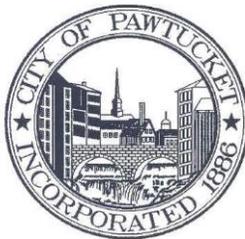


City of Pawtucket Comprehensive Plan

Approved by the City Planning Commission October 18, 2016
Adopted by the City Council March 22, 2017



City of Pawtucket

CHAPTER

3124

APPROVED

3/23/2017

AN ORDINANCE ADOPTING THE 2017 COMPREHENSIVE PLAN AND REPEALING CHAPTER 2958 OF THE ORDINANCES OF THE CITY OF PAWTUCKET AND ANY AMENDMENTS THERETO IN THEIR ENTIRETY

Be it ordained by the City of Pawtucket as follows:

WHEREAS, Section 4-1600 of the Charter of the City of Pawtucket requires the City Planning Commission to make and adopt a Comprehensive Plan, referred to in the Charter as a Master Plan, to include Land Use, Streets, and Community Facilities, and

WHEREAS, the Rhode Island Comprehensive Planning and Land Use Act, Title 45, Chapter 22.2-2 requires that all Rhode Island communities adopt a Comprehensive Plan to be in conformance with the Act, and

WHEREAS, the City Planning Commission held the necessary public hearing with the required advertising, and

WHEREAS, the City Council held the necessary public hearing with the required advertising.

NOW THEREFORE BE IT ORDAINED by the City Of Pawtucket as follows:

Section 1. That the Pawtucket City Council hereby adopts the updated City of Pawtucket Comprehensive Plan, consisting of the following elements:

- (1) Land Use
- (2) Housing
- (3) Economic Development
- (4) Natural and Cultural Resources
- (5) Open Space and Recreations
- (6) Community Facilities and Services
- (7) Transportation

Section 2. That said City of Pawtucket Comprehensive Plan shall be deemed to fulfill the requirements of the City Charter and the Rhode Island Comprehensive Planning and Land Use Act.

Section 3. A copy of this ordinance shall become part of said City of Pawtucket Comprehensive Plan

Section 4. This ordinance shall take effect upon final passage, except for purposes of guiding state agency actions, which will take effect once the Certificate of Approval is signed by the Director of Administration, an action that is necessarily preceded by the Council's adoption of this amendment.

**ORDINANCE OF THE
CITY OF PAWTUCKET**

CHAPTER # 3124

AN ORDINANCE ADOPTING THE 2017
COMPREHENSIVE PLAN AND REPEALING
CHAPTER 2958 OF THE ORDINANCES OF THE
CITY OF PAWTUCKET AND ANY AMENDMENTS
THERETO IN THEIR ENTIRETY

XXXXXXXXXXXXXXXXXX

INTRODUCED AND

~~LAI~~ ON THE TABLE

Richard Goldstein 2 / 22 / 2017 POSTPONED Clerk

LAI ON THE TABLE AND REFERRED TO THE
ORDINANCE COMMITTEE

Richard Goldstein 1 / 11 / 2017 Clerk

ORDINANCE COMMITTEE RECOMMENDS APPROVAL AND SET
RECOMMENDS A PUBLIC HEARING ON 2/22/2017

Thomas E. Moran 2 / 8 / 2017 Chair

READ AND GIVEN FIRST PASSAGE

AYES 9 NOES 0

Richard Goldstein 3 / 8 / 2017 Clerk

READ AND GIVEN SECOND PASSAGE

AYES 9 NOES 0

Richard Goldstein 3 / 22 / 2017 Clerk

APPROVED

3 / 23 / 2017

[Signature] MAYOR

Acknowledgements

The City of Pawtucket would like to acknowledge the following for their assistance in the development of this Comprehensive Plan.

Mayor Donald R. Grebien

City Council

David P. Moran, Council President

John J. Barry, III	Terrence E. Mercer
Sandra C. Cano	Timothy P. Rudd, Jr.
Thomas E. Hodge	Lorenzo C. Tetreault
	Mark J. Wildenhain

City Planning Commission

Carl I. Freedman, Chair
John E. Sawyer
Steven M. Pedro
Antero L. Martins
Monique Renaud

Department of Planning and Redevelopment

Susan Mara, Acting Director
Edward Soares, Community Development Program Manager
Michael Wilcox, Project Engineer
Herb Weiss, Economic and Cultural Affairs Officer

Table of Contents

Introduction	1
Accomplishments Since 2011	2
Public Participation	2
Land Use.....	9
Introduction	9
Current Land Use and Zoning Districts.....	10
Future Development Capacity	13
Land Use and Transportation Connection	17
Land Uses, Climate Change and Natural Disasters	18
Future Land Use	21
Goals, Objectives, and Policies.....	24
Housing	26
Introduction	26
Overview of Existing Housing.....	26
Existing Housing Patterns and Conditions	31
Future Housing Needs.....	36
Goals, Policies and Actions.....	46
Economic Development	48
Introduction	48
Overview of City Economy	48
Focus Areas	50
Playing to Pawtucket’s Strengths.....	52
Urban Agriculture.....	53
Government Support	55
Goals, Objectives, and Policies.....	56
Historic and Cultural Resources	58
Introduction	58
Overview of Historic and Cultural Resources.....	58
Arts and Culture	61
Historic Areas and Sites.....	62
Issues Threatening Resources.....	65
Local Programs and Management	65
Goals, Objectives, and Policies.....	69
Natural Resources.....	71
Introduction	71
Overview of Natural Resources.....	71

Permanently Protected Conservation Areas.....	74
Sea Level Rise Impacts on Salt Marshes.....	75
Surface Water Quality.....	75
Threats to Resources.....	78
Priorities for Land Conservation	80
Techniques to Minimize Negative Impacts from Development	80
Goals, Objectives, and Policies.....	81
Recreation	83
Introduction	83
Existing Recreational Areas.....	83
Existing and Future Recreational Needs	89
Expansion of Recreational Resources	90
Goals, Objectives, and Policies.....	91
Community Services and Facilities	93
Introduction	93
Solid Waste Management.....	95
Wastewater Management	96
Stormwater Management.....	97
Public Safety and Emergency Services.....	99
Public Schools.....	102
Public Library.....	104
Senior Center	105
Energy	106
Water Supply.....	109
Goals and Policies	115
Transportation.....	117
Introduction	117
Existing Transportation System and Planned Improvements.....	117
Transportation Improvement Program (TIP)	123
Commuting Statistics	124
Land Use and Transportation Connection	124
Transportation Needs	125
Goals, Objectives, and Policies.....	130
Implementation Schedule	132
List of Acronyms.....	132
Land Use.....	133
Housing	133
Economic Development	133
Historic and Cultural Resources	134

Natural Resources	135
Recreation	135
Community Services and Facilities	137
Transportation	138
References.....	139
City Reports and Plans	139
Other References and Sources.....	140

Appendices

Appendix A	Review of 2011 Pawtucket Comprehensive Plan Action Plan
Appendix B	Open House Summary
Appendix C	Pawtucket Water Supply Board Water Supply System Management Plan Executive Summary
Appendix D	Non-Local Roads, Functional Classification, and Eligibility for Federal Aid

List of Tables

Table 1. Brownfield Redevelopment Projects	17
Table 2. Total Number of Housing Units (1970-2013)	26
Table 3. Units in Housing Structures.....	26
Table 4. Occupied Housing Units	27
Table 5. Vacant Housing Units	27
Table 6. Status of Vacant Units	28
Table 7. Age of Housing Stock.....	28
Table 8. Average Monthly Rents by Room Size (2005-2014).....	30
Table 9. Housing Units by Planning District (2000-2013)	31
Table 10. Estimated Incidences of Childhood Lead Poisoning.....	34
Table 11. Annual Foreclosures Filed in Pawtucket (2011-2014).....	35
Table 12. Change in Race and Ethnicity (2000, 2010).....	37
Table 13. Population Age (2000, 2010).....	37
Table 14. Household Composition (2000, 2010).....	38
Table 15. Median Household and Family Incomes (2000, 2009, & 2013)	39
Table 16. Estimated Households with Housing Cost Burdens	40
Table 17. Estimated Number of City Residents with Disabilities by Age	41
Table 18. Number of Households Receiving Assistance/Supplemental Benefits in the Past 12 Months... 41	
Table 19. Percentage of Pawtucket Families and Individuals with Income Below the Poverty Level in the Past 12 Months.....	42
Table 20. Number of Bedrooms in Housing Units	43
Table 21. Estimated individuals by age group with a disability living below or at the poverty level	45
Table 22. Occupations in Pawtucket 2002-2008	49
Table 23. Fifteen Largest Private Employers in Pawtucket.....	50
Table 24. Districts on the National Register of Historic Places	59
Table 25. Properties on the National Register of Historic Places	59
Table 26. Priorities for the Pawtucket Commission on Arts and Culture	62
Table 27. Historic Cemeteries in Pawtucket	64
Table 28. City of Pawtucket Preservation Projects	66
Table 29. Public and Private Recreational Facilities in Pawtucket by Planning District.....	85

Table 30. Estimated Youth and Senior Populations by District	90
Table 31. Wastewater Pumping Stations.....	96
Table 32. Pawtucket Fire Stations.....	99
Table 33. Pawtucket School System Facilities: Capacity and Date Built	103
Table 34. Change in Student Enrollment (2000, 2010, & 2015)	103
Table 35. Projected Student Enrollment (2015-2025).....	103
Table 36. Fourth-Grade Proficiency in Math and Reading, Pawtucket and State of Rhode Island (2005, 2013).....	105
Table 37. Population Age (2000, 2010).....	106
Table 38. Summary of ESCO Recommendations	107
Table 39. Capital Improvement Projects.....	112
Table 40. Projected Average Annual System Yield and Demand for PWSB.....	114
Table 41. State-owned roads in Pawtucket	119
Table 42. Total Ridership on Routes Servicing Pawtucket.....	120
Table 43. Transportation Improvement Program, 2013-2016, Pawtucket Projects	123
Table 44. Workers 16 years and over mode of transportation to work.....	124
Table 45. Occupied housing units (renter and owner-occupied) with access to a private vehicle	124
Table 46. Intersections with Highest Incidences of Accidents.....	127

List of Figures

Figure 1. Sea Level Rise Scenarios.....	20
Figure 2. Median Sales Price for Single Family Homes in Pawtucket (2005-2015).....	29
Figure 3. Median Sales Price for Multi-Family Homes in Pawtucket (2005-2014)	29
Figure 4. Average Monthly Rents by Room Size, 2005-2014.....	30
Figure 5. Population Projections for the City of Pawtucket.....	36
Figure 6. Prime Agricultural Soils in Pawtucket	54
Figure 7. Highway Functional Classification System and Federal Aid Eligibility	119
Figure 8. Summit Bikability/Walkability Map	126

List of Maps

Map 1. Current Land Use	11
Map 2. Zoning Map.....	12
Map 3. Flood Zones.....	19
Map 4. Future Land Uses	22
Map 5. Neighborhoods/Planning Districts.....	32
Map 6. Historic and Cultural Resources.....	60
Map 7. Natural Resources.....	72
Map 8. Recreation Resources	84
Map 9. Community Services and Facilities	94
Map 10. Transportation Network	118

Introduction

Many of us find planning to be an important process when considering personal goals around education, career, or well-being. Businesses plan strategically for their future growth based on trends and customer demands, and organizations of all types often engage in strategic planning and visioning to ensure long-term success. Rhode Island communities also need to plan for their future, and are required to do so as stated in the Rhode Island Comprehensive Planning and Land Use Regulation Act (RIGL subsection 45-22.2-3(a)), herein referred to as the Act. The community planning process allows a city like Pawtucket to work with local residents and the business community to assess where it stands today, where it wants to be, and how to get there. The culmination of this process is the *Comprehensive Plan*, which covers a wide range of topics including business growth, neighborhoods, parks, historic places, municipal services, and environmental protection, among others. The Comprehensive Plan has a 20-year timeframe and prioritizes what needs to be done by outlining short, mid and long term actions.

The Act identifies several reasons why Pawtucket and other communities should plan for its future. The legislation states that Comprehensive Plans will:

- *Provide for protection, development, use, and management of our land and natural resources;*
- *Promote the appropriate use of land;*
- *Provide for the coordination of growth and the intensity of development with provisions for services and facilities;*
- *Provide a basis for municipal and state initiatives to ensure all citizens have access to a range of housing choices, including the availability of affordable housing for all income levels and age groups; and*
- *Recognize and address potentially conflicting land uses as well as shared resources in contiguous municipalities and encourage cooperative planning efforts by municipalities.*

From this list it is apparent that community planning has many economic, environmental, and social benefits for the City. Over the past several years, municipal budgets across the State have been strained, including in Pawtucket, and the City is constantly looking for new sources of revenue or opportunities to share resources with neighboring communities. Through the comprehensive planning process, the City can make better decisions about where to invest in public infrastructure and improve city services. Doing so ensures that limited financial resources are spent wisely. Responsible planning can also set the stage for job creation. Taking steps upfront to target and attract new businesses can give the City a competitive advantage by focusing resources on the type of growth it wants to see and where it should occur. Executing these plans might involve marketing efforts, cleaning up contaminated sites, or developing financial incentives.

Community planning can also benefit the natural environment. The City's rivers are significant in so many ways – historically, environmentally, and aesthetically. Through comprehensive planning, the City has been able to gradually improve water quality by identifying activities that have had a negative impact on the rivers and prioritize resources to minimize degradation. Planning can also allow the City to think about how it will be impacted by climate change, increased numbers of severe storms, and sea level rise. Keeping apprised of new data and understanding the implications of these events gives Pawtucket the knowledge necessary to make better decisions about where development happens and impacts to infrastructure and services.

In the end, community planning is about people. At the end of the planning process the City hopes to be on a path that will improve the quality of life of its residents. It is an inclusive and dynamic process that allows for meaningful engagement so everyone's ideas and needs are heard and understood. Planning ensures that the costs and benefits of growth and change are equitably distributed and no one group or neighborhood is disproportionately burdened. All residents should be able to live in a safe neighborhood, have a good job that pays the bills, breathe clean air, and drink clean water.¹

Accomplishments Since 2011

The last update of the Pawtucket Comprehensive Plan was in 2011. Since then, the City has completed many of the action items it set out to do. The review of the 2011 Action Plan is provided in Appendix A, but a sampling of completed actions is offered below:

- Designated a Growth Center encompassing the downtown and area around future commuter rail station.
- Prepared promotional marketing materials, including a portfolio of successful adaptive reuse projects and a specialized economic development web presence.
- Established a cemetery commission.
- Enhanced aesthetics of the historic bridges on the river by lighting their architectural details.
- Added a playground at Winters Elementary School.
- Completed the renovation of State Pier into a first-class docking and recreational facility.
- Completed the segment of the Ten Mile River Bikeway in Pawtucket.
- Purchased with grant funds "Red Farms Studios" (1135 Roosevelt Avenue) as a passive recreational amenity to the neighborhood.
- Implemented energy efficiency improvements to City Hall as well as Department of Public Works and Department of Recreation buildings, including upgrades to lighting and heating systems.

Many policies and actions of the 2011 Comprehensive Plan are ongoing and carried forward into this update.

Public Participation

The City used several methods to reach the public and understand neighborhood issues. These included neighborhood meetings, a city wide open house, and website postings. The City also took advantage of other efforts that engaged the public and used these events as opportunities to learn about resident needs and expectations.

Neighborhood Meetings

At the start of the planning process, several meetings were coordinated to gain input from residents about the needs of their neighborhood.

Fairlawn Neighborhood

City staff met with residents in the Fairlawn neighborhood on February 10, 2014. Residents were asked about what they felt were the City's assets and what were its challenges in providing a high quality of life for the people that lived here. The following is a summary of what was discussed:

¹ American Planning Association. PAS Quick Notes No. 54 "The Value of Planning." (2015)

Assets		Challenges	
Smithfield Congregational Church – community resource, historic resource	C.O.Z. Headstart Smithfield Ave. Playground	Ways to allow elderly to remain in neighborhoods (housing, programs, etc.) No supermarket – potential for farmer’s market, small market	Community policing Summer programs – kids Senior Services Vets Park Traffic Calming
Vets Park – for children and families, not necessarily elderly.	Lorraine Mills Mineral Spring Commercial Development	Crime and safety – generally	Stop and Go Plaza – drugs Taco Truck Lack of landscaping and weeds
Strong established neighborhood (near Cong. Church)	Active Churches Public Transportation	Make Smithfield Avenue more pedestrian and bicycle friendly	Gateways need improvements Vacant properties
CVS, Rite Aid	Slater Mill New Businesses in storefronts	Owen Ave is a cut-through/Speeding Bus Shelter Lack of services/center Lack of parking Streetscape CVS Plaza	Lighting – safety Lorraine Mills School overcrowding Redevelopment – Transfer station
Great highway access			
Park across from church			
F.A.C.T.			
Other Comments			
<ul style="list-style-type: none"> • Better parking Downtown Library • Economic Development in Concord Street Area 			

Oak Hill Neighborhood

City staff met with residents from the Oak Hill neighborhood on Jun 16, 2014. Attendees were asked what they like best about the City and their biggest concerns. The following is a list of responses:

Likes	Concerns
<ul style="list-style-type: none"> • Tennis Courts • Green spaces- trees, walking track at Max Reid field • Playgrounds • Both cemeteries • Farmer’s market/kiosk at Raleigh Ave • Excited for the new Arts and Culture Advisory Commission • Public Arts • Traffic Box Painting • People are the biggest asset of the City 	<ul style="list-style-type: none"> • Riverside Cemetery • Road Maintenance • Green House • National Grid Property • Need more recreation areas • Wants to see more police patrol/ bike patrols • Wants to see more senior shuttle services

Barton Street Neighborhood

City staff met with residents in the Barton Street neighborhood on July 22, 2014. The following is a summary of the major issues of residents:

- More playground space (with swings)
- More walking access
- More local businesses→ still have lots of empty commercial space
 - Would especially like to see another supermarket, similar to Price Right
 - Household items store

- Better High Schools
- Happy with neighborhood
 - Seen lots of improvement over the years
 - PCDC is great
- Need a homeless shelter
 - St. Paul's is the only homeless shelter in the area, and it only operates during the winter months
- Need more youth activities
 - One where the kids are being watched by an adult
- Bus Issues
 - Buses need to run later, most stop at a certain time and riders have to walk all the way from Providence in order to get home
 - Want more bus routes, used to have one that went to Lincoln Mall
 - RIPTA should survey the houses
- Really excited about the train station
- Problems at Fonseca Auto body on Dexter Ct.--> don't follow the rules that the City Council gave them
- GOOD: Police bike patrolmen
- Would like PCDC to help teach current homeowners how to maintain a home
 - More home improvement loan programs
- Would like to have a program with the city in which they cut your grass for a decent fee
- Want more sidewalks, clean streets
- Should put an "Hours of Operation" sign outside the Tot-Lot
- Some people don't realize that the park is open to all, need to make the signs clearer

Downtown

City staff met with business owners and residents in the downtown area on September 23, 2014. During this meeting, attendees were asked what you like about the downtown area/Pawtucket overall and what could be improved. The following is a summary of comments received:

What you like about the downtown area/ Pawtucket overall?

- | | |
|--|--|
| • Proximity to Providence (East Side), Boston and other MA towns | • Winter time farmer's market |
| • Historical significance- background and buildings/ architecture | • Wildlife |
| • Arts- plethora of galleries and shows available to the public, arts festival | • Skyline- Historic City Hall and Tower |
| • The Blackstone Valley River | • Nice loft spaces |
| • Bridge Projects | • Special, historic feel to the layout of the city |
| • Loft Developments | • People that live here |
| • Affordability- taxes are lower than Providence | • Slater Mill→ National Park |
| • McCoy Stadium | • 175 Main St Sale |
| • Architecture- good scale, gives our city individual character | • Visitor's Center/Theatre |
| • Potential | • Connection to Public Transit |
| • Walkable | • Proximity to 95 |
| • Parking | • Soho/Brooklyn feel |
| | • New bridge space- town landing |
| | • Armando's |
| | • Bravo |

What can be improved?

- Need a downtown supermarket, dry cleaners, retail space (*considered a priority*)
- Too many one-ways, confusing
- Too much gap between the different active spaces, needs to be more connected
- There is available parking, but it is hard to access- little to no signage
- “Broken windows” theory- streetscape improvements (trash/weeds)
- Need more signage- need to make it consistent and visible
- Need more cafes, restaurants (look at the Hope St. model)
- Need more spaces for children- there are no playgrounds downtown (*considered a priority*)
- Many vacant buildings
- Would like to have a summertime farmer’s market too
- Would like see more mixed use buildings
- Pedestrian signals

Open House

A larger city-wide open house was also held on December 4, 2015. Attendees were asked to comment on draft goals, policies and actions and to identify those that they felt were most important. Attendance was small at the open house and the City did not receive the amount of input it would have liked. Information was posted on the City’s website to solicit more input. A listing of all those policies and actions that were prioritized are in Appendix B. Below are the top three policies and actions for each topic area.

Land Use Priorities

Policies (as ranked)

- Policy LU 9. Wherever possible, encourage pedestrian and bicycle links along the riverfront as well as throughout the City. (4)
- Policy LU 8. Implement the Riverfront Development Plan. (3)
- Policy LU 10. Implement the specific recommendations within 2010 Downtown Design Plan. (3)

Actions (as ranked)

- Action LU 2. Update the Zoning around the future Commuter Rail Station to allow appropriate Transit-Oriented-Development. (3)
- Action LU 4. Review the Zoning Ordinance and consider allowing increased density where appropriate, including the downtown, mill redevelopment projects, and riverfront. (3)
- Action LU 5. Consider the rezoning of unusable vacant industrial land to open space, specifically along the Moshassuck. (3)

Housing Priorities

Policies (as ranked)

- Policy H 1. Reduce the number of illegal and substandard units. (4)
- Policy H 2. Reduce the number of vacant/abandoned houses in residential neighborhoods. (4)
- Policy H 13. Acquire vacant and abandoned properties to stabilize neighborhoods. (3)

Actions (as ranked)

- Action H1. Investigate receivership option for vacant and abandoned houses. (3)
- Action H2. Investigate housing resources to assist moderate-income homebuyers. (1)
- Action H3. Create a complete brochure and website for all housing-related opportunities for Pawtucket residents including homeownership, rental opportunities, elderly housing and housing rehabilitation. (1)

Economic Development Priorities

Policies (as ranked)

- Policy ED 7. Support and encourage policies that entice artists, art organizations and art institutions to relocate to Pawtucket. (2)
- Policy ED 18. Continue to promote the Arts District as a way to attract new businesses and visitors. (2)
- Policy ED 1. Support development that creates a strong, diverse and vital commercial downtown. (1)

Actions (as ranked)

- Action ED 4. Provide uniform signage to improve the visibility and accessibility of downtown parking. (2)
- Action ED 10. Work with the Pawtucket Foundation to implement their marketing program and social media outreach. (2)
- Action ED 5 Improve visitor access to major attractions by developing and implementing a cohesive signage program. (1)

Historic and Cultural Resources Priorities

Policies (as ranked)

- Policy HC 6. Encourage a reuse of vacant structures of historic or architectural interest. (3)
- Policy HC 7. Coordinate activities with the BRVNHC Visitor Center to promote visitors at the Slater Mill, the National Park, and other area attractions. (3)
- Policy HC 13. Work with federal, state and other agencies to promote the creation of public art and support of the art community in Pawtucket. (2)

Actions (as ranked)

- Action ED 4. Provide uniform signage to improve the visibility and accessibility of downtown parking. (2)
- Action ED 10. Work with the Pawtucket Foundation to implement their marketing program and social media outreach. (2)
- Action ED 5 Improve visitor access to major attractions by developing and implementing a cohesive signage program. (1)

Natural Resources Priorities:

Policies (as ranked)

- Policy NR 10. Offer the street tree program to City residents and enforce the landscape requirements of the Zoning Ordinance to expand the number and concentration of trees in the City. (4)
- Policy NR 4. To the maximum extent feasible, retain and restore the quality of the remaining natural wetlands within the City. (3)
- Policy NR 1. Use reduced salt level for winter snow and ice removal on city streets and sidewalks, and properly site and manage salt storage to prevent adverse water quality impacts. (2)

Actions (as ranked)

- Action NR2. Participate in planning and development of fish ladders at the Slater Mill and Main Street dams. (4)
- Action NR1. Consider expanding the tree planning program to allow public trees on private land. (3)
- Action NR8. Develop a program to highlight and promote awareness of native wildlife along the City's waterfront, including Festival Pier. (3)

Recreation Priorities:

Policies (as ranked)

- Policy R 4. Coordinate recreational facility improvements with public school site improvements and other City and privately

Actions (as ranked)

- Action R1. Develop a cycling master plan to build links from neighborhoods to bike paths. (2)

- sponsored revitalization efforts. (2)
- Policy R 8. Ensure that there are trash receptacles and bike parking at all public parks and recreation areas. (2)

- Action R10. Expand bike path to include shoreline access along National Grid and Tidewater properties. (2)
- Action R13. Provide public access to the Seekonk River. (2)

Community Services and Facilities Priorities:

Policies (as ranked)

- Policy CS 1. Improve the water quality of Pawtucket’s waterways through the elimination of combined sewer overflows by cooperation with the NBC to site combined sewer overflow treatment or mitigation facilities, as necessary. (2)
- Policy CS 10. Continue to work with neighboring businesses and organizations of the library to develop parking solutions for the area. (1)
- Policy CS 12. Allow the use of alternative pavement types on municipal parking lots, sidewalks, and other vehicular storage and travel ways to reduce stormwater runoff and to preserve architectural and landscape character. (1)

Actions (as ranked)

- Action CS 2. Complete the Long Term Energy and Sustainability Plan. (2)
- Action CS 14. Evaluate the feasibility of a new public safety complex. (2)
- Action CS 1. Continue to investigate opportunities for consolidating services with other Rhode Island communities to reduce costs. (1)

Transportation Priorities:

Policies (as ranked)

- Policy T 3. Evaluate the need to install sidewalks, curbs and drainage improvements in neighborhoods and on streets where these amenities do not exist. (2)
- Policy T 7. Continue to implement the 50/50 sidewalk improvement program. (2)
- Policy T 1. Continue with the street tree planting plan and implementation program which allows for the planting of new trees and the replacement of diseased and dying trees along the city’s street. Plant new street trees when installing new sidewalks. (1)

Actions (as ranked)

- Action T2. Work with RIDOT and FTA to advance the Pawtucket/Central Falls future Commuter Rail Station. (3)
- Action T3. Develop a linear greenway along Pawtucket riverfronts. (3)
- Action T7. Improve visitor access to major attractions by developing a comprehensive city wide signage program. (3))

Based on these priorities, those that attended the open house would like to see the City take advantage of new opportunities, such as the future Commuter Rail Station, and development on the riverfront. Building the bike path network with existing recreation and historic properties and resources are also important. Water quality is also an important issue and implementing policies that minimize adverse impacts from future development and redevelopment activities.

These rankings were used to develop the Implementation Schedule.

City's Website

All draft chapters were posted on the City's website as they were developed. The public was welcome to provide comments on materials throughout the planning process.

Public Hearings

The City is required to hold at a minimum two public hearings: one with the Planning Commission and one with the City Council.

- On October 18, 2016, the City Planning Commission held a public hearing and approved the Comprehensive Plan.
- On March 22, 2017, the City Council held a public hearing and adopted the Comprehensive Plan as an ordinance.

Land Use

Introduction

Land use considerations are closely related to virtually every other facet of community planning – natural resource protection, economic development, neighborhoods, parks, public services, etc. This chapter examines how land is used throughout the City and whether those uses are meeting growth and investment goals.

It should be noted that the U.S. Census reported that in 2010 Pawtucket had lost approximately 1,800 residents since 2000. Further, over the next several decades, the RI Statewide Planning Program projects that Pawtucket’s population will continue to decline 7.6 percent (about 5,400 residents) by 2040. To remain a vibrant community, the City would like to maintain its existing population, but also attract new residents and businesses. Many approaches to reach this goal are proposed throughout the comprehensive plan, but this chapter attempts to bring them together and show how they are interconnected through physical land development policies. Three example approaches are environmental cleanup, creative placemaking, and transportation improvements.

Unlike more suburban and rural communities, Pawtucket has very little land that is actually buildable; therefore, the City’s growth will be primarily redevelopment and infill. In its land use policies, Pawtucket focuses on allowing flexibility in redevelopment while still protecting existing neighborhoods. The design of infill development needs to be in the context of the area. In addition, when looking at the land that is vacant or underutilized, many parcels have environmental concerns around contamination from historic uses. Environmental clean-up adds another layer of complexity as well as cost, to development in the City.

The City’s land use and development policies should encourage responsible growth. Pawtucket is an interesting and active place for its residents and current businesses. It wants to build on this to attract new establishments and future residents of all age groups and interests. The City’s leading edge over other municipalities is its growing arts and culture community, which it supports with leadership at the mayoral level and through sponsorship of local events. Pawtucket uses creative placemaking principles to guide public and private investments downtown, along the riverfront and other strategic redevelopment areas.

In addition, because Pawtucket is an urban dense community, transportation is an important factor for the sustainability of future development initiatives. Transportation becomes the driving force behind land development policies around the future commuter rail station, improved pedestrian and bike infrastructure, and the need for more efficient public transit. It’s critical that residents as well as customers and employees of local businesses are able to travel to and through the City efficiently and safely.

All of these initiatives, and others discussed in this chapter, must be interwoven into a set of land use policies that create a regulatory system that is efficient and transparent, and that will result in projects that are innovative and sustainable to meet the needs of residents and the business community both now and in the future.

Current Land Use and Zoning Districts

Map 1 is a snapshot of the City's current land uses (2011). They are predominantly high-density residential with equally significant industrial and commercial uses along major roads. Communities that abut Pawtucket to the north, west and south have similar land uses where they meet the Pawtucket city line. The eastern portion of the City has a large open space network along Ten Mile River where it abuts the Town of Seekonk, Massachusetts, which has a lower residential density.

Map 2 depicts the City's zoning. Reflective of the City's land uses, a majority of Pawtucket is zoned for residential uses. The following provides an overview of each zoning district.

Residential Limited (RL). This zone is intended to establish low-density single-household dwelling areas.

Residential Single-Family (RS). This zone is intended to establish single-household dwellings where such single-household dwellings now prevail.

Residential Two-Family (RT). This zone is intended for neighborhoods consisting of interspersed one and two-family dwellings.

Residential Multifamily (RM). This zone is intended to continue single-household and multi-household dwellings of specified density and building height in those areas where such development is prevalent.

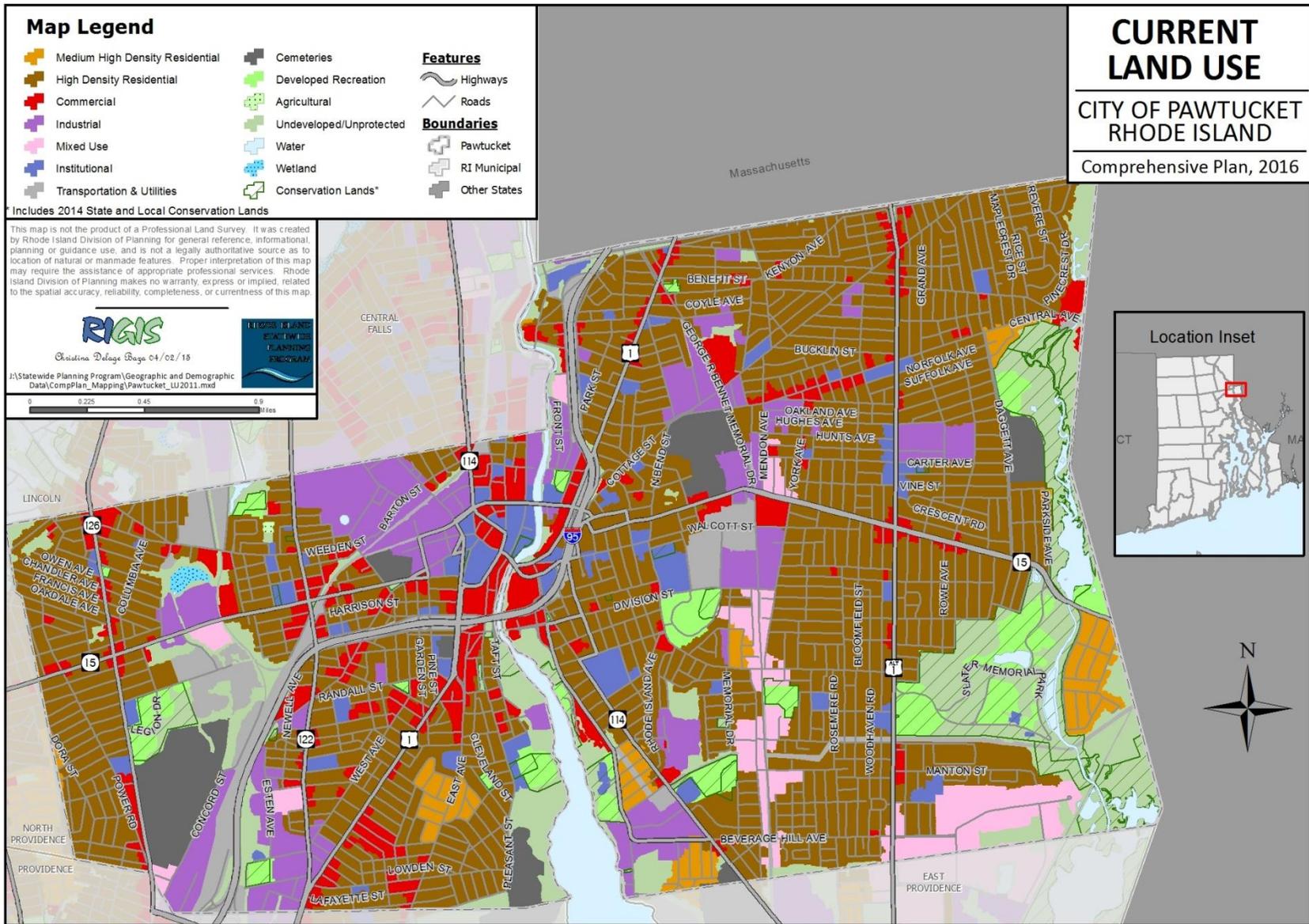
Residential Elevator (RE). This zone is intended to establish high-density residential structures around the downtown area.

Riverfront districts:

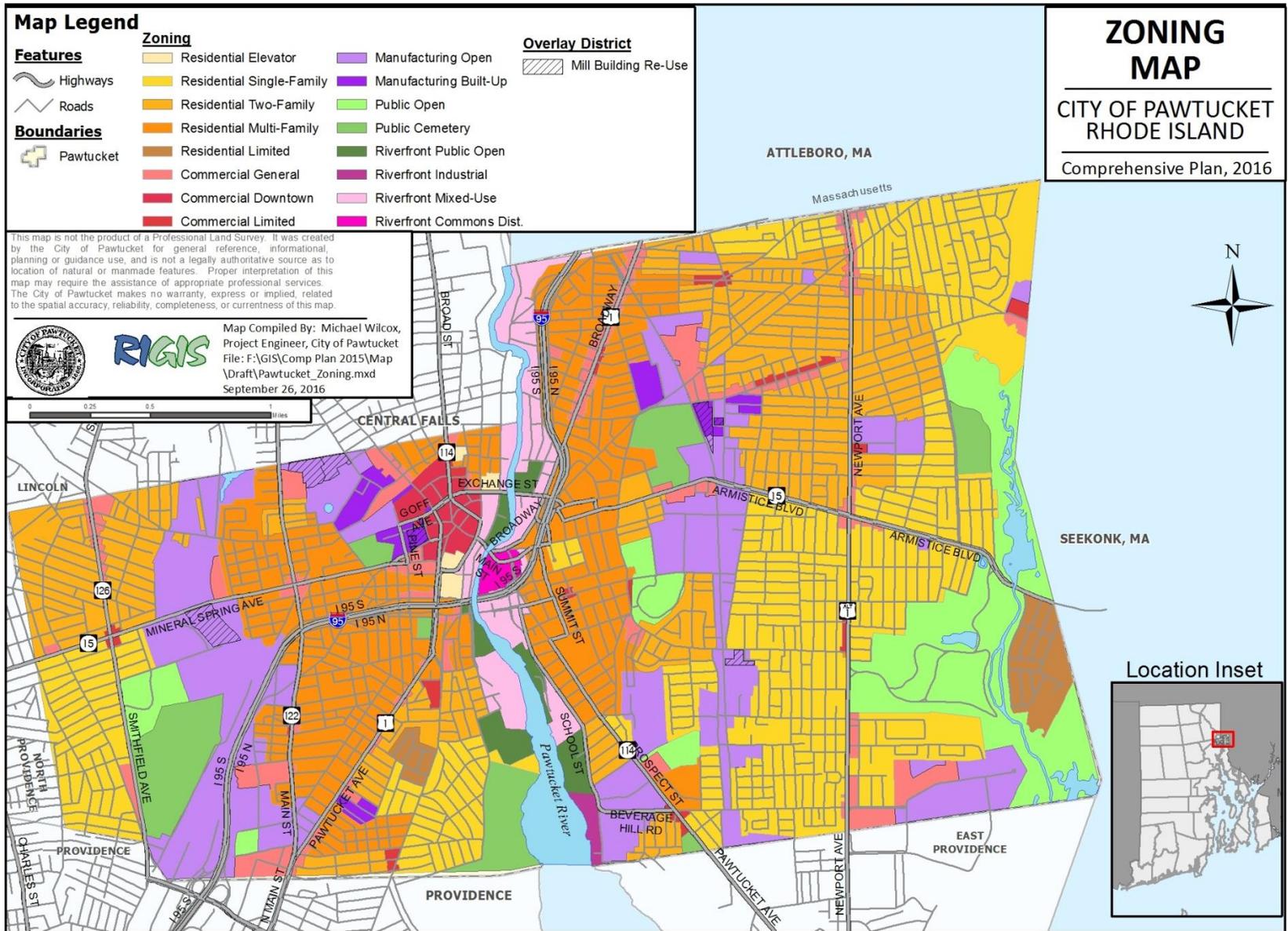
Riverfront Public Open (RD1). The purpose of the RD1 Riverfront Public Open District is to promote and preserve public spaces, including parks, riverwalks and public amenities along the riverfront.

Riverfront Industrial (RD2). The purpose of the RD2 Riverfront Industrial Zoning District is to preserve existing industrial uses that are compatible with uses along the river in a manner that protects the river from industrial discharge, including stormwater runoff from large expanses of impervious paving.

Riverfront Mixed-Use (RD3). The purpose of the RD3 Riverfront Mixed-Use Zoning District is to promote a mix of residential, commercial and light industrial uses that are compatible with uses along the river, including housing and commercial buildings; preserve and adaptively reuse existing mill-type structures; promote variations in the siting of structures and amenities; and to enhance view corridors to the river.



Map 1. Current Land Use



Map 2. Zoning Map

Commercial Local (CL). This zone is intended for neighborhood commercial areas that primarily serve local neighborhood needs for convenience retail services and professional office establishments.

Commercial General (CG). This zone is intended for commercial areas that serve City-wide needs for retail, services and professional office establishments.

Commercial Downtown (CD). This zone is intended to enhance and restore the downtown area.

Industrial Open (MO). This zone is intended for light industrial uses that accommodate a variety of manufacturing, assembly, storage of durable goods and related activities.

Industrial Built-Up (MB). This zone is intended for existing high-density industrial structures that are used for manufacturing and storage purposes.

Public Open (PO). This zone is intended to preserve open space recreation use and, in certain instances, public education uses.

Public Cemetery (PC). This zone is intended to retain cemetery land for its designated purposes.

Riverfront Commons District (RCD). The purpose of the Riverfront Commons District RCD is to encourage use and development of previously developed buildings, land, and/or sites by promoting flexibility in use and design being cognizant of its proximity to the Blackstone River.

Overlay zoning districts. Overlay districts are superimposed on existing zoning districts or part of a district and which impose specified requirements in addition to, but not less than, those otherwise applicable and/or allow alternate uses.

Historic Districts. These overlay zoning districts are designated in accordance with Title 45, Chapter 24.1, of the General Laws of Rhode Island, as amended, which declares the preservation of structures of historic or architectural value to be a public purpose and authorizes the creation of the Historic District Commission for that purpose in the City of Pawtucket.

Flood Hazard Districts. The Flood Hazard District includes all special flood hazard areas: Zone A, A1-30, AE and Zone V, V1-30, VE on the City of Pawtucket Flood Rate Maps (FIRM) and the Flood Boundary and Floodway Maps, as amended. Activities with the flood hazard areas must comply with state and federal regulations and meet performance standards.

Mill Building Reuse District (MBRD). The MBRD creates a zoning overlay district within the MB and MO Zones on sites containing obsolete or underutilized manufacturing and/or industrial buildings. The MBRD designation allows the development of such sites according to a master plan for mixed use. All such reuse developments shall be done in accordance with Article VA of the chapter.

Future Development Capacity

The City is considered to have little to no available land for new development. New growth will occur most exclusively as infill or property redevelopment. The City focuses its revitalization policies in the

downtown, along the riverfront, at the future commuter rail station, mill redevelopment and brownfield redevelopment. These efforts approach development through a comprehensive lens, evaluating the transportation, economic, open space, and housing needs of the neighborhood or project site and how it can link to the larger community. This is indicative of the KeepSpace Initiative² that the City participated in 2009 and 2010. Several efforts identified in this Comprehensive Plan are a result of the initiative and spearheaded by the Pawtucket Central Falls Development Corporation (PCFDC). Their work continues to move the KeepSpace projects forward and the City will provide support.

Downtown

Downtown is the City’s hub for business growth, historic preservation, cultural activities, recreational opportunities, transportation initiatives, and residential development. While these efforts are discussed in greater detail in other chapters of this comprehensive plan, from a land use perspective, the focus is on having the physical development and redevelopment policies that support them. Land development policies for downtown need to increase residences, allow mixed use development and attract offices, restaurants, retail and other types of uses that encourage street activity day and night. An example of a recent success is the redevelopment of the Gately Building downtown, a former commercial structure that sat vacant for over 20 years.³ PCFDC completed the renovations of the building in 2016, and it now is houses 13 residential units with commercial space on the first floor, including a café, food market, and job training business.

Creative Placemaking

In creative placemaking, partners from public, private, non-profit, and community sectors strategically shape the physical and social character of a neighborhood, town, city, or region around arts and cultural activities. Creative placemaking animates public and private spaces, rejuvenates structures and streetscapes, improves local business viability and public safety, and brings diverse people together to celebrate, inspire, and be inspired.
- Ann Markusen and Anne Gadwa, *Creative Placemaking* (2010)

The arts and culture community in Pawtucket is large and is a significant portion of the City’s economic activity. *Creative placemaking* is used to attract other artists and those who want to live and work near artistic people.⁴

The 2011 *Downtown Design Plan* analyzed these issues and identified several regulatory barriers to redevelopment, which have since been addressed. Zoning reform that was implemented for the downtown area removed special use permits for desirable uses, eliminated minimum parking requirements, and developed design guidelines to help developers to redevelop within the historic character of the area, while exploring more contemporary styles where appropriate.

