scattered manufacturing zones to the northwest. A large quarry, owned by P.J. Keating Company, is centrally located and comprises roughly 183 acres (P.J. Keating, 2024).

The City should carefully monitor future development near natural resources and open space areas. Increased development can create more impervious surface, which can contribute to increased stormwater runoff and affect wildlife habitat. Adverse impacts of development on natural resources are further detailed in Chapter 4, *Natural Resources*. Land development can also lead to loss of green cover and formation of heat islands. Heat islands are structures and impervious cover such as buildings and roads that absorb and re-emit the sun's heat (EPA, 2023). As a result, these surfaces have higher temperatures than natural landscapes such as forests. Impacts of development on climate are further detailed in Chapter 12, *Natural Hazards and Climate Change*.

The City has promoted low-impact development and sustainable standards since the 2012 Comprehensive Plan. Smart growth districts and mixed-use zones, as further discussed in Section 13.2.2, Existing Zoning Districts, have been implemented to promote sustainable development in high density areas. However, the City has also experienced disputes over solar development. The City enacted several solar farm regulations to manage growth of these areas and protect existing land uses. Cranston's largest solar farm to the east of Lippitt Avenue with the West Warwick border is located along Hope Road at roughly 60 acres (City of Cranston, 2019). As discussed in Section 13.5., Challenges & Opportunities, solar arrays have become a point of contention.

13.2.2 Existing Zoning Districts

The allowable use of land is determined by the designation of a zoning district, which is established in the zoning ordinance. The zoning ordinance establishes the zoning districts in the City and proscribes which uses are allowed in each district.

Approximately 15,620 acres of Cranston's total land area is located within one of 15 major zoning categories, which are outlined in Table 13-3, *Land Area by Zoning Category*. Figure 13-2, *Zoning*, visually depicts the location of each zone. This map visually illustrates that nearly all of western Cranston is A-80 residential zoning, which contains the largest minimum lot sizes of any residential zoning district. Several additional zones, including the Mixed-Use Planned Districts and Educational Institution (EI) Zones, comprise an additional 120 acres and 22 acres, respectively. The map also depicts two future village centers to the west of I-295 where the planned centers overlap with A-80, A-12, M-2, and MPD zones. These zones include additional requirements and limitations that are not applicable to the traditional zoning categories.

Below are descriptions of each zoning district with their intended primary uses. Please refer to Figure 13-2 for any relevant geographic information or the Cranston Zoning Ordinance for additional information on each district.

Residential (A-80, A-20, A-12, A-8, A-6)

Residential districts that primarily encompass residential dwellings on lots ranging from low- to moderate- density of 80,000 square feet to 6,000 square feet. The only types of multi-family homes allowed in these districts are community residences.

Residential (B-1, B-2)

Residential districts that promote moderate- to high- density single-family and multi-family dwellings on 6,000 and 8,000 square foot lots, respectively. Residential B-1 and B-2 are designed for multi-family homes.

Commercial (C-1)

Commercial C-1 is the major office business district. C-1 is centrally located around Reservoir Avenue and Park Avenue, as well as Broad Street. Single-family residential uses are also permitted in these areas. A major cluster is found along Cranston Street in the northeast portion of the City.

Commercial (C-2)

Commercial C-2 is the neighborhood business district and can be found scattered throughout eastern Cranston.

Commercial (C-3)

Commercial C-3 is comprised of general business, which does not include any provisions for allowing residential housing, except residences above a first story business use.

Commercial (C-4)

Commercial C-4 is primarily used for highway business and is located along I-295, State Highways 2, 10, and 37, and along Reservoir and Park Avenues, as well as a small cluster bordering Scituate in the southwestern corner of the City.

Commercial (C-5)

Commercial C-5 is a transitional point between heavy commercial and industrial uses. Clusters of C-5 are found throughout Cranston, but they are often between a commercial and an industrial district.

Industrial (M-1 and M-2)

Industrial M-1 are made up of restricted industry while M-2 is considered general industry. There are only slight differences between these two districts, including whether open space is permitted and the greater amount of space that M-2 covers.

Open Space (S-1)

Open Space S-1 districts are dedicated to preserving open space and natural character of its jurisdiction. A large lot of S-1 zoned land is located south of the intersection of New London Avenue and State Highway 37 West. Existing open spaces and protected lands are found throughout Cranston. Additional information on open space and protected resources can be found in Chapter 4, *Natural Resources*, and Chapter 10, *Open Space and Recreation*.

Other Districts

Other districts, including Mixed-Use Planned Districts (MPD) and Educational Institutional (EI), have their own purposes. The Mixed-Use Planned Districts are used for developments that are compatible with local needs and expectations, but do not fit properly into one category and thus must be reviewed as its own district entirely. The EI is another distinct district that has particularly criteria aimed at "continued viability and expansion of higher education institutions" (City of Cranston, 2024). All development in these districts must adhere to strict guidelines.

Table 13-3. Land Area by Zoning Category

Zoning District	Acres	Percentage of Total Land Area
Residential or R Zones		
A-80	4,728	30%
A-20	2,286	15%
A-12	264	2%
A-8	1,695	11%
A-6	1,616	10%
B-1	906	6%
B-2	312	2%
Residential Total	**11,807**	**76%**
Commercial or C Zones		
C-1	82	<1%
C-2	130	<1%
C-3	130	<1%
C-4	217	1%
C-5	203	1%
Commercial Total	**762**	**4%**
Industrial/Manufacturing or M Zones		
M-1	225	2%
M-2	1,302	8%
Industrial/Manufacturing Total	**1,527**	**10%**
Open Space or S Zones		
S-1	1,524	10%
Open Space Total	**1,524**	**10%**
Other Districts		
MPD	120	<1%
Educational Institution (EI)	22	<1%
Other Districts Total	**142**	**<1%**

Table 13-3. Land Area by Zoning Category		
Zoning District	Acres	Percentage of Total Land Area
TOTAL	**15,620**	**100%**

Source: City of Cranston, RIGIS, 2024

The zoning ordinance also establishes the dimensional requirements for lot sizes within the City. The minimum lot size, or area within the boundaries of a lot that excludes any street right-of-way, is included in Table 13-4, *Zoning District Standards* and Table 13-5, *Residential Planned District Zoning Standards.*

Table 13-4. Zoning District Dimensional Standards							
Zoning District	Minimum Lot Area (ft.)	Minimum Lot Width and Frontage (ft.)	Minimum Yards (ft.) Front	Minimum Yards (ft.) Rear	Minimum Yards (ft.) Side	Maximum Lot Coverage	Maximum Building Height
S-1, A-80	80,000	200	40	100	20	10	35
A-20	20,000	125	30	30	15	20	35
A-12	12,000	100	25	20	10	30	35
A-8	8,000	80	25	20	10	30	35
A-6	6,000	60	25	20	8	30	35
B-l and B-2 (single-family)	6,000	60	25	20	8	35	35
B-l and B-2 (two-family)	8,000	60	25	20	8	35	35
B-2 (multi-family)	See formula in Section 30-14(a)	See formula in Section 30-14(a)	25	20	8	50	35
C-1	6,000	60	25	20	8	60	35
C-2	6,000	60	25	20	8	60	30
C-3	6,000	60	0	20	0	100	35
C-4	12,000	120	40	20	8	50	35
C-5	10,000	80	30	20	8	60	35
M-1	30,000	150	40	30	20	60	35
M-2	60,000	200	40	30	25	60	35
EI**	10,000	0	0	20***	20***	100%***	35****

Source: City of Cranston, 2024

Table 13-5. Residential Planned District				
Zoning District	Single-Family Dwellings Minimum Lot Area (sq. ft.)	Single-Family Dwellings Minimum Lot Frontage (feet)	Two-Family Dwellings Minimum Lot Area (sq. ft.)	Two-Family Dwellings Minimum Lot Frontage (feet)
A-80	20,000	125	60,000	150
A-20	10,000	80	15,000	100
A-12	6,000	60	9,000	80

A-8	4,000	50	6,000	60
A-6	4,000	50	Not Allowed	Not Allowed
B-1	4,000	50	6,000	60
B-2	4,000	50	6,000	60

Source: City of Cranston, 2024

13.2.3 Development and Demographic Trends

Long-term development and demographic trends are expected to reflect the patterns depicted throughout the past few decades. A shift from agriculture, large lot sizes, and automobile-focused development patterns towards mixed-use, transit-oriented development, and smart growth are expected to continue taking hold. Western Cranston has experienced additional development in areas that have historically been open space and agriculture. These trends are expected to continue, especially given the State's recent push to encourage development through various legislative changes.

Smart growth strategies may play a larger role in protecting open space, agricultural resources, and minimizing overcrowding, especially in Western Cranston. "Smart Growth" can be defined in several ways, but for the purposes of this Chapter, the phrase refers to five primary factors:

1. Promoting development in already built areas
2. Emphasizing a mix of uses
3. Reducing development of open space
4. Supporting transit improvements and transit-oriented development
5. Promoting land use practices that reduce sprawl and improve the quality of neighborhoods and village centers.

Smart Growth Development in Cranston

A long-held interest of the City has been to implement smart growth policies to balance the importance of development, open space, and aesthetics. Promoting mixed-use development in heavily built sections of Cranston is integral to village development and open space protection in western portions of the City where encroaching housing is a concern among local residents. The 2012 Plan proposed three types of mixed-used planned development districts, ranging among low, medium, and high intensity. Candidates for this development included the Elmwood/Wellington Avenues area in preparation for future rail service, the intersection of Phenix Avenue and Route 37, the intersection of Pippin Orchard Road and Scituate Avenue, and the Cranston Printworks area.

13.3 Future Land Use

Land uses are expected to remain similar in eastern portions of the City since these areas are already heavily developed. As shown in the Figure 13-3, *Future Land Use*, eastern Cranston is primarily comprised of Sewered Urban Development, or existing developed areas with sewer systems in place. However, western Cranston is in a state of flux. Portions of this area considered conservation land or open space while others are non-urban developed; others are also considered sewered urban development.

Eastern Cranston is largely built-out, but may attract new investment in the form of adaptive reuse, the development of existing small lots[1], mixed-use, and redevelopment proposals. Western Cranston is home to historic farms, protected open space and spacious residential developments. There is more undeveloped land in Western Cranston, but this is constrained due to open space protections, environmental constraints and the goals of maintaining its rural character, and preserving scenic landscapes.

13.4 Current Measures

Cranston enacted a solar ordinance in 2019 that regulated solar energy systems and restricted solar energy systems to specific zoning districts and special requirements. They are allowed as" minor accessories" in all zones, major accessories in C-4, C-5, M-1, M-2, EI, and G, and principal in M-1 and M-2 with varying lot coverage requirements depending on its characterization and location. Additional information on Solar Energy Systems can be found in the Zoning Ordinance.

Several affordable housing projects and major apartment proposals have been brought to and approved by the City Plan Commission and the City Council in recent years. Similar proposals have become common across the City and are expected to continue being developed due to the need for housing, especially affordable housing.

Land Use Policy 9.1 of the 2012 Comprehensive Plan and Land Use Policy 12 carried forward in this 2024 Plan seeks to protect and stabilize existing residential neighborhoods by increasing open space, improving roadway conditions, and making the zoning conform to existing uses. Policy 9.3 (and Land Use Policy 18 in the 2024 Plan) further call for preserving the exiting density of established neighborhoods. The 2012 Plan "Zoning Conformity Analysis" Appendix A identifies parcels where the zoning is not aligned with existing neighborhoods. Appendix A is carried forward in this 2024 Plan.

13.5 Challenges and Opportunities

13.5.1 Challenges

Changes to City Character:

Cranston is unique. It is a mixture of urban, suburban and rural characteristics. It provides a variety of lifestyle choices for its residents. As discussed in the 2012 Comprehensive Plan, an ongoing challenge is connecting the disparate land uses within Cranston while preserving the unique qualities of each neighborhood. Balancing the demand for increased housing and development while protecting the density and character of existing neighborhoods is a persistent issue in highly developed Eastern Cranston. Balancing open space and farmland preservation with encroaching development is a recurring issue particularly in western Cranston. Recent examples of contentious issues have been the planning of sewer connections and enforcement of conservation subdivision design standards in areas with historically large lot sizes and open space.

Vacant Lands:

As previously noted in Table 13-2, nearly 200 acres of land remain vacant or in transition, despite a 6% decrease between 2011 and 2021. In such a heavily populated region with such a variety of land uses, Cranston is facing a need for protection or development of these parcels, either through easements or infrastructure. In their current state, numerous parcels are not being fully utilized for the kind of interconnected, lively array of village centers the City envisions.

[1] See RIGL 45-24-38. General Provisions—Substandard lots of record. Effective 1/1/2024.

Streetscape Limitations:

The reliance of Cranston on automobile infrastructure has led to car-oriented design. Discussions around accessibility and transit-oriented development have been ongoing since the previous Comprehensive Plan in 2012, but more can be done. Few streetscape improvements and sidewalk maintenance procedures have positively altered the pedestrian-level connectivity for residents.

Environmental Sustainability:

Disputes over sustainability and Cranston's ability to balance development, open space, affordability, longstanding ways of life, and environmental protection have recently converged to create a significant challenge for Cranston.

13.5.2 Opportunities

Diversification of Village Centers:

As early as the 2012 Plan, village and neighborhood centers were identified as potential areas of improvement. Such areas continue to be of primary importance when it comes to improving pedestrian access, reimagining streetscapes, integrating mixed-use development, and reconsidering zoning. Smart growth is one strategy for expanding Cranston's development capacity while limiting the environmental and aesthetic concerns of such desires. To further develop unique neighborhood character and promote village centers, the City espoused requiring streetscape design and signage standards in 2012 and continues to emphasize the importance. The City has also considered establishing a historic preservation program for the scenic landscapes and agricultural lands of western Cranston and the Historic Farm Loop.

Expanded Access for All Modes of Transportation:

Transit-oriented development is worth consideration given Cranston's proximity to Providence, major thoroughfares, and other large population centers. Should rail service be established in the future in Cranston, the Amtrak rail yard between Elmwood and Wellington Avenues poses a compelling candidate for the location of a station. Greater connectivity for pedestrians to reach places in and around Cranston remains top of mind.

Better connectivity between open spaces provides another opportunity for improving access to Cranston residents. Large swaths of open space could be connected through bike routes and sidewalks lined with signage to promote recreation for residents.