Riverfront Redevelopment

Redevelopment along the Blackstone and Seekonk Rivers offers many opportunities for investments, extending from the Central Falls/Pawtucket city line through downtown to Festival Pier south of I-95.

² Launched by RI Housing in the summer of 2007, KeepSpace is a widely inclusive partnership initiative to change the way we think about, build and approach the creation of sustainable communities. The focus was, and is, to bring housing, economic, environmental, transportation, and other local advocates together and talk holistically about communities and their future. This includes government, private and non-profit entities.
<http://www.keeppspace.org/Pawtucket-Central-Falls/>

³ A project that came out of the KeepSpace Initiative.

⁴ <http://arts.gov/sites/default/files/CreativePlacemaking-Paper.pdf>; Also see “Arts and Culture” section of Economic Development Chapter.

The 2013 *River Corridor Development Plan* was an effort with the City of Central Falls, City of Pawtucket and the Pawtucket Foundation to develop a common, integrated vision. This plan and other public and private initiatives are moving the City's vision for the riverfront forward.

Tidewater

Tidewater is a 15 acre parcel on the western side of the Seekonk River along Taft Street. National Grid, owner of 10 acres of the property, is working with the City to develop a collective vision to redevelop the property that includes a mix of uses and public access to the river. There is known contamination on the site from past uses, including storage tanks and support structures, which will significantly shape any future designs of the property. Preliminary concepts include a public park, residential, commercial and office uses. Because National Grid's substation and gas regulator need to remain on the property, these types of uses can act as a buffer from redevelopment activities and National Grid's equipment. A linear park is also proposed along the river for the length of the property. Pedestrian and bike connections can be made to Max Read Field to the south, which could further connect to the bike path along Blackstone Boulevard less than one mile from the field. Tidewater also provides a platform to make connections between new activities on the site and the West Riverview and Oak Hill neighborhoods.

Division Street

The City Council is currently evaluating a redevelopment proposal for a 10-acre parcel on the riverfront bordered by Division Street, Water Street and School Street. The proposal envisions a mixed-use development of multi-family residential, medical office, retail and a public riverwalk. The City's RFP for the site specifically requested a proposal that was multi-use and provided for public access along the riverfront

Festival Pier

South of Division Street is Festival Pier, which opened in the summer of 2015. The old state pier was redesigned with new parking, lighting, benches, picnic tables, a dock, and boat ramp. The project also involved environmental cleanup. The new park is seen as a cornerstone for redevelopment efforts along the Seekonk River. It is already a popular fishing spot and central hub for the annual Rhode Island Chinese Dragon Boat Races and Taiwan Day Festival. In 2015, the Blackstone Valley Riverboat Explore used Festival pier as a departure point for cruises in addition to its regular cruises at the Central Falls Boat Landing.

Commuter Rail Station and Transit-Oriented Development

The cities of Pawtucket and Central Falls began examining the potential to restore access between Boston and Providence via commuter rail service in 2005. The cities believe that developing a commuter rail station would benefit the residents by increasing mobility and access to economic opportunity as well as benefit the cities overall by improving the environment and encouraging economic growth. With funding from RIDOT, Federal Transit Authority (FTA), and Federal Highway Administration (FHWA), the cities prepared a feasibility study to answer their initial questions about the viability of re-introducing commuter rail service in Pawtucket/Central Falls. The key findings of the feasibility affirmed that commuter rail service in Pawtucket/Central Falls was indeed viable based on the following findings:

- Of the 30 weekday commuter rail trains passing through Pawtucket/Central Falls, based on the schedule as of July 2006, 23 could stop at a commuter rail facility without adversely impacting Amtrak intercity, MBTA commuter rail, or Providence and Worcester Railroad's (P&W) freight rail service.
- Approximately 1,500 weekday daily boardings were projected for the commuter rail station.
- There are numerous opportunities in the surrounding areas for transit-oriented development (TOD).

Several locations in both Pawtucket and Central Falls were evaluated for a station, and the site chosen is between Barton Street, Conant Street, Goff Avenue and Dexter Street at the city line in Pawtucket. RIDOT, in 2015 with federal funds and the required match, contracted a consulting firm to undertake preliminary engineering of the station. The following year, RIDOT received additional funding from the federal Transportation Investment Generating Economic Recovery (TIGER) program (\$13.1 million) to be put toward the next phase of planning and property acquisition.

As noted above, one of the key findings from the feasibility study is the opportunity created by the commuter rail station for additional investment in its vicinity as a TOD and development of a Train Station District. The City will determine the extent of the station's influence as a way of delineating the boundaries of the District and assessing its full buildout potential. For example, to the south and east, the District can extend and connect with downtown. To the north, the District can also connect into Central Falls along Dexter Street and into the Barton Street neighborhood. Also, north of the tracks the City owns two parcels and the District can open investment opportunities in these locations. Implementation of the District will be done either through a new zoning district or an overlay district and will require coordination between Pawtucket and Central Falls.

Guidelines are another tool the cities can use to provide direction for the physical design of public and private development and investments within the District. They can show examples of development that are at an appropriate scale and density for the area. Guidelines can also be used as a way to promote walkability, biking, and access to RIPTA service.

Mill Building Redevelopment

Recent trends in Pawtucket include the redevelopment of vacant and underutilized mills. The loss of industrial land uses in the City is a continuing trend and is likely to result in the rezoning of these types of properties. The City is supportive of this reuse, provided that it does not displace active

Transit Oriented Development (TOD) is a type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation...Successful TOD provides people from all walks of life with convenient, affordable and active lifestyles...

Some of the benefits of TOD include:

- Reduced household driving and thus lowered regional congestion, air pollution and greenhouse gas emissions.
- Walkable communities that accommodate more healthy and active lifestyles.
- Increased transit ridership and fare revenue.
- Potential for added value created through increased and/or sustained property values where transit investments have occurred.
- Improved access to jobs and economic opportunity for low-income people and working families.
- Expanded mobility choices that reduce dependence on the automobile, reduce transportation costs and free up household income for other purposes.

- Reconnecting America

<http://reconnectingamerica.org/what-we-do/what-is-tod/>

manufacturing uses. However, in many cases the layout of the older mill buildings is no longer viable for reuse in an industrial capacity. A number of these mills have been rezoned to allow for commercial uses. This led to the City’s designation of a Mill Building Reuse District (MBRD) overlay district to allow for the types of uses that are desirable in these redevelopments. Designation as an MBRD requires the submission of a Master Plan for redevelopment, including parking, landscaping, stormwater management, etc. The submission package allows the City to take a comprehensive look at the redevelopment, while allowing the applicant more flexibility in terms of future uses.

Brownfields Redevelopment

Because of its industrial past, many properties within Pawtucket have some degree of contamination from hazardous substances. The City of Pawtucket has worked over the past decade to secure over \$1 million in U.S. Environmental Protection Agency (EPA) Cleanup Grant funding. The City has also worked with the Rhode Island Department of Environmental Management (RIDEM) on its Targeted Brownfields Assessment program to make funding available for site assessment. Completed projects include Festival Pier, Newman/Crosby Soccer Complex, and three redevelopment parcels on Front Street. Table 1 lists brownfield clean-up projects the City is currently coordinating.

Table 1. Brownfield Redevelopment Projects

Project	End Use	Status
354 Pine Street	Redevelopment Site	50 % Complete
Conant Street Parking Lot	Parking Lot	Began Nov. 2015
Laurel Hill Playground	Housing Development	Spring, 2016 Start
Branch Street Properties	Housing Redevelopment	December, 2015 Start

Source: Department of Planning and Redevelopment, 2015

Recently, RIDEM allocated several Phase I assessment grants specifically to the Pawtucket/Central Falls KeepSpace area. As of mid-2016, six assessment grants have been awarded to private property owners and more were recently announced as being available. The City will continue to advocate for these efforts and continue the efforts to remediate contaminated sites.

Land Use and Transportation Connection

As also discussed in the Transportation Chapter, creating sustainable land development (or transportation) policies is recognizing the relationship between land uses and transportation networks. The City clearly acknowledges this connection through the development of the future commuter rail station and the use of a TOD strategy, as noted above. Development around the commuter station will be successful if there are multimodal links to downtown and surrounding neighborhoods.

Transportation systems also support the City’s effort in placemaking. The goal of transportation systems is to connect people with goods and services as well as social activities. In urban areas, the local streets are many times where this exchange happens and themselves become destinations. In these denser areas, the car can often times inhibit access these opportunities.⁵ As redevelopment in the city moves forward, decisions around access should recognize these connections and build networks for pedestrians, bikes, public transit, and “shared” services such as Zip Cars.

⁵ <http://www.pps.org/blog/integrating-land-use-and-transportation-planning-through-placemaking/>

Land Uses, Climate Change and Natural Disasters

Understanding areas that are projected to be impacted by climate change and natural disasters will help the City evaluate land use policies to reduce damage to life and property, both public and private. The Pawtucket Hazard Mitigation Plan (Mitigation Plan) assesses the City's risk of being impacted by natural hazard events, such as hurricanes, blizzards, and floods, as well as climate change and sea level rise. Based on this assessment, the Mitigation Plan outlines strategies the City will implement to reduce post-disaster costs and minimize economic and social disruptions. According to the Mitigation Plan, Pawtucket is most vulnerable to severe weather (inclusive of Nor'easters, winter storms, ice storms, severe thunderstorms, and tornadoes), flooding and dam failure, and urban fire.

The Mitigation Plan lists areas and infrastructure most vulnerable to these high-risk events and outlines actions the City can do to mitigate impacts. Actions are grouped into the following categories:

- Planning and Prevention
- Property Protection
- Natural Resource Protection
- Structural Projects
- Emergency Services
- Public Education and Awareness

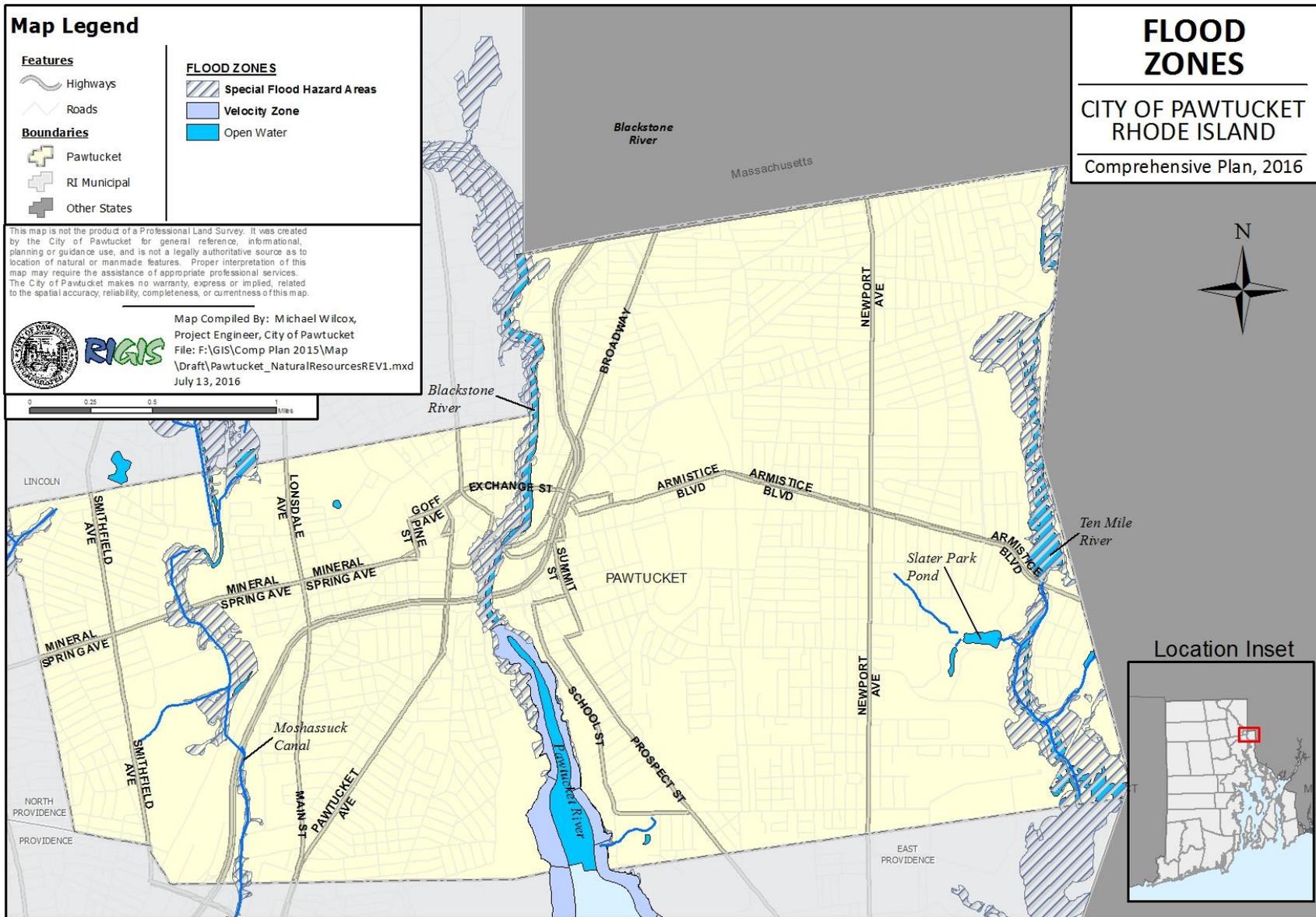
All of these have some relevance to future land use planning; however, the comprehensive plan focuses on land use policies that impact future development and investments in areas of the City that are most vulnerable to natural hazards and climate change. The following pulls from the Mitigation Plan and supplements where needed to meet future land use objectives. Resources that help in this process are the Federal Emergency Management Act (FEMA) floodplain information and sea level rise scenarios developed by the Rhode Island Division of Planning with assistance from the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center.

As already noted, there will be little new development in Pawtucket. Growth will take the form of redevelopment of existing structures and infill. Areas most vulnerable to flooding are those along the City's rivers, which is where some of the City's land use policies for reinvestment are targeted. Map 3 depicts areas prone to flooding, specifically during the 100-year flood or from storm-induced velocity wave action (velocity zone). The City's industrial rivers, the Blackstone and Moshassuck, are more likely to have existing development in the 100-year floodplain because of the historic use of water to power the mills. The City's current Flood Hazard District overlay zone ensures that all development and redevelopment activities comply with federal and state standards for health and safety to protect investments.

Source: RI Division of Planning and NOAA Coastal Services Center

Figure 1 shows the areas of the City that could be inundated by one foot, three foot and five foot increases in sea level. Riverfront areas that are projected to be impacted by sea level rise are located below the falls at Slater Mill, particularly those more low-lying south of I-95. Properties that the scenarios show could be impacted by sea level area, particularly an increase of five feet, are also targeted for new investment by the City and private developers, including Tidewater and Festival Pier.

As more refined climate change and sea level rise data become available, the City will monitor conditions along its rivers as investments are made.





Source: RI Division of Planning and NOAA Coastal Services Center

Figure 1. Sea Level Rise Scenarios

It should be stressed that the projected timeframe to see an increase of three to five feet in sea level is nearly 100 years, longer than the timeframe of this plan. Even so, the City has begun to think about its implications. The Mitigation Plan has several actions that support redevelopment in these areas in a way such that investments are resilient and adaptive to changes in sea level or increased storm events. One example is the development of programs for flood proofing existing industrial structures in the floodplain with incentives for private property owners. Implementation of low impact development (LID) techniques to manage stormwater and runoff is also a suggested pursuit. While implementation of LID in urban environments can be a challenge due to the lack of available open land, incremental projects can add up to have a beneficial effect. Examples that are commonly used in more urban areas focus on strategies that reduce pavement and allow stormwater and runoff to infiltrate. They include rain gardens, green roofs, and pervious pavement.

Low impact development (LID) is both a site planning process and an application of small-scale management practices that minimizes stormwater runoff, disperses runoff across multiple locations, and utilizes a more naturalized system approach to runoff management.
- Rhode Island Stormwater Design and Installation Standards Manual (December 2010)

Future Land Use

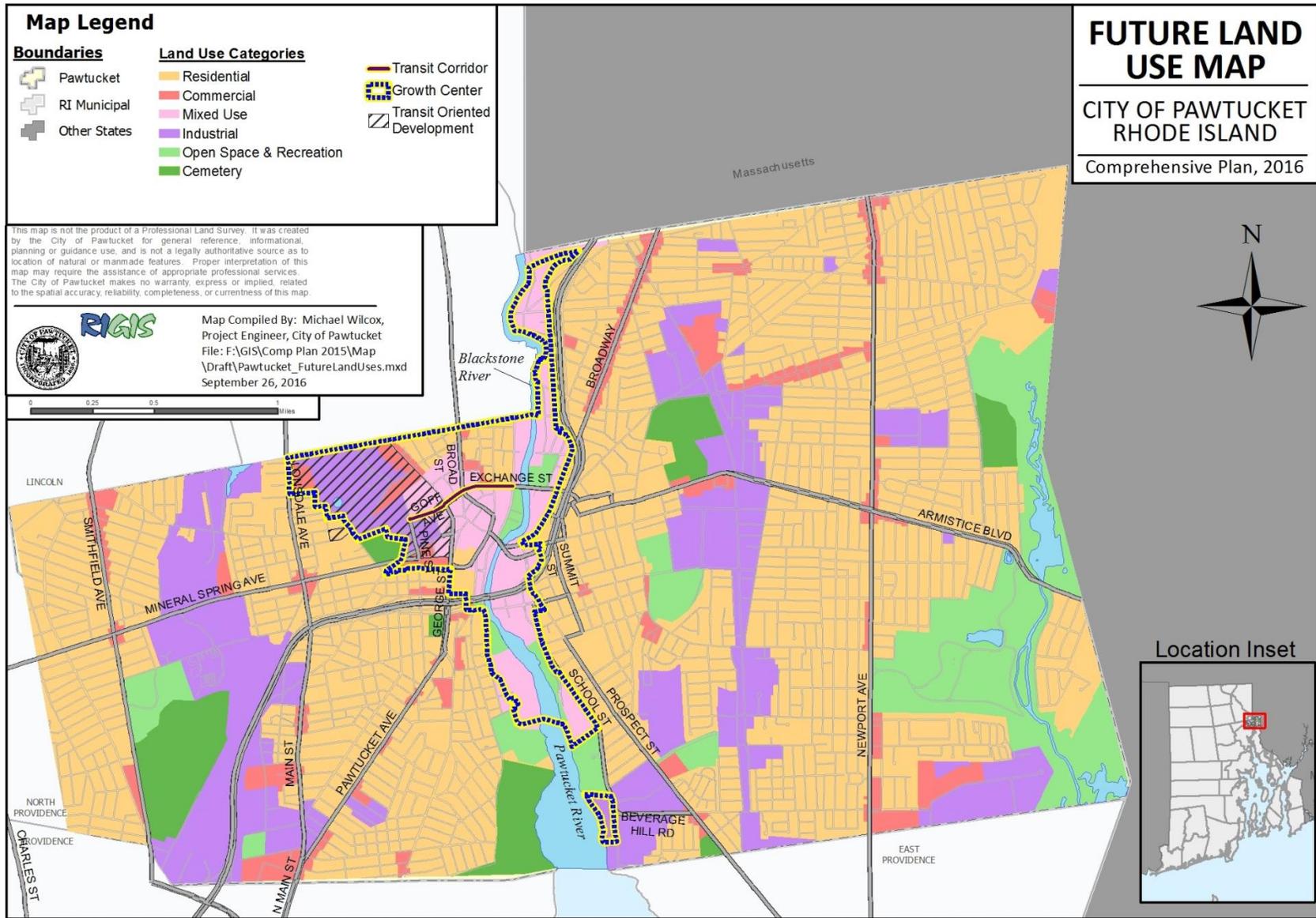
The Future Land Use Map (FLUM) represents how the City sees itself in the next 20 years (Map 4). It is intended to help decisions makers create policies around growth and redevelopment. It also can provide direction as they assess proposed private projects and public initiatives.

Pawtucket's FLUM is consistent with the policies of *Land Use 2015* and the land uses depicted on Figure 121-02(1) in that plan. Pawtucket is located entirely within the state's designated Urban Services Boundary, an area served by existing public infrastructure (water, sewer, etc.) that supports development and growth. Pawtucket's FLUM shows redevelopment and reinvestment in the City's historic economic center and along its riverfront needed economic activity to support the social and cultural vitality of the City, but in a way that is mindful of anticipated impacts by natural hazards and sea level rise, but also.

Pawtucket Downtown Growth Center

The Pawtucket Downtown Growth Center (PDGC) encompasses the future commuter rail station, riverfront, downtown and the City's Arts District. This area is the focus of many of the City's redevelopment efforts; including initiatives related to economic development, environmental clean-up, recreation, transportation improvements, and historic and cultural activities. It is a mix of residential, commercial, and industrial uses as well as civic and public spaces and buildings. These uses are located in and around the downtown at a density that, when fully redeveloped, will support an active mixed use downtown. Residential development within the PDGC consists of multi-family neighborhoods, senior housing and residential mill conversions. Civic and public spaces such as the City's Library, City Hall, the historic Slater Mill and two riverfront parks are also in the PDGC. Commercial uses are centered around the downtown and also along Broad Street and Dexter Street.

Designation of the PDGC gives the City an opportunity to provide incentives for public and private investment in the future. This area is the social, cultural and economic hub of the City and has the greatest opportunities for creative placemaking, a guiding principal for economic and land development.



Future Land Use Categories

Residential

The minimum lot size for all residential zoning districts is 5,000 square feet. Higher density, approximately 14 dwelling units per acre (one unit per 3,000 square feet), multi-family residential development is found primarily near the center of the City close to the mills and major transportation routes. Current zoning allows 14 per acre for multi-family homes and two parking spaces per unit. However, recent mill redevelopment projects have residential densities above what is allowed by zoning for new development. As residential density becomes less dense throughout the neighborhoods, the mill redevelopment projects are bringing higher residential densities adjacent to the downtown. Less dense, two-family and single-family residential development is generally found to the east and west of the multi-family districts. Current zoning allows eight units per acre for single family homes.

The City of Pawtucket has a number of existing non-conforming commercial uses within residential neighborhoods. These small retail/office uses are appropriately scaled for the neighborhoods, located along major streets or corners. Allowing them to continue to provide services to the surrounding neighborhoods is consistent with the Comprehensive Plan. Because they are existing non-conforming, they will not increase in size or intensity, without review by the Zoning Board of Review, and notification of the neighbors. Non-conformance is a tool that the City uses to ensure that these small-scale commercial uses remain at an appropriate scale

Commercial

The Commercial land use category consists of diverse commercial areas. Large commercial establishments satisfy the major shopping requirements of residents city-wide and tend to be more auto than pedestrian oriented. These uses are found throughout the City primarily along the major streets, including all of the numbered routes that run through Pawtucket – Routes 15, 122, 1, 1A, and 114. Smaller-scale commercial uses serve the day to day convenience shopping of people living nearby and are primarily found within established neighborhoods.

Mixed Use

The downtown and riverfront are the focus of economic, transportation and residential reinvestment opportunities. To promote more activity, the City needs to accommodate higher residential density and allow mixed use development. Because of the desire to have higher densities and more activity, development should be designed for pedestrians and parking managed efficiently. Downtown is also the transportation hub for the City and investments in RIPTA services need to be discussed in cooperation with RIPTA to ensure all user needs are met safely and efficiently. The City has several studies that recommend regulatory and design strategies in the downtown and riverfront to meet all these objectives. Areas designated as “mixed use” may not actually be parcels with more than one use; however, the purpose is to promote diverse activities.

Industrial

Because of the City’s industrial past, much of the land identified as Industrial is primarily located along the Blackstone or Moshassuck Rivers. There are, however, a significant amount of vacant industrial buildings throughout the City. In general, the historic industrial areas are less viable than the newer industrial infrastructure for reuse as industrial because of the current manufacturing needs for space. The City will remain open to reuse of these structures and promote the use of the MBRD overlay.

Transit Oriented Development

A new Transit Oriented Development District will focus on redevelopment of the future commuter train station and adjacent land. The new district will encourage redevelopment and infrastructure investments that are at an appropriate scale and density, and promote design that is walkable, bike friendly, and has access to RIPTA service.

Open Space and Recreation

Land within this category is dedicated for recreational uses such as parks, playgrounds and ballfields, or protected open space areas.

Cemetery

These areas are locations of the City's cemeteries.

Mill Building Re-Use

Properties within this land use category are mill buildings in industrial areas that have been redeveloped to accommodate a mix of uses. The floating overlay zone Mill Building Re-Use District has been applied to these areas.

Inconsistencies Between the FLUM and Zoning

To implement the vision proposed on the FLUM, the City's Zoning Ordinances must be consistent with the proposed future land uses. The area designated on the FLUM as Train Station District is the only area inconsistent with the City's Zoning Ordinances. As the commuter train station moves forward through its next planning phase, the City will work with Central Falls and amend its regulations to allow this type of development to occur as a joint effort between the two communities.

Goals, Objectives, and Policies

Goals

Goal LU 1. Protect successful land uses: established residential neighborhoods; viable industrial areas; and public open space and recreation areas.

Goal LU 2. Invest in the City's designated growth center and recognize the different objectives of its components:

- Downtown
- Riverfront
- Transit Oriented Development District around the future commuter station
- Historic buildings

Objectives

Objective LU 1. No loss of viable industrial land and buildings.

Objective LU 2. No conversions of residential to commercial within established residential neighborhoods.

Objective LU 3. No loss of publicly owned open space and recreation land.

Objective LU 4. Increase in the amount of available public recreation areas.

Objective LU 5. Reduction in the amount of vacant industrial space.

Objective LU 6. Decrease of residential and commercial vacancy within downtown.

Objective LU 7. Increase residential density within the downtown.

Policies

Policy LU 1. Protect existing residential neighborhoods from undue encroachment of conflicting non-residential uses.

Policy LU 2. Protect existing neighborhoods (except downtown, riverfront and mills) from increasing housing densities that lead to overcrowding, shortage of available off-street parking and traffic congestion.

Policy LU 3. Control strip commercial development by promoting small-scale neighborhood commercial areas.

Policy LU 4. Maintain an updated file on all brownfields sites and encourage the remediation of these sites where necessary.

Policy LU 5. Encourage infill development that reflects the built character of the surrounding area.

Policy LU 6. Protect and preserve environmentally sensitive areas through open space acquisition.

Policy LU 7. Accommodate new industrial, commercial, residential and other developments through carefully considered rezoning.

Policy LU 8. Implement the Riverfront Development Plan.

Policy LU 9. Wherever possible, encourage pedestrian and bicycle links along the riverfront as well as throughout the City.

Policy LU 10. Implement the specific recommendations within 2010 Downtown Design Plan.

Policy LU 11. Continually review the Zoning Ordinance to maintain relevancy.

Policy LU 12. Continuously monitor new data and findings for climate change and sea level rise for implications to City infrastructure and other community assets.

Policy LU 13. Continue to support the PCFDC as they move projects from the RI Housing KeepSpace Initiative forward.

Housing

Introduction

Housing in Pawtucket is very diverse and is reflective of the trends in housing development over many decades. Many of the homes in Pawtucket were built before World War II and most were concentrated around the mills in the center of the City. Much of Pawtucket’s housing built during that era (1874-1920) consists of three-story wooden structures. Almost 50 percent of the city-wide housing stock is made up of these multifamily structures. After World War II, residential development shifted to lower density single-family units and a more suburban style. Through the 1950s, residential development expanded outside the urban core, and the City’s outer neighborhoods were created. In the 1960s, a combination of federal housing policies affecting public housing authorities and private developers resulted in the construction of five high-rise apartments for senior citizens in and around the downtown area. Although the emphasis remains on single-family homes, mill buildings were recently converted into residences. Because there is little undeveloped land in the City, it is anticipated that the vast majority of any new housing units will be part of redevelopment projects.

Overview of Existing Housing

Much of Pawtucket’s land area is developed. Because so little vacant land remains, much of the residential building occurring today takes the form of infill development. Table 2 shows the number of housing units in Pawtucket from 1970 to 2013. Since 1970, the number of housing units has increased by almost 4,000. However, most of that growth occurred prior to 1990. From 1990 to 2013 the number has remained relatively stable.

Table 2. Total Number of Housing Units (1970-2013)

	1970	1980	1990	2000	2010	2013
Total	27,819	29,763	31,615	31,819	32,055	31,789 (MOE +/-587)

MOE: Margin of error

Source: U.S. Census, 1970-2010 Censuses and 2013 American Community Survey 5-Year Estimates (2009-2013)

Types of Housing and Occupancy

Reflective of Pawtucket being a dense, urban community, at least two thirds of its housing units are multi-family (Table 3) and renter-occupied (Table 4). The percentage of owner- and renter-occupied units has been relatively stable, with renter-occupied just higher than 50 percent since 1980.

Table 3. Units in Housing Structures

	Total	Margin of Error	% of total housing units	Margin of Error
Total housing units	31,798	+/-587	-	-
1-unit, detached	10,875	+/-486	34.2%	1.3
1-unit, attached	937	+/-162	2.9%	0.5
2 units	5,350	+/-371	16.8%	1.1
3 or 4 units	7,662	+/-518	24.1%	1.5
5 to 9 units	2,757	+/-377	8.7%	1.2
10 to 19 units	1,381	+/-259	4.3%	0.8

	Total	Margin of Error	% of total housing units	Margin of Error
20 or more units	2,499	+/-308	7.9%	1.0
Mobile home	323	+/-104	1.0%	0.3
Boat, RV, van, etc.	14	+/-22	0.0%	0.1

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

Table 4. Occupied Housing Units

	1980		1990		2000		2010		2013	
	Units	% of total	Units	% of total						
Owner-Occupied Units	13,103	46.6	13,619	45.9	13,331	44.4	13,020	44.9	12,750 (MOE +/-494)	45.0
Renter-Occupied Units	15,044	53.4	16,092	54.1	16,716	55.6	16,002	55.1	15,578 (MOE +/-597)	55.0
Total Occupied Units	28,147	-	29,711	-	30,047	-	29,022	-	28,328 (MOE +/-580)	-

MOE: Margin of error

Source: U.S. Census, 1980-2010 and 2013 American Community Survey 5-Year Estimates (2009-2013)

Since 2000, the vacancy rate has increased. As shown in Table 5, there was a dramatic jump from 2000 to 2010 with an increase of almost 4 percent, and the rate continued to rise and was estimated to be 10.9 percent in 2013. At that time, it was estimated that approximately 40 percent of the vacant units (1,426) remained vacant and available for rent (Table 6). Another 40 percent (1,410) were estimated to be “other vacant.” One of the common reasons a unit could be classified as “other vacant” includes the unit is being foreclosed; however, foreclosures may also appear in any of the other vacant or occupied categories as well.⁶⁶ Foreclosures and their impact in Pawtucket are discussed later in this chapter (*Issues of Concern*), and some links can be made between the high vacancy rate and families leaving their homes due to foreclosure.

Table 5. Vacant Housing Units

	1980	1990	2000	2010	2013
Vacant Units	1,616	1,904	1,772	3,033	3,470 (MOE +/- 375)
Vacancy Rate	5.4	6.0	5.6	9.5	10.9% (MOE +/- 1.1%)

MOE: Margin of error

Source: U.S. Census, 1980-2010 and 2013 American Community Survey 5-Year Estimates (2009-2013)

⁶⁶ Other reasons to classify a unit as “other vacant” may be because no one lives in the unit and the owner does not want to sell or rent it, it is being using for storage, or the owner is elderly and is living elsewhere (assisted living, with relatives, etc.). Other reasons for “other vacant” might be the unit is being held for settlement of an estate or is being repaired or renovated. <http://www.census.gov/housing/hvs/files/qtr113/PAA-poster.pdf>

Table 6. Status of Vacant Units

	Number of Units	MOE (+/-)
Total Vacant	3,470	375
For rent	1,426	220
Rented, not occupied	280	112
For sale only	166	103
Sold, not occupied	60	57
For seasonal, recreational, or occasional use	128	80
For migrant workers	0	30
Other vacant	1,410	256

MOE: Margin of error

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

Age and Condition of Housing

Like many communities in Rhode Island, Pawtucket's housing stock is old. In 2013, the median year a structure was built was estimated to be 1942 (+/- 2 years). Nearly half (47.7 percent) was constructed before 1940 and another 24.8 percent was built before 1960. Only 5.5 percent of the City's housing has been added since 1990.

Table 7. Age of Housing Stock

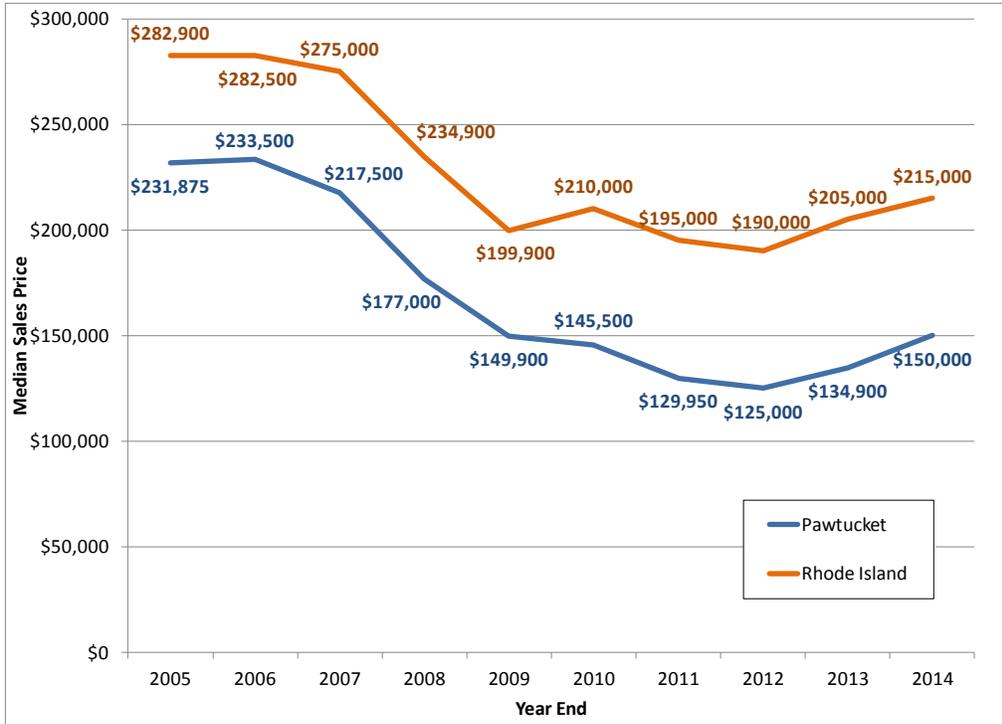
Year Structure Built	Number	MOE (+/-)	% of Total	MOE (+/-)
Built 2010 or later	62	57	0.2%	0.2
Built 2000 to 2009	855	175	2.7%	0.5
Built 1990 to 1999	813	210	2.6%	0.7
Built 1980 to 1989	1,580	266	5.0%	0.8
Built 1970 to 1979	2,617	325	8.2%	1.0
Built 1960 to 1969	2,785	384	8.8%	1.2
Built 1950 to 1959	4,393	353	13.8%	1.1
Built 1940 to 1949	3,512	340	11.0%	1.1
Built 1939 or earlier	15,181	622	47.7%	1.7
Total housing units	31,798	587	-	-

MOE: Margin of error

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

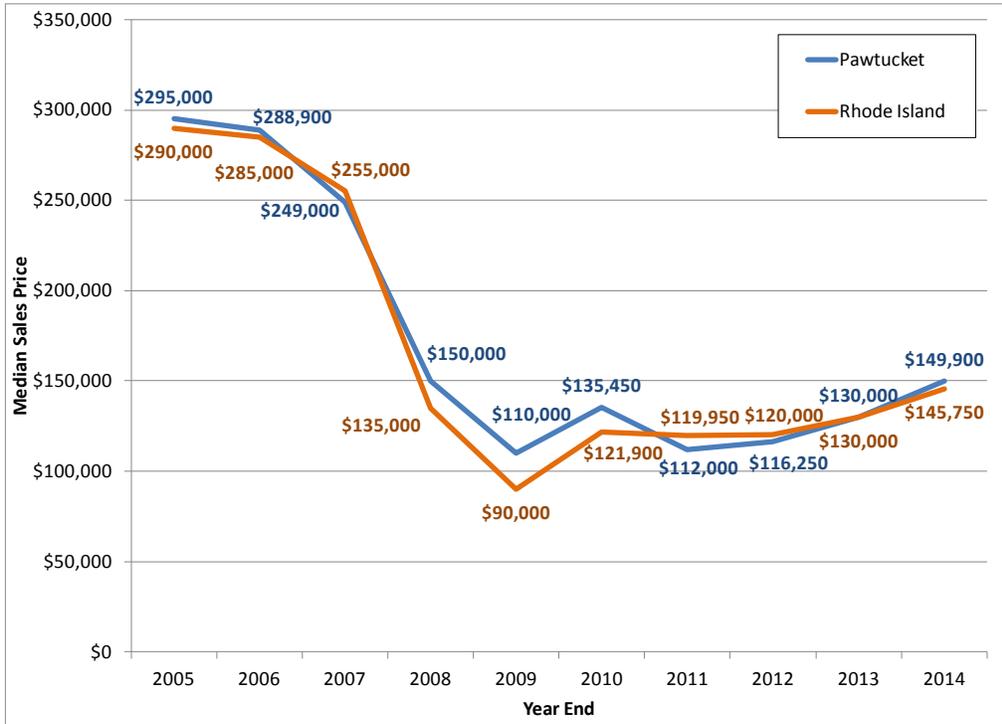
Costs to Buy or Rent

The median cost of a single family home in Pawtucket is typically lower than the state as a whole. As show in Figure 2, median single family home prices over the past 10 years has ranged from approximately \$51,000 (2005) to \$65,000 (2014) less than that of the state. Median sales prices for multi-family homes has generally been the same as the state median sales prices, with the exception of during the Great Recession (2008-2010), when sales prices were \$13,000 to \$20,000 lower that the state (Figure 3).



Source: RI Living (<http://www.riliving.com/About-Rhode-Island/HomeSales/Index.aspx>)

Figure 2. Median Sales Price for Single Family Homes in Pawtucket (2005-2015)



Source: RI Living (<http://www.riliving.com/About-Rhode-Island/HomeSales/Index.aspx>)

Figure 3. Median Sales Price for Multi-Family Homes in Pawtucket (2005-2014)

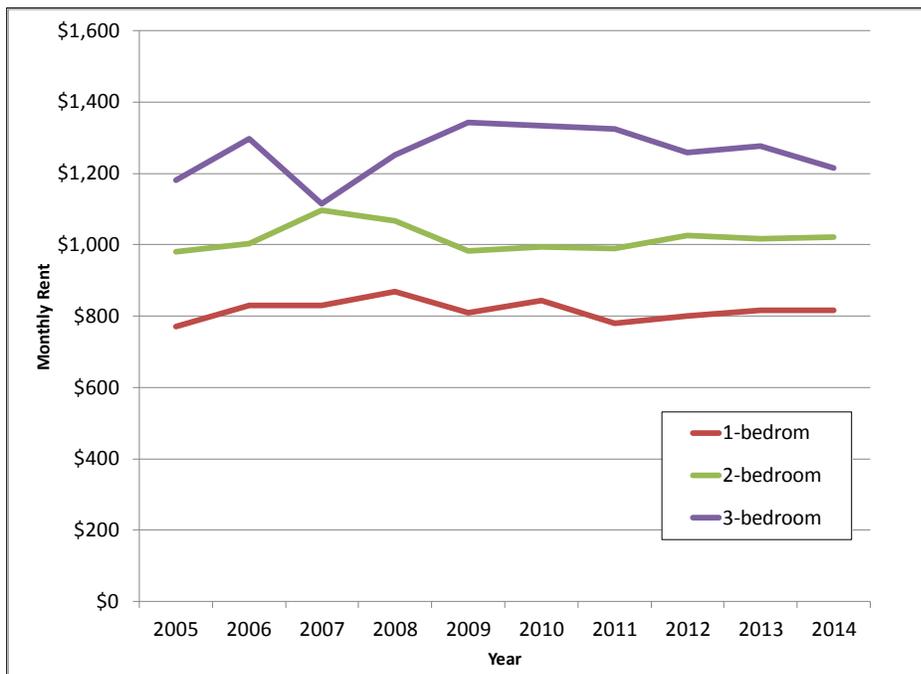
Table 8 lists average monthly rents for Pawtucket and the State, as surveyed by Rhode Island Housing, over the past ten years. Rents in Pawtucket have been, on average, lower than the State average, regardless of unit size. As illustrated in Figure 4, rents in Pawtucket have changed very little since 2005. One-bedroom units have stayed at approximately \$800 a month; two-bedroom units have stayed at approximately \$1,000 a month, and three-bedroom units have stayed at approximately \$1,300 a month. From 2007 to 2009, rents peaked, but have since leveled off. Overall, from 2005 to 2014, rents increased between three and six percent.

Table 8. Average Monthly Rents by Room Size (2005-2014)

	Efficiency		1-bedroom		2-bedroom		3-bedroom	
	Pawtucket	State	Pawtucket	State	Pawtucket	State	Pawtucket	State
2014	N/A	\$721	\$816	\$928	\$1,021	\$1,172	\$1,216	\$1,496
2013	\$692	\$728	\$816	\$900	\$1,018	\$1,154	\$1,276	\$1,419
2012	\$667	\$754	\$800	\$941	\$1,026	\$1,176	\$1,259	\$1,416
2011	\$608	\$649	\$779	\$946	\$990	\$1,150	\$1,325	\$1,522
2010	\$725	\$764	\$844	\$943	\$995	\$1,165	\$1,333	\$1,531
2009	\$642	\$718	\$809	\$956	\$982	\$1,170	\$1,342	\$1,533
2008	\$683	\$705	\$869	\$944	\$1,068	\$1,232	\$1,252	\$1,406
2007	N/A	\$671	\$830	\$905	\$1,096	\$1,142	\$1,116	\$1,350
2006	N/A	\$749	\$829	\$903	\$1,003	\$1,172	\$1,298	\$1,423
2005	\$647	\$715	\$770	\$911	\$980	\$1,147	\$1,181	\$1,418

Note: Contract (list) rents from rental advertisements are logged throughout the year, and an 'adjusted rent' for each listing is produced based on HUD utility allowances in a given year. These 'adjusted rents' are then averaged to produce each listed rent per bedroom.

Source: RI Housing, 2015



Source: RI Housing Annual Rent Surveys

Figure 4. Average Monthly Rents by Room Size, 2005-2014

Existing Housing Patterns and Conditions

Neighborhoods

Pawtucket has eight planning districts (Map 5). District boundaries conform to census tract boundaries and where possible to neighborhoods as perceived by residents. Table 9 lists the number of housing units by planning district for Pawtucket from 2000 to 2013. From 2000 to 2010, Districts 1, 2, 5, and 8 saw an increase in units. Districts 4, 6 and 7 lost units. Given the margin of error for 2013, it is estimated that all planning districts have remained stable from 2010 to 2013.