APPENDIX A
ZONING CONSISTENCY ANALYSIS

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
1	9	2139 Broad St	Neighborhood Commercial/Services	A-6	C-3	2	1573	303 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
1	62	0 Commercial St	Open Space	B-2	S-1	2	1674	160 Shaw Ave	Governmental/Institutional	B-1	GI
1	70	0 Commercial St	Open Space	B-2	GI	2	1907	276 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
1	82	115 Sheldon St	Open Space	B-2	GI	2	1909	280 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
1	467	110 Woodbury Rd	Governmental/Institutional	A-6	GI	2	1991	69 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
1	480	0 Commercial St	Open Space	B-2	GI	2	1992	67 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
1	496	85 Seaview Ave	Open Space	A-6	GI	2	2029	0 Calvin Ave	Open Space	A-6	S-1
2	306	339 Smith St	Open Space	B-1	S-1	2	2096	77 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
2	834	205 Norwood Ave	Governmental/Institutional	C-2	GI	2	2099	87 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
2	949	2139 Broad St	Multifamily	B-1	B-2	2	2103	1996 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	985	2045 Broad St	Neighborhood Commercial/Services	A-6	C-3	2	2104	201 Norwood Ave	Governmental/Institutional	C-2	GI
2	1063	0 Warwick Ave	Open Space	C-5	S-1	2	2340	0 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
2	1096	0 Alfred St	Highway Commercial/Services	A-6/C-5	C-5	2	2341	125 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
2	1097	0 Alfred St	Highway Commercial/Services	A-6/C-5	C-5	2	2358	3 Henry St	Neighborhood Commercial/Services	B-1	C-2
2	1319	131 Park Ave	Governmental/Institutional	A-6	GI	2	2595	2015 Broad St	Neighborhood Commercial/Services	A-6	2
2	1333	1825 Park Ave	Governmental/Institutional	B-2	GI	2	2598	0 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1345	107 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2	2	2599	2007 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1346	95 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2	2	2600	2003 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1362	45 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2	2	2601	2001 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1363	39 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2	2	2602	1997 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1429	0 Ivy Ave	Open Space	B-1	S-1	2	2603	0 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1430	33 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2	2	2604	0 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1431	29 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2	2	2635	299 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1521	324 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	2769	9 Bay St	Governmental/Institutional	B-1	GI
2	1524	314 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	2918	0 Indian Rd	Governmental/Institutional	B-1	GI
2	1527	310 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	2929	10 Indian Rd	Governmental/Institutional	B-1	GI
2	1530	302 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3083	294 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1533	290 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3153	90 Warwick Ave	Neighborhood Commercial/Services	A-6	C-3
2	1563	229 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3211	0 Cherry Rd	Governmental/Institutional	B-1	GI
2	1536	286 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3456	230 Warwick Ave	Open Space	C-5	S-1
2	1539	0 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3470	251 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1542	272 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3487	160 Pawtuxet Ave	Governmental/Institutional	B-1	GI
2	1545	262 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3492	225 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1548	254 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3559	291 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1551	246 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3623	233 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1554	234 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3640	61 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
2	1557	232 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3641	63 Warwick Ave	Neighborhood Commercial/Services	B-1	C-2
2	1564	237 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3705	1985 Broad St	Neighborhood Commercial/Services	A-6	C-3
2	1566	253 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3907	277 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1567	255 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3956	0 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
2	1568	259 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3966	0 Bay View Ave	Governmental/Institutional	M-2	GI
2	1569	273 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3971	0 Hampton Rd	Governmental/Institutional	B-1	GI
2	1570	283 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3972	0 Aurora Ave	Governmental/Institutional	B-1	GI
2	1571	295 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3982	0 Central St	Governmental/Institutional	B-1	GI
2	1572	0 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	2	3983	0 Central St	Governmental/Institutional	B-1	GI

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
2	3893	307 Norwood Ave	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6	4	934	0 Holden Ave	Open Space	M-2	S-1
3	1283	9 Beachmont Ave	Governmental/Institutional	A-6	GI	4	935	0 Holden Ave	Open Space	M-2	S-1
3	1315	75 Beachmont Ave	Open Space	A-6	S-1	4	936	0 Holden Ave	Open Space	M-2	S-1
3	1369	0 Beachmont Ave	Open Space	A-6	S-1	4	937	0 Holden Ave	Open Space	M-2	S-1
3	1405	0 Beachmont Ave	Open Space	A-6	S-1	4	938	0 Holden Ave	Open Space	M-2	S-1
3	1541	14 Haddon Hill Rd	SFR 7.26 to 3.64 Units Per Acre	A-6/C-2	A-6	4	939	0 Holden Ave	Open Space	M-2	S-1
4	56	0 Park Ave	Neighborhood Commercial/Services	A-6	C-2	4	940	0 Holden Ave	Open Space	M-2	S-1
4	60	0 Park Ave	Neighborhood Commercial/Services	A-6	C-2	4	941	0 Holden Ave	Open Space	M-2	S-1
4	150	330 Park Ave	Neighborhood Commercial/Services	A-6	C-2	4	942	0 Holden Ave	Open Space	M-2	S-1
4	160	0 Park Ave	Neighborhood Commercial/Services	A-6	C-2	4	943	0 Holden Ave	Open Space	M-2	S-1
4	167	350 Park Ave	Neighborhood Commercial/Services	A-6	C-2	4	944	0 Holden Ave	Open Space	M-2	S-1
4	168	0 Mill St	Neighborhood Commercial/Services	A-6	C-2	4	945	0 Holden Ave	Open Space	M-2	S-1
4	822	7 Youldan Ave	Governmental/Institutional	A-6	GI	4	946	0 Holden Ave	Open Space	M-2	S-1
4	823	0 Moore Ave	Governmental/Institutional	A-6	GI	4	947	0 Holden Ave	Open Space	M-2	S-1
4	824	0 Moore Ave	Governmental/Institutional	A-6	GI	4	948	0 Holden Ave	Open Space	M-2	S-1
4	825	0 Moore Ave	Governmental/Institutional	A-6	GI	4	949	0 Holden Ave	Open Space	M-2	S-1
4	854	0 Dodge Ave	Open Space	M-2	S-1	4	950	0 Holden Ave	Open Space	M-2	S-1
4	855	0 Dodge Ave	Open Space	M-2	S-1	4	951	0 Holden Ave	Open Space	M-2	S-1
4	856	0 Dodge Ave	Open Space	M-2	S-1	4	952	0 Holden Ave	Open Space	M-2	S-1
4	908	0 Chambers Ave	Open Space	M-2	S-1	4	953	0 Holden Ave	Open Space	M-2	S-1
4	909	0 Chambers Ave	Open Space	M-2	S-1	4	959	0 Dodge Ave	Open Space	M-2	S-1
4	910	0 Chambers Ave	Open Space	M-2	S-1	4	960	0 Dodge Ave	Open Space	M-2	S-1
4	911	0 Youlden Ave	Open Space	M-2	S-1	4	961	0 Dodge Ave	Open Space	M-2	S-1
4	912	0 Youlden Ave	Open Space	M-2	S-1	4	962	0 Holden Ave	Open Space	M-2	S-1
4	913	0 Youlden Ave	Open Space	M-2	S-1	4	963	0 Holden Ave	Open Space	M-2	S-1
4	914	0 Youlden Ave	Open Space	M-2	S-1	4	964	0 Holden Ave	Open Space	M-2	S-1
4	915	0 Youlden Ave	Open Space	M-2	S-1	4	965	0 Holden Ave	Open Space	M-2	S-1
4	916	0 Youlden Ave	Open Space	M-2	S-1	4	966	0 Holden Ave	Open Space	M-2	S-1
4	917	0 Holden Ave	Open Space	M-2	S-1	4	967	0 Youlden Ave	Open Space	M-2	S-1
4	918	0 Holden Ave	Open Space	M-2	S-1	4	968	0 Youlden Ave	Open Space	M-2	S-1
4	919	0 Holden Ave	Open Space	M-2	S-1	4	969	0 Youlden Ave	Open Space	M-2	S-1
4	920	0 Holden Ave	Open Space	M-2	S-1	4	970	0 Youlden Ave	Open Space	M-2	S-1
4	921	0 Holden Ave	Open Space	M-2	S-1	4	971	0 Youlden Ave	Open Space	M-2	S-1
4	922	0 Holden Ave	Open Space	M-2	S-1	4	972	0 Youlden Ave	Open Space	M-2	S-1
4	923	0 Holden Ave	Open Space	M-2	S-1	4	973	0 Youlden Ave	Open Space	M-2	S-1
4	924	0 Holden Ave	Open Space	M-2	S-1	4	974	0 Youlden Ave	Open Space	M-2	S-1
4	925	0 Holden Ave	Open Space	M-2	S-1	4	978	0 Youlden Ave	Open Space	M-2	S-1
4	926	0 Holden Ave	Open Space	M-2	S-1	4	979	0 Youlden Ave	Open Space	M-2	S-1
4	927	0 Holden Ave	Open Space	M-2	S-1	4	980	0 Youlden Ave	Open Space	M-2	S-1
4	928	0 Holden Ave	Open Space	M-2	S-1	4	981	0 Murray Ave	Open Space	M-2	S-1
4	929	0 Holden Ave	Open Space	M-2	S-1	4	982	0 Murray Ave	Open Space	M-2	S-1
4	930	0 Holden Ave	Open Space	M-2	S-1	4	983	0 Murray Ave	Open Space	M-2	S-1
4	931	0 Holden Ave	Open Space	M-2	S-1	4	984	0 Murray Ave	Open Space	M-2	S-1
4	932	0 Holden Ave	Open Space	M-2	S-1	4	985	0 Murray Ave	Open Space	M-2	S-1
4	933	0 Holden Ave	Open Space	M-2	S-1	4	986	0 Murray Ave	Open Space	M-2	S-1

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
4	987	0 Murray Ave	Open Space	M-2	S-1	4	1847	0 Park View Blvd	Open Space	M-2	S-1
4	988	0 Perkins Ave	Open Space	M-2	S-1	4	1868	0 Park View Blvd	Open Space	M-2	S-1
4	991	0 Youlden Ave	Open Space	M-2	S-1	4	1869	0 Park View Blvd	Open Space	M-2	S-1
4	992	0 Youlden Ave	Open Space	M-2	S-1	4	1870	0 Park View Blvd	Open Space	M-2	S-1
4	993	0 Youlden Ave	Open Space	M-2	S-1	4	1871	0 Park View Blvd	Open Space	M-2	S-1
4	994	0 Youlden Ave	Open Space	M-2	S-1	4	1913	0 St James Ave	Open Space	M-2	S-1
4	995	0 Youlden Ave	Open Space	M-2	S-1	4	1914	0 St James Ave	Open Space	M-2	S-1
4	996	0 Youlden Ave	Open Space	M-2	S-1	4	1926	0 Wheatland Ave	Open Space	M-2	S-1
4	997	0 Youlden Ave	Open Space	M-2	S-1	4	1947	0 St James Ave	Open Space	M-2	S-1
4	998	0 Youlden Ave	Open Space	M-2	S-1	4	1958	0 St James Ave	Open Space	M-2	S-1
4	999	0 Youlden Ave	Open Space	M-2	S-1	4	2008	0 Wheatland Ave	Open Space	M-2	S-1
4	1000	0 Youlden Ave	Open Space	M-2	S-1	4	2011	0 Wheatland Ave	Open Space	M-2	S-1
4	1001	0 Youlden Ave	Open Space	M-2	S-1	4	2015	0 Wheatland Ave	Open Space	M-2	S-1
4	1002	0 Youlden Ave	Open Space	M-2	S-1	4	2018	0 Wheatland Ave	Open Space	M-2	S-1
4	1003	0 Youlden Ave	Open Space	M-2	S-1	4	2021	0 Wheatland Ave	Open Space	M-2	S-1
4	1004	0 Youlden Ave	Open Space	M-2	S-1	4	2025	0 Wheatland Ave	Open Space	M-2	S-1
4	1005	0 Youlden Ave	Open Space	M-2	S-1	4	2038	0 Wheatland Ave	Open Space	M-2	S-1
4	1006	0 Youlden Ave	Open Space	M-2	S-1	4	2039	0 Wheatland Ave	Open Space	M-2	S-1
4	1007	0 Youlden Ave	Open Space	M-2	S-1	4	2040	0 Wheatland Ave	Open Space	M-2	S-1
4	1008	0 Youlden Ave	Open Space	M-2	S-1	4	2041	0 Wheatland Ave	Open Space	M-2	S-1
4	1009	0 Perkins Ave	Open Space	M-2	S-1	4	2042	0 Wheatland Ave	Open Space	M-2	S-1
4	1010	0 Perkins Ave	Open Space	M-2	S-1	4	2043	0 Wheatland Ave	Open Space	M-2	S-1
4	1011	0 Perkins Ave	Open Space	M-2	S-1	4	2065	140 Mayflower Dr	Open Space	C-5	S-1
4	1012	0 Perkins Ave	Open Space	M-2	S-1	4	2554	0 Riverbank Rd	Open Space	M-2	S-1
4	1013	0 Perkins Ave	Open Space	M-2	S-1	4	2562	471 Doric Rd	Open Space	A-6	S-1
4	1014	0 Perkins Ave	Open Space	M-2	S-1	4	2652	200 First Ave	Industrial	A-6	M-2
4	1015	0 Perkins Ave	Open Space	M-2	S-1	4	2657	0 Woodbine St	Open Space	A-6	S-1
4	1016	0 Perkins Ave	Open Space	M-2	S-1	4	2664	0 arthur St	Open Space	A-6	S-1
4	1017	0 Perkins Ave	Open Space	M-2	S-1	4	2666	0 Wheatland Ave	Open Space	M-2	S-1
4	1018	0 Perkins Ave	Open Space	M-2	S-1	4	2705	0 Perkins Ave	Open Space	M-2	S-1
4	1019	0 Perkins Ave	Open Space	M-2	S-1	5	2	0 Hamilton Rd	Open Space	M-2	S-1
4	1020	0 Perkins Ave	Open Space	M-2	S-1	5	4	0 Riverside Ave	Open Space	M-2	S-1
4	1022	0 Murray Ave	Open Space	M-2	S-1	5	16	570 Pontiac Ave	Neighborhood Commercial/Services	A-6/C-3	C-3
4	1024	0 Perkins Ave	Open Space	M-2	S-1	5	357	0 Garden St	Open Space	B-1	S-1
4	1025	0 Perkins Ave	Open Space	M-2	S-1	5	358	0 Garden St	Open Space	B-1	S-1
4	1026	0 Perkins Ave	Open Space	M-2	S-1	5	663	396 Pontiac Ave	Governmental/Institutional	C-3	GI
4	1027	0 Perkins Ave	Open Space	M-2	S-1	5	666	396 Pontiac Ave	Governmental/Institutional	C-3	GI
4	1028	0 Perkins Ave	Open Space	M-2	S-1	5	681	0 Pontiac Ave	Open Space	C-3	S-1
4	1400	25 Park View Blvd	Governmental/Institutional	A-6	GI	5	687	0 Pontiac Ave	Open Space	C-3	S-1
4	1602	0 Lakeside Ave	Open Space	A-6	S-1	5	690	0 Belmont Rd	Open Space	A-6	S-1
4	1711	0 Wheatland Ave	Open Space	M-2	S-1	5	1626	0 Hamilton Rd	Open Space	M-2	S-1
4	1748	0 Waverly St	Open Space	M-2	S-1	5	2109	722 Pontiac Ave	Governmental/Institutional	A-6	GI
4	1779	0 Park View Blvd	Open Space	M-2	S-1	5	2425	0 Marine Dr	Open Space	M-2	S-1
4	1816	0 Park View Blvd	Open Space	M-2	S-1	5	2426	0 Riverside Ave	Open Space	M-2	S-1
4	1837	0 Park View Blvd	Open Space	M-2	S-1	5	2427	0 Marine Dr	Open Space	M-2	S-1