Table 9. Housing Units by Planning District (2000-2013)

District	CTs	2000	% of Total	2010	% of Total	% Change	2013	MOE* (+/-)	% of total	% MOE	% change
1	150, 163	2,950	9.3%	2,954	9.2%	0.1%	2,949	98	9.3%	0.3%	-0.2%
2	151, 161, 164	5,868	18.4%	6,090	19.0%	3.8%	6,079	240	19.1%	0.5%	-0.2%
3	165, 166	2,590	8.1%	2,653	8.3%	2.4%	2,633	88	8.3%	0.2%	-0.8%
4	152	1,751	5.5%	1,658	5.2%	-5.3%	1,647	80	5.2%	0.2%	-0.7%
5	153, 154, 160	3,698	11.6%	3,819	11.9%	3.3%	3,817	154	12.0%	0.4%	-0.1%
6	167, 171	3,486	11.0%	3,477	10.8%	-0.3%	3,428	169	10.8%	0.5%	-1.4%
7	155, 156, 157, 158, 159	7,409	23.3%	7,312	22.8%	-1.3%	7,236	257	22.8%	0.2%	-1.0%
8	168, 169, 170	4,067	12.8%	4,092	12.8%	0.6%	4,009	162	12.6%	0.4%	-2.0%
		31,819		32,055		0.7%	31,798	546			-0.8%

* Margin of error

Source: U.S. Census 2000, 2010, and 2013 American Community Survey 5-Year Estimates (2009-2013)

District 1/Fairlawn

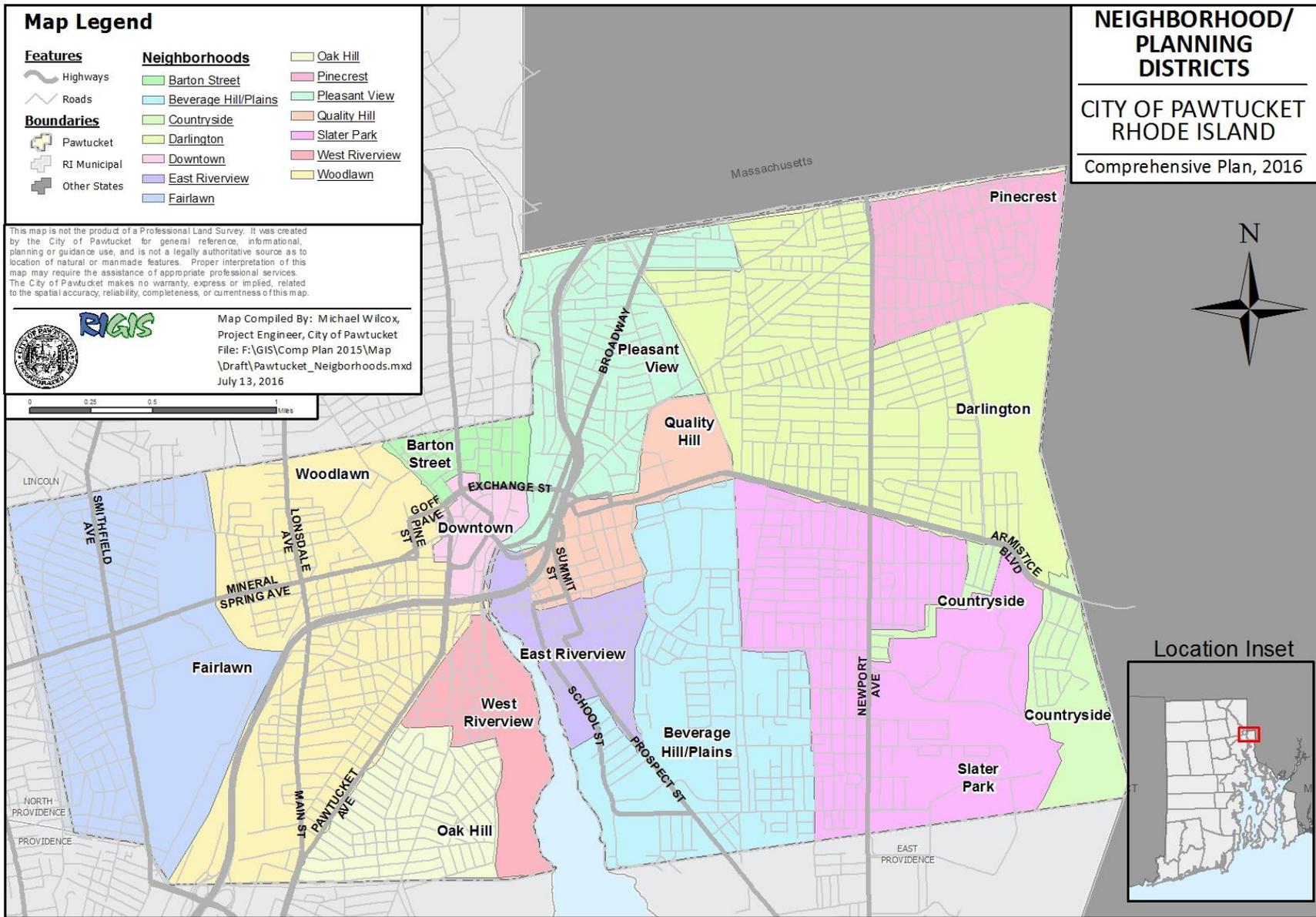
District 1 includes census tracts 150 and 163 located in the western part of the City. It includes the Fairlawn section of the City. Housing in this District is primarily single family with the exception of a number of blocks in the northern Fairlawn area, which are mostly two-family structures. Most homes are owner-occupied.

District 2/Woodlawn

District 2 encompasses the Woodlawn neighborhood, and includes census tracts 151, 161, and 164. Woodlawn is one of the more populated, lower-income neighborhoods within the City and also about 19 percent of the City's population (2013 estimate). Housing in this district is dominated by multi-family structures with some exceptions along the southern and western portions of the neighborhood.

District 3/Oak Hill and West Riverview

District 3 includes census tracts 165 and 166 and encompasses the area east of Pawtucket Avenue to the Pawtucket/Blackstone River. The two neighborhoods which make up this district are very different. West Riverview is characterized by younger, minority families. The median age is estimated to be 31. Oak Hill on the other hand, is not as diverse, and the median age is estimated to be 40.5.



District 4/Barton Street and Downtown

District 4 includes census tract 152 and generally conforms to the central business district (CBD). District 4 has the smallest supply of housing with an estimated 1,647 units, 5.2 percent (+/- 0.2 percent) of the total units in the City. The Barton Street neighborhood was separated from the Downtown as part of the efforts of the City and the Pawtucket Citizens Development Corporation (PCDC) on neighborhood improvements and affordable housing. Few residents live downtown and many live in subsidized housing structures, including two large senior citizens apartment towers. Barton Street is the densest neighborhood in the City. The neighborhood can also be characterized as low-income. District 4 has one of the lowest home-ownership rates (7.4 percent, +/- 4 percent) in the City, and more than half of the residents living here do not have access to a vehicle (59.3 percent, +/-8.8 percent).

District 5/Pleasant View

District 5 includes census tracts 153, 154, and 160 and lies in the north central part of the City between the Blackstone River and the Industrial Highway. This district, known as the Pleasant View neighborhood, is dominated by multi-family residential development. District 5 had 3,698 units in 2000 and increased to an estimated 3,817 (+/- 154) in 2013. District 5 comprises 12 percent (+/- 0.4 percent) of the City's total housing units.

District 6/East Riverview and Quality Hill and Beverage Hill/Plains

District 6 includes census tracts 167 and 171 and lies south of Walcott Street and Armistice Boulevard between the Blackstone River and the Industrial Highway. This district is comprised predominately of multi-family residential development but does have an area of single-family units in its southern portion. District 6 had 3,486 units in 2000 and 3,477 in 2010, a 0.3 percent decrease. The number of units was estimated to be consistent in 2013. All of these neighborhoods have demographics which are similar to Pawtucket's City-wide statistics. The Quality Hill neighborhood is differentiated because it is a district on the National Register of Historic Places. The East Riverview designation was created to describe a Redevelopment area.

District 7/Darlington and Pinecrest

District 7 includes census tracts 155, 156, 157, 158, and 159 and lies to the north of Armistice Boulevard between the Industrial Highway and the City's eastern border with Seekonk, Massachusetts. This district, being the largest in area, also has the largest supply of residential units. Single-family development is found generally east of Newport Avenue and particularly within Pinecrest. District 7 lost 1.3 percent of its housing units between 2000 and 2010, and, given the margin of error, remained stable through 2013. According to the Neighborhood Analysis, Darlington, like Pawtucket as a whole, is primarily white and working and middle-class and has maintained that characterization. Pinecrest is one of the most suburban sections of Pawtucket and the incomes of Pinecrest residents are also higher than City averages.

District 8/Slater Park and Countryside

District 8 includes census tracts 168, 169 and 170 and lies to the south of Armistice Boulevard between the Industrial Highway and the City's eastern border with Seekonk, Massachusetts. This district is the second largest in area but is ranked third in number of housing units primarily because most of the structures are single-family dwellings. Both Slater Park and Countryside have higher average annual household and family incomes than the rest of Pawtucket. Homeownership is highest in these census tracts, from 71 to 83 percent of occupied units.

Housing Issues of Concern

Lead-Based Paint

Since the majority of Pawtucket’s housing stock was built before 1970, lead paint is a serious issue facing the City. The Pawtucket Lead Safe Program is funded by HUD’s Office of Healthy Homes and Lead Hazard Control and is run in conjunction with the Blackstone Valley Community Action Program, Inc. The Pawtucket Lead Safe Program provides financial assistance to qualified property owners to reduce lead hazards in their property. Deferred payment loans are offered and there is minimal cost to the homeowners until the property is sold or transferred. The goal of the program is to increase the number of lead-safe housing units in Pawtucket. Table 10 depicts aggregate numbers of children six years old and younger testing positive for lead poisoning (5 micrograms per deciliter (µg/dL) or higher). While numbers continue to drop, many children are still exposed to lead paint and lead dust in their homes.

Table 10. Estimated Incidences of Childhood Lead Poisoning

	2005-2007 (Estimate)	2008-2010 (Estimate)	2011-2013 (Estimate)
Children with Confirmed Blood Tests ¹	5,920	5,625	5,175
Elevated Blood Lead Levels of 5+ ²	1,339	979	438
Elevated Blood Lead Levels 10+ ³	183	115	67
	2000 (Estimate)	2010 (Estimate)	
Children Age 0-6	7,031	6,835	

¹ Children under age 6 with confirmed blood tests, aggregated over the three-year time period.

² Children with confirmed blood tests that test with elevated blood lead levels of 5 micro g/dL or higher. This only includes children under age 72 months tested for lead between January 1 of the first year of the time period and December 31 of the last year of the time period. Unique child count aggregated over three years.

³ Children with confirmed blood tests that test with elevated blood lead levels of 10 micro g/dL or higher. This only includes children under age 72 months tested for lead between January 1 of the first year of the time period and December 31 of the last year of the time period. Unique child count aggregated over three years.

Source: RI Community Profiles from ProvPlan and RI Dept. of Health Childhood Lead Poisoning Prevention Program

Beginning January 1, 2015, the City began enforcing the requirements of the Rhode Island Lead Hazard Mitigation Act. Property owners of rental units that are in violation of minimum housing code must certify that the units have been made lead safe.

Substandard, Overcrowded and Abandoned Housing

Substandard housing as defined by the U.S. Census is any unit lacking complete plumbing facilities for exclusive use. In 2013, it was estimated that 0.6 percent (184 units (+/-95 units)) of all occupied units in Pawtucket lacked complete plumbing. Urban centers such as Pawtucket typically have a greater percentage of substandard housing because of the age of the housing stock.

Housing is considered overcrowded if there is more than one person per room. In 2013, it was estimated that 753 units (+/- 258) or 2.6 percent (+/- 0.9 percent) of all housing units in Pawtucket were considered overcrowded according to this criterion.

The City of Pawtucket, like many other urban communities, has been concerned with the increasing number of vacant, abandoned, or substandard properties and how to improve, occupy, or eliminate them. In 1995, the City successfully lobbied the Rhode Island General Assembly to expand the powers

of its Housing Court. The housing court judge now has the ability to find an individual in contempt of court for failing to comply with a specific judicial order. Additionally, the judge now has the right to order properties into receivership, forcing owners to act quickly or lose their property. The judge has also been given the ability to order the removal of any cloud on the title to a building or property that has been ordered into receivership. This added authority has greatly strengthened the enforcement process because the City no longer has to petition the Superior Court to gain clear title of the property. Since its declaration, more than 250 abandoned or vacant properties have been removed from the City's abandoned/vacant property list. This program was nationally recognized by Harvard's Kennedy School of Government through its selection as an "Innovations in American Government" semifinalist.

Foreclosures

The Great Recession, the result of many factors including subprime mortgage rates and a bursting housing bubble, began in late 2007 and had serious economic repercussions throughout the country. While most of the nation began to see signs of recovery in mid 2009, Rhode Island struggled and continues to make slow progress in creating jobs and employing its residents. Unemployment peaked in August 2009 at 11.3 percent (seasonally adjusted), the second lowest in the nation behind Nevada, and did not go below 10 percent until November 2012. In April 2015, the State's unemployment rate was 6.1 percent.⁷

During the recession, foreclosures also spiked. As people lost their jobs, they could no longer afford their homes. In 2009, Rhode Island ranked 10th in foreclosures in the nation. According to HousingWorks RI, Rhode Island residents were victims to subprime lending practices at higher rates because of the State's lack of long-term affordable housing.⁸ The cost of housing accelerated from 2000 to 2006; however, the incomes of Rhode Islanders failed to follow. By the end of 2009, nearly 20,000 Rhode Islanders were behind on their mortgages.

HousingWorks RI reports that from 2009 to the end of 2014, 11,609 residential foreclosure deeds were filed in Rhode Island, representing 6.5 percent of the state's housing. Of these filings, 945 foreclosures were in Pawtucket (8.1 percent), 532 of which were single-family homes and condos and 422 of which were multi-family homes. Since 2011, the number of annual foreclosures in the City has decreased overall, but a 5 percent increase was experienced from 2013 to 2014 (Table 11).⁹

Table 11. Annual Foreclosures Filed in Pawtucket (2011-2014)

	2011	2012	2013	2014	% Change 2013-2014
Actual Foreclosures	168	132	105	110	5%

Source: *Foreclosures in RI: Quarterly Report 2014 Q4*, HousingWorks RI.

⁷ RI Department of Labor and Training. Available at <http://www.dlt.ri.gov/lmi/laus/state/histadi.htm>

⁸ *Special Report: Foreclosures in Rhode Island*, HousingWorks RI (Winter 2010). Available at <http://www.housingworksri.org/sites/default/files/HWRI-2-2010Foreclosures-SpecialReport.pdf>.

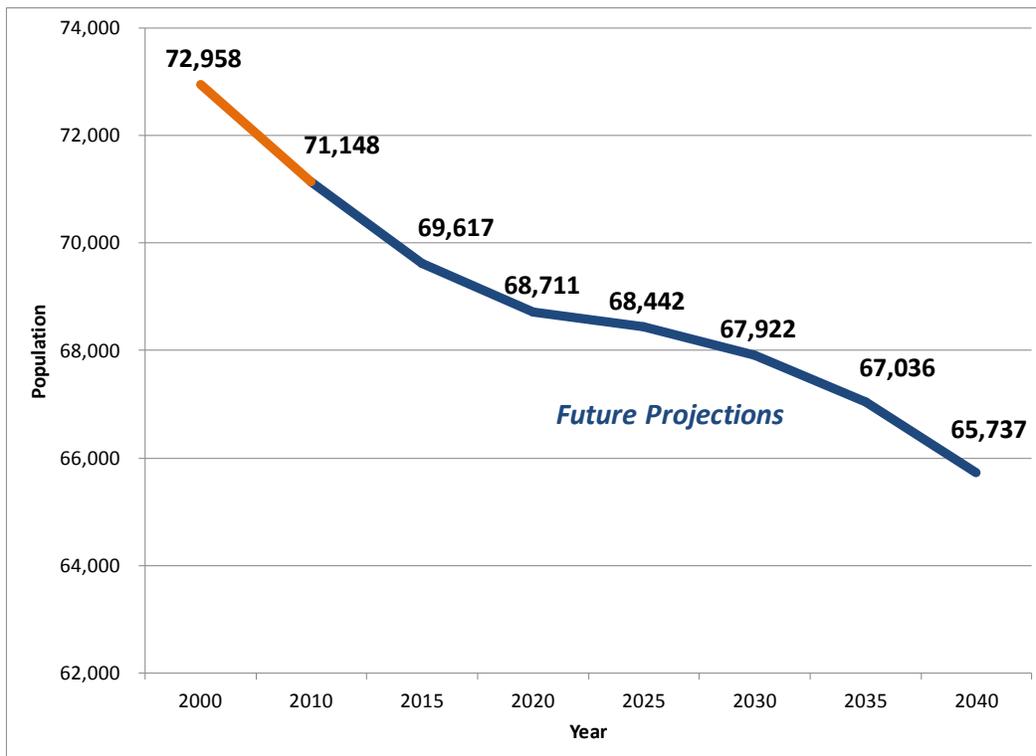
⁹ *Foreclosures in RI: Quarterly Report 2014 Q4*, HousingWorks RI. Available at http://www.housingworksri.org/sites/default/files/HWRIForeclosureReportQ4_2014.pdf

Future Housing Needs

Determining the City's future housing needs requires an assessment of its current population and how it may change in the next twenty years. Growth of the population as a whole, cultural changes, age shifts, income, and family or household size all need to be considered. Are the housing needs of the populations most at risk being met? These would include the homeless, elderly, low income populations, and other populations with special needs.

Changing Population

The U.S. Census reported that in 2010 Pawtucket had lost approximately 1,800 residents since 2000. Over the next several decades, the RI Statewide Planning Program projects that Pawtucket's population will continue to decline 7.6 percent (about 5,400 residents) by 2040 (Figure 5).



Source: *Technical Paper 162: Population Projections 2010-2040*, RI Statewide Planning Program (April 2013)

Figure 5. Population Projections for the City of Pawtucket

While the City's population decreased in 2010, its diversity increased (Table 12). One third of Pawtucket's residents were people of color, an increase from one quarter in 2000. The Latino and African American communities had the greatest representation. The African American, Asian and American Indian communities experienced the largest percentage of growth. This is a similar trend state-wide. In the same decade, Rhode Island's Latino population grew 44 percent, and the Asian and African American population grew by 28 and 23 percent respectively.¹⁰

¹⁰ *An Equity Profile of Rhode Island*, PolicyLink and PERE (May 2013)

Table 12. Change in Race and Ethnicity (2000, 2010)

	2000	% of total	2010	% of total	Change	% Change
RACE						
Total population	72,958		71,148		-1,810	-2.5%
One race	69,059	94.7%	66,818	93.9%	-2,241	-3.2%
White	55,004	75.4%	47,289	66.5%	-7,715	-14.0%
Black or African American	5,334	7.3%	9,534	13.4%	4,200	78.7%
American Indian and Alaska Native	217	0.3%	445	0.6%	228	105.1%
Asian	621	0.9%	1,073	1.5%	452	72.8%
Native Hawaiian and Other Pacific Islander	42	0.1%	54	0.1%	12	28.6%
Some Other Race	7,841	10.7%	8,423	11.8%	582	7.4%
Two or More Races	3,899	5.3%	4,330	6.1%	431	11.1%
HISPANIC OR LATINO ORIGIN						
Total population	72,958		71,148		-1,810	-2.5%
Hispanic or Latino (of any race)	10,141	13.9%	14,042	19.7%	3,901	38.5%
Mexican	581	0.8%	798	1.1%	217	37.3%
Puerto Rican	3,298	4.5%	4,729	6.6%	1,431	43.4%
Cuban	75	0.1%	113	0.2%	38	50.7%
Other Hispanic or Latino	6,187	8.5%	8,402	11.8%	2,215	35.8%
Not Hispanic or Latino	62,817	86.1%	57,106	80.3%	-5,711	-9.1%

Source: U.S. Census 2000 and 2010

Like other communities in Rhode Island, the median age of the City's population is increasing, but Pawtucket has typically had a younger population. In 2000, the City's median age was 35.4 years, where it was 36.7 years for the State. In 2010, it rose to 37 years, but the State median increased to 39.4 years.

From 2000 to 2010, the City lost young families, typically represented by adults between the ages of 25 and 44 years and school-aged children (Table 13). By 2010, the number of older residents between the ages of 65 and 84 years also decreased. Residents between the ages of 45 and 64 have increased, along with a notable increase of people between 20 to 24 years. This increase could be associated with young adults continuing to live with their parents after finishing high school or college because of the difficulty in finding work to support themselves on their own.

Table 13. Population Age (2000, 2010)

	2000	% of Total	2010	% of Total	Actual Change	% Change
Total Population	72,958		71,148		-1,810	-2.5%
Under 5 years	4,918	6.7%	5,012	7.0%	94	1.9%
5 to 9 years	5,376	7.4%	4,430	6.2%	-946	-21.4%
10 to 14 years	5,060	6.9%	4,243	6.0%	-817	-19.3%
15 to 19 years	4,624	6.3%	4,725	6.6%	101	2.1%
20 to 24 years	4,791	6.6%	5,180	7.3%	389	7.5%
25 to 34	11,154	15.3%	10,348	14.5%	-806	-7.8%
35 to 44	11,684	16.0%	9,958	14.0%	-1,726	-17.3%
45 to 54	8,737	12.0%	10,613	15.0%	1,876	17.7%
55 to 59 years	3,065	4.2%	4,366	6.1%	1,301	29.8%
60 to 64 years	2,721	3.7%	3,281	4.6%	560	17.1%

	2000	% of Total	2010	% of Total	Actual Change	% Change
65 to 74	5,232	7.2%	4,416	6.2%	-816	-18.5%
75 to 84	4,207	5.8%	3,123	4.4%	-1,084	-34.7%
85 years and over	1,389	1.9%	1,453	2.0%	64	4.4%
Median age (years)	35.4	-	37	-	1.6	-
State median age (years)	36.7		39.4		2.7	

Source: U.S. Census 2000 and 2010

Changing Households

Between 2000 and 2010, the average household and family size increased, but only slightly. The more significant changes were seen in the composition of the household. Reflecting the changing demographics, Table 14 provides further evidence that young families and the elderly are leaving Pawtucket. Within the decade, married couples decreased by 3.9 percent, and those couples with children under age 18 decreased by 2.8 percent. Households with individuals over the age of 65 and individuals over the age of 65 living alone also decreased, 2.2 percent and 3.1 percent respectively. Female-headed households (without a husband present) saw an increase of 2.1 percent and those with children under the age of 18 increased by 0.9 percent.

Table 14. Household Composition (2000, 2010)

	2000	% of total	2010	% of total	% Change
Total households	30,047	-	29,022	-	-
Family households*	18,520	61.6%	17,703	61	-0.6%
With own children under 18 years	9,179	30.5%	8,428	29	-1.5%
Married-couple family	11,923	39.7%	10,380	35.8	-3.9%
With own children under 18 years	5,183	17.2%	4,173	14.4	-2.8%
Female householder, no husband present	5,040	16.8%	5,494	18.9	2.1%
With own children under 18 years	3,242	10.8%	3,382	11.7	0.9%
Nonfamily households	11,527	38.4%	11,319	39	0.6%
Householder living alone	9,700	32.3%	9,189	31.7	-0.6%
65 years and over	3,756	12.5%	2,995	10.3	-2.2%
Households with individuals under 18 years	9,966	33.2%	9,424	32.5	-0.7%
Households with individuals 65 years and over	7,996	26.6%	6,810	23.5	-3.1%
Average household size	2.41	-	2.43	-	
Average family size	3.07	-	3.08	-	

* A "family household" includes the householder and all (one or more) other people living in the same household who are related to the householder by blood, marriage, or adoption.

Source: U.S. Census 2000 and 2010

Household and family incomes have remained relatively flat since 2000. Table 15 shows estimated incomes in 2000, 2009 and 2013, all adjusted to 2013 dollars. Considering the margin of error in the estimates for 2009 and 2013, incomes have not increased since 2000, and may be decreasing.

Table 15. Median Household and Family Incomes (2000, 2009, & 2013)

	2000*	2009 *	2013
Families	\$52,811	\$53,303 MOE (+/- \$1,900)	\$49,597 MOE (+/- \$2,756)
Households	\$42,986	\$44,937 MOE (+/- \$2,084)	\$40,379 MOE (+/- \$1,840)

* adjusted to 2013 dollars

MOE: Margin of error

Source: U.S. Census 2000; 2009 and 2013 American Community Survey 5-Year Estimates (2009-2013)

Housing Affordability

How much does it cost?

Annually since 2007, HousingWorks RI¹¹ assesses how much it costs to live in Rhode Island and its 39 municipalities by looking at home sales, average rents, and local private sector wages. According to their *2014 Fact Book*, the median selling price of a single family house in Pawtucket was approximately \$134,900. With a typical monthly housing payment¹² of \$1,117, the income needed to afford those payments would be \$44,696. The average monthly rent for a two-bedroom apartment or house in Pawtucket was \$1,018, and the income necessary to afford the rent is \$40,720. HousingWorks RI reports that the average private sector wage for jobs in Pawtucket is \$47,528, and it, therefore, could be assumed that a person working in Pawtucket could afford to live in the City. However, in 2013, it was estimated that the median household income in Pawtucket was \$40,379 (+/- \$1,840). Based on the scenarios presented, there still may be an affordability gap to homeownership for some Pawtucket residents, and some households may be paying too much of their income for housing.

Median Home Price: \$134,900	Average Rent for 2-bedroom Unit
<ul style="list-style-type: none"> • Monthly Payment: \$1,117 • Annual income needed: \$44,696 • Average private sector wage in Pawtucket: \$47,528 • Median household income (2013): \$40,379 (+/- \$1,840) 	<ul style="list-style-type: none"> • Monthly rent: \$1,018 • Annual income needed: \$40,720 • Average private sector wage in Pawtucket: \$47,528 • Median household income (2013): \$40,379 (+/- \$1,840)

Considering the trend of housing costs, monthly rents (Table 8) should remain affordable. But the cost to buy a home may continue to rise (Figure 3) and while Pawtucket has been more affordable than the

¹¹ *2014 Fact Book*, HousingWorks RI. Available at <http://www.housingworksri.org/sites/default/files/HWRI-RWU-HousingFactBook2014LowRes.pdf>.

¹² The calculation for the monthly housing payment includes: a 30-year mortgage at 3.98% interest rate; municipal property taxes, hazard insurance; and FHA mortgage insurance of 1.35% as well as a financed upfront 1.75% insurance fee required by FHA. Monthly mortgage payment based on \$4,722 down payment and a mortgage amount of \$130,179.

state as a whole, the median household income is an indicator that there is potentially a gap. Future need requires affordable, safe housing for most residents.

Cost-Burden

If the costs of living in a home exceed 30 percent of a household’s income, it is considered a cost-burden. Costs include mortgage payments, property taxes, rent, utilities, insurance and fees. Paying too much of a household’s income for housing can make it difficult to pay for other expenses such as food, clothing, transportation, and medical care.

From 2008 to 2012 (Table 16), it is estimated that just under one half (43.8 percent) of Pawtucket households were paying more than 30 percent of their total income on housing costs. Nearly one quarter was paying more than 50 percent of their income. Nearly 64 percent of low income households were paying more than 30 percent of their income on housing, and one third were paying more than 50 percent. Renters in low income households are also more likely to have housing costs burdens (67.6 percent) than homeowners (31.6 percent).

Table 16. Estimated Households with Housing Cost Burdens

	Estimate	% of total
Total Households	29,075	-
Total Households with Cost Burdens	12,730	43.8%
Cost Burden (>30% of income)	6,625	22.8%
Severe Cost Burden (>50% of income)	6,195	21.0%
Total Low Income Households	16,455	-
Cost Burden (>30%)	10,515	63.9%
Renters	7,110	67.6%
Homeowners	3,400	31.6%
Severe Cost Burden (>50%)	5,860	35.6%

Low income households: Households with income less than 80% of HAMFI. (HUD Area Median Family Income: The median family income calculated by HUD for each jurisdiction, in order to determine Fair Market Rents (FMRs) and income limits for HUD programs. HAMFI will not necessarily be the same as other calculations of median incomes (such as a simple Census number), due to a series of adjustments that are made (For full documentation of these adjustments, consult the HUD Income Limit Briefing Materials).)

Source: U.S. Department of Housing and Urban Development (HUD) Comprehensive Housing Affordability Strategy (CHAS) Data Tabulations, Estimates from 2008-2012

Vulnerable Populations

Vulnerable populations include the homeless, households with low and very low incomes, the elderly, and individuals with special needs.

Households with Special Needs

Individuals with developmental or physical disabilities can require homes with specific modifications, access to resources such as public transportation, or assisted living conditions. Table 17 shows the estimated number of residents with a disability. Around 6,200 adults between the ages of 18 and 64 (14 percent of that age group) have a disability. Most indicated a cognitive, ambulatory or independent living difficulty. Nearly 3,500 of residents over the age of 65 (42 percent) are estimated to have a disability, primarily a hearing, ambulatory or independent living difficulty.

Table 17. Estimated Number of City Residents with Disabilities by Age

	Under 5	MOE (+/-)	Age 5-17	MOE (+/-)	Age 18-64	MOE (+/-)	65 and older	MOE (+/-)
Estimate Population	4,753	432	11,552	545	46,198	613	8,433	443
Estimate Population with a disability	24	34	686	170	6,617	560	3,417	334
With a hearing difficulty	34	34	118	58	1,359	242	1,406	223
With a vision difficulty	0	29	106	62	996	209	634	126
With a cognitive difficulty	-	-	596	153	3,095	380	864	192
With an ambulatory difficulty	-	-	105	79	2,964	338	2,251	280
With a self-care difficulty	-	-	177	76	1,014	200	662	149
With an independent living difficulty	-	-	-	-	2,102	275	1,434	213

MOE: Margin of error; Red text indicates that margin of error is greater than 25%.

“Cognitive difficulty” asked respondents if due to physical, mental, or emotional condition, they had “serious difficulty concentrating, remembering, or making decisions.”

“Ambulatory difficulty” asked respondents if they had “serious difficulty walking or climbing stairs.”

“Self-care difficulty” asked respondents if they had “difficulty dressing or bathing.” Difficulty with these activities are two of six specific Activities of Daily Living (ADLs) often used by health care providers to assess patients’ self-care needs.

“Independent living difficulty” asked respondents if due to a physical, mental, or emotional condition, they had difficulty “doing errands alone such as visiting a doctor’s office or shopping.” Difficulty with this activity is one of several Instrumental Activities of Daily Living (IADL) used by health care providers in making care decisions.

Source: 2014 American Community Survey 5-Year Estimates (2010-2014)

Low Income Households

Low income households with housing cost burdens are most at risk of losing their homes. Many will not have a place to go and become homeless. More than half (63.9 percent) of the City’s low income households are paying too much for housing

The City can look at the participation in subsidy programs for assistance in determining a better estimate of those at-risk and in need. In Pawtucket, individuals and families who are unable to afford the high costs of housing rely upon programs such as Family Independence Program (FIP), Supplemental Nutrition Assistance Program (SNAP) (formerly known as food stamps), Supplemental Security Income (SSI), and General Public Assistance (GPA). The figures in Table 18 indicate that approximately 24 percent of the City’s households participate in SNAP, nearly 10 percent receive SSI, and 3.2 percent receive GPA.

Table 18. Number of Households Receiving Assistance/Supplemental Benefits in the Past 12 Months

	Households	MOE (+/-)	% of Total Households	MOE (+/-)
Total Households	28,328	580	-	-
With Supplemental Security Income	2,696	337	9.5	1.2
<i>Mean Supplemental Security Income (2013 dollars)</i>	<i>\$9,838</i>	<i>\$784</i>	-	-
With cash public assistance income	899	168	3.2	0.6
<i>Mean cash public assistance income (2013 dollars)</i>	<i>\$4,402</i>	<i>\$836</i>	-	-
With Food Stamp/SNAP benefits	6,836	454	24.1	1.6

MOE: Margin of error

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

In 2013 it was estimated that 15.3 percent (+/- 1.7 percent) of the City’s families were below the poverty level in the past 12 months, and it was also estimated that 19.3 percent (+/- 1.5 percent) of the City’s total population lived below the poverty level, including 28.9 percent (+/- 3.2 percent) under the age of 18 (Table 19). All of these figures are estimated to have increased since 2009. Individuals and families in these income groups require additional affordable units and more housing subsidies.

Table 19. Percentage of Pawtucket Families and Individuals with Income Below the Poverty Level in the Past 12 Months

	2000	2009 Estimate	MOE (+/-)	2013 Estimate	MOE (+/-)
Families	14.9%	14.4%	1.7%	15.3%	1.7%
Individuals	16.8%	16.4%	1.7%	19.3%	1.5%
Under the age of 18	14.0%	26.7%	3.6%	28.9%	3.2%

MOE: Margin of error

Source: US Census Bureau (1990 and 2010), 2009 American Community Survey 5-Year Estimates (2005-2009), 2013 American Community Survey 5-Year Estimates (2009-2013)

Elderly

The elderly living alone or with families typically have fixed incomes and experience higher cost burdens. The City’s population trends show that households with individuals over the age of 65, either living alone or with family members, are decreasing. Reasons why this population may be leaving could be the lack of affordable options as they downsize or the increasing difficulty in living alone, as discussed earlier, and fewer housing options that meet their physical or other disability needs.

Pawtucket does offer tax abatement for its elderly residents to assist in keeping elderly residents in their own homes. Smaller rental units affordable to people on fixed incomes are needed for this segment of the population.

Homelessness

It is not possible to obtain an accurate number of homeless persons living within Pawtucket at any one point in time. Housing costs have been on the rise and are prohibitively high for many individuals and families with marginal employment. This coupled with poor economic times will likely lead to an increase in the number of homeless in Pawtucket and surrounding communities. Additional shelter space and programs designed to get people back into an independent or semi-independent housing situation are needed.

The City of Pawtucket is one of three municipalities (including Providence, Woonsocket) that, along with the State of Rhode Island, receive an annual allocation of federal "Emergency Solutions Grant" funds to both assist in preventing persons from becoming homeless and assist those persons who are homeless with basic shelter needs. The 2015-2016 "Emergency Solutions Grant" (ESG) to the City of Pawtucket was \$167,582. In addition to the City's ESG resources, Pawtucket's homeless providers access Community Development Block Grant (CDBG), HUD Supportive Services, and state homeless assistance monies as well as private sources of funds. Listed below are brief descriptions of the homeless assistance providers, which service the Pawtucket area.

House of Hope, CDC Pawtucket Day Program

The House of Hope operates the Pawtucket Day Program (access to HOPE Center) at 185 Dexter Street. Homeless clients received essential services and outreach.

House of Hope, CDC Operation First Step – Homeless Shelter for Women

The City assists in funding a six-bed homeless shelter that provides short-term and intensive case management support for women to stabilize clients, address barriers to permanent housing, and begin to treat the trauma of homelessness. Through the program, 12 to 14 clients receive housing services each year.

Meeting the Need

Generally, based on population projections (Figure 5) and average household size of 2.43 (2010), the City would need 28,165 housing units by 2025, and 27,586 by 2035. It is estimated that there are approximately 32,000 housing units in Pawtucket, with roughly 3,400 vacant for various reasons. The number of existing housing units will meet future needs. Given the age of the City’s housing, however, the condition of these units will have to be upgraded and maintained to be cost effective, including energy efficiency and environmental health (e.g. lead based paint, asbestos, etc.).

While the City does not expect the overall population size to increase and create a demand to build more housing, it will change demographically and the types of housing in demand will evolve. The statistics show a trend that young families and the elderly are leaving Pawtucket, but the population between the ages of 44 and 65 is increasing. And while married-couple families are decreasing, female-headed households with children under the age of 18 are growing, which may require similar housing needs. Those that are living in Pawtucket are more ethnically and culturally diverse than previous decades. Household incomes are relatively flat, but the cost of buying a home in the City is rising, though still lower than the state median. Rents have remained affordable for current residents and are lower than the state average.

Most housing in Pawtucket has two to three bedrooms (Table 20), which can accommodate individuals and small families, which appear to be the dominate household types in the City. One bedroom units make up about 18 percent of households. These types of units are desirable for older residents living alone that want to downsize. They also appeal to young couples or other individuals that choose to live alone. There are very few larger homes with four or more bedrooms to accommodate larger families.

Table 20. Number of Bedrooms in Housing Units

		MOE	% of Total	MOE
Total housing units	31,798	+/-587	-	-
No bedroom	1,112	+/-245	3.5%	+/-0.8%
1 bedroom	5,924	+/-460	18.6%	+/-1.3%
2 bedrooms	11,433	+/-588	36.0%	+/-1.7%
3 bedrooms	10,242	+/-472	32.2%	+/-1.5%
4 bedrooms	2,446	+/-262	7.7%	+/-0.8%
5 or more bedrooms	641	+/-142	2.0%	+/-0.4%

MOE: Margin of error

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

If new housing is to be developed, it will most likely be in the form of converted mill buildings. Data from the City Assessor indicates that there were approximately 161 acres of land classified as residential vacant in 2009; however, other evidence suggests that the City of Pawtucket is actually very close to buildout in terms of new development. In theory a total of 1,402 legal lots could be divided from the

residentially zoned vacant land in Pawtucket. However, some of the smaller lots are not contiguous and therefore do not have enough land area to support a new structure. Also, some of the lots have been merged with the undersized lots with a structure that are contiguous and in common ownership which also prevents some vacant lots from becoming buildable. Therefore, the actual number of units which might be built in the future on the remaining 161 acres of vacant land is likely to be considerably smaller.

In 2007 the Planning Department conducted an analysis of vacant residential land in the City of Pawtucket. Using assessor's data and GIS, they made a preliminary determination of which of these lots would be merged with adjacent lots because of an area or frontage nonconformity. The analysis determined that approximately 133 acres of this vacant residential land was not buildable. This analysis did not take into account topography or wetland issues, so it is a reasonable assumption that the 30 "buildable" acres would be further constrained. Assuming that half of the "buildable" land can indeed be built upon, that would leave 15 acres, upon which would result in approximately 130,500 square foot lots. Based on these assumptions, Pawtucket's population at buildout capacity would be approximately 330 people (130 units x 2.54 persons per household).

However, this analysis does not take into account redevelopment. The Pawtucket Mill Building Survey identifies just fewer than 100 mills of varying sizes within City limits. The redevelopment of these structures normally requires relief from the City Zoning ordinance to allow denser redevelopment, with less parking than would be allowed with new residential development. Without this flexibility, these structures, which are now inappropriate for large-scale industrial use, would remain vacant and underutilized. As noted in a previous section, the density of recent redevelopments ranged from 17 to over 100 units per acre while zoning allows approximately 12 units per acre.

Additionally, there are opportunities Downtown and in its vicinity to incorporate residential units into mixed use redevelopment projects, either reusing commercial buildings or construction on vacant or underutilized lots. Other opportunities exist around the proposed transit oriented development being evaluated as part of the future commuter rail station between Dexter and Conant Streets. These projects and others are highlighted in the Land Use Chapter.

Low and Moderate Income Housing/Federally Subsidized Housing Units

Pawtucket is exempt from meeting the requirements of the Low and Moderate Income Housing Act (RIGL § 45-53-3). This exemption is based on the criteria that it has at least 5,000 occupied rental units that comprise at least 25 percent of all its housing units, and its low- and moderate-income rental units exceed 15 percent of the occupied rental units. In Pawtucket, 50 percent, or 16,002 units, of the City's year-round housing is rented; and low and moderate income units account for 17 percent, or 2,780 units.¹³ Because the City does not have to meet the 10 percent mandated low and moderate income unit threshold in the Act, it has not adopted an inclusionary zoning ordinance, a common tool used by other communities to meet this mandate.

Even though it is exempt, many of the City's residents are individuals and families with low and very low incomes that struggle to meet daily needs. As noted above, within Pawtucket, there are 2,780 units that are insured and/or subsidized by the US Department of Housing and Urban Development (HUD) and set aside for low and moderate income residents:

¹³ City of Pawtucket Department of Planning and Redevelopment, 2015

- 1,351 elderly housing units
- 1,201 family housing units
- 228 special needs housing units

To qualify for these units, applicants must meet income limits established by HUD, which are updated annually. The Rhode Island General Assembly has enacted legislation (Chapter 45-25) that allows cities to establish local public housing authorities. A local public housing authority was created in Pawtucket in the early 1940s. The five-person authority, whose members are appointed by the Mayor, has entered into an agreement with HUD to construct and manage public housing in the City.

Further, as a partner with the Pawtucket Central Falls Development Corporation (PCFDC), the development of low and moderate income units continues. Recently, 74 units were constructed in the Blackstone Valley Gateways development (33 in Phase I (in 2011) and 41 in Phase II (in 2015)). The City will continue to support the PCFDC and other organizations in developing low and moderate income housing throughout the City.

Housing for Those with Special Needs

Meeting the housing needs of people with developmental and physical disabilities is diverse and requires a variety of housing options. Housing style or amenities might include one-floor living, access ramps, and bathroom upgrades. Modifications to existing housing stock will most likely meet these types of needs, but costs can be a barrier. Location of housing is equally important. Access to public transportation and living within walking distance to work, shopping, social events, or appointments can be critical. According to the Rhode Island Development Disability Council (RIDDC), people with development disabilities should have the opportunities to live and participate in their communities. Units and developments meeting the needs of those with physical and developmental disabilities should be integrated into the community and efforts should be made to not isolate these populations.

As shown in Table 21, there are also many individuals with disabilities living below the poverty level, particularly adults between the ages of 18 and 64. Future affordable and subsidized housing units should take into consideration the specific accommodations needed by these individuals and where the housing units are located.

Table 21. Estimated individuals by age group with a disability living below or at the poverty level

		MOE (+/-)
Under 18 years	15,742	568
With a disability	633	169
Income in the past 12-months below poverty level	224	100
18 to 64 years	46,276	618
With a disability	6,511	560
Income in the past 12-months below poverty level	2,111	322
65 years and over:	8,272	461
With a disability	3,426	336
Income in the past 12-months below poverty level	702	169

MOE: Margin of error; Red text indicates that margin of error is greater than 25%.
 Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

Goals, Policies and Actions

Goals

Goal H 1. Provide Pawtucket residents from all socio-economic groups with safe, decent and affordable housing.

Goal H 2. Ensure that residential growth does not adversely affect environmental, recreational and cultural resources.

Goal H 3. Protect the quality of life and character within established residential neighborhoods.

Goal H 4. Accommodate increased residential density in the designated Growth Center and mill redevelopment projects.

Objectives

Objective H 1. Increase the amount of affordable units by 100 in 20 years.

Objective H 2. Expand homeownership in all neighborhoods by 10% in 20 years.

Policies

Policy H 1. Reduce the number of illegal and substandard units.

Policy H 2. Reduce the number of vacant/abandoned houses in residential neighborhoods.

Policy H 3. Maintain or reduce densities in established residential neighborhoods.

Policy H 4. Ensure that a consistent portion of the City's rental housing stock remains affordable and is in compliance with the provisions of the State of Rhode Island Low and Moderate Income Housing Act.