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
5	2480	0 Riverside Ave	Open Space	M-2	S-1
5	2556	100 Arthur St	Multifamily	A-6	B-2
5	2561	0 Marine Dr	Open Space	M-2	S-1
5	2562	0 Wellington Ave	Open Space	M-2	S-1
5	2650	0 Justin Way	Open Space	A-6	S-1
6	142	32 Garden St	Governmental/Institutional	B-1	GI
6	230	845 Park Ave	Governmental/Institutional	C-1	GI
6	240	869 Park Ave	Governmental/Institutional	C-1	GI
6	250	0 Legion Wy	Governmental/Institutional	B-1	GI
6	260	301 Pontiac Ave	Governmental/Institutional	B-1	GI
6	550	899 Park Ave	Governmental/Institutional	C-1	GI
6	722	90 Pontiac Ave	Highway Commercial/Services	C-2	C-3
6	723	95 Pontiac Ave	Highway Commercial/Services	C-2	C-3
6	729	74 Lambert St	Multifamily	C-4	C-2
6	812	165 Burnside St	Highway Commercial/Services	B-1	C-4
6	854	0 Midwood St	Open Space	M-2	S-1
6	954	45 Sprague Ave	Governmental/Institutional	B-1	GI
6	971	0 Cottage St	Open Space	B-1	S-1
6	978	0 Carlton St	Open Space	B-1	S-1
6	1067	0 Carlton St	Open Space	B-1	S-1
6	1083	0 Carlton St	Open Space	B-1	S-1
6	1091	0 Carlton St	Open Space	B-1	S-1
6	1227	513 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1228	503 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1229	503 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1277	18 East Spectacle St	Neighborhood Commercial/Services	M-2	C-2
6	1279	11 East Josephine St	Neighborhood Commercial/Services	M-2	C-2
6	1280	501 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1281	445 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1282	441 Niatic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1283	487 Niatic Ave	Neighborhood Commercial/Services	M-2	C-2
6	1458	0 Pontiac Ave	Highway Commercial/Services	C-2	C-3
6	1495	120 Orchard St	Neighborhood Commercial/Services	B-1/C-1	C-1
6	1534	95 Pontiac Ave	Highway Commercial/Services	C-2	C-3
6	1539	0 Richfield Ave	Highway Commercial/Services	C-2	C-3
6	1659	0 Pontiac Ave	Governmental/Institutional	B-1	GI
6	1660	0 Pontiac Ave	Governmental/Institutional	B-1	GI
6	1665	0 Pontiac Ave	Governmental/Institutional	B-1	GI
6	2124	11 Gleason St	Governmental/Institutional	A-6	GI
6	2126	21 Gleason St	SFR 7.26 to 3.64 Units Per Acre	M-1	A-6
6	2161	119 Magnolia St	Neighborhood Commercial/Services	B-1/C-1	C-1
6	2338	82 Pontiac Ave	Multifamily	B-1	B-2
6	2700	35 Flint Ave	Open Space	A-6	S-1
6	3201	0 Park Ave	Governmental/Institutional	B-1	GI
6	3294	80 Russe St	Neighborhood Commercial/Services	M-2	C-2
6	3296	69 Russe St	Neighborhood Commercial/Services	M-2	C-2
6	3297	0 Russe St	Neighborhood Commercial/Services	M-2	C-2
6	3321	75 Russe St	Neighborhood Commercial/Services	M-2	C-3
6	3323	517 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	3329	0 Cottage St	Open Space	B-1	S-1
6	3330	0 Sprague Ave	Open Space	B-1	S-1
6	3331	0 Carlton St	Open Space	B-1	S-1
6	3332	0 Carlton St	Open Space	B-1	S-1
6	3344	0 East Spectacle St	Neighborhood Commercial/Services	M-2	C-2
6	3354	0 Russe St	Neighborhood Commercial/Services	M-2	C-3
6	3355	0 Niantic Ave	Neighborhood Commercial/Services	M-2	C-2
6	3356	0 Garden St	Governmental/Institutional	B-1	GI
6	3357	0 Grace St	Governmental/Institutional	B-1	GI
7	645	0 Cutting Ave	Open Space	C-5	S-1
7	648	0 Cutting Ave	Open Space	C-5	S-1
7	756	59 Sumner Ave	Highway Commercial/Services	B-1/C-5	C-5
7	787	50 Birch St	Multifamily	B-1	B-2
7	1116	1214 Cranston St	Multifamily	C-5	B-2
7	1238	65 Hassis Ave	S/TFR Less Than 10.89 Unites Acre	C-3	B-1
7	1278	0 Princess Ave	Governmental/Institutional	B-1	GI
7	1900	100 Cresent Ave	Governmental/Institutional	A-6	GI
7	1920	0 Appleton St	Governmental/Institutional	A-6	GI
7	1921	0 Appleton St	Governmental/Institutional	A-6	GI
7	2158	0 Crawford St	Neighborhood Commercial/Services	B-1	C-2
7	2159	0 Crawford St	Neighborhood Commercial/Services	B-1	C-2
7	2160	0 Crawford St	Neighborhood Commercial/Services	B-1	C-2
7	2161	83 Crawford St	Neighborhood Commercial/Services	B-1	C-2
7	2162	77 Crawford St	Neighborhood Commercial/Services	B-1	C-2
7	2320	10 Ridge St	S/TFR Less Than 10.89 Unites Acre	C-5	B-1
7	2371	1070 Cranston St	Governmental/Institutional	B-1	GI
7	2537	50 Gladstone St	Governmental/Institutional	B-1	GI
7	2626	1116 Cranston St	Idustrial	C-4	C-5
7	2627	1110 Cranston St	Idustrial	C-4	C-5
7	3141	35 Carlsbad St	Idustrial	C-4	M-2
7	3142	28 Harris Ave	Multifamily	M-2	B-2
7	3164	0 Oneida St	Governmental/Institutional	B-1	GI
7	3165	0 Carlsbad St	Governmental/Institutional	B-1	GI
7	3166	0 Carlsbad St	Governmental/Institutional	B-1	GI
7	3168	0 Fay St	Governmental/Institutional	B-1	GI
7	3169	0 Fay St	Governmental/Institutional	B-1	GI
7	3223	15 Seneca St	S/TFR Less Than 10.89 Unites Acre	C-5	B-1
7	3248	155 Princess Ave	Governmental/Institutional	B-1	GI
7	3267	0 Fay St	Governmental/Institutional	B-1	GI
7	3346	152 Fountain ave	S/TFR Less Than 10.89 Unites Acre	C-5	B-1
7	3347	0 Fountain Ave	S/TFR Less Than 10.89 Unites Acre	C-5	B-1

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
7	3359	24 Pavilion Ave	S/TFR Less Than 10.89 Unites Acre	C-5	B-1	8	1794	1641Cranston St	Neighborhood Commercial/Services	B-1	C-2
7	3461	0 Seneca St	S/TFR Less Than 10.89 Unites Acre	C-5	B-1	8	2535	0 Dyer Ave	Governmental/Institutional	C-4	GI
7	3470	62 Bain St	S/TFR Less Than 10.89 Unites Acre	C-3	B-1	8	2545	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2
7	3533	0 whipple Ave	Open Space	B-1	S-1	8	2619	0 Vallone Rd	Neighborhood Commercial/Services	B-1	C-2
7	3755	70 Lincoln Ave	Multifamily	B-1/M-2	B-2	8	2621	0 Vallone Rd	Neighborhood Commercial/Services	B-1	C-2
7	3840	0 Fay St	Governmental/Institutional	B-1	GI	8	2622	15 Vallone Rd	Neighborhood Commercial/Services	B-1	C-2
7	3854	0 Cranston St	Highway Commercial/Services	B-1/C-5	C-5	8	2623	1525 Cranston St	Neighborhood Commercial/Services	B-1	C-2
7	3865	0 Nobel St	Multifamily	B-1/M-2	B-2	8	2648	0 Dyer Ave	Governmental/Institutional	C-4	GI
7	3866	0 Nobel St	Multifamily	B-1/M-2	B-2	8	2656	0 Whales St	S/TFR Less Than 10.89 Unites Acre	C-4	B-1
8	89	484 Dyer Ave	Highway Commercial/Services	B-1C-4	C-4	8	2657	147 Wales St	S/TFR Less Than 10.89 Unites Acre	C-4	B-1
8	165	550 Dyer Ave	Neighborhood Commercial/Services	B-1	C-2	8	2691	399 Dyer Ave	Governmental/Institutional	C-4	GI
8	199	1225 Cranston St	Highway Commercial/Services	B-1	C-5	8	2749	589 Dyer Ave	Neighborhood Commercial/Services	C-5	C-3
8	201	1351 Cranston St	Governmental/Institutional	C-2	GI	8	2763	1561 Cranston St	Neighborhood Commercial/Services	B-1	C-2
8	221	3 Haven Ave	Neighborhood Commercial/Services	B-1	C-2	8	2780	655 Dyer Ave	Governmental/Institutional	S-1	GI
8	231	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	8	2797	625 Dyer Ave	Governmental/Institutional	S-1	GI
8	235	1525 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	12	1090 Park Ave	Highway Commercial/Services	C-1	C-3
8	276	1573 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	16	1082 Park Ave	Highway Commercial/Services	C-1	C-3
8	277	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	17	1078 Park Ave	Highway Commercial/Services	C-1	C-3
8	278	1575 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	18	10 Crothers Ave	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6
8	308	0 Urbana St	Neighborhood Commercial/Services	B-1	C-2	9	19	0 Crothers Ave	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6
8	309	1591 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	31	1076 Park Ave	Highway Commercial/Services	C-1	C-3
8	310	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	32	1070 Park Ave	Highway Commercial/Services	C-1	C-3
8	311	1595 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	33	1060 Park Ave	Highway Commercial/Services	C-1	C-4
8	312	1599Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	48	1052 Park Ave	Highway Commercial/Services	C-1	C-4
8	328	75 Mathewson St	Multifamily	B-1	B-2	9	73	1030 Park Ave	Highway Commercial/Services	C-1	C-4
8	339	1609 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	134	0 Waterway Rd	Open Space	A-6	S-1
8	364	1627 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	146	747 Pontiac Ave	Neighborhood Commercial/Services	A-6	C-3
8	366	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	156	1150 Reservoir Ave	Highway Commercial/Services	C-1	C-4
8	845	0 Dyer Ave	Multifamily	C-4	B-2	9	157	8 Seymour Ave	Highway Commercial/Services	C-1	C-3
8	857	0 Florida Ave	Neighborhood Commercial/Services	B-1	C-3	9	180	926 Park Ave	Neighborhood Commercial/Services	B-1/C-4	C-1
8	858	0 Florida Ave	Neighborhood Commercial/Services	B-1	C-3	9	189	966 Park Ave	Highway Commercial/Services	C-1	C-4
8	932	1555 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	414	66 Essex St	SFR 7.26 to 3.64 Units Per Acre	C-4	A-6
8	933	1551 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	453	0 Blaisdell St	Highway Commercial/Services	A-6	C-4
8	964	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	454	70 Blaisdell St	Highway Commercial/Services	A-6	C-4
8	965	1545 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	572	800 Reservoir Ave	Highway Commercial/Services	C-1	C-3
8	966	1615 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	573	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3
8	999	575 Dyer Ave	Multifamily	C-4	B-2	9	574	806 Reservoir Ave	Highway Commercial/Services	C-1	C-3
8	1028	220 Bracken St	S/TFR Less Than 10.89 Unites Acre	C-4	B-1	9	575	65 Hazelwood St	Highway Commercial/Services	C-1	C-3
8	1103	0 Dyer Ave	Governmental/Institutional	C-4	GI	9	599	822 Reservoir Ave	Highway Commercial/Services	C-1	C-3
8	1104	0 Dyer Ave	Governmental/Institutional	C-4	GI	9	621	860 Reservoir Ave	Highway Commercial/Services	C-1	C-3
8	1105	0 Dyer Ave	Governmental/Institutional	C-4	GI	9	1279	0 Intervale Rd	Open Space	B-2	S-1
8	1759	112 Greene Ave	Open Space	B-1	S-1	9	1281	0 Longway Rd	Highway Commercial/Services	C-1	C-4
8	1760	0 Greene Ave	Open Space	B-1	S-1	9	1676	865 Pontiac Ave	S/TFR Less Than 10.89 Unites Acre	B-2	B-1
8	1761	0 Cranston St	Open Space	B-1	S-1	9	1701	1212 Park Ave	Highway Commercial/Services	C-1	C-3
8	1791	1635 Cranston St	Neighborhood Commercial/Services	B-1	C-2	9	1702	1208 Park Ave	Highway Commercial/Services	C-1	C-3

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9	1710	1196 Park Ave	Governmental/Institutional	C-1	GI	9	2378	1001 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1711	0 Turin St	Governmental/Institutional	C-1	GI	9	2380	1005 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1728	1180 Park Ave	Highway Commercial/Services	C-1	C-3	9	2381	1009 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1729	1174 Park Ave	Highway Commercial/Services	C-1	C-3	9	2382	1013 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1778	1166 Park Ave	Highway Commercial/Services	C-1	C-3	9	2383	1015 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1779	1164 Park Ave	Highway Commercial/Services	C-1	C-3	9	2384	1029 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1780	0 Park Ave	Highway Commercial/Services	C-1	C-3	9	2385	1035 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1781	0 Park Ave	Highway Commercial/Services	C-1	C-3	9	2388	1039 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1782	1152 Park Ave	Highway Commercial/Services	C-1	C-3	9	2391	1051 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1814	1150 Park Ave	Highway Commercial/Services	C-1	C-3	9	2392	1055 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1815	0 Park Ave	Highway Commercial/Services	C-1	C-3	9	2393	1067 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1816	1140 Park Ave	Highway Commercial/Services	C-1	C-3	9	2394	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	1818	1138 Park Ave	Highway Commercial/Services	C-1	C-3	9	2397	1073 Reservior Ave	Highway Commercial/Services	C-1	C-3
9	1843	1136 Park Ave	Highway Commercial/Services	C-1	C-3	9	2403	0 Knollwood Ave	Highway Commercial/Services	C-1	C-3
9	1848	838 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2404	0 Knollwood Ave	Highway Commercial/Services	C-1	C-3
9	1944	719 Pontiac Ave	Neighborhood Commercial/Services	A-6	C-3	9	2406	310 Knollwood Ave	Highway Commercial/Services	C-1	C-3
9	1945	723 Pontiac Ave	Neighborhood Commercial/Services	A-6	C-3	9	2407	1045 Rersevoir Ave	Highway Commercial/Services	C-1	C-3
9	1956	729 Pontiac Ave	Neighborhood Commercial/Services	A-6	C-3	9	2409	0 Knollwood Ave	Highway Commercial/Services	C-1	C-3
9	1957	733 Pontiac Ave	Neighborhood Commercial/Services	A-6	C-3	9	2428	301 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2230	815 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	2431	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2246	823 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2432	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2247	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2433	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2260	843 Reservior Ave	Highway Commercial/Services	C-1	C-3	9	2434	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2261	7 River Farm Rd	Highway Commercial/Services	C-1	C-3	9	2435	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2262	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2436	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3
9	2263	855 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2526	0 Aqueduct Rd	Highway Commercial/Services	C-1	C-3
9	2276	861 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2606	1036 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2277	865 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2609	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2279	875 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2618	7 Shortway Rd	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6
9	2308	885 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2619	1050 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2309	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2620	1054 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2310	897 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2621	1058 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2331	901 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2622	4 Crossway Rd	Highway Commercial/Services	C-1	C-3
9	2332	3 Lockmere Rd	Highway Commercial/Services	C-1	C-3	9	2623	10 Crossway Rd	Highway Commercial/Services	C-1	C-3
9	2333	915 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2641	11 Crossway Rd	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6
9	2340	0 Knolwood Ave	Highway Commercial/Services	C-1	C-3	9	2642	1070 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2348	925 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2643	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2350	931 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2644	1076 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2351	935 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2672	354 Aqueduct Rd	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6
9	2361	3 Vicking St	Highway Commercial/Services	C-1	C-3	9	2673	1100 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2370	957 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2710	70 Delway Rd	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6
9	2372	971 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2713	1112 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2373	973 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2719	38 Barnsdale Rd	SFR 7.26 to 3.64 Units Per Acre	B-2	A-6
9	2374	975 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2736	292 Aqueduct Rd	Multifamily	A-6	B-2
9	2376	989 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	2756	868 Reservoir Ave	Highway Commercial/Services	C-1	C-4

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
9	2759	888 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	3364	960 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2762	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	3365	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2763	900 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	3366	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2765	906 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	3370	849 Pontiac Ave	S/TFR Less Than 10.89 Unites Acre	B-2	B-1
9	2766	916 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3421	853 Pontiac Ave	S/TFR Less Than 10.89 Unites Acre	B-2	B-1
9	2767	920 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	3453	1119 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2768	1024 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3456	845 Pontiac Ave	S/TFR Less Than 10.89 Unites Acre	B-2	B-1
9	2769	1022 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3491	1099 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2770	1012 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3496	11 Seymour Ave	Highway Commercial/Services	C-1	C-3
9	2773	1006 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3497	0 Brigton Rd	Highway Commercial/Services	C-1	C-3
9	2774	1000 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3498	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2775	998 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3500	0 Aqueduct Rd	Highway Commercial/Services	C-1	C-3
9	2776	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3506	0 Seymour Ave	Highway Commercial/Services	C-1	C-3
9	2777	994 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3513	0 Aqueduct Rd	Highway Commercial/Services	C-1	C-3
9	2778	986 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3515	1140 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2779	980 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3529	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2781	972 Reservoir Ave	Highway Commercial/Services	C-1	C-3	9	3530	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2795	0 Nickerson St	Highway Commercial/Services	C-1	C-3	9	3531	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2847	180 Oakland Ave	Governmental/Institutional	A-6	GI	9	3533	410 Garden City Dr	Neighborhood Commercial/Services - SFR Less Than 10.39 Units Per	C-4	B-2/C-3
9	2877	0 Longway Rd	SFR 7.26 to 3.64 Units Per Acre	C-1	A-6	9	3534	0 Reservoir Ave	Highway Commercial/Services	C-1	C-3
9	2894	922 Reservoir Ave	Highway Commercial/Services	C-1	C-4	9	3535	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4
9	2895	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	2	0 Pontiac Ave	Open Space	M-2	S-1
9	2897	936 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	3	0 Pontiac Ave	Open Space	M-2	S-1
9	2898	940 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	4	935 Pontiac Ave	Multifamily	A-8/C-2	B-2
9	2899	942 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	7	1000 Pontiac Ave	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8
9	2901	950 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	9	0 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8
9	2903	960 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	11	54 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8
9	2919	72 Essex St	SFR 7.26 to 3.64 Units Per Acre	C-4	A-6	10	21	6 Glen Rd	Neighborhood Commercial/Services	M-2	C-3
9	2924	1096 Park Ave	Highway Commercial/Services	C-1	C-3	10	22	1100 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3
9	2947	1108 Park Ave	Highway Commercial/Services	C-1	C-3	10	23	1081 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3
9	2949	1114 Park Ave	Highway Commercial/Services	C-1	C-3	10	24	1125 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3
9	2962	1120 Park Ave	Highway Commercial/Services	C-1	C-3	10	27	140 Pettaconsett Ave	Governmental/Institutional	M-2	GI
9	2967	1200 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	31	1200 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4
9	2968	1107 Reservoir Ave	Highway Commercial/Services	C-1	C-3	10	32	0 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4
9	2972	0 Intervale Rd	Open Space	B-2	S-1	10	33	1194 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4
9	3057	0 Columbus Dlve	Open Space	A-6	S-1	10	34	1188 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4
9	3058	0 Waterway Rd	Open Space	A-6	S-1	10	39	1191 Pontiac Ave	Highway Commercial/Services	M-2	C-4
9	3075	0 Spenstone Rd		C-1	A-6	10	97	1207 Pontiac Ave	Highway Commercial/Services	M-2	C-4
9	3089	0 Aqueduct Rd	Highway Commercial/Services	C-1	C-3	10	98	1093 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3
9	3200	875 Pontiac Ave	Neighborhood Commercial/Services	C-4	C-3	10	103	22 Glen Rd	Neighborhood Commercial/Services	M-2	C-3
9	3202	867 Pontiac Ave	S/TFR Less Than 10.89 Unites Acre	B-2	B-1	10	109	1078 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3
9	3203	859 Pontiac Ave	S/TFR Less Than 10.89 Unites Acre	B-2	B-1	10	116	0 Pontiac Ave	Governmental/Institutional	A-8	GI
9	3360	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	117	1077 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3
9	3361	0 Reservoir Ave	Highway Commercial/Services	C-1	C-4	10	118	66 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8