Policy H 5. Protect the City's residential neighborhoods by preventing encroachment from other non-residential land uses and discouraging increased density.

Policy H 6. Promote the de-concentration of affordable housing.

Policy H 7. Support appropriately scaled housing that meets the needs of the displaced and homeless population as well as the development of transitional housing.

Policy H 8. Promote and enforce the federal Fair Housing Law throughout the City.

Policy H 9. Continue efforts to eliminate lead hazards in Pawtucket's housing stock.

Policy H 10. Discourage absentee ownership of vacant land.

Policy H 11. Utilize HOME funds to provide affordable housing opportunities to low and moderate-income persons and families.

Policy H 12. Support the efforts of Pawtucket neighborhood advocacy groups including neighborhood associations and crime watch groups.

Policy H 13. Acquire vacant and abandoned properties to stabilize neighborhoods.

Policy H 14. Assist neighborhood clean-up efforts by supplying waste removal and regular street cleaning.

Policy H 15. Allow the subdivision of lots with two existing primary structures into undersized lots.

Policy H 16. Educate residents about measures that can be taken to control rodents.

Policy H 17. Provide educational materials for property owners and tenants on laws regarding lead hazards.

Policy H 18. Continue to work with the existing network of non-profits to develop support services and appropriately scaled permanent supportive housing for the homeless, disabled and other special needs populations.

Policy H 19. Continue to provide financial incentives for landlord occupied multi-family historic housing.

Economic Development

Introduction

The City of Pawtucket is proud of its reputation as the birthplace of the American industrial revolution. Iconic Slater Mill, located in the heart of the City's downtown, is a grand symbol of this proud economic heritage.

Today, like many urban communities, Pawtucket is looking to diversify its economic base. In the past twenty years, Pawtucket has capitalized on the repurposing of its former manufacturing mills into flex space for art, design and small incubator-type businesses. A good example of such reuse is Hope Artiste Village located at 1005 Main Street where some 600,000 square feet is utilized for a variety of small businesses, coffee roasting, bread baking, pilates, studio, restaurant, a nightclub and a highly successful indoor wintertime farmers market.

Pawtucket has had recent success in attracting some national and international corporations. In 2012, Tunstall America, a medical alert call center located a call center in a rehabbed mill and now employs over 300 people. And in August of 2015, the Pet Food Experts, a national pet food retailer and distributor, relocated its corporate headquarters and 85 jobs to 175 Main Street in downtown Pawtucket.

Pawtucket, already known for its reputation as an arts mecca, continues to attract art and design related businesses. The Design Exchange Center, located at 163 Exchange Street, is home to LLB Architects (28 employees) and 8 design related businesses.

Experts from the International Economic Development Council (IEDC) recently completed a study of Pawtucket's downtown. Their report, completed in May of 2015, contains 20 specific recommendations as to how best to revitalize the downtown.

Overview of City Economy

Employment

This section of the community profile addresses the employment available in Pawtucket. Note that these employment opportunities are not necessarily reflective of employment for Pawtucket residents, but rather indicate jobs within the City that are available to anyone in the state or region.

Table 22 shows the current and historic breakdown of occupations within the City. Although it continues to decline, manufacturing is still the second largest industry employer category in Pawtucket. Because of economic circumstances that affect the region and nation, many of the sectors have lost employees. However, Table 22 also shows where the City's efforts to attract artists and other professionals have been successful. These industry groups all show a marked increase. Employees under arts, entertainment and recreation have increased almost 50% since 2002.

Table 22. Occupations in Pawtucket 2002-2008

Average Employment	2002⁽¹⁾	2008⁽¹⁾	2014⁽²⁾	% Change 2002-2014
Total Private & Government	28,410	26,122	23,094	-18.7%
Total Private Only	26,167	23,617	21,088	-19.4%
Agriculture, Forestry, Fishing & Hunting	*	0	-	
Mining	0	0	-	
Utilities	*	9	*	
Construction	1,095	902	914	-16.5%
Manufacturing	7,525	4,830	3,891	-48.3%
Wholesale Trade	659	542	500	-24.1%
Retail Trade	2,362	1,787	1,397	-40.9%
Transportation & Warehousing	512	421	538	5.1%
Information	1,084	260	85	-92.2%
Finance & Insurance	906	905	544	-40.0%
Real Estate & Rental & Leasing	322	265	180	-44.1%
Professional & Technical Services	462	632	759	64.3%
Management of Companies & Enterprises	1,181	1,485	*	
Administrative Support/ Waste Mngmnt.	1,729	1,963	2,378	37.5%
Educational Services	269	389	354	31.6%
Health Care & Social Assistance	5,086	5,762	4,914	-3.4%
Arts, Entertainment, & Recreation	335	495	324	-3.3%
Accommodation & Food Services	1,279	1,616	1,664	30.1%
Other services (except Public Administration)	1,341	1,354	1,275	-4.9%
Unclassified Establishments	6	*	*	
Public Administration	2,243	2,503	2,006	-10.6%

¹ Rhode Island Economic Development Corporation, 2009

² Rhode Island Department of Labor and Training, 2015

Making strategic decisions about individual industries using the data in Table 22 is challenging primarily due to the overall state of Rhode Island’s economy. The state is finally starting to reach employment numbers that mimic those prior to the Great Recession. However, many of Rhode Island’s urban areas felt the effects of the recession disproportionately and continue to work toward conditions that will provide stability across all sectors. Changes in demographics, technology, and industries are occurring quickly and while it important to understand which industries are likely to remain viable, it is also important to develop a policy framework that can be nimble and easily accommodate unexpected opportunities.

In 2015, there were 42 private-sector employers in Pawtucket who employed 100 or more people and 15 that employed over 200 (see Table 23). Much of the growth that Pawtucket did experience in recent years, however, has been as a result of smaller enterprises. The City’s focus on the arts has resulted in a number of artists locating their studios in Pawtucket which are generally one or two person small businesses.

Table 23. Fifteen Largest Private Employers in Pawtucket

Employer	Number of Employees	NAICS Code	Product or Services
Memorial Hospital of Rhode Island	1488	622110	Health care
Hasbro, Inc.	1000	551114	Games and toys
Gateway Healthcare Inc.	800	621610	Health services
The Matlet Group	640	323110	Printing and packaging
International Packaging Corp.	603	337215	Boxes and packaging
Collette Vacations	400	561510	Travel agency
The ARC of Blackstone Valley	350	624310	Non-profit human services
American Insulated Wire Company	340	331422	Wire and cable manufacturer
Teknor Apex Company	325	326130	Rubber and plastics
Lifetime Medical Support Services	300	621610	Nursing services
Nursing Placement, Inc.	300	621610	Nursing services
Pawtucket Red Sox	300	711211	AAA Baseball
Aid Maintenance Co. Inc.	250	561720	Commercial cleaning service.
RI Textile Company	250	313221	Knit and woven elastics

Rhode Island Economic Development Corporation, 2010

New commercial and industrial construction is one indicator of the growth of the City's economic base. The number of construction jobs remained relatively stable from 2002 to 2008. This number is anticipated to go up over the next year, as a result of the stimulus programming. Since the 2011 update, the new commercial and industrial square footage has increased slowly (City of Pawtucket Building Department, 2010). These figures, however, do not take into consideration the rehabilitation of space for commercial or industrial uses in historic mill and other buildings.

Focus Areas

Business Retention and Expansion

At the core of any municipal or regional economic development plan is a commitment to keeping the businesses that already exist and providing an environment in which they can prosper. The City considers this piece of economic development to be the most important function of staff members working on economic issues. Customer service and collaborative relationships with the private sector are seen as fundamental to the future growth of Pawtucket's employment opportunities, neighborhood vibrancy, tax base, and regional presence.

To foster business retention and expansion, a variety of capacity building and partnership programs were recently instituted. Between 2013 and 2015, the City maintained operations with a zero tax increase for businesses. This decision was lauded by numerous local businesses as a key focal point for providing a stable, supportive and predictive cost environment. As part of outreach initiatives, the City continues direct engagement of the business community with regular visits from the Mayor. These visits cultivate relationships, allow the City learn about challenges in the community, and provide a forum for discussing solutions. As a capacity building program, the City partnered with Small Business Administration (SBA) Workshops, the Pawtucket Foundation, the Northern Rhode Island Chamber, and a number of other partners to provide a menu of workshops for current and prospective business owners alike. The workshops provide training on a wide variety of topics including everything from business planning to social media marketing. Finally, as an example of targeted service support, a local

business recycling program was provided to better serve these operations, while having the added benefit of improving the City's recycling rate.

Some of Pawtucket's recent business retention and expansion successes include:

- The City was instrumental in retaining Women's Care, the largest provider of reproductive health services in the State. The completely rehabbed 18,000 square foot former tire store at 21 Division Street now houses both the medical office suites for Women's Care and a state of the art physical therapy practice for a total employment of 70 people.
- The critically acclaimed La Arepa Restaurant on Smithfield Avenue is a shining example of a business that is thriving and expanding in Pawtucket. The restaurant recently purchased the entire building of its original tenancy and will expand into the new space. It is also renovating the building to create other storefront spaces for additional businesses.

Business Attraction

In addition to cultivating the businesses that already call Pawtucket "home," the City works hard across several departments and offices to attract new businesses. These efforts are designed to help the City expand its tax base, add to the vitality of strategic areas of investment, and increase the number of available. Many businesses offer services to residents, and the convenience of having ready access to them can increase affordability and resident quality of life. These businesses can also rehabilitate old buildings or build new ones that both increase property values and improve the overall quality of the area.

In an effort to both encourage reinvestment from existing Pawtucket firms and attract new business investment, the City passed a standardized property tax stabilization agreement which phases in taxes over five or ten years for businesses investing \$250,000 in property improvements. The standardized stabilization agreement provides a clear, predictable and reliable incentive for companies seeking to expand or relocate to Pawtucket.

Recent new businesses that have come to Pawtucket Include, but are not limited to:

- L.A. Fitness, national gym, opened a large facility on Pawtucket Avenue.
- Kitchen Countertops of New England, the Providence-based business, is expanding and moving to a mill on Esten Avenue. The business has already invested heavily in rehabbing the building and is bringing over 40 jobs to Pawtucket.
- Blaze Restaurant, an established restaurant, recently relocated from Providence to Hope Artiste Village.
- Three breweries (Foolproof, the Bucket, and Crooked Current) have opened in Pawtucket in about the five years. In November of 2015, the Isle Brewers Guild announced that they purchased the Kellaway Center, an industrial complex at 461 Main Street. The operation will partner with smaller beer brewers (producing less than 3,000 barrels annually) as they growth their businesses. As a result of this growing sector in the City, Valley Breeze reporter Ethan Shorey dubbed the city the "Craft Brew Capital of Rhode Island." This new business sector for the City is largely attributable to the state of the art water treatment system in the city - a great example of how investment in public infrastructure can spur economic growth. The City also

played an important financing role for the project with loans from both the Pawtucket Redevelopment Agency and Pawtucket Business Development Corporation.

Playing to Pawtucket's Strengths

Place-Based Economy

Much of Pawtucket's inherent economic strengths are identified with specific areas or places within the City. The most obvious areas of economic focus include the downtown, numerous mill complexes, and the riverfront area at City Hall and Slater Mill. In recent years, attention and planning efforts have also focused on the future commuter rail station. A more detailed description of these place-based initiatives is provided in the Land Use chapter of this plan, demonstrating the strong link between the City's land use policies and those for economic development. It is also worth noting in this section that policies surrounding housing development are closely woven into these place-based initiatives. Increasing residential density, particularly in the downtown area, is a strategy that the City has enabled through zoning allowances to specifically to enhance commercial viability for downtown area businesses. Recent examples of downtown building conversions to residential include Slater Mill (130 units), historic Gately building (13 units), and planned Clock Tower residences at the former St. Mary's School and convent (100 units).

McCoy Stadium also plays an important role in Pawtucket's economy and traditions, drawing visitors to Pawtucket Red Sox games. On occasion, the stadium is also used for music concerts. There are no current plans for the owners to relocate the Minor League Baseball team. The City will continue to work with the owners to assess the facility in meeting the organizations current and future needs.

Pawtucket Arts and Mill Clusters

In the decade preceding the adoption of this plan, the City of Pawtucket had focused much of its revitalization efforts on the arts and will continue to do so. The arts scene is diverse, rich, and complex in the City with outlets that are "event-based," others that are "place-based," and still others that are rooted in individual organizations. The collective impact of this community—both economically and in terms of Pawtucket's "brand"—is significant and will continue to set the City apart from other urban centers within the region. Some of the highlights of the arts economy in Pawtucket include:

- The Pawtucket Arts Festival and associated Film Festival had their 17th anniversary. The Pawtucket Arts Festival was listed as one of the largest "Tourist and Cultural Attractions" in the 2009 *Book of Lists* prepared by the Providence Business News. This event was estimated to draw 25,000 visitors to the City of Pawtucket.
- The Sandra Feinstein-Gamm Theater, located in the Pawtucket Armory, was estimated to bring 27,000 people into downtown Pawtucket through their regular programming.
- Successful mill rehabilitation arts cluster project include 1005 Main Street, 560 Mineral Spring Avenue, 545 Pawtucket Avenue, 65 Blackstone Avenue, 80 Fountain Street and 250 Esten Avenue.
- The City created an Arts and Entertainment Panel that centers on the downtown and also instituted grant programs to support the arts and spur local economic development. The Arts Panel reviews application for small grants (\$500 to \$2,000), which provide expose thousands of local residents to the arts at a minimal or no cost. In its early years, the Arts Panel received

eight to 10 applications, but then showed tremendous growth with over 30 applications submitted in 2009.

- Formation of the Advisory Commission on Arts and Culture to highlight and improve public art in the city. The Commission has begun numerous initiatives including the Hasbro Transformers Exhibit in City Hall and neighborhood paint boxes. All of these projects are targeted toward beautifying the city and calling attention to the beauty and uniqueness of Pawtucket.

Marketing the Pawtucket Experience

Pawtucket's list of assets is extensive and includes its geographic advantages on I-95 between Boston and New York, the Blackstone River Valley National Historic Park and National Heritage Corridor (See Historic and Cultural Resources), the vibrant arts community, Slater Park, the Pawtucket Red Sox, and beautiful neighborhoods. The City continues to reinvent itself through marketing initiatives that are geared around image building and highlighting the attributes that make Pawtucket a great place to live, work, play, and do business. Some of these initiatives and accomplishments include:

- Continued collaboration with the Pawtucket Foundation and their Experience Pawtucket initiative.
- Press coverage in the Providence Business News highlighting the riverfront, the City's commitment to infrastructure, transportation improvements, wonderful mill spaces, attractions, and more.
- Engaging a Pawtucket-based full service ad agency to help us undertake a rebranding effort that includes image building and a full website redesign.
- Receiving an "Our Town" Grant from the National Endowment for the Arts to sponsor public art installation on highway overpasses. This initiative will be another improvement to Pawtucket as a gateway to Rhode Island on I-95 and will communicate to all passersby that Pawtucket is a city with a vibrant arts community.
- Receiving the Barbara C. Burlingame Award (to the Mayor) for outstanding contributions to the business community by the Northern Rhode Island Chamber of Commerce. The award recognized all that is being done in Pawtucket to improve the business climate and change the government/business paradigm from adversarial to a partnership.
- The Armory has played host to Rhode Island Brew Fest, an event that attracts craft brewers (including Pawtucket's own) to showcase their wares, and features live music and local vendors and food. The event continues to grow and reinforces the City's status as Rhode Island's "Craft Brew Capital."

Urban Agriculture

Urban agriculture is small in Pawtucket. Figure 6 shows the locations of prime agricultural soils. These locations have been impacted by the growth of the City as an industrial center centuries earlier. Existing farming activities are mainly community gardens. New Urban Farmers established a small community garden at Galego Heights, a housing development managed by the Pawtucket Housing Authority. Residents maintain the garden.

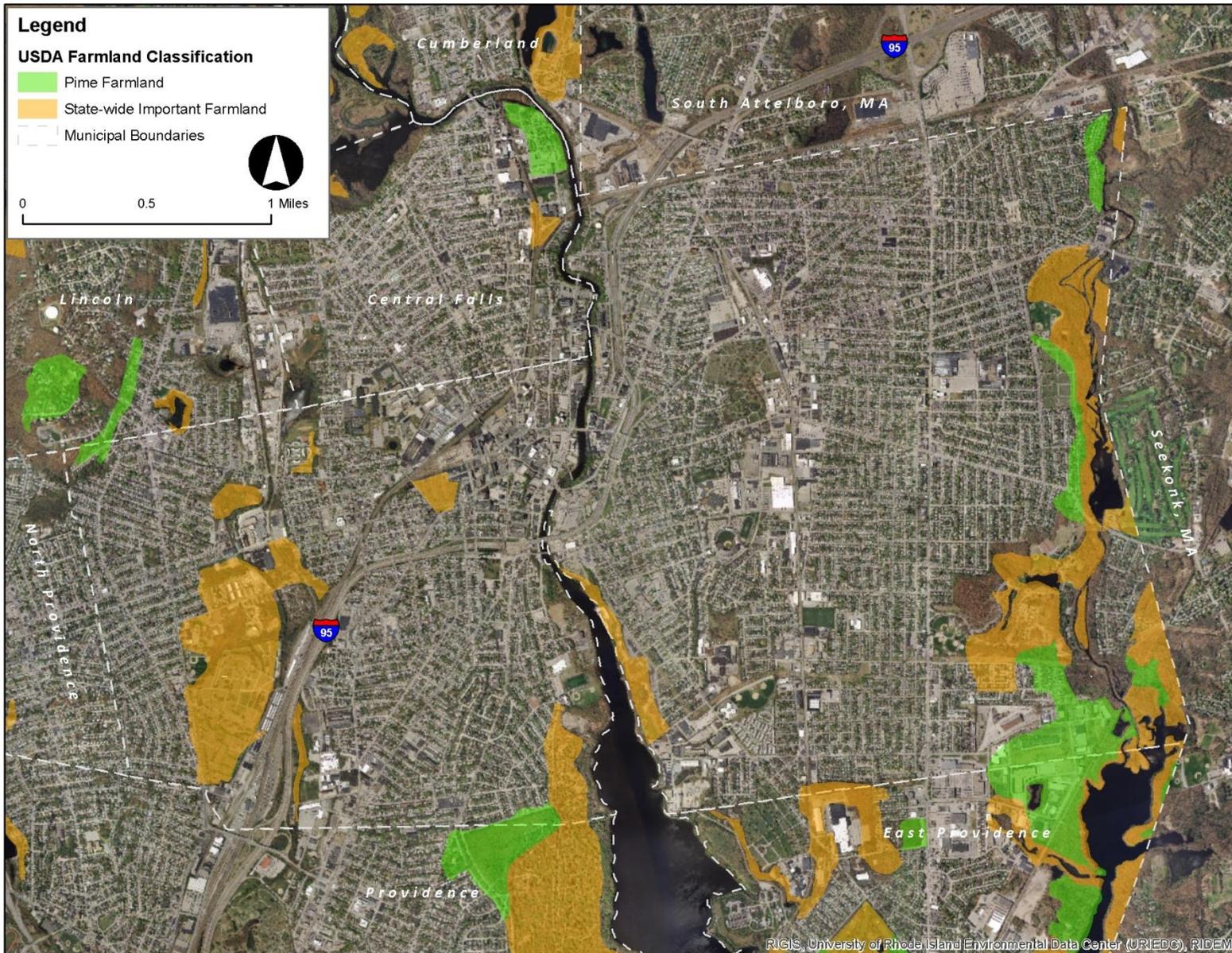


Figure 6. Prime Agricultural Soils in Pawtucket

The City hosts one of two Farm Fresh RI's Wintertime Farmers Markets at the Hope Artiste Village in the Woodlawn neighborhood. It is seasonally open from November to April. The first Wintertime Farmers Market started in 2007 in Providence at AS220. It quickly grew and moved to Pawtucket the following year. Since then, the market has grown tremendously. In 2010, a second day was added and in 2013 the vendors expanded from one hallway of the mill building to two. Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) benefits are accepted. Through corporate donations, Farm Fresh RI offers \$2 to every \$5 for customers using their SNAP debit cards.

Being in an urban area, any new agricultural activities in Pawtucket will require a different approach than more suburban and rural communities. Not only is open land limited, the legacy of historic industrial uses may have left contaminants behind. Above-ground planters can be an alternative, similar to what is being done at a brownfields site in collaboration with a local housing group and the RIDEM. Indoor agriculture can also be explored where appropriate. The City can also assess the use of public land for community gardens. Any use of land for edibles will have to be assessed for pollutants if the history of the site is not known.

Raising animals, including chickens, as well as beekeeping, are currently prohibited uses in the City. Ordinances were proposed to allow these uses, but were not successful in passing. The City will continue to work with local organizations to increase education and awareness of these uses in more urban areas.

Working with local and state food and agriculture organizations is another way Pawtucket can support agriculture in the City and throughout the state. In addition to the Wintertime Farmers Market, Pawtucket has partnered with Farm Fresh Rhode Island to provide funding and support for food service training at the former Old Colony Bank. This effort not only connects people and local food but provides job training.

Government Support

Several areas of this chapter provide examples of public sector initiatives pushed forward by the City to catalyze economic development. Investments in infrastructure, marketing, outreach, strategic planning, and regulatory reform are all part of a broad suite of government-based efforts designed to foster growth in the community. Strategies of note the City currently implements to support existing businesses and attracting new ones include:

- An emphasis on streamlining regulatory approvals for businesses including licensing and electronic building permitting.
- Aggressive small business lending through the Pawtucket Business Development Corporation.
- Infrastructure improvements including city-wide paving and converting downtown one-way traffic to two-way traffic.
- Brownfield remediation efforts including loan assistance from the Pawtucket Redevelopment Agency.
- Standardized tax stabilization agreements which are clear, predictable and reliable for potential business investors in the City.
- Regularly scheduled weekly meeting times for developers and architects to meet with City permitting officials

The City is forward focused and continually looking for ways to encourage economic growth now and in the future. New strategies for continued investment include:

- Programming events downtown that attract visitors and potential new customers
- Developing improved downtown wayfinding signage
- Auditing the Zoning Ordinance and Land Development Regulations to ensure a clear and efficient regulatory process

Goals, Objectives, and Policies

Goals

Goal ED 1. Make Pawtucket a high-performance local economy with a diversity of employment opportunities.

Goal ED 2. Build a reputation as a great place to do business.

Goal ED 3. Promote economic growth that capitalizes on the City's strengths.

Goal ED 4. Use the Growth Center as a focus for economic development (Also see Goal LU 2).

Goal ED 5. Strive for a well-educated, prepared, workforce.

Objectives

Objective ED 1. Decrease the amount of vacant square footage within historic downtown Pawtucket by 5% in 10 years.

Objective ED 2. Increase the number of businesses in Pawtucket.

Objective ED 3. Increase the number of jobs in Pawtucket.

Objective ED 4. Increase the number of high paying jobs in Pawtucket within the manufacturing, health care, arts/creative sectors and related businesses.

Objective ED 5. Cleanup 10 acres of contaminated property in 10 years.

Objective ED 6. Support efforts to increase graduation rate.

Policies

Policy ED 1. Support development that creates a strong, diverse and vital commercial downtown.

Policy ED 2. Support the maintenance and expansion of existing businesses in Pawtucket city wide.

Policy ED 3. Develop incentives to attract new businesses.

Policy ED 4. Support successful neighborhood commercial areas, including Central Avenue, Broad Street, Pawtucket Avenue, Main Street and Broadway.

Policy ED 5. Activate historic mill buildings with residential and commercial uses.

Policy ED 6. Support activities that improve quality of life in Pawtucket to retain an educated workforce.

Policy ED 7. Support and encourage policies that entice artists, art organizations and art institutions to relocate to Pawtucket.

Policy ED 8. Provide the adequate infrastructure including utilities, roadways, and parking facilities, at appropriate locations for economic development activities.

Policy ED 9. Support the efforts of the Pawtucket Business Development Corporation (PBDC) in providing assistance to area businesses through low interest loans, information, and referrals, including the allocation of CDBG funding to PBDC for secondary low-interest loans to Pawtucket companies.

Policy ED 10. Coordinate with Pawtucket Foundation, Northern RI Chamber of Commerce, and Commerce Rhode Island.

Policy ED 11. Utilize federal and state programs and financial incentives to assist the developers in remediation and reuse of brownfield sites within the City.

Policy ED 12. Utilize the tax stabilization ordinance and other economic incentives as a means to encourage the expansion of economic development.

Policy ED 13. Hold weekly developer meetings to assist in the navigation of the City's regulatory review process and monthly meetings to identify ways to streamline the process.

Policy ED 14. Continue to establish relationships with similar sized communities worldwide ("sister cities") to foster cultural exchanges.

Policy ED 15. Actively attract and provide resources and incentives to restaurants, galleries, grocery stores, retail and other uses which support residential development, to locate in the downtown.

Policy ED 16. Continue to support the BRVNHC through its designated coordinating entity Blackstone Heritage Corridor Inc. and capitalize on the National Park designation.

Policy ED 17. Recognize the diversity of the population as an asset in economic development efforts.

Policy ED 18. Continue to promote the Arts District as a way to attract new businesses and visitors.

Policy ED 18. Continue to support urban agriculture and community garden initiatives.

Historic and Cultural Resources

Introduction

Pawtucket has significant historic resources that represent the City's contribution to our growth as a state, region and nation. They represent Pawtucket when was the epicenter of the Industrial Revolution in the United States, which propelled the country from a purely agricultural society to one where goods were produced on a mass scale in large factories. In the late 1700s, Slater Mill was the site of the first successful cotton-spinning factory powered by the Blackstone River, revolutionizing manufacturing.¹⁴ The City and the region grew along the Blackstone and other rivers as more mills were built and used this newly harnessed power source. Many left their farms to work in these new factories. These historic resources are important to preserve because of their role in our nation's history. Recognizing its significance, Congress established the John H. Chafee Blackstone River Valley National Heritage Corridor in 1986. On December 19, 2014 President Obama signed legislation that established the Blackstone River Valley National Historical Park, the 402nd park in the national park system.

The National Park Service (NPS) defines cultural resources as "physical evidence or place of past human activity: site, object, landscape, structure; or a site, structure, landscape, object or natural feature of significance to a group of people traditionally associated with it." With this in mind, many of the City's cultural resources are inherently linked to its history. However, the role of culture is also linked to the arts and creativity, and can be described as shared beliefs or values of a community. A community that values the arts as part of their culture provides opportunities for practitioners to perform and produce their arts and crafts as well as gives the public the opportunity to experience the art and culture around them. From a planning perspective, a community can develop local policies and partnerships to support these activities.

The City partners with many local, state and national organizations and government agencies to preserve its historic heritage as well as to promote the artistic and cultural scene that has cultivated in Pawtucket over the past few decades.

Overview of Historic and Cultural Resources

Historic Resources

Between 1976 and 1977, the most recent and extensive survey of Pawtucket architecture was done. It was conducted by the Rhode Island Historical Preservation and Heritage Commission (RIHPHC) under contract with the Pawtucket Department of Planning and Redevelopment. Funding for the survey was provided in part by the city, through a Community Development Block Grant (CDBG), and in part by RIHPHC, through a survey-and-planning grant from the NPS. The survey inventoried 1,300 structures, districts, objects, and sites of architectural, historical, or visual interest. These resources date from the late seventeenth century through to the mid-1970s. Copies of the survey forms and maps are kept at the RIHPHC's office, the Pawtucket Department of Planning and Redevelopment, and at the Pawtucket Public Library.

¹⁴ <http://www.slatermill.org/home2/history/>

Following the survey, the RIHPHC published “Pawtucket, Rhode Island,” Statewide Historical Preservation Report, P-PA-2 in 1978, which serves as an excellent reference on the subject of local history and architecture. The report was reprinted in 1991.

Map 6 depicts Pawtucket’s historic and cultural resources. Currently, there are over 300 properties on the National Register of Historic Places, either listed as part of a district or individually. Historic districts on the National Register are listed in Table 24 and individual properties on the National Register are listed in Table 25.

Table 24. Districts on the National Register of Historic Places

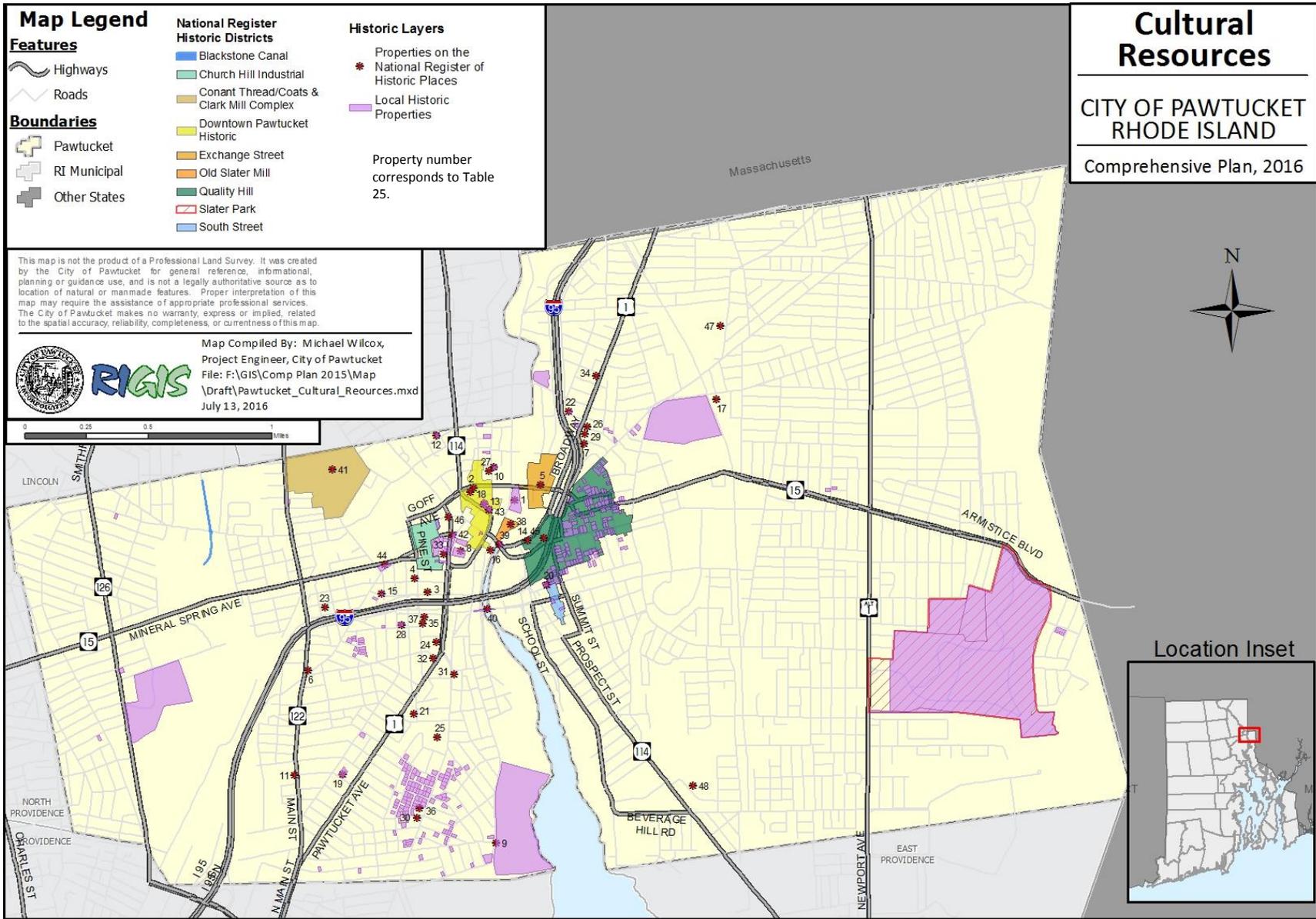
District	Date added	District	Date added
Blackstone Canal Historic District	1971	Old Slater Mill Historic District	1966
Church Hill Industrial District	1982/expanded 2011	Quality Hill Historic District	1984
Conant Thread Company Mills	1983	Slater Park Historic District	1976
Downtown Pawtucket Historic District	2007	South Street Historic District	1983
Exchange Street Historic District	2002		

Source: RI Historical Preservation and Heritage Commission (obtained December 2015).

Table 25. Properties on the National Register of Historic Places

Property	Map ID*	Property	Map ID*
Pawtucket City Hall	1	St. John the Baptist Church	23
Pawtucket Elks Lodge Building	2	St. Mary's Church of the Immaculate Conception Complex	24, 35, & 37
Potter--Collyer House	3	Pawtucket West High School	25
Childs--Brown House	4	Adams, John E., House	26
Pawtucket Armory	5	Montgomery, Nathaniel, House	27
Art's Auto	6	Payne, Charles, House	28
Fuller Houses	7 & 29	Kotzow, Louis, House	30
St. Paul's Church	8	Modern Diner	31
Riverside Cemetery	9	Gilbane's Service Center Building	32
Crandall, Lorenzo, House	10	Church Hill Grammar School	33
Hope Webbing Company Mill	11	Fire Station No. 4	34
Burnham, G.A., House	12	Scholze--Sayles House	36
Sayles, Deborah Cook, Public Library	13	Old Slater Mill	38
Pawtucket Congregational Church	14	Main Street Bridge	39
Fifth Ward Wardroom	15	Division Street Bridge	40
Bridge Mill Power Plant	16	Liberty Arming the Patriot	42
Phillips Insulated Wire Company Complex	17	Pawtucket Post Office	43
Pawtucket Times Building	18	Collyer Monument	44
Foster--Payne House	19	Pitcher--Goff House	45
Spaulding, Joseph, House	20	Gately Building	46
Mitchell--Arnold House	21	Standard Paper Box Corporation	47
First Ward Wardroom	22	Prospect Heights	48

* See Map 6. Source: RI Historical Preservation and Heritage Commission (obtained December 2015).



Map 6. Historic and Cultural Resources

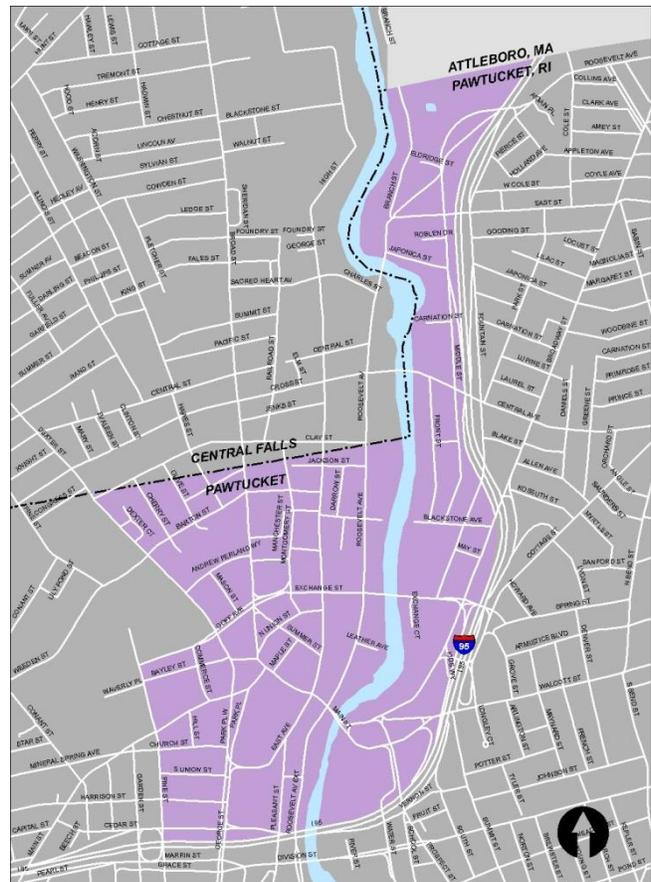
A study commissioned by the City of Pawtucket identified a number of properties which are eligible for listing on the National Register of Historic Places. Properties are added to this list as the City becomes aware of them.

Arts and Culture

The City has taken the lead in supporting the arts and culture in Pawtucket. In 1998, the Rhode Island General Assembly passed a law establishing an Arts and Entertainment District, which encompasses the downtown and mill district areas (approximately 307 acres).

Designated as a model development project, the State and City provide significant tax incentives to artists selling original art, who live and work within the district, and to art galleries that are established within the district boundaries. Some of the spaces and organizations in the District are:

- The Sandra Feinstein-Gamm Theatre
- Pawtucket Armory Arts Center
- Slater Mill Museum and Slater Mill Gallery (Slater Mill has space where organizations such as the RI Spinners Guild meet.)
- Pawtucket Arts Collaborative, with a gallery and work space in Lorraine Mills
- Mad Dog Arts Studio
- The “Forget-Me-Not” Art Gallery (The Samaritans of Rhode Island)



Pawtucket Arts and Entertainment District

The Pawtucket Arts Festival has been held annually during the month of September since 1999. According to their mission statement, “The Pawtucket Arts Festival celebrates creative and cultural life in the City of Pawtucket...”¹⁵ Events are held around the City that showcase dance, music, theatre, film, visual arts, design, and other art forms and media.

More recently, Pawtucket has recognized the value in creating both temporary and permanent public art installations to support creative placemaking.¹⁶ In 2014, the Mayor established an Advisory Commission on Arts and Culture that focuses on the identification, expansion, and promotion of the arts, culture, and artistic features throughout the city. That same year, the City received a grant from the National Endowment for the Arts to create a permanent public art exhibit on the George Street overpass on I-95. The City has named this project Art Bridges Pawtucket, and undertaken a rigorous community outreach process to fully integrate public art with the Pawtucket community. Another

¹⁵ <http://pawtucketartsfestival.org/about-us-page-2/>

¹⁶ Also see definition and discussion in “Downtown” section of Land Use Chapter.

creative placemaking initiative includes the Public Art Mapping project.¹⁷ With the Pawtucket Foundation and the Commission on Arts and Culture, the Public Art Mapping project has mapped over 20 public art installations, including sculptures, murals, and memorials. Table 26 lists the Commission’s short and long-term priorities.

Table 26. Priorities for the Pawtucket Commission on Arts and Culture

High Priorities	Medium Priorities	Long Term Priorities
Public art projects (displays and programming)	PaintBox unveiling (Rico)	City Hall retaining wall mural
Funding for public art projects	Pawtucket Arts Festival event (NEA unveiling, poetry slam, networking event)	DPW recycled art
Budget	Networking events/gallery nights	Branding
How to get the Public Art Map out to the Public	Rename display cases - Pawtucket City Hall Gallery with a dedication plaque	

Historic Areas and Sites

Map 6 identifies National Register-listed properties as well as local historic districts, cemeteries, and cultural sites. There are six general features that are most characteristic and unique to the City: the presence of a major river, the Blackstone River; residential neighborhoods; multi-family residential structures; mill structures; cemeteries; and the downtown. The following is a description of each.

Blackstone River

The Blackstone River is the largest and most historically significant of the three rivers that run through Pawtucket. Entering the City from the north, the Blackstone courses generally southward, dividing Pawtucket into almost equal parts. At the Pawtucket Falls, the Blackstone falls into the tidal Seekonk River, a navigable extension of Narragansett Bay. The Blackstone has historic significance because the waterpower available at the falls was the primary reason for Pawtucket’s early development. It was attractive for early manufacturing activity, and settlement continued to center around the river and the falls.

The Blackstone River is recognized nationally for its contributions to our country’s heritage. Congress passed an Act in 1986 to establish the John H. Chafee Blackstone River Valley National Heritage Corridor (the Corridor) in Massachusetts and Rhode Island for the purpose of “preserving and interpreting for the educational and inspirational benefit of present and future generations the unique and significant contributions to our national heritage of certain historic and cultural lands, waterways and structures within the Blackstone Valley” in order to “provide a management framework to assist the states...and their units of local government in the development and implementation of integrated cultural, historical, and land resource management programs in order to retain, enhance, and interpret the significant values of the lands, waters and structures of the Corridor.” (Public Law 99-647, November 10, 1986).

¹⁷

<http://www.experiencepawtucket.org/bVisitbPawtucket/ThingstoDoSee/PawtucketPublicArt/tabid/228/Default.aspx>

This law was amended and extended several times, most recently in 2014 (PL 113-291). It established the Blackstone River Valley National Historical Park, the 402nd park in the National Park System. The same legislation also extends the authorization of the Corridor for six years through the end of Fiscal Year 2021 and adds the Town of Auburn, Massachusetts, and additional portions of Providence to the Corridor.

The Blackstone River Valley National Historical Park was established to help preserve, protect, and interpret the nationally significant resources that exemplify the industrial heritage of the Blackstone River Valley. The park will also support the preservation, protection, and interpretation of the urban, rural, and agricultural landscape features (including the Blackstone River and Canal) of the region that provide an overarching context for the industrial heritage of the Blackstone River Valley. In addition, the park will interpret the nationally significant sites and districts that convey the industrial history of the Blackstone River Valley, and work to support the network of partners, related resources, and facilities throughout the Corridor.

It should be noted that the National Historical Park and the National Heritage Corridor are two distinct concepts and managed by separate entities. The Park boundaries have not been established but will include locations within the Corridor. The Park will be managed by the federal government through National Park Service. The Corridor is coordinated by Blackstone Heritage Corridor, Inc., a non-profit organization.

Residential Neighborhoods

In 2002, a team of Brown University students analyzed Pawtucket geography, architecture, economic, and demographic characteristics and concluded that Pawtucket has 14 distinct residential areas that can be defined as neighborhoods. The 14 different neighborhoods illustrate the diversity of the City, ethnically, architecturally, and socioeconomically. They are:

Barton Street	Oak Hill
Beverage Hill/Plains	Pinecrest
Countryside	Pleasant View
Darlington	Quality Hill
Downtown	Slater Park
East Riverview	West Riverview
Fairlawn	Woodlawn

Each of these areas has a unique history, which has been influenced by natural and physical features. They correlate in many respects to the City's planning districts (Map 5). Nearly half of Pawtucket's housing was built before 1939 (47.7 percent, +/- 1.7 percent); however, the City focuses preservation efforts in neighborhoods with structures more than 70 years old, those built before 1945. While all neighborhoods will be monitored as homes are proposed for demolition or significant alterations to structures that are considered historical, neighborhoods of interest will be Woodlawn, Pleasant View, and Quality Hill, which already is designated a local historic district. These neighborhoods have more than 70 percent of their housing built before 1950.

Multi-Family Structures

As the City developed, most residents lived in multi-family structures, and many of these structures are still in use. The private textile mills of the nineteenth and twentieth centuries did not provide housing for their workers in similar fashion as other mills in nearby locations. Privately built and owned

tenements were the main form of housing, beginning first with two-family structures, then evolving to the three-story tenements of the early 1900s. According to the 2013 American Community Survey five-year estimates, approximately 62 percent of the City’s housing stock is multi-family structures.

Mill Structures

Pawtucket has historically been, and is still today, an industrial community. It has been the scene of some of the proudest accomplishments in American industrial history. Most of the great textile companies for which Pawtucket was once famous have moved to the South or ceased operation, and a number of the mill buildings remain vacant and underutilized.