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10	124	951 Pontiac Ave	Neighborhood Commercial/Services	A-8/C-2	C-2	11	171	0 Loretta St	Open Space	A-6	S-1
10	671	0 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8	11	172	0 Loretta St	Open Space	A-6	S-1
10	680	1139 Pontiac	Highway Commercial/Services	M-2	C-4	11	173	0 Loretta St	Open Space	A-6	S-1
10	686	1092 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3	11	174	0 Loretta St	Open Space	A-6	S-1
10	688	1096 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3	11	175	0 Loretta St	Open Space	A-6	S-1
10	694	1097 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3	11	176	0 Loretta St	Open Space	A-6	S-1
10	689	30 Glen Rd	Neighborhood Commercial/Services	M-2	C-3	11	177	0 Loretta St	Open Space	A-6	S-1
10	690	42 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8	11	178	0 Loretta St	Open Space	A-6	S-1
10	701	1107 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3	11	179	0 Loretta St	Open Space	A-6	S-1
10	702	26 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8	11	180	0 Loretta St	Open Space	A-6	S-1
10	703	0 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3	11	181	0 Loretta St	Open Space	A-6	S-1
10	706	1170 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4	11	182	0 Loretta St	Open Space	A-6	S-1
10	709	70 Plantation Dr	Governmental/Institutional	A-8	GI	11	183	0 Loretta St	Open Space	A-6	S-1
10	711	0 Pontiac Ave	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8	11	184	0 Loretta St	Open Space	A-6	S-1
10	716	1109 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3	11	185	0 Loretta St	Open Space	A-6	S-1
10	747	0 Pettaconsett Ave	Open Space	M-2	S-1	11	186	0 Loretta St	Open Space	A-6	S-1
10	749	1150 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3	11	189	0 Loretta St	Open Space	A-6	S-1
10	797	1102 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3	11	194	0 Loretta St	Open Space	A-6	S-1
10	877	46 Eddy St	SFR 7.26 to 3.64 Units Per Acre	A-8/M-2	A-8	11	195	0 Loretta St	Open Space	A-6	S-1
10	1034	0 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4	11	196	0 Loretta St	Open Space	A-6	S-1
10	1035	0 Pontiac Ave	Open Space	M-2	S-1	11	197	0 Loretta St	Open Space	A-6	S-1
10	1400	1104 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3	11	198	0 Loretta St	Open Space	A-6	S-1
10	1407	1105 Pontiac Ave	Neighborhood Commercial/Services	A-8	C-3	11	199	0 Loretta St	Open Space	A-6	S-1
10	1408	0 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4	11	200	0 Loretta St	Open Space	A-6	S-1
10	1471	970 Pontiac Ave	Open Space	M-2	S-1	11	219	1766 Cranston St	Neighborhood Commercial/Services	C-5	C-2
10	1471	0 Pontiac Ave	Governmental/Institutional	S-1	GI	11	220	1766 Cranston St	Neighborhood Commercial/Services	C-5	C-2
10	1488	1106 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-3	11	222	30 Phenix Ave	Neighborhood Commercial/Services	C-5	C-2
10	1490	1210 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4	11	223	1775 Cranston St	Neighborhood Commercial/Services	C-5	C-2
10	1491	1220 Pontiac Ave	Neighborhood Commercial/Services	M-2	C-4	11	232	85 Briggs St	Multifamily	B-1/C-2	B-2
10	1498	0 Hillside Rd	Governmental/Institutional	A-8	GI	11	274	1766 Cranston St	Neighborhood Commercial/Services	C-5	C-2
10	1512	0 Pontiac Ave	Governmental/Institutional	A-8/M-2	GI	11	275	1766 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	19	1220 Park Ave	Highway Commercial/Services	C-1	C-3	11	276	1766 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	20	1215 Park Ave	Highway Commercial/Services	C-1	C-3	11	277	1790 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	28	1240 Park Ave	Highway Commercial/Services	C-1	C-3	11	279	1798 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	46	1232 Park Ave	Highway Commercial/Services	C-1	C-3	11	280	1800 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	96	0 Loretta St	Neighborhood Commercial/Services	A-6	C-1	11	281	0 Old Park Ave	Neighborhood Commercial/Services	B-1	C-1
11	97	0 Loretta St	Neighborhood Commercial/Services	A-6	C-1	11	282	0 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	98	0 Loretta St	Neighborhood Commercial/Services	A-6	C-1	11	287	1746 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	113	0 Loretta St	Open Space	A-6	S-1	11	288	1482 Park Ave	Neighborhood Commercial/Services	C-5	C-2
11	136	1280 Park Ave	Neighborhood Commercial/Services	A-6	C-1	11	289	1428 Park Ave	Neighborhood Commercial/Services	C-5	C-2
11	145	1299 Park ave	Neighborhood Commercial/Services	B-1/C-1	C-1	11	748	961 Dyer Ave	Neighborhood Commercial/Services	M-1	C-3
11	160	0 Loretta St	Neighborhood Commercial/Services	A-6	C-1	11	754	1315 Park Ave	Neighborhood Commercial/Services	M-1	C-1
11	166	0 Loretta St	Open Space	A-6	S-1	11	768	38 Phenix Ave	Neighborhood Commercial/Services	C-5	C-2
11	169	0 Loretta St	Open Space	A-6	S-1	11	774	19 Vervena St	S/TFR Less Than 10.89 Unites Acre	B-1/C-5	B-1
11	170	0 Loretta St	Open Space	A-6	S-1	11	779	1145 Reservoir Ave	Highway Commercial/Services	C-1	C-4

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11	796	0 Phenix Ave	Open Space	C-5	S-1
11	818	14 Vervena St	Neighborhood Commercial/Services	C-5	C-2
11	820	14 Vervena St	Neighborhood Commercial/Services	C-5	C-2
11	823	1891 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	859	1809 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	860	5 A St	Neighborhood Commercial/Services	C-5	C-2
11	910	8 A St	Neighborhood Commercial/Services	C-5	C-2
11	911	1821 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	912	0 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	913	1833 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	914	0 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	963	1849 Cranston St	Governmental/Institutional	B-1	GI
11	1033	1785 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	1034	0 Bolton St	Neighborhood Commercial/Services	C-5	C-2
11	1035	0 Bolton St	Neighborhood Commercial/Services	C-5	C-2
11	1053	0 Bolton St	Neighborhood Commercial/Services	C-5	C-2
11	1054	17 Bolton St	Neighborhood Commercial/Services	C-5	C-2
11	1055	0 Bolton St	Neighborhood Commercial/Services	C-5	C-2
11	1056	0 Bolton St	Neighborhood Commercial/Services	C-5	C-2
11	1058	1761 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	1060	1767 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	1061	1769 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	1354	22 Oaklawn Ave	Multifamily	A-8	B-2
11	1642	101 East View Ave	SFR 7.26 to 3.64 Units Per Acre	M-1	A-6
11	1680	1420 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1752	0 Palmer Ave	Neighborhood Commercial/Services	M-1	C-3
11	1753	0 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1754	0 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1755	1398 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1758	1388 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1759	1384 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1760	1380 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1763	1372 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1764	1360 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1768	1350 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	1771	15 Budlong Rd	Neighborhood Commercial/Services	M-1	C-3
11	1773	31 Budlong Rd	Neighborhood Commercial/Services	M-1	C-3
11	1817	0 Budlong Rd	Governmental/Institutional	A-8	GI
11	1854	0 Cranston St	Governmental/Institutional	A-6	GI
11	1855	0 Oaklawn Ave	Governmental/Institutional	B-2	GI
11	1857	0 Aqueduct Rd	Governmental/Institutional	A-6	GI
11	1859	0 Meredith Dr	Open Space	A-8	S-1
11	1862	10 Budlong rd	Neighborhood Commercial/Services	M-1	C-3
11	1863	0 Budlong Rd	Neighborhood Commercial/Services	M-1	C-3
11	1864	0 Budlong Rd	Neighborhood Commercial/Services	M-1	C-3
11	1865	1334 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	2418	0 Robson St	Open Space	A-6	S-1
11	2419	0 Robson St	Open Space	A-6	S-1
11	2428	0 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	2603	1732 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	2789	95 wayland Ave	Highway Commercial/Services	C-2	C-3
11	2813	1766 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	2817	0 Budlong Rd	Governmental/Institutional	A-6	GI
11	2821	1738 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	2839	0 Phenix Ave	Neighborhood Commercial/Services	C-5	C-2
11	2970	1430 Park Ave	Neighborhood Commercial/Services	C-5	C-2
11	2988	1216 Park Ave	Highway Commercial/Services	C-1	C-3
11	2989	1744 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	2990	0 Old Park Ave	Neighborhood Commercial/Services	B-1	C-1
11	2993	1199 Reservoir Ave	Highway Commercial/Services	C-1	C-3
11	2994	7 Coulters Rd	Highway Commercial/Services	C-1	C-3
11	3002	1193 Reservoir Ave	Highway Commercial/Services	C-1	C-3
11	3003	10 Rangeley Rd	Highway Commercial/Services	C-1	C-3
11	3019	1215 Reservoir Ave	Highway Commercial/Services	C-1	C-3
11	3020	1221 Reservoir Ave	Highway Commercial/Services	C-1	C-3
11	3027	34 Jackson Rd	Highway Commercial/Services	C-1	C-4
11	3030	1237 Reservoir Ave	Highway Commercial/Services	C-1	C-4
11	3151	401 Budlong Rd	Governmental/Institutional	A-8	GI
11	3364	1728 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	3553	1225 Park Ave	Highway Commercial/Services	C-1	C-3
11	3557	42 Phenix Ave	Neighborhood Commercial/Services	C-5	C-2
11	3559	1353 Park Ave	Neighborhood Commercial/Services	M-1	C-3
11	3572	110 Atwood Ave	Highway Commercial/Services	C-2	C-3
11	3586	945 Dyer Ave	Multifamily	M-1	B-2
11	3596	0 Loretta St	Neighborhood Commercial/Services	A-6	C-1
11	3623	1177 Reservoir Ave	Highway Commercial/Services	C-1	C-4
11	4040	0 Loretta St	Open Space	A-6	S-1
11	4041	0 Loretta St	Neighborhood Commercial/Services	A-6	C-1
11	4058	1285 Park ave	Neighborhood Commercial/Services	B-1/C-1	C-1
11	4059	1791 Cranston St	Neighborhood Commercial/Services	C-5	C-2
11	4071	1155 Reservoir Ave	Highway Commercial/Services	C-1	C-4
12	3	716 Atwood Ave	SFR 7.26 to 3.64 Units Per Acre	A-6/C-2	A-6
12	7	1366 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	21	0 Plant St	Open Space	B-1	S-1
12	22	0 Plant St	Open Space	B-1	S-1
12	23	0 Plant St	Open Space	B-1	S-1
12	24	0 Plant St	Open Space	B-1	S-1
12	115	0 Colwell St	Open Space	B-1	S-1
12	126	111 Phenix Ave	Highway Commercial/Services	B-1	C-3
12	187	175 Atwood Ave	Highway Commercial/Services	C-2	C-3

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12	192	164 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	193	160 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	211	178 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	217	200 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	218	0 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	219	0 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	226	230 Phenix Ave	Highway Commercial/Services	A-6/C-2	C-3
12	250	0 Briggs St	Open Space	C-2	S-1
12	310	305 Phenix Ave	Neighborhood Commercial/Services	A-6	C-2
12	322	0 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	334	1380 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	336	0 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	337	1394 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	338	0 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	339	0 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	341	871 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	342	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	343	855 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	344	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	345	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	354	717 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	402	1362 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	403	1342 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	404	1348 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	405	1344 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	406	1340 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	409	0 Fletcher Ave	Highway Commercial/Services	C-2	C-3
12	412	1326 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	460	828 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	461	822 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	477	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	514	662 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	532	672 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	533	700 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	605	148 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	631	1402 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	633	1400 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	634	9 Fortini St	Highway Commercial/Services	C-2	C-3
12	656	888 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	657	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	658	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	659	876 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	690	868 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	691	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	692	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	693	856 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	720	844 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	759	832 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	762	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	763	0 Tilden St	SFR 7.26 to 3.64 Units Per Acre	C-2	A-6
12	764	15 Tilden St	SFR 7.26 to 3.64 Units Per Acre	C-2	A-6
12	783	455 State St	Highway Commercial/Services	C-2	C-3
12	792	0 Tilden St	Highway Commercial/Services	C-2	C-3
12	793	0 Tilden St	Highway Commercial/Services	C-2	C-3
12	794	814 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	796	896 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	798	15 Fortini St	SFR 7.26 to 3.64 Units Per Acre	A-6/C-2	A-6
12	839	27 John St	SFR 7.26 to 3.64 Units Per Acre	C-5	A-8
12	840	0 John St	SFR 7.26 to 3.64 Units Per Acre	C-5	A-8
12	848	1530 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	851	1556 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	853	1536 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	854	44 Haven Ave	Neighborhood Commercial/Services	B-1	C-2
12	860	0 Pippin St	Highway Commercial/Services	B-2	C-5
12	866	200 Cannon St	Multifamily	C-5	B-2
12	880	0 Florida Ave	Open Space	B-1	S-1
12	918	1574 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	919	1570 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	920	1564 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	921	1560 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	1030	2 Cornell St	SFR 7.26 to 3.64 Units Per Acre	A-6/C-5	A-6
12	1032	5 Cornell St	SFR 7.26 to 3.64 Units Per Acre	A-6/C-5	A-6
12	1533	9 Imperial Ave	Highway Commercial/Services	C-2	C-3
12	1552	15 Imperial Ave	Highway Commercial/Services	C-2	C-3
12	1598	0 Royal Ave	Highway Commercial/Services	C-2	C-3
12	1599	0 Rockwood Ave	Highway Commercial/Services	C-2	C-3
12	1613	786 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1614	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1615	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1616	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1617	766 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1618	760 Awood Ave	Highway Commercial/Services	C-2	C-3
12	1619	758 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1675	750 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1676	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1677	742 Atwood	Highway Commercial/Services	C-2	C-3
12	1678	732 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1679	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1695	282 Penix Ave	Neighborhood Commercial/Services	A-6	C-2
12	1703	8 Fletcher Ave	Governmental/Institutional	M-1	GI

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
12	1795	1578 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2743	0 Phenix Ave	Highway Commercial/Services	B-1	C-3
12	1796	1580 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2744	0 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	1873	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2745	155 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	1874	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2746	165 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	1875	1594 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2747	1554 Cranston St	Neighborhood Commercial/Services	B-1	C-2
12	1876	1598 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2752	205 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	1899	1600 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2756	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2000	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2757	235 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2001	1606 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2804	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2075	55 Walnut Grove Ave	Highway Commercial/Services	B-2	C-5	12	2819	243 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	2083	166 Cannon St	SFR 7.26 to 3.64 Units Per Acre	C-5	A-8	12	2824	0 Randall St	Governmental/Institutional	M-1	GI
12	2085	0 Cannon St	SFR 7.26 to 3.64 Units Per Acre	C-5	A-8	12	2825	0 Randall St	Open Space	B-1	S-1
12	2100	161 Holland St	Multifamily	A-8	B-2	12	2826	0 Randall St	Open Space	B-1	S-1
12	2116	0 D. Street	Highway Commercial/Services	B-2	C-5	12	2827	0 Randall St	Open Space	B-1	S-1
12	2117	0 D. Street	Highway Commercial/Services	B-2	C-5	12	2828	0 Randall St	Open Space	B-1	S-1
12	2118	0 D. Street	Highway Commercial/Services	B-2	C-5	12	2829	0 Randall St	Open Space	B-1	S-1
12	2119	0 D. Street	Highway Commercial/Services	B-2	C-5	12	2830	0 Randall St	Open Space	B-1	S-1
12	2120	0 D. Street	Highway Commercial/Services	B-2	C-5	12	2831	0 Randall St	Open Space	B-1	S-1
12	2121	0 D. Street	Highway Commercial/Services	B-2	C-5	12	2832	0 Randall St	Open Space	B-1	S-1
12	2123	1616 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2834	186 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	2124	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2860	120 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2125	1626 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2862	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2126	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2864	1374 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	2236	1630 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2866	861 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2237	1636 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	2869	227Phenix Ave	Highway Commercial/Services	C-2	C-4
12	2429	10 Elena St	Multifamily	C-5	B-2	12	2878	0 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	2586	115 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	2919	44 Topeka St	Highway Commercial/Services	C-2	C-3
12	2587	0 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	2929	60 Bethel St	Multifamily	A-8	B-2
12	2588	121 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	2941	280 Atwood Ave	Highway Commercial/Services	C-2	C-4
12	2605	0 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	2943	250 Atwood Ave	Highway Commercial/Services	C-2	C-4
12	2606	131 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	2945	2 Western Hills Ln	Multifamily	A-6	B-2
12	2607	0 Kingwood Ave	Highway Commercial/Services	B-1	C-3	12	3058	1 Bethel St	Highway Commercial/Services	C-2	C-3
12	2673	0 Mirtick Ave	Highway Commercial/Services	B-1	C-3	12	3059	696 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2674	0 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	3079	270 Atwood Ave	Highway Commercial/Services	C-2	C-4
12	2675	141 Phenix Ave	Highway Commercial/Services	B-1	C-3	12	3083	415 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	2677	145 Phenix Ave	Highway Commercial/Services	C-2	C-3	12	3092	0 Randall St	Open Space	B-1	S-1
12	2679	1548 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	3093	429 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	2680	1528 Cranston St	Neighborhood Commercial/Services	B-1	C-2	12	3094	56 Phenix Ave	Neighborhood Commercial/Services	C-5	C-2
12	2700	275 Atwood Ave	Highway Commercial/Services	S-1/C-2	C-3	12	3115	471 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	2737	0 Arnolda Ave	Highway Commercial/Services	B-1	C-3	12	3116	495 Atwood Ave	Highway Commercial/Services	M-1	C-3
12	2738	0 Arnolda Ave	Highway Commercial/Services	B-1	C-3	12	3117	481 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	2739	0 Arnolda Ave	Highway Commercial/Services	B-1	C-3	12	3119	453 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	2740	0 Arnolda Ave	Highway Commercial/Services	B-1	C-3	12	3127	545 Atwood Ave	Highway Commercial/Services	M-1	C-3
12	2741	0 Arnolda Ave	Highway Commercial/Services	B-1	C-3	12	3130	898 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	2742	0 Arnolda Ave	Highway Commercial/Services	B-1	C-3	12	3136	5351 Atwood Ave	Highway Commercial/Services	M-1	C-3

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
12	3145	395 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	3157	1370 Plainfield Pk	Highway Commercial/Services	C-2	C-3
12	3165	555 Atwood Ave	Highway Commercial/Services	S-1	C-3
12	3177	0 Belvedere Dr	Open Space	A-12	S-1
12	3184	200 Atwood Ave	Highway Commercial/Services	C-2	C-4
12	3215	0 Walcot Ct	Highway Commercial/Services - SFR 7.26 to 3.64 Units Per Acre	A-8/C-2	A-8/C-3
12	3219	228 Atwood Ave	Highway Commercial/Services	C-2	C-4
12	3226	0 Phenix Ave	Highway Commercial/Services	B-1/C-2	C-3
12	3227	0 Phenix Ave	Highway Commercial/Services	C-2	C-3
12	3228	0 Phenix Ave	Highway Commercial/Services	B-1	C-3
12	3229	225 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	3250	383 Atwood Ave	Highway Commercial/Services	M-1	C-4
12	3262	7 Libera St	Highway Commercial/Services	M-1	C-3
12	3272	27 Libera St	Highway Commercial/Services	M-1	C-3
12	3273	31 Libera St	Highway Commercial/Services	M-1	C-3
12	3274	37 Libera St	Highway Commercial/Services	M-1	C-3
12	3279	0 Valentine Dr	SFR 7.26 to 3.64 Units Per Acre	C-2	A-6
12	3327	0 Holland St	Multifamily	A-8	B-2
12	3330	0 Holland St	Multifamily	A-8	B-2
12	3337	0 Atwood Ave	Highway Commercial/Services	C-2	C-3
12	8752	0 Cranston St	Neighborhood Commercial/Services	B-1	C-2
13	47	0 Shop Dr	Open Space	M-2	S-1
13	75	0 Kenney Dr	Open Space	M-2	S-1
13	1466	103 Kenney Dr	Governmental/Institutional	M-2	GI
14	2	100 Sockanosset Cross Rd	Highway Commercial/Services	S-1/M-2	C-4
14	4	375 Pontiac Ave	Governmental/Institutional	S-1	GI
14	5	0 Howard Ave	Governmental/Institutional	S-1	GI
14	6	0 Howard Ave	Governmental/Institutional	S-1	GI
14	7	54 Howard Ave	Governmental/Institutional	S-1	GI
14	8	40 Howard Ave	Governmental/Institutional	S-1	GI
14	9	41 Howard Ave	Governmental/Institutional	S-1	GI
14	10	0 Howard Ave	Governmental/Institutional	S-1	GI
14	12	160 Sockanosset Cross Rd	Governmental/Institutional	S-1	GI
14	13	140 Sockanosset Cross Rd	Governmental/Institutional	S-1	GI
14	14	0 Pontiac Ave	Governmental/Institutional	S-1	GI
14	15	0 New London Ave	Highway Commercial/Services	S-1	C-4
14	22	0 Power Rd	Highway Commercial/Services/MPD	S-1/MPD	C-4/MPD
15	7	71 Howard Ave	Governmental/Institutional	S-1	GI
15	17	0 East St	Governmental/Institutional	S-1	GI
15	19	0 East St	Governmental/Institutional	S-1	GI
15	20	80 East St	Governmental/Institutional	A-6	GI
15	29	252 Mayfield Ave	Multifamily	A-8	B-2
15	31	200 Mayfield Ave	Multifamily	A-8	B-2
15	52	100 East St	Neighborhood Commercial/Services	A-6	C-2
15	53	0 East St	Governmental/Institutional	S-1	GI
15	54	0 East St	Governmental/Institutional	S-1	GI
15	55	0 East St	Governmental/Institutional	S-1	GI
15	56	0 East St	Governmental/Institutional	S-1	GI
15	57	0 East St	Multifamily	M-2	B-2
15	59	880 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	61	892 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	71	898 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	74	908 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	282	0 Miles Ave	Highway Commercial/Services	C-2	C-3
15	340	205 Brayton Ave	Multifamily	A-6	B-2
15	350	870 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	358	0 Weaver St	Highway Commercial/Services	C-2	C-3
15	664	287 Mayfield Ave	Multifamily	A-8	B-2
15	668	101 woodhaven Ct	Multifamily	A-8	B-2
15	999	0 Hilltop Dr	Open Space	A-8	S-1
15	1122	920 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	1465	0 Cedawood Dr	Open Space	A-8	S-1
15	1514	4 mayfield Ave	SFR 7.26 to 3.64 Units Per Acre	M-1	A-6
15	1602	1703 Pontiac Ave	SFR 7.26 to 3.64 Units Per Acre	M-1	A-6
15	1618	0 New London Ave	Governmental/Institutional	S-1	GI
15	1624	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
15	1670	8 Mayfield Ave	SFR 7.26 to 3.64 Units Per Acre	M-1	A-6
15	1671	245 Mayfield Ave	Multifamily	A-8	B-2
15	1673	10 Bateman Ct	Multifamily	A-6	B-2
15	1675	1 Stacey Dr	SFR 7.26 to 3.64 Units Per Acre	M-1	A-6
15	1690	705 New London Ave	Governmental/Institutional	S-1	GI
15	1694	51 Howard Ave	Governmental/Institutional	S-1	GI
15	1746	0 Laura Circle	Open Space	A-8	S-1
16	3	630 Oaklawn Ave	Multifamily	A-8	B-2
16	163	100 Hoffman Ave	Multifamily	A-8	B-2
16	315	0 Meshanticut Valley Pkwy	Open Space	A-8	S-1
16	320	0 Tupelo Hill Dr	Open Space	A-8	S-1
16	693	766 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
16	925	650 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
16	926	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
16	927	0 Blossom Dr	Highway Commercial/Services	C-2	C-3
16	934	19 Blossom Dr	Highway Commercial/Services	C-2	C-3
16	937	0 Camelia Dr	Highway Commercial/Services	C-2	C-3
16	942	712 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
16	943	0 Oaklawn Ave	Highway Commercial/Services	A-8	C-3
16	1089	50 Melody Ln	Governmental/Institutional	A-8	GI

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
15	50	0 East St	Governmental/Institutional	S-1	GI
15	51	10 East St	Multifamily	M-2	B-2
16	1266	39 Sachem Dr	Multifamily	A-8	B-2
16	1286	0 Belvedere Dr	Open Space	A-8	S-1
16	1314	101 Dean Ridge Ct	Multifamily	A-8	B-2
16	1315	0 Dean Pkwy	Open Space	A-8	S-1
17	1	900 Phenix Ave	Governmental/Institutional	A-12	GI
17	59	0 Suantum St	Open Space	A-6	S-1
17	60	0 Cranston St	Open Space	A-6	S-1
17	84	0 Oaklawn Ave	Open Space	A-8	S-1
17	142	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	143	655 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	144	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	145	645 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	146	647 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	189	0 Sherman Ave	Open Space	A-6	S-1
17	191	0 Cranston St	Open Space	A-6	S-1
17	195	0 Phenix Ave	Open Space	A-6	S-1
17	199	80 Metropolitan Ave	Open Space	A-6/S-1	S-1
17	200	929 Phenix Ave	Governmental/Institutional	M-2	GI
17	223	0 Curtis St	Open Space	A-6	S-1
17	230	15 Curtis St	Multifamily	S-1	B-2
17	564	0 Cranston St	Open Space	A-6	S-1
17	566	0 Cranston St	Open Space	A-6	S-1
17	567	0 Cranston St	Open Space	A-6	S-1
17	568	0 Cranston St	Open Space	A-6	S-1
17	569	0 Cranston St	Open Space	A-6	S-1
17	570	0 Cranston St	Open Space	A-6	S-1
17	571	0 Cranston St	Open Space	A-6	S-1
17	572	0 Cranston St	Open Space	A-6	S-1
17	573	0 Cranston St	Open Space	A-6	S-1
17	574	0 Cranston St	Open Space	A-6	S-1
17	575	0 Cranston St	Open Space	A-6	S-1
17	576	0 Cranston St	Open Space	A-6	S-1
17	577	0 Cranston St	Open Space	A-6	S-1
17	578	0 Cranston St	Open Space	A-6	S-1
17	579	0 Cranston St	Open Space	A-6	S-1
17	580	0 Cranston St	Open Space	A-6	S-1
17	581	0 Cranston St	Open Space	A-6	S-1
17	582	0 Cranston St	Open Space	A-6	S-1
17	583	0 Cranston St	Open Space	A-6	S-1
17	584	0 Cranston St	Open Space	A-6	S-1
17	585	0 Cranston St	Open Space	A-6	S-1
17	586	0 Cranston St	Open Space	A-6	S-1
17	587	0 Cranston St	Open Space	A-6	S-1
16	1116	110 Hoffman Ave	Multifamily	A-8	B-2
16	1120	77 Hoffman Ave	Multifamily	A-8	B-2
17	690	0 Oaklawn Ave	Open Space	A-8	S-1
17	693	0 Dean St	Open Space	A-6	S-1
17	694	0 Dean St	Open Space	A-6	S-1
17	695	0 Dean St	Open Space	A-6	S-1
17	696	0 Dean St	Open Space	A-6	S-1
17	718	0 Dean St	Open Space	A-6	S-1
17	719	0 Dean St	Open Space	A-6	S-1
17	720	0 Dean St	Open Space	A-6	S-1
17	721	0 Dean St	Open Space	A-6	S-1
17	722	0 Dean St	Open Space	A-6	S-1
17	723	0 North St	Open Space	A-6	S-1
17	724	0 North St	Open Space	A-6	S-1
17	778	0 Highland St	Open Space	A-6	S-1
17	779	0 Highland St	Open Space	A-6	S-1
17	1336	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	1367	0 Cranston St	Open Space	A-8	S-1
17	1467	0 Abbott St	Governmental/Institutional	A-6	GI
17	1515	0 Old Phenix Ave	Open Space	A-6	S-1
17	1516	0 Fales St	Open Space	A-6	S-1
17	1517	0 Fales St	Open Space	A-6	S-1
17	1518	0 Old Phenix Ave	Open Space	A-6	S-1
17	1615	0 Plymouth St	Open Space	A-6	S-1
17	1633	0 Holgate St	Governmental/Institutional	A-6	GI
17	1634	0 Lodge St	Governmental/Institutional	A-6	GI
17	1635	0 Lodge St	Governmental/Institutional	A-6	GI
17	1636	0 Lodge St	Governmental/Institutional	A-6	GI
17	1757	0 Dean St	Open Space	A-8	S-1
17	1758	0 Dean St	Open Space	A-8	S-1
17	1764	0 Metropolitan Ave	Open Space	A-6	S-1
17	1770	0 Metropolitan Ave	Governmental/Institutional	A-6	GI
17	1797	0 Metropolitan Ave	Open Space	A-6	S-1
17	1809	0 Metropolitan Ave	Governmental/Institutional	S-1	GI
17	1810	400 Penix Ave	Open Space	A-6	S-1
17	1812	0 Ambros St	Governmental/Institutional	A-6	GI
17	1822	90 Sherman Ave	Open Space	A-6	S-1
17	1898	0 Cranston St	Open Space	A-6	S-1
17	1944	0 Phenix Ave	Open Space	A-6	S-1
17	1948	4 Fernbrook Ct	Multifamily	A-6	B-2
17	1951	383 Oaklawn Ave	Multifamily	A-8	B-2
17	1953	0 Oaklawn Ave	Multifamily	A-6	B-2
17	1967	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
17	1999	0 Oaklawn Ave	Multifamily	A-8	B-2
18	9	965 Oaklawn Ave	Highway Commercial/Services	C-2	C-3