A survey of existing mill buildings in Pawtucket was prepared in 1990 by Extradados Architects for the Preservation Society of Pawtucket. The Pawtucket Mill Building Survey documents approximately 100 textile-related structures in the City and details their historical and physical characteristics. This document contains location data, architectural descriptions, historical narrative, and a conditions assessment for each property. Pawtucket updated the Mill Building Survey in 2014 with grant funding from the Rhode Island Historic Preservation and Heritage Commission.

Based on this survey, some industrial resources along the Blackstone River still remain today. These buildings represent industrial accomplishments from the age of steam power, rather than those earlier industries run by waterpower. The largest mill building remaining on the Blackstone River is the former Greene and Daniels Mill, which dates back to 1860. It is currently used as residential condominiums and office space for Collette Travel. Given the decline of manufacturing in Rhode Island and New England of the past several decades, not all of these structures will continue to house these types of uses. The Pawtucket Mill Building Survey provides a valuable resource to evaluate individual buildings for potential reuse. Currently, there is only one industrial building (Parkin Yarn) in Pawtucket’s local historic district, but many of the mill structures are included on the National Register of Historic Places.

Cemeteries

Historically, Rhode Island communities had small farm cemeteries and Massachusetts communities had large town and church cemeteries. Because Pawtucket originated as a Massachusetts town it has few cemeteries. Pawtucket’s eight cemeteries, each with their own unique history, total 192 acres and contain an estimated 19,000 marked graves. An unused portion of Swan Point Cemetery is also located in Pawtucket. Table 27 lists the affiliation and noteworthy information for each cemetery.

Table 27. Historic Cemeteries in Pawtucket

Historic Cemetery #	Name	Affiliation	Comments
1	Mineral Spring Avenue	City-owned	Burial site of the Jenks family
2	Mount St. Mary's	Catholic	Prospect Street
3	St. Francis	Catholic	Largest cemetery in Pawtucket,
4	Walnut Hill	Private	Armistice Boulevard
5	Oak Grove	City-owned	28 acres, in active use
6	Notre Dame	Catholic	Daggett Avenue
7	Riverside	Private	Listed on National Register of Historic Places
8	St. Mary's	Catholic	Part of St. Mary's Church complex; Historic

Source: Cultural Resources Plan, PAL, 2001.

Downtown

Pawtucket's downtown is a dense area of institutional buildings constructed during the City's period of prominence (1930s) as well as a number of post World War II buildings. A number of structures are listed on the National Register, including the Public Library and Annex, City Hall, and Slater Mill Historic Site. Pawtucket's downtown has been the subject of numerous studies and has been the focus of redevelopment efforts in the past (more discussion of these efforts is in the Land Use Chapter). The Arts and Entertainment District is a major contributor to the growing arts and culture scene, and builds support of historic preservation.

Issues Threatening Resources

The biggest threats to the City's historic resources are demolition, alteration that destroys the historic integrity of a resource, and vandalism. The effect on historic resources must be considered when attempting to attract new development into the downtown and in 2007, Downtown Pawtucket became a designated National Register District. With the exception of the Leroy Theater and adjacent Fanning Building, there has been very little demolition of downtown buildings in recent years. Wherever feasible, the City encourages reuse and redevelopment over demolition, particularly in the downtown core. The City's demolition delay ordinance provides a six month delay for buildings older than 50 years that are of significant interest. This delay period is designed to explore options other than demolition with the owner.

Generally, older private cemeteries are finding it difficult to finance the continuous task of maintenance because of an inadequate fund established for perpetual care. Each private cemetery is working on its own program to meet its obligations and secure additional operating funds. Cemeteries are also plagued by vandalism. Tipped over headstones are expensive to reset and damages to sculpture and statues are expensive to repair.

Local Programs and Management

The preservation of the City's rich architectural and cultural resources requires the cooperation of the City, State, and local non-profit preservation organizations. For the past decade, there have been significant efforts made. The continued involvement of the City, Pawtucket Historic District Commission, non-profits, and non-professional advocates in preservation-related activities is important to the future success of preservation initiatives in Pawtucket. Each has broadened its membership and clarified organizational goals.

City of Pawtucket

The City has used city funds in combination with state and federal grants to rehabilitate a number of important historic resources. They are listed in Table 28.

Table 28. City of Pawtucket Preservation Projects

Project	Funding Source
City Hall Tower Rehabilitation	City Bond
Pawtucket Public Library	Save America's Treasures/State Preservation Grant/Champlin Foundation
Slater Park Bandstand	Save America's Treasures/RIDEM Open Space Grant – Passive and Historic Parks
Hiker Park Rehabilitation	RIDEM Open Space Grant – Passive and Historic Parks
JC Potter Casino, Slater Park	State Preservation Grant
Slater Mill Painting	Champlin Foundation

Source: Department of Planning and Redevelopment, 2015

In 2009 the City of Pawtucket partnered with Cumberland, Central Falls and the Blackstone Valley Tourism Council to receive a Preserve America grant for the Broad Street Regeneration Initiative. This plan was prepared for Broad Street, the commercial corridor which links the three communities. The focus of the plan was on revitalization through preservation. A number of programs have resulted from the plan, including a CDBG-funded façade improvement grant program and assessment funding from the RIDEM.

Pawtucket Historic District Commission

The most common method for municipalities to control or influence the condition of their historic areas and structures is through the use of a local historic district commission. On January 25, 1989, the Pawtucket City Council approved the appointment of the City's first Historic District Commission (HDC). The Pawtucket Zoning Ordinance, Chapter 410, Article V, describes in more detail the powers of the Commission and their procedures for the designation and review of structures.

Although the Pawtucket HDC was originally charged with protecting the Quality Hill neighborhood, the District has been expanded Citywide. The largest additions occurred in October 1997 when a total of 92 structures were added. A total of 280 public and private properties are currently under the jurisdiction of the HDC.

Other activities of the HDC include collaborating with the Preservation Society of Pawtucket on specific projects such as the publication of neighborhood guides. The HDC applies for and receives a small amount of grant funds from the Certified Local Government (CLG) Program of RIHPHC. CLG funds have been used for the preparation of National Register nominations and the publication of tour brochures for the City's neighborhoods. Most recently, these CLG funds were used to install historic markers designating the downtown as a National Register District.

The HDC has a set of design review standards to assist local historic property owners through the Certificate of Appropriateness process. The HDC also reviews improvements to city buildings, designates new properties to the local historic district, and provide opinions and technical advice on matters affecting historic properties.

Pawtucket recently became the first Rhode Island community to offer financial incentives for becoming a part of the local historic district. As of 2000, owner-occupied properties in the local historic district became eligible for a tax exemption on \$30,000 of assessed value on local property taxes.

The Pawtucket Library houses a Preservation Collection to assist in public education. Public education will prove even more important over the years to come as the economic development downtown intensifies, improvements to the Pawtucket Riverfront progresses and the Zoning Ordinance is revised. The Elizabeth J. Johnson History Research Center, which has moved from the private residence of Elizabeth J. Johnson to a dedicated room at the library, contains her life's work – a collection of documents, artifacts, and images related to the history of Pawtucket. This collection is substantial and has been utilized by researchers across the country.

Finally, the Pawtucket HDC worked with the Department of Planning and Redevelopment on the drafting of a demolition delay ordinance which allows the City six months to work with owners who propose to demolish significant historic structures within the City, even those that are not listed within the local Historic District.

Adaptive Reuse Successes

Another major event affecting historic preservation in Pawtucket was the start of the CDBG Program in 1975. The City is eligible for a sizeable federal grant contingent on the completion of an annual application for eligible activities. As a part of the environmental review for each project, the impact on historic properties must be assessed. The City of Pawtucket continues to utilize the historical survey conducted by the Rhode Island Historical Preservation Commission in the mid-1970s for grants and ongoing questions regarding the historical significance of houses and commercial structures in the City.

During the late 1970s and 1980s, through funding from the CDBG program, city bond issues were able to assist in the adaptive reuse of several former fire stations: 636 Central Avenue, 420 Main Street, a city ward room, several residential structures, an early gas station conversion to offices, and the early post office into a library annex. The projects, which also used private funding, are considered excellent examples of reuse.

The 1980s was a decade that witnessed intense interest in orienting development and rehabilitation along the Blackstone and Pawtucket/Seekonk rivers. Some results of this effort have been the creation of Hodgson-Rotary Park (1989) and the creation of a Veterans' Memorial Amphitheater adjacent to City Hall (1990). Several mill buildings close to the waterfront were also rehabilitated and reused, including the Green and Daniels Mill, part of which was converted to condominiums.

The City has seen many successful reuse projects. Part of the former Peerless building on Main Street has been reused as a Visitor Center. The Pawtucket Armory building on Exchange Street is being reused for a number of arts-related uses. The Preservation Society of Pawtucket (PSP) bought and rehabilitated 67 Park Place to house their organization's office as well as other not-for-profits. The former Pawtucket Children's Museum building at 58 Walcott Street in Quality Hill is now used for private functions and receptions under the business name "Grand Manor." A number of mill rehabilitation projects have successfully returned outdated industrial complexes into residences or mixed use buildings.

Preservation Society of Pawtucket

The PSP was incorporated in 1978 as a non-profit 501(c)(3) membership-driven community organization devoted to identifying, promoting, and encouraging the preservation of the rich historical and architectural resources of the City of Pawtucket through education, advocacy, and technical assistance. The PSP strives to protect the integrity of neighborhoods, encourage policies that foster environmental and historic preservation concerns, and promote a shared sense of community through education and advocacy.

The PSP has worked with the Pawtucket HDC to research, write, and produce brochures highlighting seven of the city's historic neighborhoods: Quality Hill Historic District, Main Street - the Jenks Settlement, the Church Hill Industrial District, Woodlawn, Pleasant View, Fairlawn, and Oak Hill. Each brochure is designed to allow a self-guided walking tour of the area, and includes notes on architectural features, anecdotal facts, and the significance of the buildings to the history of Pawtucket. The PSP has also produced a well-received children's education program, "This is Our City", to teach 1st through 4th grade children about the history and importance of local buildings. Survey work during the past five years has included a Barton Street Study (1998), Pleasant View (1998), and the Sayles Heights Area (1998).

Currently, the PSP has no paid staff. The PSP volunteer Board of Directors carries out all functions, including a quarterly newsletter. In 1999, the PSP purchased the building in which their offices are housed. Located in the historic 1823 Jonathan Baker House at 67 Park Place, the building is the earliest remaining house between the Pawtucket River and its location on Park Place, and is the only Federal Period brick house left in Pawtucket.

Old Slater Mill Association

One of the early historic preservation efforts in Rhode Island occurred in 1921 when the Slater Mill building was purchased by a group of businessmen and incorporated under the name of the Old Slater Mill Association. The mill was restored to its presumed appearance of around 1835, and opened to the public in 1955. At that time, the adjacent Wilkinson Mill was still used for commercial purposes. As part of the Slater Urban Renewal Project, federal funds were used in the late 1960s to buy and restore the Wilkinson Mill and move the Sylvanus Brown House (circa 1758) to the site as part of a three-building complex. The adjacent commercial land to the south was converted into open space and named Hodgson-Rotary Park, and additional land was acquired across the Blackstone River to provide a clear view of the entire site.

In the 1980s, through the use of a combination of federal, state, and foundation grants, Slater Mill was able to reconstruct the water wheel in the Wilkinson Mill and provide educational material for visitors to the mill complex. The Slater Mill Historic Site is designated as the southern anchor for Blackstone River Valley National Heritage Corridor. The opening of the Blackstone Valley Visitors Center across the street in September 1999 has served to draw even more visitors to the area.

The Slater Mill Historic Site, together with assistance from local agencies, has been engaged in a comprehensive planning process to reassess its current programs and develop new attractions as a way to better serve its visitors. The City, together with the Old Slater Mill Association, has planned some major construction projects around the Slater Mill Historic Site to improve infrastructure and aesthetics at the site and as well as access to the site. These include a new parking lot, lighting, and landscaping.

Blackstone Heritage Corridor, Inc.

As noted above, the law establishing the Corridor was amended and extended several times, most recently in 2014 (PL 113-291), when it extended its authorization through the end of Fiscal Year 2021 and expanded its area to include Auburn, Massachusetts and portions of Providence. Notably, the 2014 legislation also included a provision for the Corridor's managing commission to designate a local coordinating entity to undertake its responsibilities. That entity is the Blackstone Heritage Corridor, Inc. (BHC).¹⁸ BHC works with community partners to preserve and promote the Blackstone Valley's historic,

¹⁸ <https://blackstoneheritagecorridor.org/>

cultural, natural and recreational resources for current and future generations. The City will continue to partner BHC.

Blackstone Valley Tourism Council

The Blackstone Valley Tourism Council is located in downtown Pawtucket. Part of their mission is to encourage cultural tourism within the Blackstone Valley, including Pawtucket.

Goals, Objectives, and Policies

Goals

Goal HC 1. Preserve or assess archaeological resources to expand the body of knowledge about the pattern of Rhode Island settlement.

Goal HC 2. Preserve through use, or reuse, structures or sites in the National Register of Historic Places in the Local Historic Districts or other structures and sites of historic significance to the city.

Goal HC 3. Preserve the integrity of historic neighborhoods where most of the residential structures are more than 70 years old.

Goal HC 4. Explore temporary and permanent public art potentials for creative placemaking.

Goal HC 5. Locate the offices of the new National Park in downtown Pawtucket.

Objectives

Objective HC 1. Expand the Local Historic District by 20 properties by 2036.

Objective HC 2. Increase the number and quality of public art installations one every five years.

Policies

Policy HC 1. Increase understanding and appreciation for the City's cultural resources.

Policy HC 2. Protect all of the City's National Register listed and eligible properties from demolition and neglect.

Policy HC 3. Support efforts to re-establish the State Historic Tax Credit.

Policy HC 4. Continue to identify and document historic resources within the City.

Policy HC 5. Expand the local historic districts where appropriate.

Policy HC 6. Encourage a reuse of vacant structures of historic or architectural interest.

Policy HC 7. Coordinate activities with the Blackstone Valley Visitor Center to promote visitors at the Slater Mill, the National Heritage Corridor, the National Park, and other area attractions.

Policy HC 8. Continue to support the historic preservation efforts and programs of the Preservation Society of Pawtucket.

Policy HC 9. Continue to research, map and predict archeological sites throughout the City.

Policy HC 10. Encourage preservation of historic buildings over new construction where appropriate.

Policy HC 11. Encourage the use of the Mill Building Reuse District zoning overlay, to promote the reuse of historic buildings.

Policy HC 12. Using the Pawtucket Mill Building Survey (1990, updated in 2012) to provide information to potential developers about available incentives for the rehabilitation of vacant or underused industrial buildings.

Policy HC 13. Work with federal, state and other agencies to promote the creation of public art and support of the art community in Pawtucket.

Policy HC 14. Continue to support the National Corridor through its designated coordinating entity Blackstone Heritage Corridor Inc. and capitalize on the National Park designation as the National Park Service begins to establish its boundaries.

Natural Resources

Introduction

Pawtucket is nearly built out, which makes improving the health existing natural resources imperative. Natural systems in urban environments provide many economic, social and environmental benefits. During storms, natural systems, such as wetlands, can absorb runoff and prevent flooding, protecting properties from damage. Trees and other vegetation provide shade and reduce the impacts of the “heat island effect,” when built areas are hotter than rural areas. Pavement, rooftops, and other surfaces absorb and retain heat, and cities can be 2 to 5 degrees warmer in the day than surrounding areas. The difference can be as much as 22 degrees in the evening.¹⁹ Increasing shade and reducing pavement lowers energy costs to cool homes during the summer months and minimizes pollution that impacts air quality. Natural systems can also provide opportunities for recreational and educational activities. In a city where many live in apartment buildings or have small private yards, access to rivers or forested areas can give residents space to exercise and explore.

The natural systems in Pawtucket have been altered by industry and urban development that began more than 300 years ago. It has only been in the latter part of the twentieth century that federal, state and local policies were put in place to improve the health of these systems. The primary natural systems of Pawtucket are its waterways and small wetlands and forested areas.

Overview of Natural Resources

Filled Wetlands

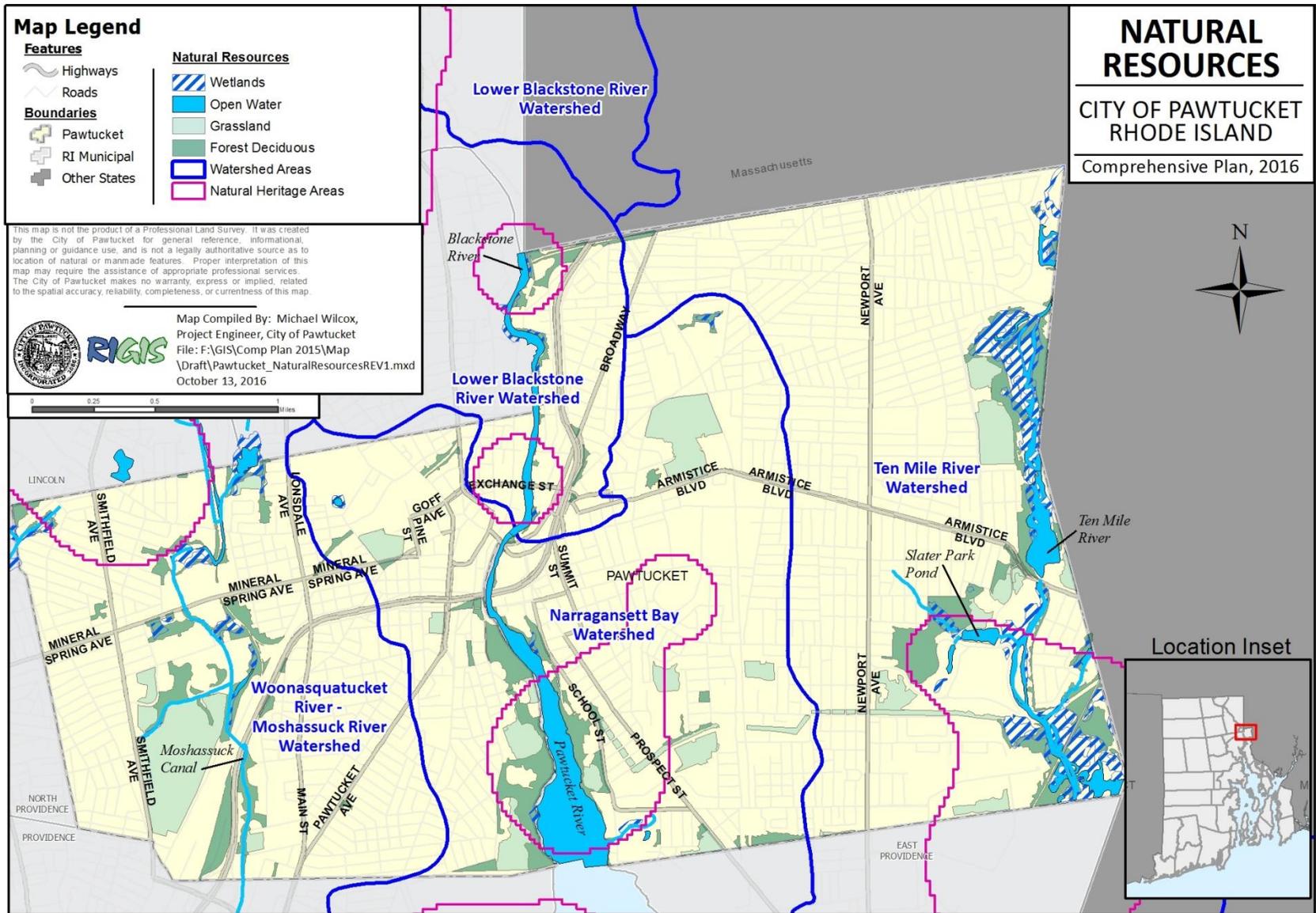
The historic development of the city has resulted in ponds and marshes being filled and extensions of man-made fill into river and tidal areas. Many of the modifications have occurred so long ago that the public today is unaware of the changes that have been made. Map 7 shows the location of all natural resources in Pawtucket.

There were several ponds located in the area now occupied by a small industrial park and McCoy Stadium. These ponds were drained by Bucklin Brook, which flowed southwesterly and into the Pawtucket River near Beverage Hill Avenue. This area has been transformed so that building with the proper foundation is possible. Another area with extensive fill is the land in the Moshassuck Valley.

Freshwater Wetlands

There is a series of freshwater wetlands totaling approximately 106 acres adjacent to the City’s river systems. The largest extent of wetlands is on the Ten Mile River System and the Moshassuck River. Those wetland areas are used extensively by migrating waterfowl. For the purposes of general planning, the location of wetlands can be determined by using U.S. Geological Survey topographic maps and information from Rhode Island Geographic Information Systems. It is the responsibility of public and private entities and developers to submit applications to the Freshwater Wetlands Section of the Rhode Island Department of Environmental Management (RIDEM) for development projects within 200 feet of a stream greater than 10 feet wide, 100 feet of stream less than 10 feet wide, or within 50 feet of a pond or wetland.

¹⁹ <http://www.epa.gov/heatisland/about/index.htm>



Map 7. Natural Resources

Forest and Wooded Areas

Pawtucket has minimal vacant land throughout the City. As the City developed, forestland was converted into farmland and then into house lots. The amount of land that can be classified as forestland or wooded is very small, less than 300 acres. Common tree types are oak, maple, and miscellaneous deciduous varieties.

A way for the City to incorporate trees appropriately into the landscape is through the installation of street trees. Street trees are of great value in an urban environment. This fact has been recognized by the City and the Department of Public Works, which, over the past decade, has been using City and other funds, to install street trees in more areas of the City. Also, the Zoning Ordinance mandates new landscaped areas and trees be installed in parking lots over four spaces and in overall developments occurring on 20,000 or more square feet. The Department of Planning and Development have also used their Development Plan Review process to preserve old growth trees to the extent feasible.

The City of Pawtucket has two trees of statewide significance: the State Champion Cedar-of-Lebanon (*Cedrus libani*) is located at 689 East Avenue and the third largest Atlas Cedar (*Cedrus atlantica*) is located in Riverside Cemetery.

Coastal Features

The Blackstone River ends at the falls under the Main Street Bridge and from that point, the Pawtucket/Seekonk River widens out as the northern most extension of Narragansett Bay. The river shoreline is tidally affected as far north as the Pawtucket Falls at Main Street. The shoreline is largely confined to man-made retaining walls from the falls to the southern terminus of the former state pier on the eastern shore and to the vicinity of the Max Read Field on the western shore. The immediate upland areas that are not developed are characterized by steep embankments along most of the shore.

The Rhode Island Coastal Resources Management Council (CRMC) reviews construction and physical alterations that affect the coastal areas of Rhode Island. Although Pawtucket does not have an extensive shoreline, the same basic regulatory process is in effect for the City's coastal feature, the Pawtucket/Seekonk River. Certain major industrial activities as well as all proposed actions within 200 feet of the tidal area shoreline require review by the CRMC. Pawtucket worked with the communities of Providence, East Providence and Cranston on the Metro Bay Special Area Management Plan (SAMP) to develop the Urban Coastal Greenways Policy, a guidance document which allows for these developed urban areas to be regulated differently from undeveloped rural areas.

Water Resources

Water resources serve many purposes in the community such as providing sources of drinking water, powering industrial uses, furnishing recreational opportunities, facilitating transportation, and giving aesthetic pleasure. It was the presence of the Blackstone River that attracted the founding settlers to the City. They saw the river as an instrument to turn the power wheels and shafts of the first industries in Pawtucket. For 170 years, the riverfront area of the Blackstone River was extensively used for industrial purposes, and there are the remains of a number of structures from the era when industries were located on the riverfront. In the mid-1990s, the City commissioned the Riverfront Development Plan to guide the redevelopment of the waterfront. The implementation of the recommendations from that plan continues today.

Pawtucket lies within the drainage basin of two major systems, the Blackstone River and the Narragansett Bay/Seekonk River System. Additionally, there are two other minor rivers, the Moshassuck and the Ten Mile River that flow through Pawtucket. An extensive amount of research has been completed to determine the conditions of the Blackstone River and the Narragansett Bay, such as the amount and types of discharges entering the waterways, their suitability for drinking water and other purposes, and determining an overall rating for their condition and recommending improvements. It is expected that as the land uses adjacent to these rivers becomes less industrial in nature, the quality of the water will improve.

Groundwater Resources

Most of the City is covered with glacial materials that are favorable for the storing and the movement of subsurface water or groundwater. This feature is also present in Cumberland, Rhode Island along the course of the Abbott Run Brook, which is of critical importance to Pawtucket's public drinking water supply. Pawtucket and the Abbott Run Brook have an extensive amount of stratified drift aquifer and also hold groundwater reservoirs. The groundwater reservoirs are the part of the aquifer, where there is the greatest potential for water supply development.

The Pawtucket Water Supply Board (PWSB) draws over 2.0 million gallons daily from wells in the Valley Falls area of Cumberland. However, there is presently very little water being withdrawn from the groundwater resources within the City of Pawtucket. This is because of the presence of a citywide water system that uses mainly surface water reservoirs in the Town of Cumberland. This surface water system has been able to meet the water demands of three communities; Central Falls, Cumberland and Pawtucket, all served by the PWSB.

Having a groundwater supply within the borders of Pawtucket is fortunate, but it has been found that the groundwater is not suitable for drinking without further treatment because of the history and concentration of industrial and commercial uses in the City.

Rare and Endangered Species

The RIDEM Natural Heritage Program has identified "Natural Heritage Areas" in the City, as noted on Map 7. Natural Heritage Areas are areas where there have been observations of a community or nesting site of State or Federally listed rare or threatened species or species deemed noteworthy by the State.²⁰ There are several species in Pawtucket that are classified as "state threatened." The first is the plant species, the Zigzag Bladderwort (*Utricularia subulata*), which has been identified at Slater Park's Friendship Garden. Marsh Wren have been identified at Central Pond. A number of wildflower types can be found in Slater Park. Other wildlife observed in the City includes hawks, eagles, and osprey along the riverfront.

Permanently Protected Conservation Areas

There are no permanently protected conservation areas in the City, and no properties have been identified within the city boundaries that are of interest for conservation purposes; however, the City will consider undeveloped land along its waterways for natural resource protection and preservation. Conservation efforts supported by the City primarily focus on protecting drinking water. According to the PWSB, it draws its source water from four surface water reservoirs and eight wells located in the Abbott Run watershed. The Abbott Run watershed is approximately 17,536 acres (27.4 square miles)

²⁰ <http://www.rigis.org/data/natHeritage>

and includes land in Cumberland, Rhode Island and neighboring Massachusetts. In the Town of Cumberland, the PWSB owns 2,046 acres (3.2 square miles) of watershed property and controls another 140 acres through the purchase of conservation easements.

Sea Level Rise Impacts on Salt Marshes

Through funding from the National Oceanic and Atmospheric Administration (NOAA), the CRMC along with its partners undertook an analysis of the potential impacts to coastal wetland ecosystems from sea level rise and the landward migration potential of coastal wetlands located within the 21 Rhode Island coastal municipalities, including Pawtucket. Using various models, the study mapped the projected loss of coastal and some freshwater wetlands under 1, 3, and 5 foot sea level rise scenarios. The mapping also showed the migration of wetlands that would result from sea level rise and how development could be impacted by this migration. According to their summary report,²¹ while the results of the analysis have some uncertainties, they can be used by local communities and others to develop adaptive management strategies to make wetland areas and adjacent uplands more resilient to sea level rise.

The Sea Level Affecting Marshes Model (SLAMM) maps that include the City show no salt marshes along the Seekonk River, but they do indicate potential marsh zones during 1, 3, and 5 foot sea level rise scenarios.

Surface Water Quality

All the waters in the state have been classified by the RIDEM based on the designated use for that waterbody. Classifications are based upon a number of physical and water quality standards, or criteria. If it is determined that a waterbody does not meet the water quality criteria for its classification, it is considered to be out of compliance with its classification, or impaired. When a waterbody is impaired, it is put on the state's 303(d) List of Impaired Waters, which references Section 303(d) of the federal Clean Water Act. Waterbodies on the 303(d) List are prioritized and a schedule is made to develop total maximum daily loads (TMDLs) for pollutants that are causing the waterbody to not meet water quality criteria. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

There are two ways to define pollution sources, point and non-point source pollution. Point source pollution is liquid that is discharged from a pipe or conduit directly into a waterway. Non-point source pollution refers to many sources of contaminants, nutrients, and pathogens that are not from an identifiable "pipe source." Non-point pollution is closely associated with land development.

Impairments are categorized as:

- **Biodiversity Impairments** are characterized according to the type of biological data and evaluation that led to the listing. The cause terms used include: *Aquatic Macroinvertebrate Bioassessment*; *Benthic Macroinvertebrate Bioassessment*; *Sediment Toxicity Tests*; *Whole Effluent Toxicity (WET) Tests*. The two macroinvertebrate bioassessment terms are differentiated according to the evaluation that led to the listing: Benthic Macroinvertebrate Bioassessment is determined by sampling of riffles in wadeable streams/ivers, using the Rapid Bioassessment Protocol (RBP) whereas, Aquatic Macroinvertebrate Bioassessment is determined in deeper/non-wadeable rivers from the deployment of artificial substrates.

²¹ http://www.crmc.ri.gov/maps/maps_slamm.html

- **Nutrient Impairments** are specified according to the element causing the impairment. For freshwaters, *Total Phosphorus* is listed as the cause of the impairment and for saltwaters, *Total Nitrogen* is listed as the cause of the impairment.
- **Mercury Impairments** are characterized according to the media impacted as either fish tissue (*mercury in fish tissue*), water column (*mercury in water column*) or sediments (*mercury*).
- **Pathogen Impairments** are listed as *Enterococcus*, *fecal coliform* or *E. coli* to reflect the actual bacteria indicator that led to the listing.

The following waterbodies are listed as impaired in the Rhode Island 2014 303(d) List of Impaired Waters (Draft, March 2015).²²

Blackstone River

The Blackstone River, bordered by six Rhode Island cities and towns, is the area’s major river. One RIDEM classified segment of the Blackstone River flows through Pawtucket. This portion of the Blackstone begins at the combined sewer overflow outfall located at River and Somoset Streets in Central Falls and ends at the Slater Mill Dam. This water is classified as B1(a) which is defined by RIDEM as follows:

“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, aquacultural 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.”

This portion of the Blackstone River is considered impaired according to RIDEM’s Draft Year 2014 List of Impaired Waters (303d List) and not meeting water quality standards to support fish and wildlife habitat, fish consumption, and primary and secondary recreation contact. There are several contaminants causing the water to be impaired and not supporting these uses, including cadmium, lead, dissolved oxygen, phosphorous, enterococcus, fecal coliform, and mercury in fish tissue. A TMDL for cadmium and lead were approved in April 2013. TMDLs to meet other impairments are scheduled to be developed between 2024 and 2028. In addition, the Consent Agreement for Combined Sewer Outfall (CSO) abatement is anticipated to reduce the pollutant levels by 2022.

Abbott Run Brook

The Abbott Run Brook originates in Wrentham, Massachusetts, and flows through the Diamond Hill and Abbott Run reservoirs, Robin Hollow Pond, and Happy Hollow Pond, which are all public water supply impoundments for the PWSB. Abbott Run Brook has a classification of AA, which is defined as:

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

Abbott Run Brook is not meeting the criteria for fish and wildlife habitat because of high levels of cadmium. A TMDL is scheduled to be developed by 2026.

²² <http://www.dem.ri.gov/pubs/303d/303d14d.pdf>

Pawtucket River

The Pawtucket River from the Slater Mill Dam at Main Street in Pawtucket until the Providence border is a part of the Narragansett Bay Basin and is classified as SB1(a) which is defined by RIDEM as follows:

“These waters are designated for primary and secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for aquacultural uses, navigation, and industrial cooling. These waters shall have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class SB criteria must be met.”

This portion of the Seekonk River is listed on RIDEM’s List of Impaired Waters. A TMDL is underway.

Moshassuck River

RIDEM divides the Moshassuck River into two segments. The first is within Lincoln, Central Falls, and Pawtucket, from Barney Pond outlet (Lincoln) to the first CSO discharge point at Weeden Street Bridge (Central Falls/Pawtucket). It has a B water classification. This portion of the river is not meeting water quality criteria for fish and wildlife habitat and primary and secondary contact recreation uses. Causes of the impairments are benthic-macroinvertebrates bioassessment and enterococcus. A TMDL was developed for enterococcus in October 1411 and one is scheduled for benthic-macroinvertebrates bioassessment in 2026.

The second segment is in Central Falls, Pawtucket, and Providence, from the first CSO discharge point at Weeden Street Bridge (Central Falls/Pawtucket) to the confluence with the Woonasquatucket River (Providence). It has a B(a) water classification. This portion of the river is also not meeting water quality criteria for fish and wildlife habitat and primary and secondary contact recreation uses. Benthic-macroinvertebrates bioassessment and enterococcus are also causing the impairments. A TMDL is scheduled to be developed for the benthic macroinvertebrates bioassessment in 2026. A Consent Agreement for CSO abatement is anticipated to reduce the pollutant levels by 2022 and negate the need for a TMDL for enterococcus.

Ten Mile River

Ten Mile River within the City of Pawtucket is not listed as impaired; however, downstream, from Turner Reservoir to Omega Pond in East Providence, it is listed for not supporting fish and wildlife habitat because of aluminum, cadmium, and benthic-macroinvertebrates bioassessment. TMDLs have been approved for aluminum cadmium in April 2014. A TMDL for benthic-macroinvertebrates bioassessment is scheduled to be developed by 2026. Ten Mile River has a B classification.

Seekonk River

The Seekonk River from the Slater Mill Dam at Main Street in Pawtucket to India Point in Providence is not meeting water quality criteria for fish and wildlife habitat and primary and secondary contact recreation uses. It is classified as SB1(a). Causes of impairment are total nitrogen, dissolved oxygen, and fecal coliform. Upgrades to Narragansett Bay Commission’s (NBC) Bucklin Point Wastewater Treatment Plant in East Providence are expected to address the high levels of total nitrogen and dissolved oxygen. RIDEM will determine the need for TMDLs for these pollutants after upgrades are completed. Compliance with the Consent Agreement for the CSO abatement and TMDLs on major tributaries flowing into the Seekonk River are expected to negate the need for a TMDL for enterococcus.

Lakes and Ponds

The only ponds in Pawtucket are manmade, the Slater Park Pond at Slater Park, and a portion of Central Pond known as Turner Reservoir which is mainly in East Providence, extending into the southeast corner

of Pawtucket. The Slater Park Pond is classified at B1 and designated as a warm-water fishery. It has been delisted from RIDEM's List of Impaired Waters.

The Turner Reservoir is classified as B. It is previously noted that Ten Mile River south of Turner Reservoir is impaired.

Threats to Resources

The area's natural resources are under constant pressure from contaminants and increased development. The means of reducing or eliminating these conditions rest on preventative regulations and technology. This section of the plan will discuss some of the conditions that are adversely affecting the City of Pawtucket and its watershed area in neighboring towns.

Combined Sewer Overflow

Discharges from municipal wastewater treatment plants and industries are considered point source discharges. All point source discharges in Rhode Island are regulated by discharge permits. Rhode Island is a delegated state, therefore effluent limitations are set and permits are given by RIDEM and reviewed by the U.S. Environmental Protection Agency (EPA). An effluent limitation is the maximum amount of pollutant that may be discharged into any water body. These limitations formally establish performance criteria for wastewater treatment facilities. Pawtucket's wastewater is pumped to the NBC's wastewater treatment facility at Bucklin Point in East Providence.

One of the major water pollution problems in the Narragansett Bay region is CSOs that periodically discharge into the Narragansett Bay. CSO systems collect both stormwater and wastewater into the same treatment facility. There are 20 CSO discharges in Pawtucket. During wet weather, the combined sanitary/stormwater flows can exceed the sewerage capacity. The excess is discharged at overflow points into the region's rivers. In 2001, the NBC began the CSO Abatement Project, a 20-year, \$500 million, 3-phase project to provide for the storage and treatment of combined sewer overflows. Phase I was completed in October 2008 and included the tunnel, tunnel pump station and seven drop shafts connected to the Fields Point Wastewater Treatment Facility in Providence. Phase II was completed in 2015 and included two near surface interceptors along the Seekonk and Woonasquatucket Rivers to bring additional flow to the Phase I tunnel, a new storm drainage system in the Summit neighborhood in Providence, and a constructed wetlands in Central Falls.

For Phase III, NBC is re-evaluating methods and technologies for CSO control. Since 2014, meetings have been held with the public to discuss alternatives, including "green" infrastructure to manage stormwater (bioswales, pervious pavement, rain gardens, tree box filters) and "grey" infrastructure (pipes, interceptors, tunnels). These alternatives are being evaluated for Central Falls, Pawtucket, and East Providence to manage flow into the Bucklin Point facility.²³

Landfills

When solid wastes are deposited in a land disposal facility (landfill), the wastes degrade as a result of various chemical and biological reactions, producing solid, liquid and gaseous by-products. Ferrous and other materials are oxidized. Organic and inorganic wastes are consumed by microorganisms through

23

<http://www.narrabay.com/ProgramsAndProjects/Combined%20Sewer%20Overflow%20Project/CSO%20Phase%20III.aspx>.

aerobic and anaerobic digestion. Liquid waste products of microbial degradation, such as organic acids, increase chemical activity within the fill.

Surface water and, in many cases, groundwater, infiltrating through the landfill will collect contaminants contained within the solid waste. This contaminated liquid is called “leachate” and may be produced by both active and inactive landfills. As the leachate migrates from the landfill, it can directly contaminate ground and surface water. Surface water also may be contaminated indirectly by polluted groundwater.

There are four known inactive landfills in Pawtucket: (1) in the area of the former municipal incinerator, (2) off San Antonio Way (former ash landfill), (3) off Grotto Avenue (convergence of Moshassuck Valley Railroad and Amtrak Railroad lines), and (4) off Palm Street (former private dumping area).

Other Sites of Concern

There are also a number of locations in Pawtucket that are not landfills but are of concern because of potential contamination. There are two sites, known as Brownfields, listed on the EPA’s Comprehensive Environmental Recovery, Compensation, and Liability Information System (CERCLIS). The first is a utility company property along the Seekonk River. The property owners are in process of preparing a remediation plan for the cleanup of the site. The other property is the former municipal incinerator.

Stormwater Runoff

Polluted stormwater runoff enters municipal separate storm sewer systems (MS4s) and ultimately discharges into local rivers and streams without treatment. Pollutants carried by stormwater can impair waterbodies, interfere with habitat for fish or other aquatic organisms and wildlife, contaminate drinking water supplies, and discourage recreational uses.

The National Pollutant Discharge Elimination System (NPDES) Phase I storm water program, initiated in 1990, required discharges from large construction sites, certain industrial activities and operators of medium or large MS4s (more than 100,000 served), to obtain permits and implement a stormwater management program as a means to control polluted discharges from these activities. Since 1984, RIDEM has been delegated the authority to implement the NPDES program in Rhode Island.

The EPA finalized the Storm Water Phase II Rule on December 8, 1999. The Storm Water Phase II Rule extends the coverage of the NPDES storm water program to include small MS4s (urbanized areas with populations less than 100,000), and includes Pawtucket. The City received a \$25,000 grant from the RIDEM Nonpoint Source Pollution Program to develop a Storm Water Management Program Plan (SWMPP) to guide Pawtucket into compliance with the Phase II Rule. This plan was completed in 2003, and the City continues its implementation.

Erosion and Sedimentation

Erosion and sedimentation can be a major problem at any site where the surface vegetation is removed and soil instability results. Projects disturbing one or more acres of land must meet the requirements of the City’s Soil Erosion and Sedimentation Control and Post-Construction Stormwater Control ordinances (Articles XA and XA respectively). An erosion and sediment control plan is required that explains the project and how stormwater runoff and sediment from the site will be contained and soil erosion prevented, both during and after construction.

Road Salt

The use of road salt (both sodium chloride and calcium chloride) to accelerate the melting of ice has been common since the 1960s. Road salt contamination of surface and groundwater can result from two sources: road salt storage and application to roads. The City of Pawtucket keeps road salt in a covered storage shed at the Department of Public Works on Armistice Boulevard. The controlled use of chlorides within the City limits will reduce the impacts on surface water and groundwater, but on the road network within the Pawtucket Reservoir watershed basin, the use of road salts should be minimized.

Individual Subsurface Disposal Systems

In the City of Pawtucket, all of the residential areas are served by public sewers, but a few homes and industrial areas have not connected to the system. The use of Individual Subsurface Disposal Systems (ISDS) is more of an issue within the watershed area of the PWSB.

Priorities for Land Conservation

The City has little land that could be considered for land conservation; however, there may be opportunities to acquire open land along the City's rivers if found to the PWSB states that it will continue to be its policy to evaluate properties within the watershed outside of the municipal boundaries as they become available for applying conservation easements or for outright purchase. Funding will come from partnership opportunities with other public or private organizations whose mission is land conservation and offer grants and other funding mechanisms.²⁴ In the past, the PWSB has worked with the Town of Cumberland, the Cumberland Land Trust, and the Cumberland Open Space Committee to acquire development rights and conservation easements, and purchase properties.

Techniques to Minimize Negative Impacts from Development

As noted, in an urban environment, stormwater is a big contributor of pollutants to surface water. Stormwater traveling across paved surfaces washes sediment and pollutants into the City's rivers and other waterbodies. Natural areas, particularly wetlands, act like sponges and absorb water then slowly release it to the destined waterbody. This process also filters out pollutants. Much of the City is developed with hard surfaces like pavement and roof tops. Stormwater flows across streets and parking lots into the City's storm system, which discharges it into the Blackstone and Seekonk Rivers without any treatment.

Reducing pavement and increasing natural areas can help manage the impacts to water quality. To do this, City policies are focused on reducing pollutants in stormwater and reducing the volume of water during storms reaching these waters. Through the implementation of its SWMPP, the City raises public awareness of these issues and is able to modify its approach to stormwater management on City properties.

Like in all Rhode Island communities, development and redevelopment in Pawtucket have to meet the requirements of the *Rhode Island Stormwater Design and Installation Manual* (December 2010), which promotes the use of low impact development (LID). LID is a term used to describe stormwater management strategies that integrate natural features (sometimes referred to as "green infrastructure") as opposed to pipes or paved channels ("grey infrastructure"). In addition to filtering pollutants in

²⁴ PWSB website: <http://www.pwsb.org/content/land> (Obtained 6/24/2015)

stormwater, LID also reduces the impacts of flooding and increases aesthetics by adding natural green space. These have added social and economic benefits. Examples of LID strategies include:

- Riparian and wetland buffers
- Bioretention basins and vegetated swales
- Pervious pavement and other alternatives to paved surfaces
- Strategies that reduce overall pavement such as narrower streets and lower parking requirements or alternatives to meet parking standards (e.g. off-site parking or shared parking)
- Conservation design and compact development standards

In an urban environment, implementing LID strategies can be a challenge because land is not available; however, the biggest hurdle is getting over perceptions that LID cannot be used at all. Incremental applications can add up and work toward meeting water quality improvement goals.

The City addresses stormwater management in its development plan review process and through zoning, particularly in the riverfront zoning districts, land clearing ordinance, and parking lot performance standards. The City's sediment and erosion control ordinance addresses stormwater management pre and post construction activities and requires practices be consistent with the 2010 Manual.

Goals, Objectives, and Policies

Goals

Goal NR 1. Protect and improve ground and surface water quality by alleviating and where possible eliminating point and non-point sources of water pollution.

Goal NR 2. Preserve and restore any existing natural areas within Pawtucket.

Objectives

Objective NR 1. Maintain current acreage of natural areas within Pawtucket.

Objective NR 2. Using the MetroBay SAMP mapping as guidance, restore one acre of riverfront area in 10 years.

Policies

Policy NR 1. Use reduced salt level for winter snow and ice removal on city streets and sidewalks, and properly site and manage salt storage to prevent adverse water quality impacts.

Policy NR 2. Utilize best management practices for design of new storm water management systems and regularly maintain the existing storm water management and drainage systems through cleaning catch basins and scheduled street cleaning.

Policy NR 3. Work cooperatively with state agencies and regional authorities to correct the problem of combined sewer overflows.

Policy NR 4. To the maximum extent feasible, retain and restore the quality of the remaining natural wetlands within the City.

Policy NR 5. Work with the Department of Public Works to implement RIDEM's requirements for stormwater runoff.

Policy NR 6. Support the efforts of local watershed organizations in protecting water quality and species habitat.

Policy NR 7. Work with the Blackstone Valley Tourism Council, the Friends of the Blackstone, and other non-profit organizations on projects which improve the health of the City's rivers.

Policy NR 8. Continue to work with the Pawtucket Water Supply Board in implementing their Water Supply Management Plan.

Policy NR 9. Maintain and update information on unique, rare, and endangered natural resources within the City.

Policy NR 10. Offer the street tree program to City residents and enforce the landscape requirements of the Zoning Ordinance to expand the number and concentration of trees in the City.

Policy NR 11. Continue to apply for RIDEM Targeted Brownfields Assessment grants and US EPA Cleanup Grants.

Policy NR 12. Consider the acquisition of undeveloped properties along the City's waterways as potential areas of natural resource protection.

Policy NR 13. Encourage the use of native species and native pollinator species in municipal landscaping.

Recreation

Introduction

Recreational and open space resources are critical to urban areas where residential density is high and private open space is limited. Diverse recreational opportunities encourage City residents to be more active and live healthier lifestyles, combating public health issues like obesity, which is linked to heart disease, diabetes and some cancers. In Rhode Island, the Centers for Disease Control and Prevention (CDC) reports that in 2015, 37.3 percent of adults were overweight, and 27.3 percent were obese,²⁵ ranking it 31 out of the 50 states. The *2015 Rhode Island Kids Count Factbook* cited that in 2013, 11 percent of Rhode Island high school students were reported to be obese (7th among 42 states ranked), and 16 percent were reported to be overweight (37th out of 42 states ranked). Around one third of middle school and high school students reported that they spend three or more hours playing video games or watching TV on school days. Approximately 40 percent said they were physically active (at least 60 minutes a day) three or fewer days a week. The wellbeing of its residents is vital to the City's prosperity. Healthy residents are able to work to afford their homes and support their families.

When the City plans for recreational opportunities, it considers the types of amenities, where they are located in proximity to potential users, affordability of user fees, changing needs of the City's residents, and which areas of the City lack resources.

Existing Recreational Areas

Map 8 shows private, state, and city recreational areas. The Parks and Recreation Department manages and maintains all the City's parks and recreational facilities, athletic complexes, traffic islands, playgrounds, passive parks and gateways from I-95. They also operate Daggett Farm and Looff Carousel in Slater Park, and the Veterans Park pool. The Department is responsible for programming that occurs at the City's facilities, including picnic permits, concerts, sports lessons and leagues, the Tree in Memorial Program, birthday parties at the Looff Carousel, bus trips, classes, festivals, and youth summer camp, among other programs.

Public Recreation Facilities

As shown in Table 29, the distribution of recreation facilities is not even among the different city neighborhoods. It is an established goal of this plan to have recreation areas distributed equally and equitably throughout residential areas. Also, it is important that as new recreational facilities are created and existing recreational facilities rehabilitated, all resources are universally accessible and recreational opportunities for those with special needs are expanded. The 5-acre McKinnon Alves Soccer Complex, which was constructed on a remediated brownfield site in 2005, is a major addition to the City's recreation resources.

²⁵ <http://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/rhode-island-state-profile.pdf>. CDC defines overweight as having a body mass index (BMI) of 25 to 29.9, and obese as having a BMI of 30 or greater.

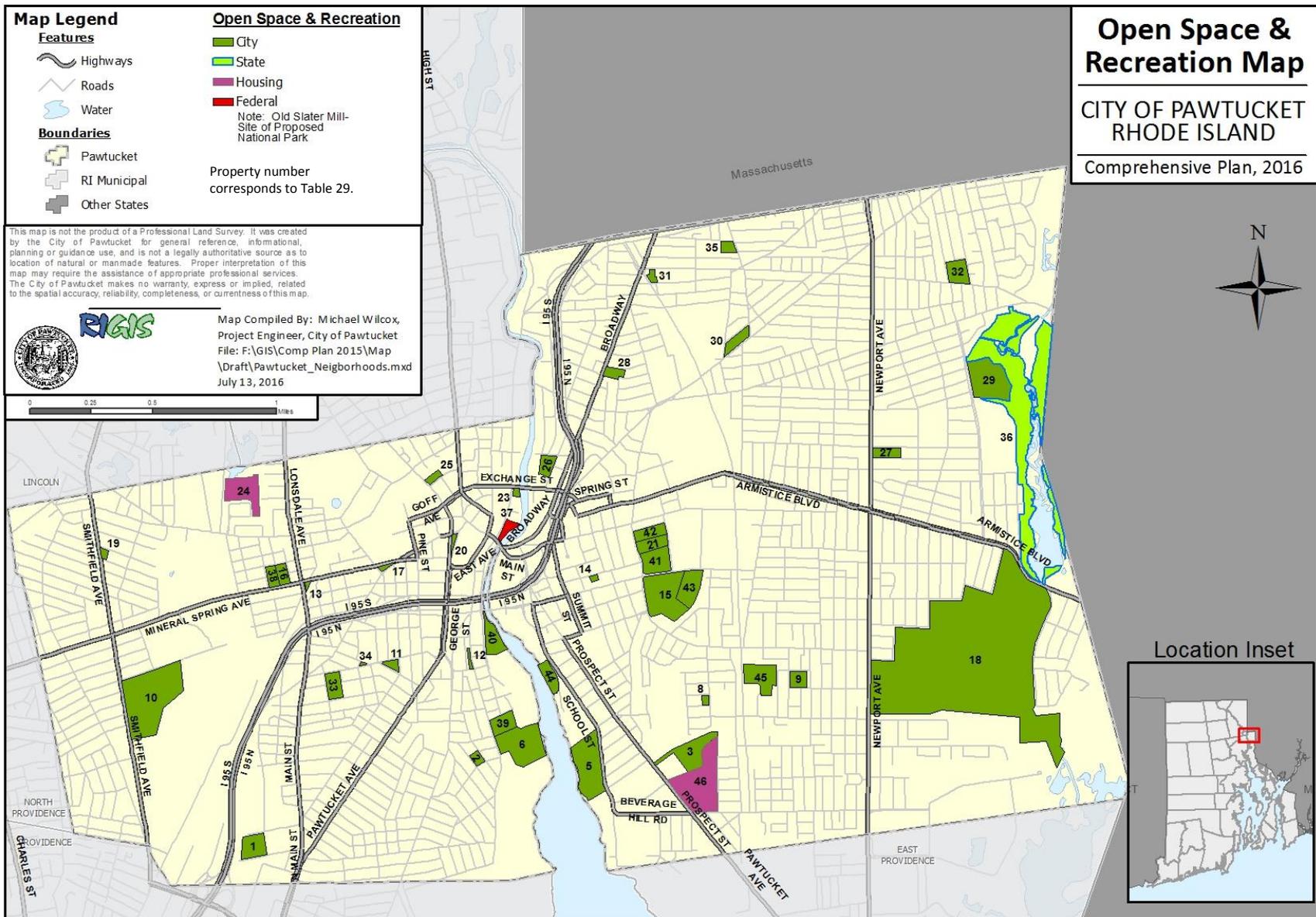


Table 29. Public and Private Recreational Facilities in Pawtucket by Planning District

FACILITY	Map ID*	OWNER	ACREAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Fairlawn																											
Fairlawn Veterans' Memorial Park	10	C	39.0	•	•	•	•		•	•	•	•				•			•	•			•	•			•
Smithfield Avenue Playground	19	C	0.7						•								•										•
Subtotal			39.7																								
2 Woodlawn																											
Baldwin School*	33	C	0.2																							•	•
Collyer Park	17	C	0.5																				•	•			•
Cunningham Elementary*	16	C	0.2														•								•		•
Galego Court	24	H	2.5			•			•														•				•
Morley Field	1	C	5.3							•										•			•				•
Payne Park	11	C	1.2						•								•										•
Randall Street Park	34	C	0.1																						•		•
Santos Park	13	C	0.1																				•	•			•
Slater Junior High	38	C	0.4						•								•									•	•
Subtotal			10.5																								
3 Oak Hill and West Riverview																											
Duffy Complex	2	C	1.7						•		•						•		•								•
Perez Passive Park	12	C	1.0														•						•	•			•
Max Read Field	6	C	13.5	•						•										•			•				•
Town Landing	40	C	5.4										•	•	•												•
Varieur Elementary	39	C	0.2														•										•
Subtotal			21.8																								

KEY

KEY												OWNERSHIP			
1	Baseball (only)	5	Volleyball (only)	9	Public Pool	13	Picnic Area	17	Restrooms	21	Benches	P	Private		
2	Football (only)	6	Basketball (only)	10	Boat Ramp	14	Playground w/Equipment	18	Hockey	22	Passive Park	NP	Non-profit		
3	Soccer (only)	7	Multi-Use Field	11	River Access	15	Track	19	Ice Skating	23	Play Area	C	City		
4	Softball (only)	8	Tennis Courts	12	Fishing	16	Natural Areas	20	Lights	24	Universal Accessibility	H	Housing Authority		

FACILITY	Map																											
	ID*	OWNER	ACREAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4 Barton Street and Downtown																												
Hodgson-Rotary Park	37	NP	2.1																									
Lynch Arena	25	P	1.7																									
Veterans' Park Amphitheater	23	C	0.3																									
Wilkinson Park	20	C	0.7																									
Subtotal			4.8																									
5 Pleasant View																												
Kyle Coutu Memorial Field	26	C	2.4																									
Warnock Memorial Field	35	C	0.4																									
Winters Elementary*	28	C	0.4																									
Subtotal			3.2																									
6 East Riverview and Quality Hill																												
560 Prospect Street*	46	H	1.0																									
Ayotte Park	14	C	1.4																									
Berkeley Park	8	C	0.9																									
Festival Pier	44	C	3.0																									
Jenks Junior High	41	C	0.9																									
Little Elementary*	21	C	0.2																									
McCarthy Park	5	C	15.8																									
McCoy Stadium	15	C	17.9																									
O'Brien Memorial Field	42	C	1.0																									
Pariseau Field	43	C	5.3																									
Soar Softball Complex	3	C	9.6																									
Subtotal			57.0																									

KEY

KEY												OWNERSHIP			
1	Baseball (only)	5	Volleyball (only)	9	Public Pool	13	Picnic Area	17	Restrooms	21	Benches	P	Private		
2	Football (only)	6	Basketball (only)	10	Boat Ramp	14	Playground w/Equipment	18	Hockey	22	Passive Park	NP	Non-profit		
3	Soccer (only)	7	Multi-Use Field	11	River Access	15	Track	19	Ice Skating	23	Play Area	C	City		
4	Softball (only)	8	Tennis Courts	12	Fishing	16	Natural Areas	20	Lights	24	Universal Accessibility	H	Housing Authority		

FACILITY	Map ID*	OWNER	ACREAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
7 Darlington and Pine Crest																												
Curtis Elementary*	32	C																									•	•
Curvin/McCabe Elementary*	30	C	0.2																								•	•
John Street Playground	31	C	1.4						•								•											•
Potter/Burns Elementary*	27	C	6.8			•																					•	•
Ten Mile River Reservation	36	C	65.5	•	•																							
Tomlinson Complex	29	C	5.0	•						•										•			•					•
Subtotal			78.9																									
8 Slater Park and Countryside																												
Fallon Elementary*	9	C	0.2																								•	•
McKinnon/Alves Soccer Complex	45	C	5.0			•														•			•					•
Slater Memorial Park	18	C	208.3	•			•		•		•					•	•		•	•			•	•				•
Subtotal			213.5																									
TOTAL			429.4																									

* See Map 8

Note: Certain Pawtucket school recreation areas are not maintained by the Department of Parks and Recreation.

Source: Department of Parks and Recreation, De (2015)

KEY										OWNERSHIP					
1	Baseball (only)	5	Volleyball (only)	9	Public Pool	13	Picnic Area	17	Restrooms	21	Benches	P	Private		
2	Football (only)	6	Basketball (only)	10	Boat Ramp	14	Playground w/Equipment	18	Hockey	22	Passive Park	NP	Non-profit		
3	Soccer (only)	7	Multi-Use Field	11	River Access	15	Track	19	Ice Skating	23	Play Area	C	City		
4	Softball (only)	8	Tennis Courts	12	Fishing	16	Natural Areas	20	Lights	24	Universal Accessibility	H	Housing Authority		

Table 29 also lists the recreational facilities' size, ownership, and facility type. Major reconstruction and renovation work has been funded through state and federal grants, federal Community Development Block Grants, and City bond issues. Recent improvements to recreation facilities have included the acquisition of a four-acre parcel on Roosevelt Avenue/Mendon Avenue (Edward Warnock Memorial Field), the addition of a covered pavilion structure at Slater Park, a disc golf course at Slater Park, and the renovation and the installation of the field bathrooms at Veteran's Memorial Park. It is also important to remember that although they are not all listed in the table, the City does provided an array of indoor recreational activities for different age groups through the Department of Parks and Recreation and the Senior Center. These activities include aerobics, dance, muscle toning, yoga and other classes, which are available to Pawtucket residents at a low cost.

While the City's bikeways are important features of the City's transportation network, they also offer recreational opportunities. They include the Blackstone River Bikeway and the Ten Mile River Bikeway. The Blackstone River Bikeway is a 48-mile bikeway that, when completed, will connect Worcester, Massachusetts, with Providence within the Blackstone River Valley National Heritage Corridor. There are approximately 11 miles of continuous off-road bike path in Cumberland, Lincoln, and Woonsocket, and several miles of on-road path in Providence and Pawtucket. More discussion about the City's bikeways can be found in the Transportation Chapter.

Private Recreation Facilities

Pawtucket is fortunate to have a number of private, nonprofit institutions offering recreational opportunities to City residents. The Family Y and the Pawtucket Boys' and Girls' Club offer a variety of indoor activities, such as basketball leagues, swimming, aerobics and weightlifting. Outdoor activities for people of all ages are offered as well, including summer youth camps. The Boys' and Girls' Club share the operation and maintenance of a leased facility, McCarthy Park. Both the Boys' and Girls' Club and the Family Y charge membership fees. The Pawtucket Country Club operates a golf course that is located in both Seekonk, Massachusetts, and Pawtucket. It is a 40-acre facility that charges membership fees. Hodgson-Rotary Park, a privately owned park at the Slater Mill, is 2.1 acres. The total area of private facilities is approximately 47 acres.

The Lynch Arena Skating Rink offers ice skating year-round. There is public ice skating time. Ice skating lessons are offered and there are numerous youth and adult hockey leagues that use the arena.

River Waterfront Access

There are three rivers flowing through Pawtucket: the Blackstone, Ten Mile and Moshassuck. All of them are important from the aspect of public access to the water. Clearly, the Blackstone/Pawtucket and the Ten Mile Rivers are important because of the public land along the water that could potentially be developed for water access. As noted above, the City is moving forward with plans for bikeways along both the Blackstone and Ten Mile Rivers. There is public land abutting the Moshassuck River and the City's long-term goal for this land is to develop a greenway/bikeway along it.

The former State Pier on the Seekonk River off of School Street has been renovated using funds from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Rhode Island Department of Environmental Management and a federal Community Development Block Grant. Now known as Festival Pier, the renovations included environmental remediation. The site now features a new waterfront pedestrian plaza, lighting, new parking areas, landscaping, a canoe/kayak launching area and a state of the art accessible boat ramp. Not only does this project increase public access to the river and

add passive and active recreational opportunities, it is an investment in the City's waterfront and a catalyst for redevelopment in surrounding areas.

The City is working on master plans for two waterfront sites, Division Street (10 acres) and Tidewater (15 acres), that it is looking to incorporate shoreline paths and physical access to the river for canoes and kayaks. More discussion on the developments associated with these projects is found in the Land Use Chapter.

Existing and Future Recreational Needs

Healthy Places by Design

In 2011, the City participated in the Healthy Places by Design (HPbD) pilot project with the Rhode Island Department of Health (HEALTH). The pilot was aimed at using local policies and initiatives to promote a healthier community. The City was able to create land development and design approaches, identify transportation improvements, and address parks and recreation.

While the City has made significant investments in the number and quality of its recreational resources, the pilot revealed some challenges to accessing and using the City's parks. Major themes were:

- Prioritize maintenance and improvement of existing parks over the development of new facilities
- Make parks safe with increased visibility through lighting or designing of park entrances
- Provide more guided outdoor recreational opportunities, perhaps in partnership with the YMCA and Pawtucket Boys' and Girls' Club
- Provide parks and recreation education and outreach to close the gap between City recreational programming and residents' knowledge of these programs
- Provide volunteer opportunities for residents to help with park maintenance and clean-up activities
- Allow the river to be a recreational resource by increasing access and continuing environmental clean-up of properties along its banks
- Provide water-based recreational opportunities other than the river, such as spray parks and public pools
- Provide new parks and recreation where they are most needed, including the Pleasant View neighborhood

Implementation strategies of this Comprehensive Plan build on these themes to address gaps in resources and opportunities to build on the City's assets.

Suitability of Recreational Options and Access

The City has diverse recreational resources. Some have regional appeal. City-wide and regional resources accommodate adult and youth leagues of all types of sports and include Slater Park, Lynch Arena, Hank Soar Softball Complex, Max Read Field, McKinnon/Alves Soccer Complex, and Fairlawn Veteran's Memorial Park. Slater Memorial Park is a regional and state-wide amenity. It is more than 200 acres and includes active and passive recreational opportunities like sports fields, bike path, picnic areas, historic and cultural activities, and children's playground. These facilities can also serve the local neighborhood, but are designed and programmed to attract visitors city-wide and in the region.

At the neighborhood level, the location of recreational options should be in proximity to their users, and the ability to access these opportunities should also be considered. It is estimated that the Darlington/Pine Crest neighborhood (District 7) has the largest number of children under the age of 18, as well as those under the age of 5 (Table 30). Equally significant is the estimation that almost half of the Woodlawn neighborhood (District 2) is under the age of 18. These neighborhoods would benefit the most from additional playgrounds, basketball courts, and other recreational uses geared to these age groups.

Darlington/Pine Crest also has the largest estimate of residents over the age of 65. Recreational opportunities for seniors might be more passive in nature (walking paths and a variety of seating). This also presents a unique opportunity to provide spaces that bring the two age groups together and create positive experiences for both youth and seniors.

Table 30. Estimated Youth and Senior Populations by District

District	Total Est. Population	Est. Under Age 5	% of District Population	Est. Under Age 18	% of District Population	Est. 65 and Over	% of District Population
1 – Fairlawn	7,790	568	7.3%	1,741	22.3%	825	10.6%
2 – Woodlawn	5,476	564	10.3%	2,457	44.9%	766	14.0%
3 – Oak Hill/West Riverview	5,483	382	7.0%	1,145	20.9%	768	14.0%
4 – Barton Street and Downtown	2,192	83	3.8%	352	16.1%	570	26.0%
5 – Pleasant View	4,210	281	6.7%	985	23.4%	328	7.8%
6 – East Riverview/Quality Hill	7,523	540	7.2%	1,884	25.0%	818	10.9%
7 – Darlington/Pine Crest	17,697	1,115	6.3%	4,107	23.2%	2,036	11.5%
8 – Slater Park/Countryside	9,679	526	5.4%	1,760	18.2%	1,642	17.0%

Source: 2013 American Community Survey Five-Year Estimates (2009-2013)

Expansion of Recreational Resources

Increased access to the waterfront will provide new recreational activities and opportunities for residents. This resource is seen as a great asset to the City. The new National Park Service designation for the Blackstone River Valley National Heritage Corridor is also seen as an opportunity to expand recreational opportunities, such as the Blackstone River Bikeway. More discussion about the bikeway is provided in the Transportation Chapter.

There is a need for more recreational opportunities in the Oak Hill/West Riverview (District 3) and Barton Street/Downtown (District 4) neighborhoods, specifically playgrounds with swings in Barton Street. Additional expansion is needed in programming offered at the City’s recreational sites. This includes a youth camp program in the Fairlawn (District 1) and Woodlawn (District 2) neighborhoods. Overall league programs are in demand, and basketball is the biggest request the City receives.

Demands are also increasing for fields, particularly for the sports of lacrosse and soccer, which are continuously growing. Artificial turf is planned for Max Read Field, and with the success of this project, other opportunities may arise. The City has little capacity to expand current fields, but some sites that have been neglected for numerous reasons have the potential to benefit from artificial turf installation. These might include Morley and Galego Fields, both in District 2. With proper planning and sufficient funding, the City can make efforts to meet this expanding need.

The City could also benefit from new types of recreational activities. The City does not have an indoor facility and competes with afterschool programming in area schools. An indoor facility could expand youth programming and activities into the winter.

Splash parks can provide opportunities in neighborhoods that do not have access to the City's outdoor pool facility. Most youth are bused to the pool by organizations such as the Child Opportunity Zone or child care programs. Activities at the pool can also be maximized. It has limited hours of operation and is not open on the weekends. It has no youth programming.

Goals, Objectives, and Policies

Goals

Goal R 1. Provide high quality and accessible recreational and open space resources and programs.

Goal R 2. Seek sites for future active and passive recreational activities which help Pawtucket to provide a balanced geographic distribution of resources.

Goal R 3. Develop recreation resources that link recreation sites, cultural sites, natural resource sites, etc., including the Blackstone River Valley Bikeway, the Ten Mile River Bikeway, walkways along both sides of the Pawtucket River.

Goal R 4. Provide access to the river for Pawtucket residents.

Goal R 5. Improve bicycle access throughout the City.

Objectives

Objective R 1. Begin work on the next segment of the Ten Mile River Bike Path within five years.

Objective R 2. Complete work on the Blackstone River Valley Bikeway in Pawtucket within 10 years.

Objective R 3. Provide all residents with access to safe recreational opportunities within a half-mile of their homes to promote physical activity.

Objective R 4. Reduce the amount of maintenance needed from City staff.

Policies

Policy R 1. Continue to improve citywide facilities consistent with the Recreation Facilities Master Plan (2014).

Policy R 2. Continue to implement an overall maintenance plan as well as maintenance documentation for each City facility.

Policy R 3. Continue to promote and coordinate City funded activities with the private sector to expand opportunities for recreational activities and avoid duplication of services.

Policy R 4. Coordinate recreational facility improvements with public school site improvements and other City and privately sponsored revitalization efforts.

Policy R 5. Lease or purchase additional recreation and open space as funding becomes available.

Policy R 6. Continue to make existing recreation facilities universally accessible through rehabilitation projects and include accessibility requirements in new construction.

Policy R 8. Ensure that there are trash receptacles and bike parking at all public parks and recreation areas.

Policy R 9. Increase the use of turf instead of grass at active recreation facilities to reduce maintenance costs.

Community Services and Facilities

Introduction

This chapter addresses the various public services and infrastructure that the City provides for its residents. It is the provision of these services and facilities that improve the quality of life of Pawtucket residents. The goal of this plan is to promote the health, safety and welfare of the City's citizens, its neighborhoods, and its businesses and industry through the provision of the necessary community services and facilities.

Services are provided through delivery systems that are unique to the particular service. Often the service or facility is greatly affected by federal or state standards or law. Additionally, responsibility for the service may be shared with other communities in the Blackstone Valley. These complexities can impact the cost and the effectiveness of services. For instance, the sharing of responsibilities for sanitary sewage disposal affects the cost to Pawtucket, not only for daily use, but also eventually for the elimination of combined sewer overflows. Likewise, standards for education programs and facilities and state building code requirements can influence the cost of providing building space for our schools. The National Fire Protection Standards can require substantial changes in equipment used by our fire fighters to protect their health and safety as well as to protect lives and property. Social services are provided to the City by a number of regional and state entities that must ensure that they are offering services that meet the critical needs of City residents. Changing community needs must be continually addressed as the City's population ages or becomes more culturally and ethnically diverse. Map 9 depicts Pawtucket's existing community facilities.

Overall, the biggest challenge in providing community services and maintaining public facilities is meeting demands with limited resources. Federal and state grant opportunities continue to decrease and municipal budgets are strained with limited economic development activities that bring in revenue. The City attempts to overcome these challenges by working with its neighboring communities and the state to pool staff and technical expertise. Currently, Pawtucket and Central Falls are sharing building inspection services on an as-needed basis. The two communities have also started a pilot project to share emergency response services. The City is also participating in an e-permitting initiative sponsored by the Rhode Island Department of Administration's Office of Regulatory Reform. The pilot will modernize the local permitting process through an integrated, online system. Pawtucket is not alone in forming these alliances; many other municipalities throughout the state are looking to each other for creative ways that will maximize dollars and meet the expectations of residents and the business community.

Map Legend

Features	Boundaries	Community Services & Facilities	
Highways	Pawtucket	Library	City Hall
Roads	RI Municipal	Police Stations	Public Works
	Other States	Schools	Recreation Dept
		Fire Stations	Senior Center
			Transfer Station

COMMUNITY SERVICES & FACILITIES

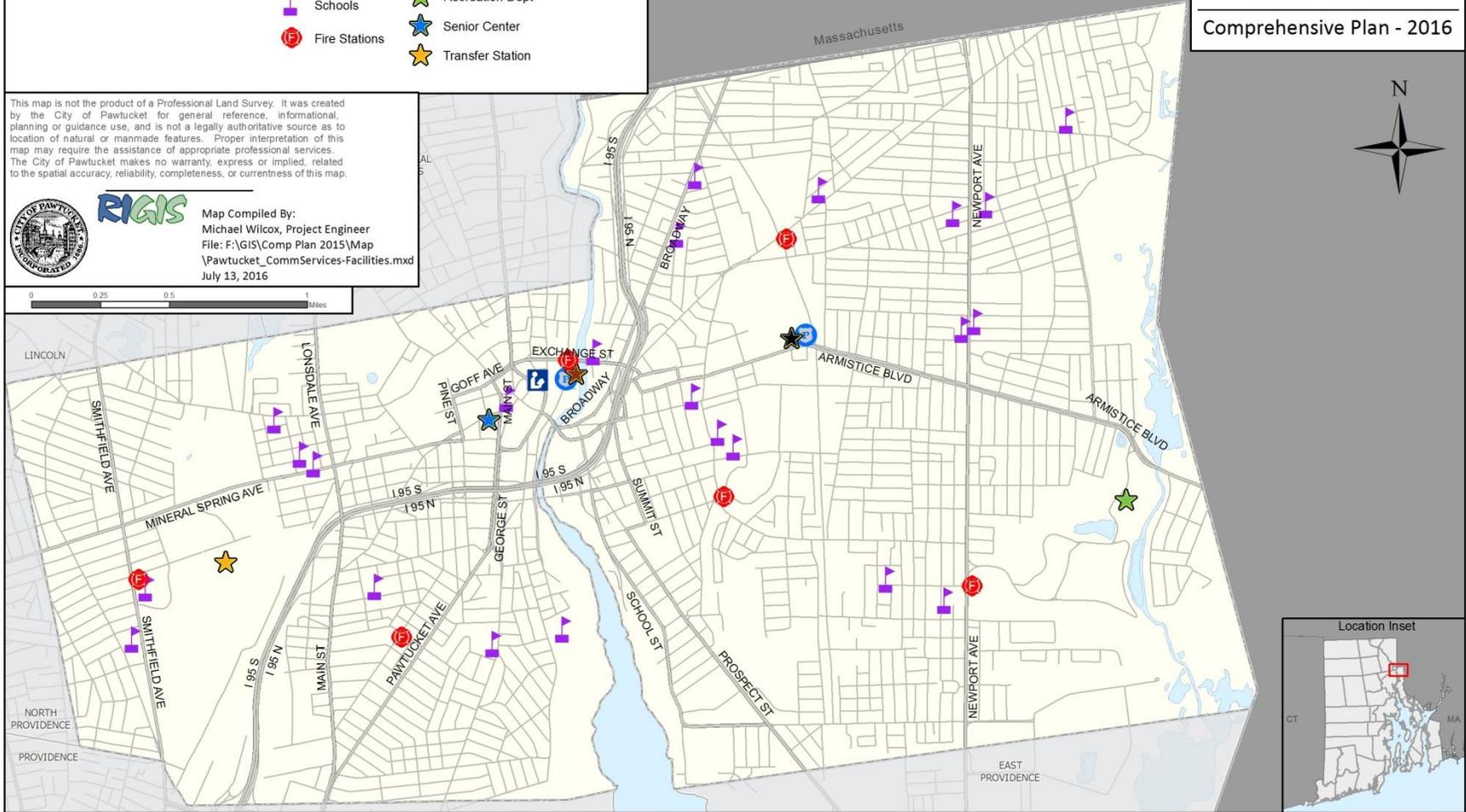
CITY OF PAWTUCKET RHODE ISLAND

Comprehensive Plan - 2016

This map is not the product of a Professional Land Survey. It was created by the City of Pawtucket for general reference, informational, planning or guidance use, and is not a legally authoritative source as to location of natural or manmade features. Proper interpretation of this map may require the assistance of appropriate professional services. The City of Pawtucket makes no warranty, express or implied, related to the spatial accuracy, reliability, completeness, or currentness of this map.



RIGIS Map Compiled By:
Michael Wilcox, Project Engineer
File: F:\GIS\Comp Plan 2015\Map
\Pawtucket_CommServices-Facilities.mxd
July 13, 2016

Map 9. Community Services and Facilities

Solid Waste Management

According to the Rhode Island Comprehensive Solid Waste Management Plan (dated May 14, 2015), the Central Landfill in Johnston, which is managed by the Rhode Island Resource Recovery Corporation (RIRRC), will be at capacity in 2038. It is estimated that Rhode Islanders (residences and businesses) generate about 1.5 million tons of solid waste, including recyclables, per year. A majority, approximately 750,000 tons, is put in the Central Landfill. About 200,000 tons is exported out-of-state for disposal, and the remainder is recycled through various state, municipal, and private programs and facilities. There is no room to expand the landfill and it is not expected that another landfill will be sited in the state. Further, exporting solid waste for disposal is expensive. With that in mind, Rhode Island communities need to find ways to maximize recycling and other strategies to extend the life of the Central Landfill.

Municipal solid waste and recyclable materials are picked up curbside or residents can bring them to the City-owned transfer station on Grotto Avenue. From there, it is brought to the Central Landfill. The transfer station's permitted capacity is 600 tons per day and it is estimated that daily usage is 300 tons.

Recycling is mandatory. Trash will not be collected unless recycling containers are present. Recyclable items include paper, cardboard, plastic, and glass jars and bottles. Rhode Island communities are required to meet the state-mandated minimum recycling rate of 35 percent and diversion rate of 50 percent. The City is working towards these goals, with a 31.4 percent recycling rate and 36.5 percent diversion rate. To increase residential recycling, the City increases awareness and education of recycling with information and guidelines on its website. There is a quick link on the home page to the Department of Public Works. Materials are translated into Portuguese and Spanish. Because recycling is collected every other week, a calendar is distributed at the beginning of the calendar year to all residents, noting which week they will have to put out their recycling carts. This calendar is also available on the City's website.

The City also collects the following items at the transfer station:

- White goods: refrigerators, freezers, washers, dryers stoves, air conditioners
- Electronic waste: computers, televisions, printers, computers monitors,
- Antifreeze
- Auto Batteries
- Cloths, textiles, shoes
- Cooking oil
- Used motor oil
- Books
- Water heaters

Solid waste management service is a tax-based funded program.

Assessment of Current Service and Future Needs

The current level of service meets residential needs. The Public Works Department indicates that there are no major issues in administering solid waste management and recycling services in the City and there are no issues related to capacity that will impact the future of these services. It is not anticipated that solid waste management or recycling demands will change in the near future.

Wastewater Management

The City is virtually 100% sewered. For those areas with existing onsite systems, the City’s Ordinance (Chapter 335, Article II: Privies and Cesspools) requires maintenance and upkeep of systems. The existing sewer system is primarily a combined system collecting both sewage and stormwater. All sewers within the Pawtucket sewer system discharge to the Narragansett Bay Commission (NBC) interceptor sewers that convey flows to the Bucklin Point wastewater treatment plant in East Providence.

The City owns and maintains approximately 200 miles of collector sewers that directly service residents. It also owns and maintains as a part of the collection system five wastewater pumping facilities. These facilities provide for sewer service to lower lying areas, primarily along the Ten Mile River. Table 31 provides a summary of the wastewater pumping stations, including capacities. Operation and maintenance of the local sewer system is provided through the City’s Department of Public Works – Sewer, Sanitation and Recycling Division.

Table 31. Wastewater Pumping Stations

Station	Capacity	Size Force Main	Construction Date	Location
1	367 gpm at 65’ TDH	6”	1980	Narragansett Park
2	160 gpm at 55’ TDH	4”	1984	Slater Park
3	50 gpm at 30’ TDH	4”	1979	Parkside
4	100 gpm at 44’ TDH	4”	1978	Pincrest
5	100 gpm at 40’ TDH	4”	1984	Branch Street

Source: Pawtucket Department of Public Works, 2003

Combined Sewer Overflows

Flows from Pawtucket’s collector sewer system go into NBC’s interceptor sewers. Considering the system’s dual function as sewer and storm water collectors, wet weather flows increase dramatically beyond the existing pipe capacities. A series of combined sewer overflow (CSO) structures along the Blackstone and Seekonk Rivers provide relief by allowing direct overflow of the system into the river.

One of the major water pollution problems in the Narragansett Bay region is CSOs that periodically discharge into the Narragansett Bay. CSO systems collect both stormwater and wastewater into the same treatment facility. There are 20 CSO discharges in Pawtucket. During wet weather, the combined sanitary/stormwater flows can exceed the sewerage capacity. The excess is discharged at overflow points into the region’s rivers. In 2001, the NBC began the CSO Abatement Project, a 20-year, \$500 million, 3-phase project to provide for the storage and treatment of combined sewer overflows. Phase I was completed in October 2008 and included the tunnel, tunnel pump station and seven drop shafts connected to the Fields Point Wastewater Treatment Facility in Providence. Phase II was completed in 2015 and included two near surface interceptors along the Seekonk and Woonasquatucket Rivers to bring additional flow to the Phase I tunnel, a new storm drainage system in the Summit neighborhood in Providence, and a constructed wetlands in Central Falls.

For Phase III, NBC is re-evaluating methods and technologies for CSO control. Since 2014, meetings have been held with the public to discuss alternatives, including “green” infrastructure to manage stormwater (bioswales, pervious pavement, rain gardens, tree box filters) and “grey” infrastructure (pipes,

interceptors, tunnels). These alternatives are being evaluated for Central Falls, Pawtucket, and East Providence to manage flow into the Bucklin Point facility.²⁶

Assessment of Current Service and Future Needs

The desired goal for wastewater management is to provide minimally disruptive transmission of sanitary waste from residential and commercial properties of the City to the NBC-owned treatment facility in East Providence. The City's performance in providing this service is considered effective, as service disruptions are infrequent for most residents.

Sewer service is not expected to change significantly over the next 20 years, in terms of the service delivery methods. Sewer fees may increase in order to implement the NBC's combined sewer overflow abatement program.

There are minimal concerns related to the hydraulic capacity of the sewer systems, given that additional system demands would most likely be the result of additional development. Given there is little undeveloped area remaining in the City, future demands are expected to be unchanged in 20 years.

The biggest challenge for the City in ensuring efficient service is lack of adequate funding. Implementation of infrastructure improvements requires a substantial investment.

Stormwater Management

Only very limited sections of the sewer system have been separated, and progress is being made to address this. As it stands, the existing infrastructure must accommodate widely fluctuating flows during wet and dry weather. The City's stormwater conveyance system includes approximately 6,000 catch basins over 200 miles of streets and sewers. Operation and maintenance of the system including catch basin cleaning and disposal, street cleaning, the flushing of dead end streets, replacement of frames and grates, and other minor pipe cleaning repairs are performed by the Sewer, Sanitation and Recycling Division of the Department of Public Works.

The U.S. Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Phase I storm water program, initiated in 1990, required discharges from large construction sites, certain industrial activities and operators of medium or large MS4s (more than 100,000 served), to obtain permits and implement a stormwater management program as a means to control polluted discharges from these activities. Since 1984, the Rhode Island Department of Environmental Management (RIDEM) has been delegated as the authority to implement the NPDES program in Rhode Island.

The EPA finalized the Storm Water Phase II Rule on December 8, 1999. The Storm Water Phase II Rule extends the coverage of the NPDES storm water program to include small MS4s (urbanized areas with populations less than 100,000), and includes Pawtucket. The City received a \$25,000 grant from the RIDEM Nonpoint Source Pollution Program to develop a Storm Water Management Program Plan (SWMPP) to guide Pawtucket into compliance with the Phase II Rule. This plan was completed in 2003 and the City continues to update and implement it.

²⁶

<http://www.narrabay.com/ProgramsAndProjects/Combined%20Sewer%20Overflow%20Project/CSO%20Phase%20III.aspx>.

As in all Rhode Island communities, development and redevelopment in Pawtucket have to meet the requirements of the *Rhode Island Stormwater Design and Installation Manual* (December 2010), which promotes the use of low impact development (LID). LID is a term used to describe stormwater management strategies that integrate natural features (sometimes referred to as “green infrastructure”) as opposed to pipes or paved channels (“gray infrastructure”). In addition to filtering pollutants in stormwater, LID also reduces the impacts of flooding and increases aesthetics by adding natural green space. These have added social and economic benefits. Examples of LID strategies include:

- Riparian and wetland buffers
- Bioretention basins and vegetated swales
- Pervious pavement and other alternatives to paved surfaces
- Strategies that reduce overall pavement such as narrower streets and lower parking requirements or alternatives to meet parking standards (e.g. off-site parking or shared parking)
- Conservation design and compact development standards

In an urban environment, implementing LID strategies can be a challenge because land is not available; however, the biggest hurdle is getting over perceptions that LID cannot be used at all. Incremental applications can add up and work toward meeting water quality improvement goals.

The City addresses stormwater management in its development plan review process and through zoning, particularly in the riverfront zoning districts, land clearing ordinance, and parking lot performance standards. The City’s sediment and erosion control ordinance addresses stormwater management pre and post construction activities and requires that practices be consistent with the 2010 Manual.

Assessment of Current Service and Future Needs

The goal of stormwater management is to minimize both surface flooding and receiving water degradation as a result of stormwater runoff. The City’s performance in managing stormwater, like that of most New England municipalities, is considered ineffective. Most receiving waters have degraded water quality and are considered impaired by environmental regulators, in part due to untreated stormwater runoff. See discussion in Natural Resources related to the state’s 303(d) List of Impaired Waters, which references Section 303(d) of the federal Clean Water Act.

The existing storm system has inadequate capacity to provide water quality treatment; though this situation may improve over the next 20 years if adequate funding is provided. With respect to the physical condition of these systems, the City currently lacks a comprehensive understanding of existing and future needs. As with other services provided by the City, lack of adequate funding limits resources dedicated to meeting stormwater management objectives and maintaining infrastructure.

In the next 20 years, stormwater service may experience notable service delivery changes depending on the regulatory landscape. Minimal change is anticipated in the maintenance of flood control systems; however, new approaches are emerging in addressing stormwater quality management. Residents and business owners may play a greater role in managing stormwater on their properties if stormwater regulations tighten as expected. This may include installation of stormwater runoff detention systems (rain barrels, etc.) or replacement of existing impervious surfaces with permeable alternatives, e.g. permeable pavers instead of concrete for driveways. The implementation of a stormwater user fee is also currently under consideration to address the City’s funding challenges.

Public Safety and Emergency Services

Police Department

The Police Department is headquartered in the City Hall complex on Roosevelt Avenue. All administrative functions and temporary lock-up facilities are located at this office. The Department's vehicular fleet operates from facilities on Armistice Boulevard, adjacent to the Public Works Department Complex. For the year 2001, the Department received 67,805 calls resulting in a total of 14,505 written reports.

The Department currently has 143 authorized police officers. The personnel breakdown includes:

1 – Chief	7 – Lieutenants	86 – Patrolmen, including 5 current recruits in the Academy
3 – Police Commanders	19 – Sergeants	
5 – Captains	22 – Detectives	

The Department also employs 58 civilian personnel, which includes, among others, school crossing guards, animal control officers, VIN station inspectors, and police signal operators.

Fire Department and Rescue Response

The Fire Department maintains six active stations serving the City. Table 32 lists the existing fire stations. The Department is headquartered at the City Hall complex on Roosevelt Avenue and provides operational service through two shifts per day, 24 hours per day, seven days per week, and 365 days per year. The Department currently has a Class 2 ISO Rating, which reflects favorably on the Department's fire prevention and fire fighting capabilities. The rating also affects insurance rates for residential, commercial and industrial buildings. The Department maintains full fire fighting capabilities for multi-story building fires. This is an important for the several multi-story residential complexes for seniors in the City.

Table 32. Pawtucket Fire Stations

Station Number	Location	Construction Date	Building Type	Area (Sq. Ft.)	Equipment	Staff per Shift
1	394 West Avenue	1901	2 Story Masonry	5,070	1 – Engine 1 – Rescue	5
2	Roosevelt Ave./ City Hall	1937	2 Story Masonry		1 – Engine 1 – Ladder 1 – Marine 1 – Battalion 1 – Chief	8
3	2 Columbus Avenue	1957	1 Story Masonry	5,266	1 – Engine 1 – Marine 1 – Res. Lad. 1 – Res. Res.	3
4	375 Cottage Street	1974	1 Story Masonry	7,870	1 – Engine 1 – Ladder 1 – Rescue	8
5	301 Smithfield Avenue	1963	1 Story Masonry	5,106	1 – Engine 1 – Res. Eng. 1 – Res. Res.	5
6	385 Newport Avenue	1948	2 Story Masonry	4,775	1 – Engine 1 – Res. Eng.	3

Pawtucket Fire Department, 2015

The Fire Department employs a total staff of 146 and provides operational service through two shifts per day. Each shift is staffed by a Battalion Chief and provides a minimum staff manpower of 31 per shift. The Department staff personnel include the following:

1 – Chief	28 – Lieutenants	3 – Rescue Captains
1 – Assistant Chief	9 – Rescue Lieutenants	98 – Fire Fighters
4 – Battalion Chiefs	9 – Captains	

The Fire Department’s primary equipment includes six engines (pumper trucks), two aerial ladder trucks and two rescue units, each providing advanced life support (ALS) system capability. The Department also maintains reserve equipment including two pumper trucks, one aerial ladder truck and two rescue units. Many of the vehicles are over 10 years old. Replacement, up grading and life cycling of the Department’s fleet should be continued.