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
18	36	0 Wilbur Ave	Governmental/Institutional	A-8	GI	19	171	791 Oaklawn Ave	Highway Commercial/Services	C-2	C-3
18	82	230 Wilbur Ave	Governmental/Institutional	A-8	GI	20	2136	0 Phenix Ave	Open Space	A-20	S-1
18	558	1292 New London Ave	Highway Commercial/Services	M-1	C-4	20	2085	167 Onley Arnold Rd	SFR 3.63 to 1 Unit Per Acre	A-20/A-80	A-20
18	692	28 Stoneham St	Open Space	A-6	S-1	21	10	0 Phenix Ave	Open Space	A-20	S-1
18	793	0 Wilbur Ave	Open Space	A-6	S-1	21	11	1050 Phenix Ave.	Open Space	A-20	S-1
18	827	0 Allard St	Open Space	A-6	S-1	21	12	0 Phenix Ave	Open Space	A-20	S-1
18	831	0 Wilbur Ave	Open Space	A-8	S-1	21	18	0 Wilber Ave	Open Space	A-20	S-1
18	1027	1294 New London Ave	Highway Commercial/Services	M-1	C-4	21	34	143 Natick Ave	SFR 3.63 to 1 Unit Per Acre	A-12	A-20
18	1193	1304 New London Ave	Highway Commercial/Services	M-1	C-4	21	190	101 Natick Ave	SFR 3.63 to 1 Unit Per Acre	A-12	A-20
18	1232	981 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	21	191	167 Natick Ave	SFR 3.63 to 1 Unit Per Acre	A-12	A-20
18	1290	1041 Oaklawn Ave	Governmental/Institutional	A-8	C-3	21	194	175 Natick Ave	SFR 3.63 to 1 Unit Per Acre	A-12	A-20
18	1345	1063 Oaklawn Ave	Highway Commercial/Services	A-8	C-3	21	200	0 Phenix Ave	Governmental/Institutional	A-80	GI
18	1346	1055 Oaklawn Ave	Highway Commercial/Services	A-8	C-3	21	204	161 Onley Arnold Rd	SFR 3.63 to 1 Unit Per Acre	A-20/A-80	A-20
18	1351	0 New London Ave	Highway Commercial/Services	M-1	C-4	21	291	155 Onley Arnold Rd	SFR 3.63 to 1 Unit Per Acre	A-20/A-80	A-20
18	1353	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	21	365	0 Conley ave	Open Space	A-20	S-1
18	1394	1033 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	21	371	0 Phenix Ave	SFR Less Than 1 Unit Per Acre	A-20/A-80	A-80
18	1398	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	21	373	0 Phenix Ave	Governmental/Institutional	A-80	GI
18	1413	915 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	21	409	91 Natick Ave	SFR 3.63 to 1 Unit Per Acre	A-12	A-20
18	1423	0 Warren Ct	Open Space	A-8	S-1	21	420	0 Pinehill Dr	Open Space	A-20	S-1
18	1456	0 Rainbow Rd	Open Space	A-8	S-1	22	115	208 Phenix Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1466	0 Rainbow Rd	Open Space	A-8	S-1	22	222	0 Rome Dr	Open Space	A-20	S-1
18	1467	0 Exchange St	Open Space	A-6	S-1	22	262	0 Pheasant Hill Ln	Open Space	A-80	S-1
18	1470	975 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	22	263	0 Walden Way	Open Space	A-80	S-1
18	1493	0 I295	Open Space	A-8	S-1	22	284	0 Walden Way	Open Space	A-80	S-1
18	1494	0 I295	Open Space	A-8	S-1	22	312	0 Wickham Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1508	0 Rodel St	Open Space	A-8	S-1	23	9	0 Burlingame Rd	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1524	0 Amanda St	Open Space	A-8	S-1	23	10	0 Burlingame Rd	Open Space	A-80	S-1
18	1532	0 Amanda St	Open Space	A-8	S-1	23	13	0 Hope Rd	Open Space	A-80	S-1
18	1545	0 Clay St	Open Space	A-8	S-1	23	14	0 Hope Rd	Open Space	A-80	S-1
18	1546	0 Clay St	Open Space	A-8	S-1	23	16	0 Burlingame Rd	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1556	0 Allard St	Open Space	A-6	S-1	23	27	2240 Phenix Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1558	845 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	35	0 Wispering Pines Dr	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1561	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	37	2212 Phenix Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1575	815 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	38	2222 Phenix Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1603	801 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	42	0 Wispering Pines Dr	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1633	875 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	43	0 Heritage Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1637	0 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	54	15 Country Ln	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1675	5 Redfern Dr	Open Space	A-8	S-1	23	76	4 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1703	0 Locust Glen Dr	Governmental/Institutional	A-8	GI	23	77	10 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1958	0 Locust Glen Dr	Open Space	A-8	S-1	23	78	18 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
18	1998	0 Valley View Dr	Open Space	A-8	S-1	23	79	22 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
19	76	689 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	80	28 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
19	77	705 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	81	27 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
19	78	709 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	82	21 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
19	170	665 Oaklawn Ave	Highway Commercial/Services	C-2	C-3	23	83	15 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING	PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
23	84	9 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20	31	4	0 Scituate Ave.	Open Space	A-80	S-1
23	85	35 Split Creek Ct	SFR 3.63 to 1 Unit Per Acre	A-80	A-20	31	5	2476 Scituate Ave.	Open Space	A-80	S-1
24	6	300 Hope Rd	Open Space	A-80	S-1	31	7	2150 Scituate Ave.	Open Space	A-80	S-1
24	8	0 Mistery Farm Dr	Open Space	A-80	S-1	31	8	0 Scituate Ave.	Open Space	A-80	S-1
24	23	1825 Phenix Ave	SFR 3.63 to 1 Unit Per Acre	A-80	S-1	31	12	0 Laten Knight Rd	Open Space	A-80	S-1
24	25	1795 Phenix Ave	SFR 3.63 to 1 Unit Per Acre	A-80	S-1	31	19	0 Scituate Ave.	Open Space	A-80	S-1
24	145	0 Maple Farms Rd	Open Space	A-80	S-1	31	20	0 Scituate Ave.	Governmental/Institutional	A-80	GI
24	188	0 Silo Dr	Open Space	A-80	S-1	31	21	0 Seven Mile Road	Open Space	A-80	S-1
24	189	0 Derby Ln	Open Space	A-80	S-1	31	22	0 Scituate Ave.	Open Space	A-80	S-1
24	204	0 Cardinal Rd	Open Space	A-80	S-1	31	24	0 Scituate Ave.	Open Space	A-80	S-1
25	302	0 Seminole Trail	Open Space	A-8	S-1	32	41	0 Scituate Ave.	Open Space	A-80	S-1
25	415	0 Eric Ct	Open Space	A-20	S-1	33	3	0 Plainfield Pike	Governmental/Institutional	A-80	GI
25	421	0 kimberly North Ln	Open Space	A-20	S-1	33	5	0 Plainfield Pike	Open Space	A-80	S-1
25	587	0 Pasture View Ln	Open Space	A-20/S1	S-1	33	7	0 Plainfield Pike	Open Space	A-80	S-1
25	752	0 Twin Birch Dr	Open Space	A-20	S-1	33	9	0 Plainfield Pike	Open Space	A-80	S-1
26	1	0 Red Hawk Dr	Open Space	A-20	S-1	33	10	0 Plainfield Pike	Open Space	A-80	S-1
26	4	0 Laten Knight Rd	Open Space	A-80	S-1	33	11	0 Plainfield Pike	Open Space	A-80	S-1
26	7	0 Rowe Dr	SFR Less Than 1 Unit Per Acre	A-20/A-80	A-80	33	12	0 Plainfield Pike	Open Space	A-80	S-1
26	186	0 Lebaron Ct	Open Space	A-20	S-1	33	19	0 Plainfield Pike	Open Space	A-80	S-1
26	255	0 Fox Ridge Dr	Open Space	A-20	S-1	33	22	2814 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
26	274	0 Red Hawk Dr	Open Space	A-20	S-1	33	35	2870 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
26	299	0 Fox Ridge Dr	Open Space	A-20	S-1	33	36	2824 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
27	10	1370 Scituate Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20	33	45	0 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
27	124	0 Wildflower Dr	Open Space	A-20	S-1	33	46	2860 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
27	217	0 Council Rock Rd	Open Space	A-20	S-1	33	63	2840 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
27	324	0 BoxtonDr	Open Space	A-20	S-1	33	64	2780 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
27	342	0 Bakewell Ct	Open Space	A-20	S-1	33	66	2970 Plainfield Pike	Governmental/Institutional	A-80	GI
27	363	0 Derbshire Dr	Open Space	A-20	S-1	33	75	2788 Plainfield Pike	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
27	431	0 Perveril Rd	Open Space	A-20	S-1	33	80	0 Plainfield Pike	Open Space	A-80	S-1
27	437	0 Williams Ave.	Open Space	A-20	S-1	34	3	1800 Scituate Ave.	Open Space	A-80	S-1
28	24	0 Pipin Orchard Rd	Governmental/Institutional	A-80	GI	34	8	1555 Scituate Ave	Open Space	A-80	S-1
28	25	0 Pipin Orchard Rd	Governmental/Institutional	A-80	GI	34	9	0 Scituate Ave	Open Space	A-80	S-1
28	26	0 Pipin Orchard Rd	Governmental/Institutional	A-80	GI	34	101	0 Ash Brook Dr	Open Space	A-20	S-1
28	68	0 Hope Rd	Open Space	A-80	S-1	34	105	0 Ash Brook Dr	Open Space	A-20	S-1
28	69	0 Hope Rd	Open Space	A-80	S-1	34	107	0 Ash Brook Dr	Open Space	A-20	S-1
28	227	0 Twin Birch Dr	Open Space	A-20	S-1	35	2	0 Sage Dr	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
28	733	0 Orchard Valley Dr	Open Space	A-20	S-1	35	3	0 Pipin Orchard Rd	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
29	1	0 Laten Knight Rd	Open Space	A-80	S-1	35	9	2110 Plainfield Pk	Industrial	A-80	M-2
29	9	0 Hope Rd	Open Space	A-80	A-80	35	11	2430 Plainfield Pk	Industrial	A-80	M-2
30	35	9 Wini St	Governmental/Institutional	A-20	GI	35	12	0 Plainfield Pk	Industrial	A-80	M-2
30	64	1535 Hope Rd	Open Space	A-80/A-20	S-1	35	13	0 Pepper Mill Ln	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
30	101	0 Lipitt Ave	Open Space	A-80	S-1	35	20	0 Alpine Estates Dr	Open Space	A-20	S-1
30	144	1380 Hope Rd	SFR Less Than 1 Unit Per Acre	A-80/A-20	A-80	35	65	1225 Scituate Ave	Multifamily	A-80	B-2
30	194	93 Main	SFR 3.63 to 1 Unit Per Acre	M-2	A-20	35	205	0 Starline Way	Open Space	M-2	S-1
30	195	1 Vaughn Ln	SFR 3.63 to 1 Unit Per Acre	M-2	A-20	35	206	34 Starline Way	Governmental/Institutional	M-2	GI

PLAT	LOT	ADDRESS	LAND USE CLASSIFICATION	EXIST. ZONING	PROP. ZONING
35	207	36 Starline Way	Governmental/Institutional	M-2	GI
35	300	0 Basil Crossing	Open Space	A-20	S-1
35	398	Pine Ride Dr	Open Space	A-80	S-1
35	400	Pine Ride Dr	Open Space	A-80	S-1
36	1	0 Scituate Ave	Industrial/SFR 3.63 to 1 Unit Per Acre	A-20/S-1	A-20/M-2
36	10	Gray Coach Ln	Open Space	A-20	S-1
36	12	2096 Plainfield Pk	Industrial	A-80	M-2
36	22	1441 Scituate Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
36	26	0 Charcalee Dr	Industrial/Open Space	A-20	M-2/S-1
36	33	0 Sictuate Ave	SFR Less Than 1 Unit Per Acre	A-80/M-2	A-80
36	39	1429 Scituate Ave	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
36	43	10175 Scituate Ave	Open Space	A-80	S-1
36	58	2400 Plainfield Pk	Industrial	A-80	M-2
36	73	0 Stamp Farm Rd	Governmental/Institutional	M-2	GI
36	106	0 Amflex Dr	Open Space	M-2	S-1
36	115	0 Amflex Dr	Open Space	M-2	S-1
36	152	Gray Coach Ln	Open Space	A-20	S-1
36	153	Gray Coach Ln	Open Space	A-20	S-1
36	168	East Pine Road	SFR 3.63 to 1 Unit Per Acre	A-80	A-20
37	3	1776 Plainfield Pk	Highway Commercial/Services	C-2	C-4
37	9	235 Scituate Ave	Multifamily	A-20	B-2
37	14	1890 Plainfield Pk	Highway Commercial/Services	C-2	C-4
37	159	435 Scituate Ave	Multifamily	A-20	B-2
37	164	0 Arrow Way	Open Space	A-8	S-1
37	752	0 Arrow Way	Open Space	A-8	S-1
37	810	0 Gianna Dr	Open Space	A-8	S-1
37	818	0 Sundale Rd	Open Space	A-20	S-1
37	836	0 Penny Ln	Open Space	A-8	S-1
37	851	0 Scituate Farms Dr	Open Space	A-8	S-1
38	6	Rail Road	Open Space	MULTI	S-1
38	7	Bike Path	Open Space	A-8/M-2	S-1
38	12	0 Bike Path	Open Space	M-2	S-1

APPENDIX B
PROVIDENCE WATER SUPPLY BOARD
WATER SUPPLY SYSTEM MANAGEMENT PLAN
EXECUTIVE SUMMARY

PROVIDENCE WATER SUPPLY BOARD
WATER SUPPLY SYSTEM MANAGEMENT PLAN
EXECUTIVE SUMMARY

PROVIDENCE WATER

PREPARED BY:
PROVIDENCE WATER SUPPLY BOARD
125 DUPONT DRIVE
PROVIDENCE, RI 02907

September 2017
(Revised May 2018)

Executive Summary

This Water Supply System Management Plan (WSSMP) has been prepared as required under Rhode Island General Laws 46-15.3, as amended and titled "The Water Supply System Management Planning Act" (Act). The legislative authority to effectuate the goals and polices of this Act has been conferred to the Rhode Island Water Resources Board (RIWRB). To this end, the RIWRB has promulgated the Rules and Regulations for Water Supply System Management Planning, October 2002, as amended to implement the provisions of this Act.

Under this legislation, Providence Water Supply Board (PWSB), as a water purveyor that produces, treats, transports and supplies over 50 million gallons per year, is responsible for the preparation and adoption of a WSSMP. It is also incumbent that PWSB update this WSSMP periodically as significant system modifications may warrant and every five years, or as otherwise stipulated in the Regulations.

This WSSMP has been prepared to provide the proper framework to promote the effective and efficient conservation, development, utilization and protection of the natural water resources of the State and specifically the Scituate Reservoir Complex, as utilized exclusively by PWSB. Furthermore, the overall goals shall be consistent with State Guide Element - Rhode Island Water 2035, "Water Supply Policies for Rhode Island." As such, this WSSMP outlines specific objectives of the water supply system management planning process for the PWSB system, and will also serve as a guide to aid in employing proper decision-making processes.

The WSSMP has been prepared in three separate documents, identified as the main WSSMP document, the Emergency Management Plan (EMP) Volumes I and II, and the Water Quality Protection Plan (WQPP). The EMP relates a vulnerability assessment of the water system to emergency management planning. The WQPP encompasses the water quality protection aspect for the surface water supply/reservoir complex. This entire submission comprises the WSSMP, as presented herein.

Background

The Rhode Island General Assembly that enacted Chapter 1278 of Public Laws of Rhode Island on April 25, 1915 established the original PWSB. The City of Providence in turn developed an increased and safe supply of water for the residents of the city. This consisted of the construction of a large reservoir and water treatment plant on the north branch of the Pawtuxet River in the Town of Scituate. From 1929 to 1941, operation of the Scituate Supply system fell under the Water Supply Division of the Providence Department of Public Works.

In 1941, the presently constituted Water Supply Board was established by authority of the Providence City Charter as amended under Chapter 832 of the Public Laws of Rhode Island. This current reservoir system, which today provides water to approximately 60% of the State's residents, consists of the main Scituate Reservoir supply and its five tributary reservoirs, all of which combine to make up the Scituate Reservoir Complex.

Scituate Reservoir was formed by the construction of a dam across the Pawtuxet River at the former village of Kent. The Gainer Dam, constructed principally of earth, is approximately 3,200 feet long and upwards of 109 feet in height. Water was initially stored in the reservoir on November 10, 1925. An aqueduct from Gainer Dam feeds the nearby treatment plant that was put into operation on September 30, 1926.

PWSB maintains a single water purification plant, the Philip J. Holton Water Purification Plant (PJHPP), to process 100% of the surface water supply used from the Scituate Reservoir Complex. Presently, the PJHPP has a maximum capacity of 144 million gallons per day (MGD) and continues to remain the largest of its type in New England.