Emergency Management and Preparedness

Man-made disasters (fire, chemical spills, terrorist attacks, and acts of war against the United States) and natural disasters (floods, hurricanes, blizzards) are destructive and disruptive events that can affect any community. Past disasters have taught valuable lessons on mitigation and recovery out of which has emerged the field of emergency preparedness. The Federal Emergency Management Agency (FEMA) is the federal branch of emergency preparedness assisting communities to recover from disaster as well as assisting them in becoming disaster resistant. In the Northeast, FEMA has been most active in establishing development codes for regulating building in flood prone areas. All states now have emergency management agencies, as do many large cities. Pawtucket has a Director of Emergency Management housed at the Office of Emergency Management and Emergency Operations Center located at 260 Armistice Boulevard.

In the case of an emergency, the office of the Director of Emergency Management coordinates all essential operations at the Emergency Operations Center. Based on the incident type the Director utilizes emergency support functions (ESF) partners to prepare, respond, mitigate and recover from the manmade or natural disaster. The Pawtucket Office of Emergency Management has signed memorandum of understanding (MOU) contracts with the Rhode Island Emergency Management Agency (RIEMA), American Red Cross, and First Student Bus Company; and has designated shelters in the city which include Jenks Junior High School, Baldwin Elementary School, Varieur Elementary School, Curvin McCabe Elementary School and Nathaniel Greene Elementary School. These locations are designated as emergency shelters in case of a natural disaster, but can be utilized as points of distribution as well.

To prepare for and reduce risk from storm events and other natural disasters, the City refers to its “A Strategy for Reducing Risks from Natural Hazards in Pawtucket Rhode Island” (also referred to as a hazard mitigation plan). This plan identifies which natural disaster and storm events the City is most vulnerable to, which areas of the City are most at risk, and the projects and policies that the City will implement to reduce its vulnerability and reduce risk to property and lives. This plan is prepared based on the requirements of FEMA and is approved by RIEMA. The City updates the plan every five years through a committee with members representing city departments, local organizations, and state agencies.

Having an approved hazard mitigation plan allows the City to apply for grants that can be used to implement it. Over the years, the City has been able to complete numerous projects that increase the safety of its residents and protects property. They include:

- Rebates to residents for installing backflow prevention valves.
- Installation of an emergency generator connection at the Senior Center.
- Installation of backflow prevention valves at City Hall, the Roosevelt Avenue Fire Station and Police Headquarters.
- Designing and printing of Disaster Preparedness Coloring Book to educate young children about disaster preparedness.
- Training sessions for a variety of special interest groups including Post Disaster Recovery for municipal and private industry and general training for boards and commissions.
- A complete catch basin cleaning of the Darlington area of Pawtucket where major street flooding has occurred.

The City also obtained a Class 8 rating from FEMA's Community Rating System, which entitles affected properties to lower flood insurance rates.

Flash flooding as a result of overwhelmed or unmaintained municipal infrastructure has not occurred, however, there are areas that are prone to flooding. Development vulnerable to natural disasters and the impacts of climate change are further discussed in the Land Use Chapter.

The Director of Emergency Management also acts as the liaison for Emergency-911 (E-911). Those responsibilities include the review and update of the E-911 Master Street Guide annually or as often as requested, verification and confirmation of street ranges, check and correction of incorrect addresses, verification and confirmation of new locations and addresses, and attendance at state and regional meetings and workshops as scheduled. The Director of Emergency Management also sits on the Urban Area Security Initiative Stakeholders group representing the City on grant funding which is made available to the City.

In July 2015, Pawtucket and Central Falls signed a memorandum of understanding to establish a two-year cost-sharing pilot program that will merge the emergency management services of the two cities. This is a starting point for other joint efforts, including the development of a joint Hazard Mitigation Plan in 2016.

Assessment of Current Service and Future Needs

Police Department

Residents are able to adequately access the Police Department and it has been effective in meeting the needs of the community; however, it does not go without challenges. The major challenge of the Police Department is the ability to cover all required duties, including the schools, court, etc., with a limited number of officers. The Department is 40 to 60 percent undersized. While the population is not expected to increase exponentially over the next 20 years, the Department will continue to manage staff and budgets to grow its force. It is also looking for a long-term solution to developing a new public safety complex that houses police, fire and the Office of Emergency Management.

Language can also be a barrier. A phone-in translation service is used, and at times officers work with relatives that speak English. Materials are translated, but limited to Spanish and Cape Verdean. Today

there are many languages being spoken throughout the City, including Russian and Hmong, and the number of city residents speaking a language other than English as their primary language is expected to increase in the next 20 years. The Department has made efforts to recruit minority officers, but has been unsuccessful, which is noted as both a local and national problem. To address this hurdle, it has begun to work with local organizations such as Progresso Latino, NAACP, and faith-based groups. The Department is also advertising on Spanish-language radio.

Fire Department

Like the Police Department, residents are able to adequately access the Fire Department and it has been effective in meeting the needs of the community; however, it does not go without challenges. The standard for Fire Department staffing requirements is generally five full time fire fighters per 1,000 dwelling units. Based on the current number of full time personnel in proportion to the 2010 U.S. Census of dwelling units, 32,055, a net deficiency of 14 fire fighters exists. Considering the slow population increase that is projected for the next 20 years and the slow rate of new dwelling unit construction, this deficiency is not expected to increase significantly.

All of the existing fire stations are old structures ranging in age from approximately 40 to 115 years old. Station 4 at 397 Cottage Street is the most recent structure, built in 1974. All of the stations require varying degrees of improvements to correct Building and Life Safety Code deficiencies. The Fire Department has identified potential improvements approaching \$1 million to correct existing deficiencies. An extensive rehabilitation of the exterior of West Avenue was completed in 2002 to ensure that the structure remain a focal point of the neighborhood and retain its historic character. Exterior rehabilitation of the other facilities in the City is also necessary. Interior rehabilitation of the West Avenue structure as well as the other structures is necessary to update heating systems, electrical wiring, and plumbing fixtures.

Emergency Management and Preparedness

Currently, providing emergency management services to City residents is meeting department objectives and adequately serving the community. In the coming year, the City will kick off a cost-sharing pilot with the City of Central Falls to share emergency management services between the two communities. It is hope that this is a long-term approach in meeting anticipated limited resources in both communities over the next 20-years. Additionally the present Emergency Operations Center is too small to accommodate both communities; however, a long-range solution of building a new EMA public safety complex along the Pawtucket-Central Falls line is being proposed in a redevelopment area. In addition to the pilot project, the City is installing a new modern phone system at the Office of Emergency Management. The system will give the City capacity to set up informational phone banks during city or state-wide emergencies. This will improve communications to residents and businesses.

Public Schools

The Pawtucket School System consists of ten elementary schools, three junior high schools, and three senior high schools and the school administration building. Table 33 provides an overview of the different facilities, including estimated student capacity for each school. In 2006, the City added the Jacqueline M. Walsh School for Performing and Visual Arts, a conservatory style high school where students are accepted based on auditions. It is located at Jenks Junior High School.

Table 33. Pawtucket School System Facilities: Capacity and Date Built

Facility	2015 Enrollment	Capacity (estimated)	Remaining Capacity	Date Built/ Renovations
Baldwin	690	692	2	1963/1974
Cunningham	533	434	-99	1965
Curtis	376	324	-52	1956/1965
Curvin/McCabe	472	448	-24	1977
Fallon	606	566	-40	1949/1968
Greene	528	492	-36	1918
Little	444	385	-59	1967
Potter/Burns	513	434	-79	1919
Varieur	403	422	19	1971
Winters	394	402	8	1961
Total Elementary	4,959	4,599	-360	
Goff	717	472	-245	1931
Jenks/Walsh Arts HS	727	497	-230	1977
Slater	725	448	-277	1915
Total Junior High	2,169	1,417	-752	
Shea	803	749	-54	1940
Tolman	999	838	-161	1926
Total Senior High	1,802	1,587	-215	

Source: Pawtucket School Department, 2015

Assessment of Current Service and Future Needs

Enrollment has been decreasing since a historic high of 12,474 students in 1970. Since 2000, enrollment has decreased, but has remained consistent over the last five years, and is projected to slowly increase level through 2020 (Table 34 and Table 35).

Table 34. Change in Student Enrollment (2000, 2010, & 2015)

	2000	2010	2015	Net Change (2000-2015)	Percent Change (2010-2015)
Elementary	5,692	4,913	4,959	-733	-12.88%
Junior High	2,096	1,552	2,001	-95	-4.53%
Senior High	2,281	2,112	1,970	-311	-13.63%
Total Public School	10,069	8,577	8,930	-1,139	-11.31%

Source: Pawtucket School Department, 2015

Table 35. Projected Student Enrollment (2015-2025)

Sch Yr	Grade													
	PK	K	1	2	3	4	5	6	7	8	9	10	11	12
2015-16	134	701	787	821	867	773	756	765	776	846	549	446	488	464
2016-17	135	747	716	786	824	869	752	760	805	772	568	496	402	435
2017-18	136	714	763	715	789	826	845	756	799	801	679	513	447	358
2018-19	137	682	730	762	718	791	803	849	795	795	705	614	462	398
2019-20	138	720	697	729	765	720	769	807	893	791	700	637	553	412
2020-21	139	713	736	696	732	767	700	773	849	889	696	633	574	493
2021-22	140	715	729	735	699	734	746	704	813	845	782	629	570	512
2022-23	141	706	731	728	738	701	714	750	741	809	744	707	567	508
2023-24	142	708	725	730	731	740	682	718	789	737	712	672	637	505
2024-25	143	713	713	724	733	733	719	686	755	785	649	643	606	568

Source: NEDEC, December 29, 2014

The primary concern is that most schools are operating over capacity. The School Department began master planning efforts in 2012 and assessed different scenarios. Because there are limited available sites for new facilities, the Department is implementing a combination of new construction and repairs to existing buildings. This will also require reorganization of grades.

According to its Facilities Master Plan, from 2015 to 2018, the School Department will implement Phase I of consolidating Shea and Tolman high schools and renovating two elementary schools (Greene and Potter/Burns). Phase II (2018-2021) involves the renovations of several schools buildings. Finally, during Phase III (2021-2024), it is anticipated that the consolidation process will be complete and Tolman High School will close. It is also projected that Little Elementary School will close at this time.

Public Library

As the Pawtucket Public Library Strategic Plan suggests, in a community with residents who lack the financial means to purchase their own informational and entertainment resources or subscribe for Internet services, the local library becomes a very important place. The Pawtucket Public Library is a located downtown. It is two connected buildings, both of which are on the National Register of Historic Places. The buildings provide 42,675 square feet for library use including seating for 225 users and a 100-seat auditorium. The library is open 64 hours per week. The door count in fiscal year 2014 was 253,629 and the library has 28,677 registered borrowers. The library also has a bookmobile that delivers library services to Pawtucket neighborhoods and schools. It's on the road approximately 14 hours a week.

The library is a member of a network of public libraries in the state that share a common database and circulation system. They purchase many items as a group at a discounted rate. Interlibrary loan is provided to library users through a multi-type statewide library network called Library of Rhode Island.

Library services include traditional information/reference service, circulation of materials, and programs for children, young adults, and adults. Two of the library's most popular programs are computer workshops and literacy classes. The library provides meeting room space for community meetings, access to the Internet and personal computers for public use. The library's website includes information about the library's services, library's catalog, links and on-line resources our users find invaluable.

Assessment of Current Service and Future Needs

The library is centrally located in the downtown area of the city. It has very little access to parking for its users but bus transportation is close by and frequent. It will continue to work with neighboring businesses and organizations to develop a comprehensive solution for the area.

The library has seen increased usage as a result of Economic Recession of 2008. People are borrowing more books and media, using the libraries computers for job searching and to further their education. They are attending the library's free programs for entertainment. The waiting lists for English language literacy and computer classes continue to grow. In their recent survey, the library found that many of its users would like to see more classes around computer and jobs skills as well as help with completing job applications, creating resumes and preparing for interviews. It is anticipated that these needs will continue to increase in the next 20 years and the library will use its Strategic Plan²⁷ to meet user needs. It also has a Technology Plan (2016-2018) to address the growing use of the library as an information

²⁷ <http://www.pawtucketlibrary.org/strategicplan.htm> (Obtained June 9, 2016)

center for the community. In the immediate future, the library does not plan to expand physically, but maintain its existing facility. I will look to its community partners to expand for new programming.

The library’s Strategic Plan also calls on the need to support the Pawtucket School System in their efforts to improve students’ skills. According to the 2015 Rhode Island Kids Count Factbook, fourth grade students in Pawtucket were not as proficient in reading and math as the state as a whole; however, rates are improving overall (Table 36). In the next 10 to 20 years, the library hopes to further support improved proficiency of City students.

Table 36. Fourth-Grade Proficiency in Math and Reading, Pawtucket and State of Rhode Island (2005, 2013)

	Pawtucket		Rhode Island	
	2005	2013	2005	2013
At or above proficiency in reading	48%	62%	60%	71%
At or above proficiency in math	42%	50%	52%	63%

Source: 2015 Rhode Island Kids Count Factbook

Senior Center

The Leon Mathieu Senior Center was designated as Pawtucket’s community focal point on aging in November 1, 1980. The facility opened after the major renovation of a vacant fire station and was funded by Community Development Block Grant and Title V of the Older Americans Act monies. The Rhode Island Department of Elderly Affairs was an integral participant.

After a 16-month evaluation and application period, the Leon Mathieu Senior Center became nationally accredited by the National Council on the Aging’s National Institute of Senior Centers, as of January 2002. The Center is one of 14 accredited senior centers in Rhode Island and one of fewer than 100 accredited senior centers nationally.

Assessment of Current Service and Future Needs

The Leon Mathieu Senior Center has demonstrated its capability to provide comprehensive services to its elderly population. The Senior Center enjoys a positive community image of providing full access to information and services available through all federal, state, and local sources with an emphasis upon targeting services to low and low-moderation income individuals. The Senior Center offers a variety of programs which include: support services, a monthly newsletter, daily exercise classes, monthly health screenings, educational programs, tax preparation, arts and crafts, information and referrals on resources, programs and services available locally, statewide and federally, RIPTA bus passes, Senior Health Insurance Programs, Alzheimer’s Alert Program and RI Pharmaceutical Assistance to the Elderly.

One of the most successful programs of the Senior Center is the Check ‘Em Program run in conjunction with the Police Department. The Check ‘Em Program is a telephone reassurance system that will call senior 60 years of age or older living in their own homes, or who live in private apartment, to ensure that they are okay. This is a potential life saving program that is free to Pawtucket residents. It is especially comforting to children living out of state with an older parent living alone. An automated call is placed in the morning. If there is no answer, the call is placed again every 15 minutes for 45 minutes. If there is still no answer, a policeman is dispatched to check on them. Although the number of people enrolled in the program is constantly changing, the program averages about 100 participants.

The Senior Center has 8,394 individuals in its database. From July 1, 2012 to June 30, 2013, 2,100 individuals were assisted with social and human services; 3,600 individuals participated in health, fitness, education, cultural, and life-long learning activities; and 19,000 rides were given to older adults by the two vans operated by the Senior Center.

Looking forward, the demand for services will remain constant. While the 2010 U.S. Census indicates that much of the population 65 years and older had left the City from 2000, residents between the ages 45 to 64 increased (Table 37). These individuals are the anticipated future population that the Senior Center will be servicing in the next 20 years.

Table 37. Population Age (2000, 2010)

	2000	% of Total	2010	% of Total	Actual Change	% Change
Total Population	72,958		71,148		-1,810	-2.5%
Under 5 years	4,918	6.7	5,012	7	94	1.9%
5 to 9 years	5,376	7.4	4,430	6.2	-946	-21.4%
10 to 14 years	5,060	6.9	4,243	6	-817	-19.3%
15 to 19 years	4,624	6.3	4,725	6.6	101	2.1%
20 to 24 years	4,791	6.6	5,180	7.3	389	7.5%
25 to 34	11,154	15.3	10,348	14.5	-806	-7.8%
35 to 44	11,684	16.0	9,958	14	-1,726	-17.3%
45 to 54	8,737	12.0	10,613	15	1,876	17.7%
55 to 59 years	3,065	4.2	4,366	6.1	1,301	29.8%
60 to 64 years	2,721	3.7	3,281	4.6	560	17.1%
65 to 74	5,232	7.2	4,416	6.2	-816	-18.5%
75 to 84	4,207	5.8	3,123	4.4	-1,084	-34.7%
85 years and over	1,389	1.9	1,453	2	64	4.4%
Median age (years)	35.4	-	37	-	1.6	-
State median age (years)	36.7		39.4		2.7	

Source: U.S. Census 2000 and 2010

Energy

There are two approaches to energy from the City planning perspective. The first is how much energy is being consumed by municipal facilities and operations, including public buildings, transportation and equipment. The second perspective is the evaluation of implementing renewable energy alternatives like wind, solar and hydropower by the private sector.

Municipal Energy Consumption

In 2011, an energy services company (ESCO) performed a feasibility study of the City's buildings to assess energy consumption. Overall, the study provides several observations, conservation measures, and possible initiatives that can be implemented to increase building performance and provide a reduction in energy consumption and cost. Table 38 lists recommendations and estimated construction costs, utility rebates, annual savings, and number of years the City can expect to see a payback on the investment. The City will use this list to evaluate its options based on available funding and priorities.

Table 38. Summary of ESCO Recommendations

Building	ECM Number	ECM Name	Construction Cost (\$)	Utility Rebate (\$)	Total Cost (\$)	Annual Savings (\$)	Simple Payback (years)
General	G-1	Install Multi Facility BAS System	\$500,000	\$100,000	\$400,000	\$32,607	12.3
	G-2	Oil to Gas Conversion	\$113,000	\$ -	\$113,000	\$15,726	7.2
City Hall	CH-1	Vending Machine Misers	\$695	\$285	\$410	\$912	0.4
	CH-2	Install Condensing Boiler	\$150,000	\$10,000	\$140,000	\$8,418	16.6
	CH-3	Programmable Thermostats	\$1,500	\$250	\$1,250	\$1,263	1.0
	CH-4	City Hall Fire Station RTU Replacement	\$ 20,000	\$ 2,125	\$ 17,875	\$4,135	4.3
	CH-5	City Hall Police Station RTU Replacement	\$ 20,000	\$ 2,125	\$ 17,875	\$6,836	2.6
Public Works	DPW-1	DPW Split AC Installation	\$ 5,300	\$ 383	\$ 4,918	\$615	8.0
	DPW-2	DPW Infrared Installation	\$ 24,024	\$ 3,500	\$ 20,524	\$3,772	5.4
	DPW-3	DPW Upgrade AHU	\$ 15,000	\$ 638	\$ 14,363	\$2,127	6.8
	DPW-4	Install Heating Unit that runs on Waste Oil	\$ 12,000	\$	\$ 12,000	\$2,495	4.8
	DPW-5	Town Garage Architectural Upgrades	\$ 175,000	\$	\$ 175,000	\$ 21,313	8.2
Quonset Hut	QH-1	Replace Reznor Units and Add Scheduling Control	\$ 12,000	\$	\$ 12,000	\$ 1,022	11.7
Welding	W-1	Install Infrared Heater in Welding Bay	\$ 3,432	\$	\$ 3,432	\$ 472	7.3
Emergency Response	EO-1	Programmable Thermostats	\$ 450	\$ 75	\$ 375	\$ 126	3.0
Police Substation	PSS-1	Replace AHU	\$ 12,000	\$ 638	\$ 11,363	\$ 2,051	5.5
	PSS-2	Occupancy Sensors	\$ 1,700	\$ 680	\$ 1,020	\$ 222	4.6
Library	LB-1	Add Demand Control Ventilation Sequence	\$ 25,000	\$	\$ 25,000	\$ 4,751	5.3
	LB-2	Install New Boiler	\$ 100,000	\$ 10,000	\$ 90,000	\$ 4,997	18.0
175 Main	M-1	Heat Pump Motor Upgrade	\$ 20,500	\$ 2,000	\$ 18,500	\$ 3,103	6.0
	M-2	Add Demand Control Ventilation Sequence First Floor	\$ 30,000	\$	\$ 30,000	\$ 6,209	4.8
	M-3	Add Demand Control Ventilation Sequence Second Floor	\$ 40,000	\$	\$ 40,000	\$ 9,854	4.1
	M-4	Add Demand Control Ventilation Sequence Third Floor	\$ 20,000	\$	\$ 20,000	\$ 4,022	5.0
	M-5	Cooling Tower Reset Control	\$ 8,000	\$ 2,400	\$ 5,600	\$ 3,240	1.7
	M-6	Lighting Upgrades	\$ 99,880	\$ 5,745	\$ 94,135	\$ 41,320	2.3
	M-7	Occupancy Sensors	\$ 11,400	\$ 3,120	\$ 8,280	\$ 1,418	5.8
Senior Center	SC-1	Replace Boiler	\$ 75,000	\$ 3,000	\$ 72,000	\$ 3,833	18.8
	SC-2	Install Occupancy Sensors	\$ 8,000	\$ 2,800	\$ 5,200	\$ 1,193	4.4
Slater Park Office	SP-1	Replace Window AC Units with Split Systems	\$6,183	\$255	\$5,928	\$766	7.7
	SP-2	Install Occupancy Sensors	\$1,100	\$400	\$660	\$157	4.2
	SP-3	Install High Efficiency T8 Lighting with Electronic Ballasts	\$1,980	\$270	\$1,710	\$303	5.6
	SP-4	Install Programmable Thermostats	\$450	\$75	\$375	\$89	4.2

Building	ECM Number	ECM Name	Construction Cost (\$)	Utility Rebate (\$)	Total Cost (\$)	Annual Savings (\$)	Simple Payback (years)
Fire Stations	FS-1	Install High Efficiency T8 Lighting with Electronic Ballasts	\$11,660	\$1,590	\$10,070	\$5,793	1.7
	FS-2	Occupancy Sensors	\$3,900	\$1,160	\$2,740	\$1,324	2.1
	FS-3	Replace Window AC Units with Split Systems	\$20,316	\$1,275	\$19,041	\$2,051	9.3
	FS-4	Install Infrared Heaters in High Bays	\$34,320	\$5,000	\$29,320	\$3,371	8.7
ECM Tools			\$1,583,790	\$159,828	\$1,423,963	\$201,907	7.05

Source: "Table 1 – ECM Summary Table" from *Draft Energy Service Company Feasibility Analysis* (January 14, 2011)

The City has begun to implement several recommendations. They include:

- Energy efficient lighting at City Hall, Department of Public Works, all recreation buildings and city parking garage
- Oil-to-gas conversions at a number of City buildings
- Boiler replacements with high efficiency boilers at the Senior Center, one fire station and Library
- Traffic signals converted to LED signals

Renewable Energy

The ESCO feasibility study also evaluated the City’s development and use of renewable energy sources, specifically wind, solar, hydropower and biomass. Wind was not considered feasible for several reasons. The lack of open space to accommodate wind turbines, weak wind speeds, and the unavailability of tax-based incentives do not make wind an economically feasible alternative.

Solar photovoltaic (PV) systems showed some benefit. Solar PV systems have high upfront equipment, installation and commissioning costs, but maintenance and operation costs are low. The financial values of systems rely on the cost of electricity being served. Based on an analysis of the City’s power price growth rate (looking at capacity and demand by the City), the ESCO concluded that there is a reasonable expectation that capacity charges from the City’s power supplier will be reduced because the capacity tag of the facility is determined during the system peak for the entire New England grid, which typically happens on hot summer afternoons when PV systems are operating at or near full capacity. In addition to cost savings, a PV system in Rhode Island also generates RECs.²⁸

Slater Mill represents an opportunity for the City to implement a hydropower facility. Given the City does not own the mill further discussions with the property owner would have to take place to see if there is interest in partnering with the City. Hydropower is being generated by private commercial entity, Pawtucket Hydropower LLC. Its 1.35-megawatt facility is located on Vine Street on the Blackstone.

²⁸ Renewable Energy Credits. When a renewable generator generates a MWh of electricity, it also creates an environmental benefit associated with not burning fossil fuels to generate that MWh. That environmental benefit is defined as a REC and can be sold on a per MWh basis either bundled with electricity on its own as a distinct product. Utilities in many states are obligated to buy a quota of RECs every year as part of what is known as a Renewable Portfolio Standard (RPS).

Funding for any renewable energy project would have to be sought elsewhere. The Rhode Island Office of Energy completed several funding activities for energy projects that were initiated under the federal Energy Efficiency and Conservation Block Grant Program. There are currently no new funding opportunities at the state level; however, the Rhode Island Renewable Energy Fund (RIREF) has both the Municipal Renewable Energy Investment Program and the Renewable Energy Development Program. Both of these are funded by the renewable energy surcharge on utility bills in the state. These funds are diverted back into support of renewable energy projects throughout Rhode Island. To the extent that the City is able to develop a worthy project, there may be an opportunity to have the RIREF share the cost. Such an award could substantially alter the economics of a solar PV project. The siting constraints of a wind turbine are likely restrictive enough to limit development even with RIREF assistance.

Water Supply

The Pawtucket Water Supply Board (PWSB) through a system of both surface and groundwater sources, supplies water to the City of Pawtucket, the City of Central Falls and the Valley Falls portion of Cumberland. The original system was established in 1875. Up until 1970, the water system was operated and maintained by the City's Department of Public Works, at which time the PWSB was established to take over all aspects of the water system.

The City coordinates with the PWSB on several issues. First, through the Development Plan Review process, the PWSB comments on development projects and evaluates their impact on the water supply. The PWSB also participates in the development and implementation of the City's Hazard Mitigation Plan, coordinating responses to water emergencies. Equally, the City's Department of Planning and Redevelopment provide input on development trends in the city for updates the PWSB Water Supply System Management Plan.

Description of Water Supply System

The discussion about the water supply system in this chapter is taken directly from the PWSB 2014 Water Supply System Management Plan (WSSMP) 5-Year Update. The WSSMP Executive Summary and water system distribution map are provided in Appendix C.

Service Area

The PWSB system serves approximately 98,000 customers (2012), which includes in the entire cities of Pawtucket and Central Falls as well as the Valley Falls portion of Cumberland. The PWSB also has a wholesale contract with the Town of Cumberland. The service area is almost fully developed. Customers are predominately residences in medium to high density areas, but the PWSB also serves commercial, industrial and institutional users.

Water Sources

Surface Water Sources

The source of the PWSB water supply is the Abbott Run watershed, a sub-basin of the Blackstone Valley Drainage Basin. The watershed covers an area of about 27 square miles in the Town of Cumberland, Rhode Island, and the Towns of Wrentham, Franklin, Plainville, North Attleboro and Attleboro, Massachusetts.

The Diamond Hill Reservoir is the first and largest of the ponds and impoundments that make up the surface water supply. It was originally constructed in 1887. Over the years it has been enlarged twice and currently has a storage capacity of 3.67 billion gallons of water.

Downstream is the Arnold Mills Reservoir. It was constructed in 1927 and can store up to 1.163 billion gallons of water.

There are four other smaller ponds along the seven-mile length of Abbott Run. The PWSB owns two: Robin Hollow Pond and Happy Hollow Reservoir. The total available storage in these ponds is about 142 million gallons. The other two ponds, Rawson Pond and Howard Pond, are privately owned. The total storage in these ponds is about 51 million gallons.

Groundwater Sources

The PWSB owns a series of ten wells along Abbott Run, although only eight are currently active. They supplement the surface water supply. The operating wells are fed directly into the raw water intake at Happy Hollow Pond as water quality dictates. These wells are activated when raw water quality is very poor, which may occur in the spring with high turbidity and in the summer to reduce surface water temperature. Generally, at minimum, two to three wells are in operation at any time to supplement surface water supply to the treatment plant.

Water Supply System Infrastructure

Water Treatment Facility

The new water treatment facility is located at 87 Branch Street in Pawtucket. It opened in 2008 when the facility at 120 Mill Street in Cumberland was decommissioned. The new facility is designed to produce up to 25 million gallons of water per day (MGD) of finished water and can allow 30 MGD to flow through the facility without major piping or structural modifications. The facility design also allows implementation of chloramines for disinfection without major modification or plant shut down. Raw water from Happy Hollow Pond is drawn by the raw water pump station (RWPS) located at 118 Mill Street and pumped approximately one mile through two 36-inch raw water transmission pipelines to the treatment facility. Treated water from the groundwater wells also connects to the pond's intake line to the RWPS.

Storage Facilities

The water system maintains two distribution storage facilities located in Lincoln; a clear well at the treatment plant and a finish water supply storage tank at the location of the treatment plant. The total distribution system storage including the finish water tank system storage is 20.9 million gallons.

Pumping Stations

In addition to the RWPS, the PWSB owns and operates three additional pumping stations.

Branch Street (Station 1)

Located at 85 Branch Street in Pawtucket, Station 1 serves as an emergency transmission station to Station 4, consisting of one 9 MGD pump coupled to a diesel engine. This pump is run periodically during power outages.

Branch Street (Station 4) Emergency Water Treatment Plant Effluent

Also located at 85 Branch Street, this station was formerly the main pumping station for the PWSB when the old treatment facility was in service. This station is now used as a backup for the high lift service pumps at the new water treatment plant at 87 Branch Street. Five pumps were installed in 1983 at this facility (three 9 MGD pumps, one 6 MGD pump, and one 3 MGD pump).

Raw Water Pump Station

This pump station was constructed in 2007 and is located at 118 Mill Street in Cumberland adjacent to Happy Hollow Pond. It is designed to deliver raw water approximately one mile south to the water treatment facility. The station is equipped with three 13.2 MGD pumps, for a total reliable pumping capacity of 26.4 MGD. The 200 HP pump motors are scheduled to be retrofitted with variable frequency drives (VFDs) in 2014 in order to optimize efficiency of the facility.

In 2012, the RWPS station was retrofitted with a pilot system designed to feed powder activated carbon (PAC) to the raw water supply to aid in the control of seasonal taste and odor problems. These taste and odor problems have been attributed to the levels of Geosmin and 2-Methylisoborneol (MBE) which are naturally occurring organic compounds in surface waters and both of which are discernible to consumers at extremely low levels. Their occurrence is commonly associated with warmer weather and algal blooms that occur in late summer.

The introduction of the PAC at the raw water intake has proven successful in reducing the levels of these compounds and has improved the taste and odor of the finished water. A permanent PAC system is being installed in 2014 for use when the levels of these compounds are detected in the raw water at elevated levels in order to assist in controlling taste and odor of the finish water.

Finish Water Pump Station

This pump station was constructed in 2007 and is located at 87 Branch Street at the water treatment plant. The pump station consists of four 13 MGD pumps, for a total reliable (one spare) pumping capacity of 39 MGD. Two of the 900 horsepower pump motors were retrofitted with VFDs in 2012 in order to optimize efficiency of the facility.

Transmission System

The PWSB's current system consists of approximately 284 miles of water mains with approximately 24 miles of transmission mains (16-inch water main and greater). Pipe sizes range from 2-inch diameter to 12-inch for distribution mains. Transmission mains are 16-inch diameter to 48-inch diameter. These mains transport water from the water treatment plant, the 5.0 million gallon storage tank at 87 Branch Street and the two distribution system storage tanks at Stump Hill to the entire water distribution system. The transmission and distribution system is comprised predominantly of cement lined cast iron, cement lined ductile iron and a limited amount of unlined cast iron water mains.

Interconnections

Through interconnections, the PWSB can supply water to six neighboring municipal water systems including the Town of Cumberland, Town of Lincoln, City of East Providence, and Providence Water Supply Board in Rhode Island, as well as the Towns of Seekonk and Attleboro in Massachusetts. There is a contract to supply wholesale water to Cumberland; however it has expired. However, both parties continue to honor the contract and Cumberland continues to purchase water under the terms of the original contract. The remaining interconnections are currently for emergency use only.

Water Production

From 2003 to 2012, the water withdrawn from all supply sources (referred to as "water production") for the system has ranged from 3,148.6 to 4,470.6 million gallons per year. The PWSB produced 3,424.6 million gallons in the year 2012 with an average day demand (ADD) of 9.38 million gallons per day (MGD). From 2003 to 2012, the ADD decreased at a steady rate from 11.97 MGD in 2003 to 9.38 MGD in 2012. In 2012, the maximum day demand (MDD) was 14.07 million gallons and the peak hour demand

was 18.64 million gallons. The MDD has ranged from 21.5 million in 2002 to 14.07 million gallons in 2012. The MDD between 2007 and 2012 was in the range of 14.07 to 17.49 million gallons.

Water Services

The PWSB meters 100 percent of its customers and maintains two types of billing periods. Residential and small industrial customers (approximately 22,800 accounts) are billed on a quarterly basis; this group represents approximately 99.6% of the PWSB customer base. There are approximately 100 large industrial and commercial customers that are billed on a monthly basis.

Maintenance and Future Improvements

Transmission and Distribution Main Lining and Replacement

As noted, the PWSB owns and operates a total of approximately 24 miles of transmission water main. Less than 1 percent of these transmission mains are unlined pipe. Since 1988, the PWSB has undertaken an aggressive approach to replace or rehabilitate the entire distribution system with a goal of either cement lining or replacing all unlined cast iron water mains. By 2018, the PWSB will have completed its goal of replacing or rehabilitating the entire distribution system.

System Meters

The PWSB maintains an ongoing program of meter replacement which targets meters that have been in service for 10 years or longer. These “older” meters are routinely replaced by in-house staff on a daily basis (average of six to eight per day) and will continue through the Infrastructure Replacement Fund (IRF) program. The PWSB averages approximately 1,600 to 1,800 meter replacements per year.

Capital Improvement Plan

The PWSB maintains a Capital Improvement Plan to forecast and provide needed system improvements. System improvements include dam and well rehabilitation, reports and studies, main replacement projects and cleaning and lining projects over a 20-year planning period. Those listed in the 2014 WSSMP are provided in Table 39.

Table 39. Capital Improvement Projects

Project	Funding	Timing	Estimated Cost
Diamond Hill Dam and Spillway and Emergency Action Plan	IFR	2014	\$8,000
Diamond Hill Dam and Spillway Rehabilitation	SRF/IFR	2014-2015	\$300,000
Happy Hollow Dam and Spillway Emergency Action Plan	IFR	2013	\$10,000
Happy Hollow Dam and Spillway Rehabilitation	SRF/IFR	2018	\$300,000
Millers River Water Quality Basin Design	IFR	2014	\$55,000
Millers River Water Quality Basin Construction	SRF/IFR	2015	\$300,000
Abbott Run Stream Bank Rehabilitation	SRF/IFR	2013-2014	\$200,000
Stormwater Controls Pollution Management Program	IFR	2012-2027	\$600,000
Replace valves Wells 3,4,5,6,7,8, & 9	IFR	2014	\$28,000
Replace well building/housing at Wells 6,7,8, & 9	IFR	2014	\$160,000
Well 8 Rehabilitation (redevelopment)	IFR	2013	\$30,000
Well 9 Rehabilitation (redevelopment)	IFR	2014	\$30,000
Well 6 Rehabilitation (redevelopment)	IFR	2015	\$30,000
Well 7 Rehabilitation (redevelopment)	IFR	2016	\$30,000
Repaint Stump Hill Tank	IFR	2015	\$1,200,000
Distribution System Water Quality Monitors	IFR	2014	\$100,000
Ralco Way Pump Station Demolition	IFR	2014-2015	\$1,000,000
Main Replacement Improvements 8-10, 36,000 L.F. per year	SRF/IFR	2012-2016	\$9,000,000

Project	Funding	Timing	Estimated Cost
Main Replacement Improvements 11-16, 6,400 L.F. (bi-annual maintenance)	IFR	2017-2027	\$7,905,000
Meter Replacement	IFR	2017-2027	\$5,318,200

IFR – Infrastructure Replacement Fund SRF – State Revolving Fund

Existing and Future Issues of Concern

Existing and Future Needs

A majority of the land located in the PWSB service area is zoned residential; therefore, most of its customers are residential users. This make-up is expected to remain consistent in the next 20 years. According to the Rhode Island Statewide Planning Program, forecasted residential population of the PWSB service area is projected to decline from 98,120 (2012) to 96,557 (2030).

The PWSB wholesale water supply to the Town of Cumberland will continue as long as Cumberland requires the supplemental water supply. For the past several years, the Town of Cumberland has become more reliant upon its own available water resources including surface water from Sneece Pond and several groundwater supply wells. In addition, the Town has implemented a groundwater exploration and development program which is aimed at gaining further independence of water supply. It is uncertain to what degree this may impact the future wholesale water volumes to the Town of Cumberland.

There is interest among other abutting communities for the purchase of wholesale water from the PWSB. Reasons for this include the potential to gain added “emergency” redundancy from other current wholesale purchase suppliers, the potential to purchase water at reduced rates, and the maintenance of a new source of viable water supply. Preliminary interest has been expressed from East Providence, Bristol County Water Authority and the Town of Lincoln. These inquiries are only at the conceptual stages and would require additional efforts including likely significant infrastructure improvements should this move forward at some point in the future. The results of this would likely have a significant impact on the wholesale water currently sold by PWSB. Exact volumes that might be available for sale cannot be quantified at this time.

Availability of drinking water for both retail and wholesale customers is based on a water supply’s “safe yield.” Safe yield is the amount of water that can be sustainably withdrawn from a water supply source without having ecological impacts. The PWSB’s most recent safe yield analysis was completed in 1996 by Camp, Dresser & McKee (CDM). The safe yield was determined to be between 18.6 MGD and 20.6 MGD. This safe yield was not based on the Abbott Run watershed directly, but rather the analysis was based on a watershed that is hydrologically similar to Abbott Run.

The PWSB safe yield calculated by CDM in 1996 was based on the longest and most severe period of drought on record for New England, the drought of the 1960s. Watershed parameters and data were adapted from PWSB records for the Abbott Run watershed, as well as from the Nipmuc River USGS stream gage near Harrisville. According to the 1996 CDM Safe Yield report, the safe yield range for the surface water supply from the Abbott Run watershed is between 15 and 17 MGD. The PWSB has elected to adopt the results provided by the Abbott Run gage, which provides a yield of 16 MGD. This value is considered valid for safe yield determination and planning purposes.

The 1996 CDM Safe Yield report states that the potential yield of the groundwater reservoir under Abbott Run is significantly affected by the amount of induced recharge available from Abbott Run. For

example, 12 MGD can be pumped provided that adequate stream depth is maintained, but only 5 MGD can be pumped if no recharge is available from Abbott Run. Using the results of these studies, the system reliable safe yield of 19.6 MGD is currently used in planning studies. It is important to note that although different methods were used to analyze the safe yield of the PWSB system, all have been completed by using data from other basins thought to be comparable; no flow gauges have ever been installed within the Abbott Run sub-basin in order to complete such a study.

The current reliable safe yield of the PWSB system is greater than the demand and wholesale water demand projected in both the five and twenty year projections. The comparison is summarized in Table 40. Note that safe yield is only comparable with ADD, and not MDD, as the reliable safe yield represents the sustainable yield from a water source over an extended period of time.

Table 40. Projected Average Annual System Yield and Demand for PWSB

	2012 (MGD)	2015 Projections (MGD)	2030 Projections (MGD)
System Safe Yield	18.6 – 20.6	18.6 – 20.6	18.6 – 20.6
System Demand	(9.38)	(9.24)	(9.23)
Wholesale Water Sales (Cumberland)	(1.09)	(1.09)	(1.09)
Total Demand	(10.47)	(10.33)	(10.32)
System Surplus (Deficit)	8.33 – 10.13	8.27 – 10.27	8.28 – 10.82

Source: PWSB WSSMP (2014)

Drought

The PWSB prepared a Drought Management Strategy in 2012 to meet the requirements of *Rules and Procedures Governing the Water Use and Efficiency Act for Major Public Water Suppliers*, Adopted May 16, 2011. The Rhode Island Water Supply Board provided comments and the PWSB subsequently addressed issues raised in those comments. Additionally, emergency procedures are in place through the PWSB’s Emergency Action Plan, which includes drought conditions. The Drought Management Strategy details the protocols including triggers, actions and responsible parties for the various phases of a drought. These include normal, advisory, watch, warning and emergency phases of a drought condition.

Water Quality Protection

The PWSB continues its policy of working with the Town of Cumberland, the Cumberland Land Trust and the Cumberland Open Space Commission to acquire properties or development rights of properties in the Abbott Run watershed with the prime intent of water quality protection. The PWSB continues to actively maintain and manage the land surrounding the watershed. By owning the property, the PWSB can set forth stormwater management plans to ensure that the reservoir is not negatively impacted by the development. All construction within the watershed is reviewed by the PWSB, and if comments are warranted, the comments are sent to the Town or the Rhode Island Department of Environmental Management (RIDEM).

The PWSB also worked with the Cumberland Zoning Committee to create a watershed overlay district. This watershed overlay district will help protect both Cumberland’s and Pawtucket’s watersheds by prohibiting certain types of commercial and industrial activities.

As part of its WSSMP update, the PWSB provided updated information on their efforts to map wellhead protection areas for existing, active groundwater wells. It also redefined wellhead areas based on RIDEM’s updated groundwater rules (2010).

Natural Hazards and Climate Change

As noted, the PWSB has an Emergency Action Plan and Drought Management Strategy that establish procedures and protocols during natural hazard events, including drought. As the City begins to address issues around climate change, the PWSB will be involved.

Goals and Policies

Goals

Goal CS 1. Provide the City of Pawtucket with a full range of city services and community facilities commensurate with the needs of an urban industrial city.

Goal CS 2. Increase energy efficiency city wide.

Goal CS 3. Use water supply resources efficiently and effectively.

Policies

Policy CS 1. Improve the water quality of Pawtucket's waterways through the elimination of combined sewer overflows by cooperation with the NBC to site combines sewer overflow treatment or mitigation facilities, as necessary.

Policy CS 2. Regularly review and prioritize public works operations and capital need for inclusion in the five-year capital improvement program and the annual municipal budget.

Policy CS 3. Develop renewable energy generating assets in the City and encourage the City's use of renewable energy.

Policy CS 4. Maintain and improve groundwater and surface water quality by requiring the use of Best Management Practices for stormwater management.

Policy CS 5. Utilize RIDEM's "Rhode Island Soil Erosion and Sediment Control Handbook" for design guidance for all new and improved drainage systems.

Policy CS 6. Require developers of parcels not connected to the municipal sewer system to connect to it.

Policy CS 7. Preserve the Pawtucket Water Supply Board (PWSB) reservoir impoundment system to guarantee a continued source of water for future generations.

Policy CS 8. Annually review senior services delivery systems and levels of service to ensure efficient and effective service delivery to qualified residents.

Policy CS 9. Utilize senior volunteer services to the maximum extent in the operation of the senior center and to provide assistance and care to other older adults in the community.

Policy CS 10. Continue to work with neighboring businesses and organizations of the library to develop parking solutions for the area.

Policy CS 11. Work independently and with local and non-profit service providers to obtain sufficient funding to meet the social service needs of Pawtucket residents.

Policy CS 12. Allow the use of alternative pavement types on municipal parking lots, sidewalks, and other vehicular storage and travel ways to reduce stormwater runoff and to preserve architectural and landscape character.