Since the mid 1920's, PWSB has implemented various improvements to the water system infrastructure and continues to maintain and operate the existing treatment plant and reservoir complex. This has consisted of various infrastructure improvement projects related to all aspects of the system including source protection, supply, treatment, transmission and distribution, storage, consumer demand management and water quality monitoring. In 1996, PWSB

embarked on a progressive infrastructure improvement and capital improvement program. The PWSB has maintained this program with millions of dollars invested into existing infrastructure each year and approximately $780 million of improvements over the next 20 year period as proposed in our last 20 year Infrastructure Replacement Plan submitted to the RI Department of Health in December 2015 over the period from fiscal years 2016 through 2035.

Water System Description

The PWSB supply and distribution system is classified by the RIDOH as a "Community" water supply system. As such, the system is required to conform to applicable rules and regulations mandated by the RIDOH as well as meet requirements of the federal Safe Drinking Water Act (SDWA). Currently, the mandated samples, taken in accordance with RIDOH regulations *and* EPA standards, have demonstrated a lead level that exceeds the established action level. As a result, given the concerns that have been raised about the effectiveness of partial lead service line replacements in reducing lead, Providence Water has entered a Consent Agreement with the Rhode Island Department of RIDOH (RIDOH) which has granted a stay of the USEPA lead service replacement requirement. Also part of the consent agreement includes optimized treatment, a system wide unidirectional flushing program, and an extensive infrastructure program consisting of cleaning, lining, and main replacement of the distribution system that is composed of unlined cast iron pipe.

The existing PWSB system is developed primarily from the original water supply system infrastructure developed in the 1920's. Improvements have been implemented over the years to maintain and upgrade the system and to keep pace with increasingly stringent water quality regulations. The water quality has consistently been rated as good to excellent and is continually monitored and tested to insure compliance and consumer confidence.

The Scituate Reservoir watershed contains 92.8 square miles of land, of which PWSB owns or controls approximately 27 square miles. Local governments and the Rhode Island Department of Environmental Management (RIDEM) also assist in source water protection through a combination of land ownership, ordinances and "open space" protection strategies. The reservoir

complex consists of the Scituate Reservoir and five smaller reservoirs that are tributary to the main reservoir. The five tributary reservoirs are the Regulating, Barden, Moswansicut, Ponaganset and Westconnaug Reservoirs. The complex has a total storage capacity of 41.3 Billion Gallons (BG), a net storage capacity of 39.8 BG and a safe yield of 92 MGD, leaving a net safe yield of 83 MGD after the allocation of 9 MGD for downstream release to the Pawtuxet River.

A conventional water purification plant is situated downstream of the Gainer Dam located on the Scituate Reservoir. Water is withdrawn from the Scituate Reservoir through a concrete structure and conveyed by gravity into the influent control chamber. If insufficient head exists in Scituate Reservoir to meet demand, a raw water booster pump station may be utilized. The treatment process consists of aeration coagulation-flocculation, lime addition for corrosion control and pH adjustment, sedimentation, rapid sand filtration, disinfection and fluoridation.

Water flows from the influent chamber to the aeration basin. The aeration system works under gravity pressure and sprays water into the air in a fountain style. This treatment step serves to remove volatile organics and other dissolved gases (CO_2, etc.). The aerated water travels from the influent control chamber into two venturi tubes that measure the influent flow and then to the tangential mixer. Quicklime is added in the basin influent tunnel and reacts with ferric sulfate to form ferric hydroxide floc. The floc is encouraged to form through the use of a tangential mixer. The mixer works under gravity feed and imparts a slow cyclical motion to the water. The cyclical motion aids in the destabilization of colloidal material and the formation of floc, commonly known as coagulation and flocculation.

The next step is the removal of the flocculated colloidal material through sedimentation. The resulting ferric sludge must be removed by draining and flushing the basins manually. Settled water travels from the open basins through a 10-foot wide, 11-foot high conduit to the sand filters. A second lime injection point is located in this conduit to raise the pH from 7.0 to 9.7. Chlorine is also added in this conduit for disinfection purposes. Following the coagulation, flocculation, and sedimentation stages water then goes to eighteen (18) filters that remove remaining non-settleable floc and impurities. The backwash water is supplied by gravity via a

400,000-gallon wash water tank and is discharged to waste lagoons. Water then goes to the clearwell where hydrofluosilicic acid and fluoride are added.

The transmission and distribution system consists of approximately 4 miles of concrete lined tunnel, 10 miles of concrete aqueduct, 110 miles of transmission piping (16 to 66 inches) and 909 miles of distribution piping (6 to 12 inches). Transmission and distribution piping materials primarily consist of cast iron, ductile iron, asbestos cement and polyvinyl chloride. New and replacement mains consist of ductile iron and polyvinyl chloride pipe.

The distribution system contains five water storage reservoirs that are utilized to optimize system efficiency by equalizing demands, improving and stabilizing water flows and pressures and providing fire reserve storage. These consist of the Aqueduct Reservoir, located in Cranston, with a storage capacity of 43.3 MG and overflow of 231 feet Mean High Water (MHW); the Neutaconkanut Reservoir, located in Johnston, with a storage capacity of 42.1 MG and overflow of 227 feet MHW; the Longview Reservoir, located in North Providence, with a storage capacity of 24.8 MG and overflow of 306 feet MHW; the Ridge Road Tank, located in Smithfield, with a storage capacity of 3.5 MG and an overflow of 398 feet MHW; and the Lawton Hill Reservoir, located in Cranston, with a storage capacity of 5.0 MG and an overflow of 485 feet MHW.

The retail service area of PWSB is divided into four major separate pressure zones termed low service, high service, extra high service, and Western Cranston service. There is also a separate high-pressure fire system within the downtown area of the City of Providence. The low service is the largest area comprising approximately 70% of the retail area. The high service area is the second largest comprising over 29% of the retail demand. The extra high service area consists of a small isolated area in North Providence and Smithfield with elevations ranging from 220 to 310 feet MHW. The Western Cranston Water System, a high service area, serves the western retail portion of the City of Cranston and the Johnston Water Department wholesale interconnections.

PWSB also owns and operates 11 potable water pump stations in the distribution system and a raw water pump station in proximity to the treatment plant. These pump stations are located at

various locations throughout the system and serve to supply isolated higher elevations in the service area or as primary supplies to maintain the water elevation in the high and extra high service pressure zones (i.e. supply storage reservoirs). The raw water pump station is utilized to supplement pressure head to supply raw water to the treatment plant during periods of extreme low water level in the reservoir(s).

PWSB services approximately 60% of the residents of the State of Rhode Island either directly through the retail service area or through wholesale service to various water purveyors that in turn supply various communities. The current retail service area includes portions of North Providence, Smithfield, Cranston, Johnston and all of Providence. In addition, PWSB provides wholesale water to eight water utilities. These include the Bristol County Water Authority, East Providence Water Utilities Division, Greenville Water District, Johnston Water Department, Kent Count Water Authority, Lincoln Water Commission, Smithfield Water Supply Board, and Warwick Water Department. Through these wholesale interconnections the following additional communities are served: Lincoln, Coventry, East Greenwich, Scituate, Warwick, West Greenwich, West Warwick, Bristol, Barrington and Warren.

The source and distribution system, including all wholesale interconnections, are 100% metered except for fire connections. Master meters are located at various locations throughout the purification plant, which are monitored and controlled by the new SCADA (supervisory control and data acquisition) system. Every service connection within the PWSB distribution system is metered at the point of sale, thus providing 100% distribution metering. Meters are read on a monthly basis. Wholesale meters are located at each point of interconnection with the eight wholesale customers. The wholesale customers are required to maintain the meters in good working condition and to calibrate them as required. PWSB has instituted a program of meter replacement to an automated meter reading (AMR) system which also incorporates a radio read function.

Policy and Procedure

PWSB maintains both a wholesale and retail service sector. The retail service population is comprised of residential, industrial, and commercial customers serving approximately 308,500 customers through 73,043 service connections. Among the 73,043 retail customer service connections, PWSB supplies 218 major water users. Major water users are defined by the WSSMP regulations as those customers utilizing over 3.0 MG per year.

In fiscal year 2017, PWSB supplied an average 60.54 MGD of which 27.45 MGD (45.0%) was utilized by retail customers and 27.41 MGD (45%) was supplied to the nine wholesale customers. The per capita demand for the PWSB retail service area is estimated to be 112.8 gallons per capita per day. Utilizing residential retail consumption and population data the per capita demand can be more realistically estimated. The PWSB's residential retail consumption for 2016 was 6,753 MG and the retail service population was 308,500, which yields an estimated 59.8 gallons per capita per day. Since 1997, the system has had a maximum day peaking factor that varied from 1.54 to 1.88 with an average of 1.71. In calendar year 2016 the maximum day system demand was 96.76 MGD or a maximum day peaking factor of 1.59.

Non-account water, which consists of the difference between the volume of water metered at the point of supply and that recorded at all points of sale, has averaged 10.2% since 1998. Most recently, in fiscal year 2017, PWSB maintained non-account water at 10.0 percent. In short, both the 10-year average and the fiscal year 2017 non-account water rates surpass the goal established in the State Guide Plan Element 721. PWSB shall continue striving to maintain or improve upon this goal in the future. This will largely be accomplished through continued leak detection survey and repair, meter maintenance and replacement programs, and public education programs.

In its previous WSSMP submissions, PWSB has utilized population projections issued by Statewide Planning to formulate its future demand projections over the entire service area. PWSB still believes this to be the best methodology based on current available data. Review comments to past WSSMP submissions have suggested that the demand projections of PWSB's

individual wholesale customers be incorporated into PWSB's demand projections. As such, Providence Water has developed demand projections based on methodology utilizing projected rates of population growth within the entire service area as developed by Statewide Planning. The following details the current average day demand (ADD) and maximum day demand (MDD) and the future projections for ADD and MDD.

Year	**ADD (MGD)**	**MDD(MGD)**
2007	61.01	104.33
2020	60.99	104.29
2035	62.02	106.06

The safe yield of the Scituate Reservoir Complex has been identified as 92 MGD, which when accounting for the required 9 MGD downstream release to the Pawtuxet River, provides a net of 83 MGD of available water. This safe yield provides PWSB with ample supply for the current and projected future average daily water demand. The maximum day demand is available through reserve system storage (storage reservoirs) and short-term drafting of the reservoir complex to meet this increased demand.

PWSB maintains an aggressive and ongoing approach to watershed management for the purpose of the protection of adequate supplies of water for treatment and distribution to all PWSB customers. The Water Quality Protection Plan (WQPP) section of this WSSMP establishes and continues to develop and implement watershed management and source protection measures to ensure the future quality and availability of its raw water sources within the Scituate Reservoir Complex watershed.

This WQPP is consistent with the requirements of the Water Quality Protection Act of 1987, as amended, the Rhode Island Comprehensive Planning and Land Use Act of 1988, and the Comprehensive Plans of watershed municipalities. It is intended that this WQPP be modified in the future in response to changes in land uses and applicable federal, state and local regulations. PWSB continues to take steps to address, and remove where possible, conditions that may impact source water quality. One aspect of this is fostering relationships with the watershed

communities and other public and private entities to educate the public on source water protection and to encourage land uses and best management practices aimed at protecting the surface and groundwater resources of the region.

PWSB shall continue to employ proper system management procedures including programs for meter management (source and distribution), leak detection and repair, implementation of a preventive maintenance plan, infrastructure rehabilitation, and a billing rate schedule that promotes efficient and non-wasteful water use. PWSB will continue to employ proper system management procedures aimed at increasing the overall efficiency of its water supply distribution system with the underlying theme of water conservation.

PWSB operates as a "self-supporting" water department. The Rhode Island Public Utility Commission (PUC) approves rates with the intent on providing water service at the lowest possible cost while retaining funds sufficient to develop operating reserves. The intent is to maintain long-term revenue levels sufficient to cover all fixed and variable capital and operating costs of running the water utility. PWSB operates financially as a separate accounting entity within the City of Providence organizational structure. The operations of the water utility are accounted for with a separate set of self-balancing accounts organized on an Enterprise Fund basis. The City of Providence also provides various administrative and support services to the utility in most instances to comply with Home Rule Charter requirements. Appropriately, PWSB reimburses the City for services provided in accordance with approval of the PUC.

It is intended that the financial management of the system will be one in which normal operation, maintenance, replacement, and rehabilitation will be funded through operating revenue from the customer base. Where possible, and as the need may arise, PWSB shall seek alternate funding sources such as State and Federal loans and grants, for major infrastructure and capital improvement projects.

Finally, the Emergency Management section of the WSSMP establishes the responsibilities and authority within PWSB for responding to most probable emergencies and outlines specific tasks for carrying out functional and constructive solutions based on a review of the potential

emergencies and risks. The procedures outlined are consistent with the goals of the State Emergency Water Supply System Management Plan. It is the intent that this document provides guidance to ensure that the primary aspects of recovery from an emergency are addressed in an organized manner to aid in an efficient response and in maintaining drinking water of a high quality and quantity.

APPENDIX C
KENT COUNTY WATER AUTHORITY
WATER SUPPLY SYSTEM MANAGEMENT PLAN
EXECUTIVE SUMMARY

JGA JOB NO. 19-008

EXECUTIVE SUMMARY

WATER SUPPLY SYSTEM MANAGEMENT PLAN

5-YEAR UPDATE

PREPARED FOR:

KENT COUNTY WATER AUTHORITY
1072 Main Street, P.O. Box 192
West Warwick, Rhode Island 02893

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Prepared by:

JAMES J. GEREMIA & ASSOCIATES, INC.
CONSULTING ENVIRONMENTAL ENGINEERS & SCIENTISTS
272 West Exchange St. · Suite 201 · Providence, RI 02903-1061
Tel: (401) 454-7000 · Fax: (401) 454-7415

Background

This Water Supply System Management Plan (WSSMP), as amended, has been prepared as required under the Rhode Island General Laws (RIGL) 46-15.3, as amended and titled, "The Water Supply System Management Planning Act" (Act). The legislative authority to effectuate the goals and policies of this Act has been conferred to the Rhode Island Water Resources Board (RIWRB). To this end, the RIWRB has promulgated the Rules and Regulations for Water Supply System Management Planning, October 2002, as amended to implement the provisions of this Act.

Under this regulation, the Kent County Water Authority (KCWA), as a water purveyor supplying over 50 million gallons of water per year, is responsible for the preparation and adoption of a WSSMP. It also requires that the KCWA update this WSSMP periodically, as significant changes warrant but at a minimum of every five years, or as otherwise stipulated in the Regulations.

WSSMP's are prepared in order to provide the proper framework that will facilitate the effective and efficient conservation, development, utilization and protection of the natural water resources of the State as utilized by the water purveyor. Further, the overall goals incorporate the applicable policies and recommendations of the Rhode Island Water 2030, State Guide Plan Element 721. The purpose of this WSSMP is to outline the objectives of the Water Supply System Management Planning process for the KCWA water supply system, and to serve as a guide to employ the proper decision-making processes toward meeting that goal.

This WSSMP contains a detailed description of the water system and includes the policies and procedures related to the general function, operation, and management of the water system. The water quality protection component of the plan is contained, separately, under Volume II. The Emergency Management section, Volume III, relates to the vulnerability assessment of the water system for use in emergency planning. It shall be incumbent upon the KCWA to implement the recommendations and procedures outlined in this WSSMP in order to comply with the overall requirements of the Act.

Water System Description

The Kent County Water District was formed in 1946 during the January session of the General Assembly of the State of Rhode Island and Providence Plantations, Chapter 1740. The KCWA, which operates the water district, was approved for formation on April 24, 1946, and officially organized shortly thereafter, on July 8, 1946. The Authority began functioning as a water distribution system when it acquired the assets of three privately owned water companies serving communities within Kent County, namely the Pawtuxet Valley Water Company, the Warwick and Coventry Water Company, and the East Greenwich Water Supply Company along with Good Earth, Inc., a real estate holding company and owner of Carr Pond in East Greenwich. The three water companies, each incorporated in the 1880's had been subsidiaries of New England Water, Light and Power Associates, a Massachusetts voluntary association, since 1928. The three water companies had been operated as a unit by a common staff with executive offices in Providence and operating headquarters in West Warwick. Over the years, as the towns they served grew, these small water companies expanded to service additional customers buying smaller water companies and mill lines on their way. At that time these three companies combined supplied approximately seven thousand customers on average at three million gallons a day from several surface reservoirs and well fields with a few storage tanks. Funding for these initial acquisitions was generated by the Authority's Water Revenue Bonds, issue of 1950, in the aggregate principal around of $2,050,000, all of which have been retired.

The 1956 General Laws (Section 39-16) empowered the KCWA to own, operate and maintain a water supply system (including all water supply sources, pump stations, transmission facilities and distribution piping) within Kent County and to make Rules & Regulations to serve the communities that comprise Kent County (i.e. Coventry, East Greenwich, West Greenwich, Warwick and West Warwick). Moreover, the Kent County Water Authority supplies water to outlying regions of Cranston, North Kingstown and Scituate that were either part of the original water system acquisitions or areas in need of public water that were within the serviceable limits of the system gradient. The KCWA currently supplies water regionally to central Rhode Island serving the majority of the commercial/industrial constituency and approximately 88,809 citizens through 27,392 service connections, including residential, commercial/industrial, and governmental users.

Originally, the KCWA Board consisted of five members. In 2017, Section 39-16-4 was amended to increase the Board to seven members, one each from East Greenwich, West Greenwich and Warwick, and two each from Coventry and West Warwick, each serving a 10-year term. The Board provides the leadership that establishes operating policy for the organization. Board meetings are held monthly unless issues arise that may require a special meeting to resolve. The Executive Director/Chief Engineer is responsible for daily management, operations, planning, budgeting, public relations, contracts and policy enforcement. The Executive Director/Chief Engineer is responsible for daily management, operations, planning, budgeting, public relations, contracts and policy enforcement. A management team made up of Director of Administration, Director of Engineering and Technology, Director of Finance and Human Relations, Director of Operations, and Treatment Manager/Water Project Engineer assists the Executive Director/Chief Engineer in the overall operation of the Authority. In total, thirty-seven (37) positions comprise the KCWA organizational structure to support administrative, infrastructure and customer related operations for the service area.

The primary source of water supply for the KCWA water system is wholesale water purchased from the PWSB and City of Warwick which accounts for approximately 92% of system demand for the year 2019. The KCWA also owns three independent wellfields, two of which (Mishnock and East Greenwich) collectively supplied approximately 8% of the total system demand in the year 2018. For aesthetic water quality reasons, the third well is on standby for emergency supply.

The KCWA has placed the Mishnock Water Treatment Facility on line. Water is supplied to the treatment plant via any combination of the three wells which can provide a combined total feed input of 1,805 gallons per minute (GPM). The maximum treatment plant design flow is 2,000 GPM.

The well water is first treated through deep bubble aeration. The aeration equipment removes, or strips, radon and carbon dioxide from the water. Stripping carbon dioxide increases the pH of the feed water which enhances downstream treatment and reduces costs associated with chemical pH adjustment. Water discharged from the deep bubble aeration units enters rapid mix tanks where specialized treatment chemicals (Poly-Aluminum Chloride and Potassium Permanganate) are injected into the flow stream. The treatment additives quickly convert dissolved minerals (primarily iron and manganese) to a solid state and also simultaneously coagulate organics into larger particles that can be more easily filtered. The treated well water is then discharged to the membrane ultrafiltration

system. During the filtration cycle, well water flows into specialized tanks outfitted with thousands of suspended membrane fibers. The membrane fibers are like porous straws that only allow the passage of clean fresh water (permeate) via gentle suction action provided by a series of permeate pumps. The clean filtered water is discharged to a clear well and slightly chlorinated to achieve compliance constraints required under the EPA's Ground Water Rule for virus inactivation. During production, the filtered solidified minerals and organic matter become concentrated within the tanks. To rid the membrane tanks of these wastes, the filters go through a series of backwash/backpulse cycles to purge and reject the accumulated waste into a series of recycle tanks for solids settlement. After a settling period, the recycle system pumps the top clear portion of the water back to the head of the plant. This recycling of backwash water is accomplished to optimize water production and increase production efficiency (95% – 98% clean water recovery). The thickened mineral rich waste at the bottom of the recycle tanks is pumped to lagoons where the water either evaporates and/or percolates back into the ground recharging the aquifer while leaving iron and manganese solid residuals behind for accumulated disposal.

The transmission and distribution system consists of approximately 457 miles of water main, with sizes ranging from 2-inch diameter in older areas that serve domestic supply only, to 30-inch diameter transmission mains, which transport water from the supply sources and storage tanks to the distribution system. Transmission mains, which are defined as water mains 12 inches or greater in diameter, total approximately 134 miles, or 30 percent of the total system piping.

The KCWA water distribution system is divided into seven distinct pressure zones operating at varying hydraulic pressure gradients at various locations. Three of the pressure gradients, or HGL (Hydraulic Grade Line) serve the majority of KCWA's customers. There are four water storage facilities that are operated by the KCWA and maintain the pressure gradients. The KCWA owns and operates three (3) booster pumping stations (Setian Lane, J.P. Murphy Boulevard and Johnson Boulevard Pump Stations) and two (2) transmission pumping stations (Clinton Avenue and Quaker Lane Pump Stations), in addition to the four (4) well pump stations (with Spring Lake being in standby for emergency supply).

The KCWA maintains four interconnections to neighboring water purveyors – two each with Providence Water and the City of Warwick. Three of the four interconnections supply the KCWA with finished

water on a daily basis, while one of the interconnections to the City of Warwick (Potowomut) conveys finished water to the City of Warwick. The KCWA also has four emergency interconnections, one with the Quonset Development Corporation, one with the Town of North Kingstown, one is offline in the City of Warwick and one is with the Providence Water Emergency Interconnection on Hoover Street in West Warwick.

Kent County service area comprises five communities in central Rhode Island (Coventry, East Greenwich, West Greenwich, Warwick, and West Warwick). The general laws of Rhode Island permit the KCWA to own, operate and maintain a water supply coterminous the county's political boundaries. In addition to serving all or parts of those communities, KCWA service has been extended outside of its legislative boundaries to contiguous bordering areas in need of public water supply. Currently, its service area also incorporates parts of Oaklawn in Cranston, Western Cranston, southeastern Scituate, and the extreme northeast corner of North Kingstown.

The following table indicates the breakdown of KCWA customer account distribution for the year 2019.

Type of Account	Number of Accounts
Residential	25,453
Commercial / Industrial	1,548
Governmental	273
Other (Dry – Non Metered Fire Lines)	118
Total	27,392

The KCWA does not have the ability to accurately record actual population served for each water use classification (i.e., residential, commercial, industrial, government). Census information represents an average population for residential occupancy. A reasonable estimate of total residential population served within the service district can be derived using statewide planning standards and utilizing various sources of data including the number of residential services, population figures, number of households (actual and projected), and persons per household.

Population Per Community versus Population Served by KCWA

Community	2010 [1]	2020 Population Served [2]	Percent Served
Coventry	35,014	26,971	77%
Cranston*	80,387	2,257	3%
East Greenwich	13,146	12,010	91%
North Kingstown*	26,486	28	0%
Scituate	10,329	1,364	0%
Warwick	82,672	15,504	19%
West Greenwich	6,135	1,728	28%
West Warwick	29,191	28,947	99%

* No projected increase [1] Taken from 2020 Census [2] Taken from Actual Census Track

The water supply and distribution system is 100% metered with the exception of some fire services. Master meters located at each individual well station and interconnection to neighboring purveyors, meter 100% of the water produced and purchased via wholesale interconnections. Every service connection within the water distribution system is metered at the point of sale, with the exception of a small amount of non-metered fire services, yielding 99.4% metering. At this time, all of the residential and commercial water meters have been replaced with radio reading and billing style meters.

A review of production data totals for the past four years (2015 - 2018) reveals an average production rate of 7.88 million gallons per day (mgd); the maximum day demand for that period was 15.55 MGD. Based on the total production, the current Average Day Demand for FY 2018 computes to 7.55 mgd for the entire system. The current Average Day Demand for FY 2018 is based on the total volume of water metered at the point of sale (water purchased [i.e. residential, commercial, etc.]) for the entire system.

The KCWA supplied water to forty-five (45) major users in 2018. Kent County's major water user class varies greatly ranging from hospitals, to bio-manufacturing, to a yacht club, to laundromats and private multi residential properties. The majority of the major users, however, are either residential entities (i.e. mobile home parks, condominium associations, etc.) or large industrial enterprises. In 2018, major user water consumption totaled approximately 391.7 million gallons.

The KCWA has maintained an average of 8.5% non-account water over the past four years. This rate is below the goal of 10% set forth in 2011 Water Use and Efficiency Act, RI General Laws §46-15.3-22(b). The success KCWA has achieved is largely due to the large meter testing program, residential

retrofit program, the meter replacement program, and the aggressive leak detection and repair program that it maintains.

No specific legal obligations or contract agreements exist between any city or town regarding the KCWA's provision to supply water to undeveloped territory. Agreements do exist for wholesale supply from the PWSB and the City of Warwick to obtain supply. KCWA also has an emergency interconnection agreement with the North Kingstown Water Department the Quonset Development Corporation and the City of Warwick to provide water under emergency circumstances.

Water conservation initiatives are defined as the "methods, procedures and devices designed to promote efficient use of water and to eliminate waste of water." The KCWA uses seasonal press releases to encourage efficient outdoor watering techniques, provide tips on how to check your home for leaks and encourages the installation of low-flow retrofit devices.

Recent System Improvements

The KCWA maintains an ongoing, aggressive Capital Improvement Program (CIP) in order to provide its customers with a safe and reliable supply of potable water. What follows is a list of major system improvements that are planned for the future or have taken place in recent years.

- Distribution Storage Tank Hydraulic Evaluation (ongoing)
- Computer Model Upgrade (ongoing)
- Major Users Technical Assistance Program
- Infrastructure Rehabilitation Pipeline Database Update
- Emergency Response Plan
- Five-Year Capital Improvements Program Report

Risk Taking

East Greenwich WHPA: The final risk taking for the East Greenwich WHPA was determined to be **moderate**, which is consistent with the 2012 SWAP. In regard to the East Greenwich Well, KCWA has been working with the North Kingstown Department of Water Supply and the Quonset Development Corporation in regard to the Hunt River Aquifer.

Spring Lake WHPA: The final risk rating for the Spring Lake WHPA was determined to be **moderate**, which is consistent with the 2012 SWAP.

Mishnock WHPA: The final risk rating for the Mishnock WHPA was determined to be **moderate**, which is consistent with the 2012 SWAP.

Current and Future Demands

Kent County has grown moderately over the past ten years and over this same span, however, the average day demand has remained fairly constant, indicating the effective employment of water conservation measures. Anticipated future demands for the 5- and 20-year planning periods were developed utilizing population projections for each service community as well as information from hydraulic modeling reports. The following table shows the estimated ADD and MDD for 5- and 20-year planning periods.

	ADD	MDD	PEAK HOURLY DEMAND
5-year	8.00	15.19	20.23
20-year	8.10	15.38	20.48

Theoretical Water Supply values were developed for the current year and 5-and 20-year planning periods.

Theoretical Water Supply (MGD)

	Present*	5-Year (2025)*	20-Year (2040)*
Clinton Avenue	25.00	25.00	25.00
Oaklawn Avenue	0.20	0.19	0.19
Quaker Lane	10.0	10.0	10.0
East Greenwich Well	2.5 (with treatment)	2.5	2.0**
Mishnock Wellfield	2.40	2.40	1.92**
Spring Lake Well	0.00	0.26	0.21**
Total	**40.10 MGD**	**40.35 MGD**	**39.32 MGD**

***Pump station values are based on the maximum capacity (both high and low service gradient pumps operating) of the facility and may not be achieved over extended periods due to operational system constraints. Over time, all wells will see a reduction in capacity due to aging of the well through general use. Values are used for planning purposes only and should not be construed as actual available water supply.**

****20% reduction in well capacity due to aging of well.**

Comparison of the anticipated future demands verse the theoretical water supplies revealed that the KCWA will be able to meet demands for both the 5- and 20-year planning periods.

Demand and System Management

The KCWA "Learning Center" had periodically distributed educational flyers to service area businesses and residents. Funding for periodic newsletters was denied by public utilities commission effectively cutting off one method of communicating these types of concerns to the customers. The KCWA has implemented on its website a communication mechanism on issues of water quality and conservation.

Outdoor water use during the summer months contributes to the increase in the average daily demand on most, if not all, water systems throughout the State. The Water Use & Efficiency Act requires water suppliers to 'manage demand to assure the long-term viability of water resources and water supply, to provide for strategic, prudent, reasonable and necessary use of water supplies, and to control and/or curtail water use during periods of diminished water supply availability including droughts;' The Act further states that State agencies need to become advocates for removing regulations and requirements that may hinder this objective.

The KCWA employs a Meter Installation, Maintenance and Replacement (MIMR) Plan as well as an aggressive Leak Detection and Repair program. As previously mentioned, with the exception of some fire services, the KCWA meters 100 percent of the water supplied to its customers. Other exceptions of water used include municipal, fire fighting, and water system maintenance. KCWA has recently invested in a new state-of-the-art LD system which will allow a series electronic correlator to be installed and listen on the sections of the distribution system for longer periods of time. The LD correlators send the data via cellular-based communications to a cloud server that analyzes the information and displays it on a map to locate abnormalities and anomalies. The KCWA operators can then take that information and investigate specific areas of concern more efficiently. This aggressive program is one way that KCWA has been able to maintain the non-accounted water to under ten percent.

The KCWA performs preventive maintenance on its water system, the extent of which is limited by the workforce currently available to accomplish this work. Preventive maintenance practices are largely limited to aboveground activities such as exercising emergency power at the pump stations, changing

oil, checking gauges, and semi-annual flushing of water mains. The KCWA is looking to expand and formalize its preventive maintenance program.

The KCWA is not contemplating any planned extensions of the water system infrastructure in or outside of the water service district. Any desired expansion of the water system must be applied for, approved by the KCWA, and financed independently.

The KCWA has demonstrated full compliance with all of the water quality provisions of the Safe Drinking Water Act and its subsequent amendments and RIDOH regulations.

Emergency and Drought Management

The Emergency Management section, Volume III, of the Plan establishes the responsibilities and authority within the KCWA for responding to most probable emergencies and outlines specific tasks for carrying out functional and constructive solutions based on a review of the potential emergencies and risks. The procedures outlined are generally consistent with the goals of the Rhode Island Water Emergency Response Plan. It is also intended that this document provide guidance to ensure that the primary aspects of recovery from an emergency are addressed in an organized manner to aid in an efficient response and in maintaining drinking water quality and quantity.

The KCWA developed a Demand/Drought Management Policy that was approved in April 16, 2003 and revised February 15, 2006. This policy provides the KCWA the ability to proactively prepare and manage potential drought occurrences. The use and development of this policy demonstrates KCWA's commitment to drought management.

Implementation, Financial Management, and Coordination

The KCWA has developed a 20-year Implementation Schedule for system improvements. A detailed schedule outlining the individuals or entity responsible, timing, and costs associated with recommendations of this plan has been developed and is presented within the WSSMP. Where work can be accomplished by the KCWA, the responsibility has been designated "In-House." It is intended that where outside consultants and/or contractors are required, the KCWA shall take the necessary steps to advertise for and contract with such resources. The costs developed for each

recommendation include an estimate of the capital, operating and maintenance costs associated with each implementation.

It is evident from review of these documents that KCWA's continued revenue stream and control of expenses has provided a solid foundation for the Authority to continue to provide the quality service to its customers, as well as provide repayment of the debt issuance. PUC authorized rates have failed to realize the full funding needs of all programs and operational cost. KCWA will continue to file for increases as necessary to compensate for budget shortfalls associated with reduction in sales due to variation in consumer water use patterns.

KCWA water rate charges consist of a combination of a *Consumption Charge* (Rate varies according to meter size), a *Service Charge* (Flat Rate), and a State imposed *Water Quality Protection Charge*. The Consumption Charge is of a uniform block rate structure, whereby customers are charged a constant rate per 100 cubic feet of water metered. Service charges are based on size and use.

The WSSMP is intended to be reasonably consistent with the goals and policies of the Comprehensive Community plans for the communities serviced by the KCWA. Naturally, these communities must also take into consideration the ability of the KCWA to extend water service in an area zoned for development without adversely impacting existing customer service or rates for the constituents of the communities served.