Policy CS 13. Encourage through the Executive Office, the PWSB and the NBC, industrial water use conservation through exploring the use of groundwater resources, developing process water recycling and other technologies that reduce the use of potable water and volume of wastewater.

Policy CS 14. Continue the composting program at the municipal transfer station and educate homeowners to compost landscape waste whenever possible.

Policy CS 15. Continue municipal curbside collection of residential solid waste and require commercial and industrial solid waste to be handled privately.

Policy CS 16. Prohibit new connections of storm drains to the municipal sewer system.

Policy CS 17. Cooperate with the State in the implementation of the Drought Management Plan as a means to reduce Rhode Island's vulnerability to periods of low precipitation.

Transportation

Introduction

Pawtucket is a multi-modal community and people and goods move into and through the City by a variety of means – walking, driving, biking, or taking public transportation. Planning for transportation needs must assess where people live, where they work, where they shop, and where they socialize; and how to get them to these places in an affordable way that is safe and efficient. Important issues to tackle are how to maintain the existing transportation network that is operated by both the City and State, but also modernize it to meet changing needs, commuting patterns, and preferences.

Existing Transportation System and Planned Improvements

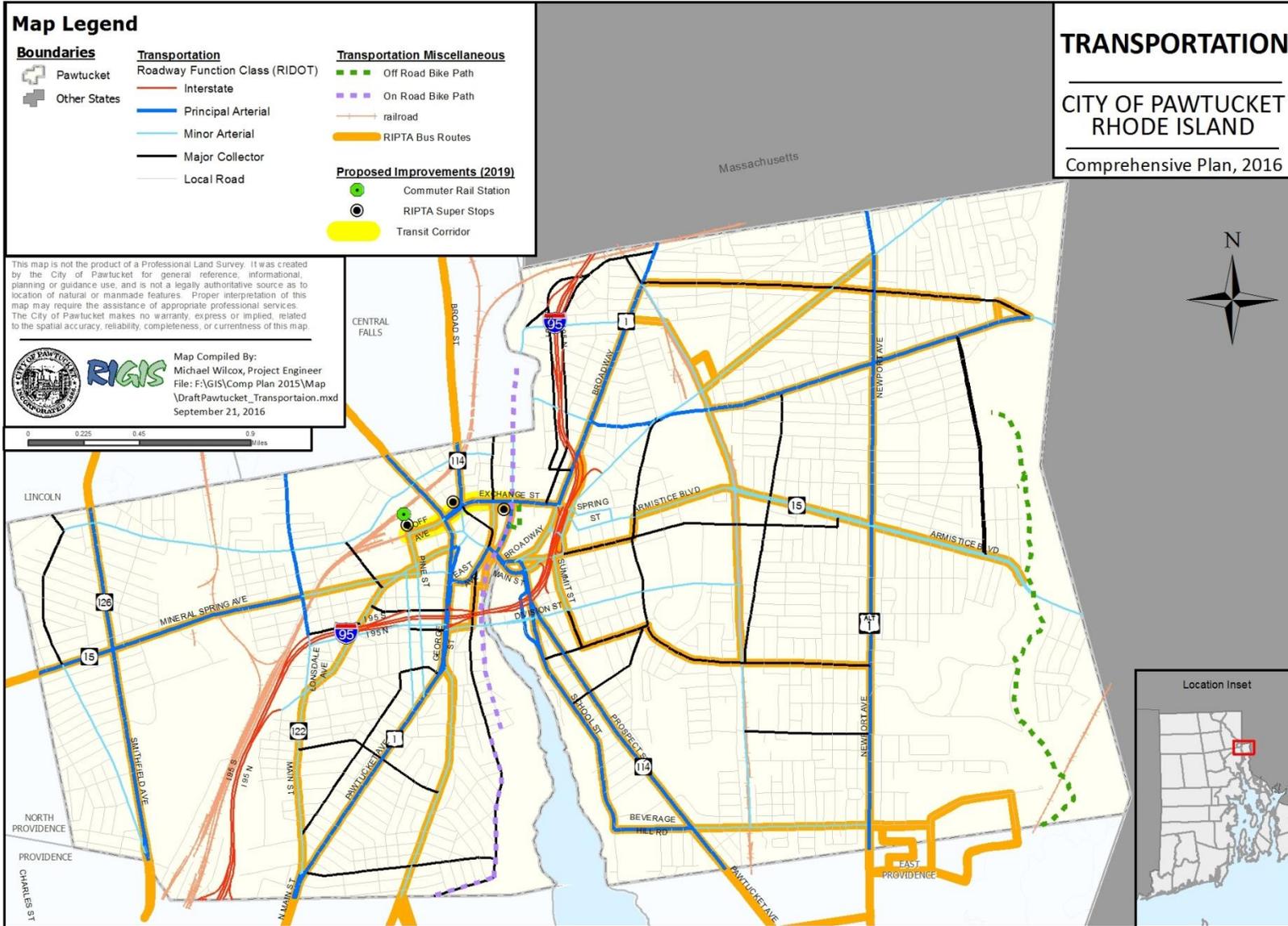
The City's transportation system is shown on Map 10. Much of it is maintained through the Highway and Cemeteries and Traffic Engineering divisions of the Public Works Department. Through the City's Capital Improvement Program, the Department of Public Works budgets for items such as street and sidewalk improvements, traffic control improvements, bridge repairs, and road repaving. The City has also issued bonds as needed for larger improvement projects. In 2014, voters passed a bond for \$1 million to address city-wide street paving.

The State, through the Rhode Island Department of Transportation (RIDOT) and Rhode Island Public Transit Authority (RIPTA), oversees I-95 as well as state highways and roadways through the City, and the public transportation system. There are also federal partners helping to build bikeway networks through funding and management, including the National Park Service (NPS) and Federal Highway Administration (FHWA). These federal agencies along with RIDOT and RIPTA are key partners in planning for the City's transportation needs.

Roads, Highways and Bridges

Roads and Highways

Approximately 1,000 acres of land area in the City is used for streets and highways. This represents 18% of the total city land area and is the second largest land use in the City. Roads are classified based on the FHWA's highway functional classification system. The purpose of this system is to define the role of a roadway in the nation's highway network, provide a way for transportation agencies to track the networks system and performance, and determine if a roadway is eligible for federal funding. Highway function classifications and federal aid eligibility are shown in Figure 7. Appendix D contains a listing of non-local roads, their functional classification, and their eligibility for federal aid.



Map 10. Transportation Network



Rural



Urban

Principal Arterial	
Interstate	N Interstate
Other Freeway & Expressway	H Other Freeway & Expressway
Other Principal Arterial	S Other Principal Arterial
Minor Arterial	
Minor Arterial	Minor Arterial
Collector	
Major Collector	Major Collector
Minor Collector	Minor Collector
Local	Local

 = Federal-Aid Eligible

NHS – National Highway System

Source: RI Division of Planning (<http://www.planning.ri.gov/statewideplanning/transportation/defin.php>)

Figure 7. Highway Functional Classification System and Federal Aid Eligibility

The majority of roadways in the City are classified as local roads, indicating that they are owned and maintained by the City. There are also some numbered routes which are State owned, but City-maintained, and still others that are State-owned and maintained (Table 41).

Table 41. State-owned roads in Pawtucket

Route #	Name	Location
1A	Newport Avenue	Entire roadway
15	Armistice Boulevard	From York Avenue to the Seekonk line
	Central Avenue	From Industrial Highway to Seekonk line
	Dexter Avenue	From Goff St. to Central Falls line
126	Smithfield Avenue	Entire roadway
1	Broadway	Entire roadway

Source: City of Pawtucket, Traffic Engineering, 2015

There are approximately 186 miles of local streets that are the responsibility of the City. The Department of Public Works maintains these streets by repairing the pavement, striping where necessary, maintaining the integrity of the road shoulder and clearing vegetation along the roadside, plowing and sanding/salting in the winter and maintaining the drainage systems. If the road has a FHWA highway functional classification, the City’s responsibility for repair and/or reconstruction of the roadway may be assisted through funding from the state aid system (see discussion of the Transportation Improvement Program (TIP) below).

The Department of Public Works has a pavement management system that provides a rating of the City’s streets based on the Pavement Condition Index. The evaluation results are computerized in conjunction with construction/inspection history and are used to formulate the schedule of repairs.

Bridges

There are a total of 43 bridge structures in the City. Of this total, 15 bridges are owned and/or maintained by the City; 23 of the 43 are associated with I-95. RIDOT recently completed work and reopened the Conant Street Bridge (#915), which had been closed for twenty years. The Cole Street Bridge (#937) has been closed and is in the need of repair or possible demolition.

Improvements to Bridge 550, which is the I-95 bridge over the Pawtucket River, were completed in 2013. The design of the new Pawtucket River Bridge was accomplished through a partnership between RIDOT and the City of Pawtucket. Emphasizing that this bridge is the southbound entrance to the State, the City of Pawtucket petitioned RIDOT to provide a bridge that was reflective of the City and its history. The new bridge's art deco design and enhanced lighting make it not only a gateway to the City and State, but also a destination. The architectural details and changing light patterns make a stunning display. Space is available under the bridge and in its immediate vicinity for holding events. The project received the 2013 AIA RI Honor Award for Urban Design, the 2014 Illuminating Engineering Society Award of Merit, and other recognition throughout the world.²⁹

Transit

The City of Pawtucket is serviced by RIPTA through a total of nine routes. While expansion of the RIPTA's overall system slowed between 2000 and 2010, ridership continued to increase as the agency implemented higher standards for service reliability. The 2008 Great Recession also impacted ridership. Rising fuel costs forced people to prioritize household costs, including driving less and taking public transportation instead. To respond to the increase in ridership, RIPTA has made several investments to make riding transit easier, convenient, and more attractive. RIPTA also has supported economic initiatives that can benefit from efficient and reliable public transportation.³⁰

Table 42. Total Ridership on Routes Servicing Pawtucket

Route/Name	TOTAL RIDERSHIP	
	Total Boardings (Year)	Avg Boardings Per Day
Rapid Service Routes		
11 Broad Street (R Line)	2,172,233	8,689
Key Corridor Routes		
1 Hope/Eddy	1,002,389	4,010
72 Weeden Street / Central Falls	346,507	1,386
Urban Radial Routes		
71 Broad Street (Pawtucket)	136,843	547
73 Fairlawn / CCRI	60,862	243
75 Dexter Street / Lincoln Mall	75,250	301
76 Central Avenue	56,140	225
80 Armistice Boulevard	47,090	188
Non-Urban/Suburban and Crosstown Routes		
35 Rumford / Newport Avenue	146,705	586
78 Beverage Hill Avenue / Newport Avenue	219,060	876

Source: RIPTA, August 2015

²⁹ <http://www.pawtucketrivierbridge.org/about.htm>.

³⁰ *A Vision for the Future of Transit in Rhode Island: RIPTA's Five Year Strategic Plan for Keeping Rhode Island Moving* (March 2011).

In 2014, RIPTA launched its first Rapid Bus Route – the R-Line. The R-Line replaced congested local service on the system’s two highest ridership routes: Route 99 between downtown Pawtucket and Kennedy Plaza along North Main Street, and Route 11 between Cranston and Kennedy Plaza along Broad Street. The R-Line has high frequency, fast and limited stop service at key passenger destinations, traffic signal improvements to improve travel time and schedule reliability, and real-time bus information, among other improved passenger amenities. Roadway improvements were made along the route, including designated bus stop lanes and intersection safety improvements.

The City and RIPTA are moving forward in establishing the Goff-Exchange Transit Emphasis Corridor (see alignment in Map 10).³¹ The corridor eliminates the existing bus hub on Roosevelt Avenue and realigns routes onto Goff Avenue and Exchange Street with three “superstops” with passenger shelters and other amenities: intersection of Roosevelt Avenue and Exchange Street, Exchange Street in front of Walgreens, and at the future Pawtucket/Central Falls Commuter Rail Station.

Para-Transit Service

Two para-transit operations provide service to City residents. The Pawtucket Senior Center owns and operates two shuttles. One provides fixed route service to the elderly public housing complexes; the other provides service by appointment. The Rlde program also operates in Pawtucket. The Rlde program is coordinated and managed by RIPTA. If a disability prevents someone from using RIPTA's regular bus service, (s)he may be eligible for ADA Para-transit Services. ADA Para-transit service is available for any trip purpose. Rlde also operates service for people age 60 and over that can only be used for specific types of trips, such as medical appointments or adult daycare.

Pedestrian and Biking Networks

The City of Pawtucket is an urban environment; therefore, sidewalks exist in many areas of the City to ensure pedestrian safety. Over the decades, as the car gained popularity, roadways through commercial corridors were modified to accommodate increased traffic volumes to the detriment of the pedestrian. Roads were widened or lanes added with minimal shoulders to buffer pedestrians from traffic.

The City’s biking network includes on-street and off-street bikeways that are multi-purpose.

Blackstone River Bikeway

The Blackstone River Bikeway is a 48-mile bikeway that will connect Worcester, Massachusetts with Providence within the Blackstone River Valley National Heritage Corridor. The portion of the bikeway in Rhode Island is being designed and constructed by RIDOT. There are approximately 11 miles of continuous off-road bike path in Cumberland, Lincoln, and Woonsocket; and several miles of on-road path in Providence and Pawtucket. In total, nearly 16 miles of bike path have been completed along the Blackstone River Bikeway, and the remaining eight miles are under design.

A portion of the off-road bikeway ends in Cumberland at this time. Other off-road segments are scheduled for construction in the near future. “Segment 3” of the bikeway will connect Cumberland and Pawtucket. Temporary on-street signage currently guides cyclists through Central Falls and Pawtucket to Slater Mill downtown. In January 2013, RIDOT completed its 10% alternative route design of this segment. Based on the analysis, agreements are in place for over 80 percent of the land required to construct the bikeway. The City has already constructed the portion of the bikeway behind City Hall. Funding for the bikeway’s construction is included in the TIP as a future project (see below).

³¹ *River Corridor Development Plan: RIPTA Relocation Study Final Report*. Prepared by ASG Planning. April 2, 2015.

Ten Mile River Bikeway

In 1993, the City of Pawtucket and the City of East Providence jointly applied for funding for this bikeway as a Transportation Enhancement Project. A three quarter-mile segment in Slater Park, Pawtucket, and a just under two-mile segment from Slater Park south to the Kimberly Ann Rock Athletic Fields in East Providence, have been completed. A segment of the Pawtucket portion of this bikeway is included in the TIP (see below).

Rail

Passenger Rail

Amtrak operates both high speed and regional intercity passenger rail service along the Northeast Corridor through Pawtucket and Central Falls. The closest station is in Providence. Amtrak's operation is focused on providing intercity service between Boston, New York City, and Washington D.C. On a typical weekday Amtrak operates 17 trains in each direction, for a total of 34 trains. Of these 34 trains, 16 are high speed and 18 are regional service trains.

Massachusetts Bay Transit Authority (MBTA) commuter rail trains traverse Pawtucket and Central Falls along the Northeast Corridor, but does not stop in either city. The MBTA operation is focused on providing local service between Providence and Boston, and the nearest stops are in Providence and in South Attleboro, Massachusetts. On a typical weekday, the MBTA operates 15 trains in each direction, for a total of 30 trains. During the weekday morning commute period, the MBTA operates seven trains from Providence to Boston (5:00-9:00 AM departure times). In the evening, six trains operate from Boston to Providence (3:30-7:00 PM departure times). The MBTA has recently expanded weekend service to Providence, which consists of nine trains in each direction on Saturday, and seven in each direction on Sunday.

While no rail passenger service exists in Pawtucket, an MBTA commuter rail station is being planned is at a site between Barton Street, Conant Street, Goff Avenue and Dexter Street at the city line in Pawtucket. The cities of Pawtucket and Central Falls began examining the potential to restore access from Boston to Providence commuter rail service in 2005. The cities believe that developing a commuter rail station would be a benefit both the residents by increasing mobility and access to economic opportunity as well as a benefit the cities themselves by improving the environment and encouraging economic growth. There could also be potential for intra-state rail service for Rhode Island. With funding from RIDOT, Federal Transit Administration (FTA) and FHWA, the cities prepared a feasibility study to answer their initial questions about the viability of re-introducing commuter rail service in Pawtucket/Central Falls. The feasibility study key findings affirmed that commuter rail service in Pawtucket/Central Falls was indeed viable based on the following findings:

- Of the 30 weekday commuter rail trains passing through Pawtucket/Central Falls, based on the schedule as of July 2006, 23 could stop at a commuter rail facility without adversely impacting Amtrak intercity, MBTA commuter rail, or Providence and Worcester Railroad's (P&W) freight rail service.
- Approximately 1,500 weekday daily boardings were projected for the proposed commuter rail stop.
- There are numerous opportunities in the surrounding areas for transit-oriented development.

RIDOT, in 2015 with federal funds and the required match, contracted a consulting firm to undertake preliminary engineering of the station. By 2016, RIDOT received additional funding from the federal

Transportation Investment Generating Economic Recovery (TIGER) program (\$13.1 million) to be put toward development of the station, specifically the next phase of planning and property acquisition. More discussion of how the cities can leverage the new commuter train station to increase economic development and revitalization of the area, see discussion in the Land Use section (“Commuter Rail Station and Transit-Oriented Development”).

Freight Rail

Rail and freight service is available through and within Pawtucket and is provided by the Providence and Worcester Railroad (P&W) along several secondary rail corridors.

East Providence Running Track - The East Providence Secondary Line and the East Junction Secondary Track were merged into the East Providence Running Track. This track has an overall length of 8.9 miles from Valley Falls to the Massachusetts State Line.

Moshassuck Industrial Track - The track is owned by the P&W and the FRA rating is Class 1. The track extends approximately two miles along the Moshassuck River Valley providing service to a heavily industrialized area at the Pawtucket/Lincoln line and it also links to the P&W’s yard on the Shoreline route.

Transportation Improvement Program (TIP)

The Rhode Island Department of Administration Division of Statewide Planning, in conjunction with the RIPTA, RIDOT and municipalities, prepares the Transportation Improvement Program (TIP). It is a four-year scheduling document, which currently covers federal fiscal years (FFY) 2013-2016. In order for a transportation project to be eligible or use federal funds, it must be on the TIP. The majority of the funding in the FFY 2013-2016 TIP is allocated to highway programs (77%). Bus (14%), rail (5%) and bike/pedestrian (4%) programs also receive funding in the TIP.

Table 43 shows the Pawtucket projects that have been scheduled in the 2013-2016 TIP. As noted earlier, Pawtucket Bridge 550 was completed in 2013. Only the projects listed in a specific year are eligible to receive individual funding authorization.

Table 43. Transportation Improvement Program, 2013-2016, Pawtucket Projects

Project	Phase	Funding in \$ Millions				
		2013	2014	2015	2016	Future
Ten Mile River Greenway	C		\$1.50	\$1.00		
I-95 Resurfacing (Westminster St, PVD to State Line)	C				\$1.00	\$17.00
Pawtucket/Central Falls Commuter Rail Station	S, D			\$4.50		
Mineral Spring Avenue	C	\$2.20				
Dexter Street	C			\$1.30		
Pawtucket Bridge 550	C	\$20.00				
Exchange Street Enhancements	C	\$0.50				
Slater Mill Phase II	C		\$0.50			
Blackstone River Bike Facility (3A)	S, D					
Blackstone River Bike Facility (3B)	S, D					
Main Street Conversion	S, D					
Total		\$22.70	\$2.00	\$6.80	\$1.00	\$17.00

S: Study D: Design C: Construction

Source: Transportation Improvement Program, 2013-2016

Commuting Statistics

As shown in Table 44, the American Community Survey (ACS) estimated that most residents drove alone to work (80.4 percent). The ACS also estimated that more residents walked to work (4.2 percent) than took public transportation (1.9 percent); however, the estimated number of workers taking public transportation seems quite low considering the ridership rates on the RIPTA routes that service the City (Table 42). Further, Table 45 indicates that 15.8 percent of occupied homes do not have access to a vehicle and rely on other forms of transportation to commute or travel. This is approximately 4,400 households. It seems fair to assume that more than 442 (+/- 182) workers are commuting by public transportation.

Table 44. Workers 16 years and over mode of transportation to work

	Estimate	MOE (+/-)	%	% MOE (+/-)
Workers 16 years and older	23,801	1,160		
Drove alone	19,138	1,063	80.4	2.1
Carpooled:	2,449	390	10.3	1.4
Public transportation (excluding taxicab):	442	182	1.9	0.8
Taxicab	0	30	0	0.1
Motorcycle	0	30	0	0.1
Bicycle	81	57	0.3	0.2
Walked	1,008	221	4.2	0.9
Other means	255	133	0.9	0.6
Worked at home	428	132	1.8	0.5

MOE: Margin of error

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

Table 45. Occupied housing units (renter and owner-occupied) with access to a private vehicle

	Occupied housing units		Owner-occupied housing units		Renter-occupied housing units	
	Estimate	MOE	Estimate	MOE	Estimate	MOE
Occupied housing units	28,328	+/-580	12,750	+/-494	15,578	+/-597
No vehicle available	15.8%	+/-1.4	4.6%	+/-1.2	25.0%	+/-2.1
1 vehicle available	41.9%	+/-1.7	32.8%	+/-2.3	49.2%	+/-2.5
2 vehicles available	29.5%	+/-1.6	40.2%	+/-2.5	20.8%	+/-2.2
3 or more vehicles available	12.8%	+/-1.3	22.4%	+/-2.3	4.9%	+/-1.1

MOE: Margin of error

Source: 2013 American Community Survey 5-Year Estimates (2009-2013)

Land Use and Transportation Connection

Building on the discussion in the Land Use Chapter, key to developing sustainable transportation (and land development) policies is recognizing the relationship between land uses and the transportation network. Major traffic generators are typically employer centers, shopping areas, and institutions like universities and hospitals. In urban areas, these uses are found city wide and not necessarily concentrated in particular areas of the community. In Pawtucket, this is the case. Many of these uses are concentrated in and around downtown, but also along George Bennett Highway (including McCoy

Stadium), Route 114, and Route 1 (Newport Avenue) at the Narragansett Business Park. Building in networks that promote more walking, biking, and taking public transit to these areas can help ease car traffic. Services such as Zipcar also reduce the need for a car. The City currently has reserved spots for Zipcars in front of City Hall. Any redevelopment and future investments in and around these existing uses also need to evaluate the impacts of additional users on the transportation system servicing them. Specific needs are discussed below.

Transportation Needs

Infrastructure Maintenance

The operation, maintenance, improvement and provision of streets, bridges, public transportation, and transportation alternatives have significant costs that are shared by the City of Pawtucket and the State and these resources are typically combined with federal funding. As with many older cities, transportation infrastructure continually needs maintenance and upgrades. Timely, routine maintenance can extend the useful life of capital facilities which the City accomplished through the annual budget and the five-year Capital Improvement Program. The Capital Improvement Program covers all transportation facilities, modes of transportation, and levels of responsibility from local street maintenance to projects to be included in the State TIP.

Walking and Biking Needs

Promoting walking and biking is a priority for the City. In 2011, the City participated in the Healthy Places by Design (HPbD) pilot project with the Rhode Island Department of Health (HEALTH). The pilot was aimed at using local policies and initiatives to promote a healthier community. Obesity is a leading contributor to premature death, second only to tobacco in Rhode Island (CDC 2012; HEALTH 2010). Low-income children are disproportionately affected by the obesity epidemic with generally less access to healthy food and opportunities for physical activity. In Pawtucket, the 2010 US Census reported that one third of children were living in households below the poverty limit, and obesity is a serious concern.

Through HPbD, the City was able to develop policies and initiatives to promote more active lifestyles for residents. In addition to land development and design approaches, recommended policies out of the pilot also addressed transportation, particularly increasing opportunities for walking and biking as well as safety. Figure 8 is the “Summit Bikability/Walkability Map” created during the pilot. It shows existing and proposed biking and walking networks and their relationships to designations like transit, schools, parks, and grocery stores. This map was the basis for assessing gaps in the City’s network.

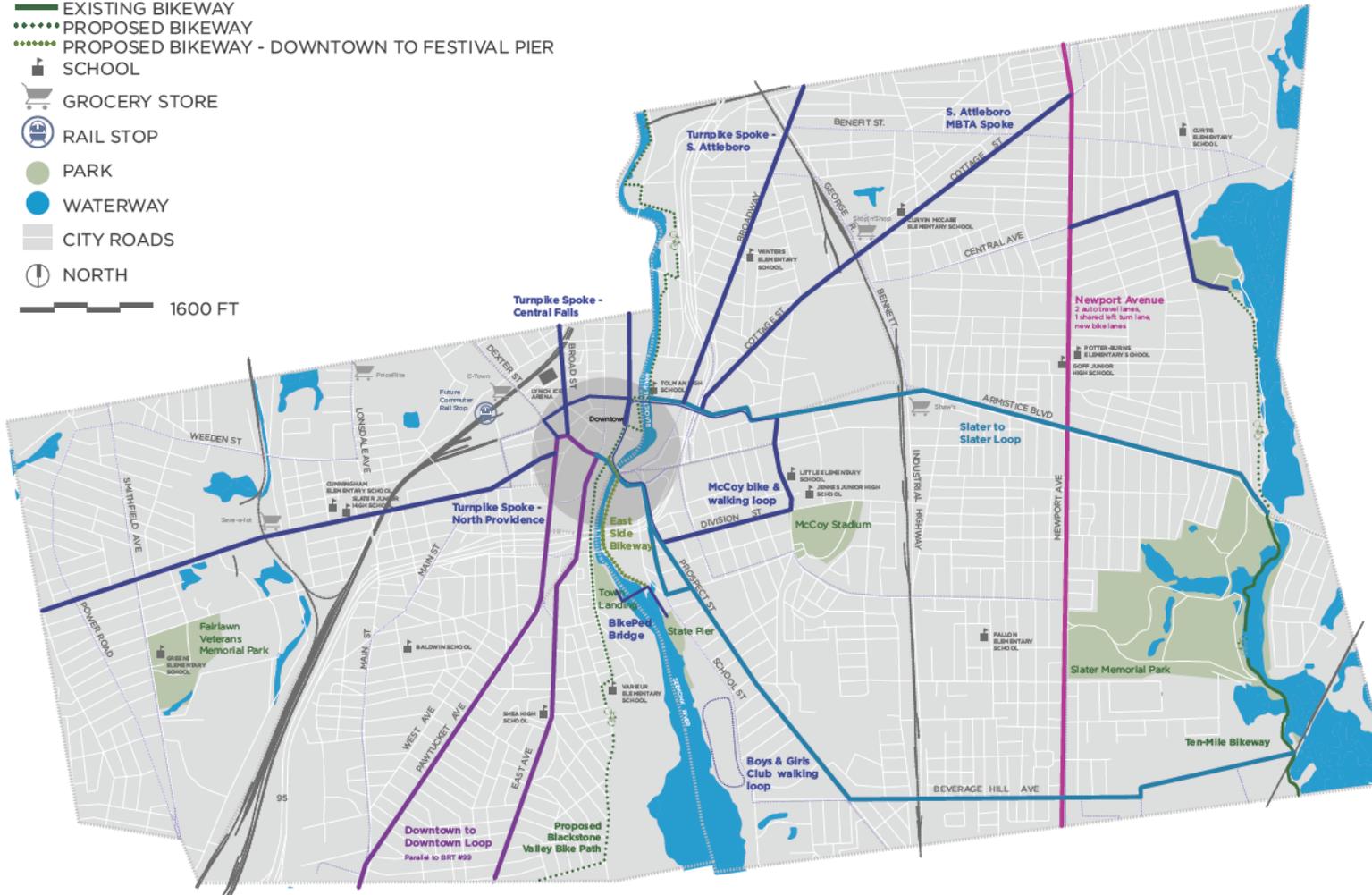
As discussed in the Recreation Chapter, Pawtucket is working on improving pedestrian access along the river as part of the overall riverfront redevelopment. The ultimate goal is to provide pedestrian access along the entirety of both sides of the river. South of the Division Street Bridge, this is feasible because a majority of the land is owned by the City or the Pawtucket Redevelopment Agency. Other major landowners, including the Boys and Girls Club and National Grid, have indicated their future cooperation. The reconstruction of the Pawtucket River Bridge provides an opportunity to connect this area south of Division Street with downtown Pawtucket.

The major themes from the pilot were:

- Increase bike amenities throughout the City, such as bike racks and signage
- Implement downtown pedestrian and bike improvements to build upon and improve existing amenities

LEGEND

- PROPOSED BICYCLE LANES - "SPOKES" FROM DOWNTOWN
 - PROPOSED BICYCLE LANES - SLATER TO SLATER LOOP
 - PROPOSED ROADWAY CONVERSION - 2 TRAVEL LANES, 1 CENTER TURN LANE, NEW BICYCLE LANES
 - EXISTING BIKEWAY
 - ⋯ PROPOSED BIKEWAY
 - ⋯⋯⋯ PROPOSED BIKEWAY - DOWNTOWN TO FESTIVAL PIER
 -  SCHOOL
 -  GROCERY STORE
 -  RAIL STOP
 -  PARK
 -  WATERWAY
 -  CITY ROADS
 -  NORTH
-  1600 FT



Source: Healthy Places by Design – Final Report (May 2012)

Figure 8. Summit Bikability/Walkability Map

- Increase bus stop amenities, such as benches and shelters
- Improve circulation patterns for people and bikes, including sidewalk maintenance and addressing ADA compliance issues
- Complete streets, so they are designed to accommodate all ways of traveling – by car, walking or biking
- Create a Bicycle Advisory Committee as a way to organize the many biking advocates in the City
- Provide walking and biking education programs to promote safety
- Improve timely snow removal on sidewalks during snow events
- Improve pedestrian safety at intersections, such as increased crosswalks and maintenance of pedestrian signals
- Prioritize the intersection of Broad Street and Exchange Street for pedestrian improvements because of the high volume of pedestrians, particularly seniors and disabled individuals from nearby residences.

These themes are still relevant. Residents continue to voice concerns over sidewalk installation and maintenance, increased bus shelters, and traffic calming on neighborhood streets. Additional issues stem from the lack of snow removal by property owners along sidewalks in front of their homes. The *Downtown Design Plan* (2011) also includes specific recommendations for improving pedestrian and bike amenities and safety within the downtown. They are consistent with those from identified in the HPbD pilot and include:

- Prioritize the pedestrian and create a continuous sidewalk ribbon throughout the downtown
- Provide lighting that is more pedestrian-oriented while reducing light pollution and energy use
- Provide safe bike parking and pedestrian amenities, such as benches and trash receptacles, near retail areas
- Improve signage to specific places, including Main Street and specific sites like City Hall and the Visitors Center

As part of the overall riverfront redevelopment, Pawtucket is working on improving pedestrian access along the river. Its ultimate goal is to provide pedestrian access along the entirety of both sides of the river. South of the Division Street Bridge this is feasible because a majority of the land is owned by the City or the Pawtucket Redevelopment Agency. Other major landowners, including the Boys’ and Girls’ Club and National Grid, have indicated their future cooperation. The reconstruction of Bridge 550, over the Pawtucket River, provides an opportunity to connect this area south of Division Street with downtown Pawtucket.

Roadway Safety

Intersections with high incidences of accidents are a concern of the City. Table 46 shows the ten worst intersections in the City as well as any improvements that are planned.

Table 46. Intersections with Highest Incidences of Accidents

Location	Control	2009 Rank	2009 Accidents	Comments
Lonsdale Ave. at Mineral Spring Ave	City	1	40	RIDOT is repairing sidewalks and repaving along Mineral Spring Ave.
Armistice Blvd. at Newport Ave.	RIDOT	2	37	RIDOT is repairing sidewalks and repaving all along Mineral Spring Ave.
Beverage Hill Av. at	RIDOT	3	35	

Location	Control	2009 Rank	2009 Accidents	Comments
Newport Av.				
Mineral Spring Ave. at Smithfield Ave.	RIDOT	3	35	
Central Ave. at Newport Ave.	RIDOT	4	33	
Barton St. at Dexter St.	City	5	25	City installed LED displays and implemented timing/phasing changes.
Cedar St. at Garden St.	City	6	23	Experiencing increased traffic volumes due to I-95 detour, State implementing improvements under I-95 project.
Division St. at School St.	City	7	22	Experiencing increased traffic volumes due to I-95 detour, State implemented phasing/timing changes, City installed LED displays.
Benefit St. at Newport Av.	RIDOT	8	20	
Division St./Grace St. ay Pleasant St.	City	9	19	Experiencing increased traffic volumes due to I-95 detour, State proposing to redesign intersection, City installing LED displays.
Lorraine St. at Mineral Spring Ave.	City	9	19	City installed LED displays and timing changes. RIDOT is repairing sidewalks and repaving all along Mineral Spring Ave.
Main St. at School St.	City	9	19	Experiencing increased traffic volumes due to I-95 detour, City installing LED displays and timing changes.

Source: City of Pawtucket, Traffic Engineering, 2010

Downtown Parking and Circulation

The *Downtown Design Plan* (2011) identifies several key concerns related to parking in the Downtown. The Plan indicates that there are enough parking spaces to meet the needs of businesses, even assuming incremental growth over the next few years. It is perceived that there is limited parking due to several factors. Most surface parking lots are privately owned and are not clearly marked; therefore, they are underused. On-street parking exists. However, parking limits are not enforced. People who work downtown often park their cars on the street for the entire day.

The 2011 Plan also assessed traffic circulation. The traffic patterns in Downtown are dictated by one-way streets. Unless one is familiar with the network, it can be confusing. Main Street was once the primary roadway into Downtown, but today, with the construction of I-95 through the center of the city, it is difficult to find.

The 2011 Plan makes recommendations to address Downtown circulation through the Turnpike System, which is defined as “a set of physical components that help define the route, allow for multiple kinds of transportation to work together, and develop material goals that work as wayfinding. Also, as a system, the components support one another in a cohesive way, but must also adapt to its specific location and conditions. Each layer of markings helps to define the edges of one type of movement from the other...The components also use a color coded system on signage, lighting and curb edges where appropriate, to define a wayfinding system.” Recommendations follow systematic improvements that build on each other to address traffic demands and circulation problems. Strategies include opening

many one-way roadways to two-way traffic, traffic calming techniques and turn lanes along Exchange Street, and intersection improvements along East Avenue Extension. Overall, the proposed recommendations in the 2011 Plan aim to improve connections into Downtown from other neighborhoods by various transportation modes.

Parking in the Downtown area is also a concern. The 2011 Plan reviewed prior parking studies and determined that conditions have changed very little. Modern parking demands have impacted the historic design of Downtown by widening streets and demolishing older buildings for surface parking. With a new focus on preserving the historic development patterns in the business core and encouraging more walking and biking, emphasis is being paid to surface parking alternatives and balancing the needs of drivers with pedestrians and bicycles. Recommendations in the 2011 Plan include:

- Enforcing existing on-street parking limits to keep these spots open for business customers
- Renovating the Main Street Garage to improve its visibility and user safety
- Encouraging the use of two-wheeled vehicles
- Installing pedestrian-oriented lighting
- Replacing asphalt with permeable paving to reduce stormwater runoff and the heat island effect
- Installing better signage to identify existing parking and time limits

Regulations also need to be more flexible to permit fewer off-street parking spaces on-site. There are requirements that make re-occupation of some structures very challenging. Changes in regulations will need to reflect an overall shift to viewing parking Downtown as a “system” that operates beyond individual sites, on a neighborhood scale.

Transit Needs

A RIPTA bus hub is currently located at Roosevelt Avenue and Main Street in downtown Pawtucket, sharing space with the Blackstone Valley Visitor Center. Recent planning studies, including the *Downtown Design Plan* (2011) and the *River Corridor Development Plan* (2013), have called for reinvestment in the downtown and the waterfront, and have identified Roosevelt Avenue as a focal point for cultural and recreational activity. The current high volume of bus activity at the Visitor Center is noted as incompatible with this latter objective and it is proposed that the bus hub be relocated to Exchange Street. It is suggested that nearly half of the riders getting on and off at the Visitor Center bus hub are only transferring to another route. These types of connections can be made at another location, provided bus access is maintained. Further pressuring the need to find a new location for the bus hub is the recent acquisition of the building by a private entity, which plans to fill the space with other uses.

The *RIPTA Relocation Study* (2014) was conducted to build upon both the 2011 and 2013 reports and focuses primarily on bus activity. It recommends the creation of a Goff-Exchange Street Transit Emphasis Corridor, which would concentrate bus activity along Goff Avenue and Exchange Street. Four key “superstops” are proposed along with other service changes, including passenger amenities, route realignments, roadway improvements, and bus layoff locations. The study also makes suggestions for maintenance of facilities, safety considerations, and cost estimates. The intent of the recommendations is to meet stated goals of maintaining/enhancing RIPTA service, supporting the downtown and river corridor redevelopment, meet RIPTA operational goals, and minimize costs.

Rail Needs

The City continues to work with RIDOT, MBTA and Amtrak to move the Pawtucket/Central Falls Commuter Rail Station project forward. The station can support future economic and residential growth in the downtown area. Building intermodal connections with the Rail Station to downtown will also strengthen its usage and viability.

Goals, Objectives, and Policies

Goals

Goal T 1. Complete the Pawtucket segment of the Blackstone Valley Bikeway

Goal T 2. Reestablish rail passenger service in the City of Pawtucket.

Goal T 3. Improve and maintain the integrity, efficiency and safety of pedestrian, bus, auto, and bicycle infrastructure city wide.

Objectives

Objective T 1. Complete construction on the Pawtucket/Central Falls Commuter Rail Station within 10 years.

Objective T 2. Complete construction of the Blackstone Valley Bikeway within 10 years.

Objective T 3. Reduce the number of annual auto and pedestrian accidents.

Objective T 4. Increase the number of street trees by 10%.

Policies

Policy T 1. Continue with the street tree planting plan and implementation program which allows for the planting of new trees and the replacement of diseased and dying trees along the city's street. Plant new street trees when installing new sidewalks.

Policy T 2. Maintain and regularly update through the Department of Public Works and the Department of Planning and Redevelopment the list of potential projects for inclusion in the State of Rhode Island Transportation Improvement Program.

Policy T 3. Evaluate the need to install sidewalks, curbs and drainage improvements in neighborhoods and on streets where these amenities do not exist.

Policy T 4. Continue to improve universal accessibility at street intersections and other crosswalks.

Policy T 5. Improve the visibility and accessibility of downtown parking facilities.

Policy T 6. Implement, maintain, and expand as necessary the database for the citywide pavement management program to facilitate the prioritization and implementation of local street improvements.

Policy T 7. Continue to implement the 50/50 sidewalk improvement program (property owners and city residents both contribute 50% of the cost of new sidewalks or sidewalk repair).

Policy T 8. Establish “No Right Turn on Red” signs at dangerous intersections.

Policy T 9. Provide bicycle storage facilities at municipal buildings and other facilities and work with community businesses to establish bicycle storage facilities at places of commerce and employment.

Policy T 10. Enforce “No Parking” and other regulations and ordinances to prevent the obstruction of sidewalks and to allow for the safe passage of all pedestrians.

Implementation Schedule

The Implementation Schedule prioritizes actions identified in individual chapters of the Comprehensive Plan based on need and available resources. Estimated timeframes for completion are short-term (ST, within five years), mid-term (MT, between five and 10 years), and long-term (LT, more than 10 years). Each action is also assigned responsible parties, indicating those departments, organizations, and/or individuals that can help move the action forward.

According to the Rhode Island Comprehensive Planning and Land Use Regulation Act (RIGL subsection 45-22.2-3(a)), municipalities are required to submit a report of completed actions to the State 10 years after the adoption of the Comprehensive Plan. The Implementation Schedule will be used for this exercise and updated at that time, as needed.

List of Acronyms

ACAC	City Advisory Commission on Arts and Culture
BHC	Blackstone Heritage Corridor, Inc.
BVCAP	Blackstone Valley Community Action Program
BVTC	Blackstone Valley Tourism Council
CPC	Pawtucket City Planning Commission
CSO	Combined sewer overflow
DP&R	Department of Parks and Recreation
DPR	Pawtucket Department of Planning and Redevelopment
DPW	Pawtucket Department of Public Works
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Authority
HDC	Pawtucket Historic District Commission
NBC	Narragansett Bay Commission
NRCS	Natural Resources Conservation Service
PBDC	Pawtucket Business Development Corporation
PCFDC	Pawtucket Central Falls Development Corporation
PHA	Pawtucket Housing Authority
PRA	Pawtucket Redevelopment Authority
PSP	Preservation Society of Pawtucket
PWSB	Pawtucket Water Supply Board
RIDEM	Rhode Island Department of Environmental Management
RIDOT	Rhode Island Department of Transportation
RIEMA	RI Emergency Management Agency
RIH	Rhode Island Housing
RIHPHC	RI Historical Preservation and Heritage Commission
RIPTA	Rhode Island Public Transit Authority
SD	Pawtucket School Department

Land Use

Action	Timeframe	Responsible Parties
Action LU 1. Revise the Zoning Ordinance to encourage mixed-use development where appropriate, flexibility in the reuse of mill buildings, and a predictable review process.	ST	DPR, City Council, CPC
Action LU 2. Update the Zoning around the proposed Commuter Rail Station to allow appropriate Transit-Oriented-Development.	ST	DPR, City Council, CPC, Pawtucket Foundation
Action LU 3. Conduct a major review of the Zoning Ordinance Use Table. Amend the Zoning Ordinance to include specific criteria for all uses allowed by Special Use Permit.	MT	DPR, City Council, CPC, Zoning Board of Review
Action LU 4. Review the Zoning Ordinance and consider allowing increased density where appropriate, including the downtown, mill redevelopment projects, and riverfront.	ST	DPR, City Council, CPC
Action LU 5. Consider the rezoning of unusable vacant industrial land to open space, specifically along the Moshassuck.	MT	DPR, City Council, CPC
Action LU 6. Amend the Zoning Map as identified in the Future Land Use Map.	ST	DPR, City Council, CPC, Department of Building and Code Enforcement
Action LU 7. Evaluate zoning along the Blackstone and Seekonk Rivers and consider revisions to meet redevelopment objectives.	ST	DPR, City Council, CPC

Housing

Action	Timeframe	Responsible Parties
Action H 1. Investigate receivership option for vacant and abandoned houses.		
Action H 2. Investigate housing resources that are available to assist moderate-income homebuyers.	Ongoing	DPR, BVCAP, PCFDC, RIH
Action H 3. Create a complete brochure and website for all housing-related opportunities for Pawtucket residents including homeownership, rental opportunities, elderly housing and housing rehabilitation.	ST	DPR, PRA, BVCAP, PCFDC, PHA, RIH
Action H 4. Analyze updated Census information to determine areas of the City where there are concentrations of poverty and develop programs targeting assistance to those areas.	ST	DPR, PCFDC, Woodlawn Community Development Corporation
Action H 5. Support the Housing Authority's plans to renovate and expand its housing development at Prospect Heights and Galego Court.	Ongoing	DPR, PHA
Action H 6. Investigate opportunities to convert underutilized and/or obsolete commercial/industrial structures to residential use at appropriate densities.	MT	DPR, City Council, CPC

Economic Development

Action	Timeframe	Responsible Parties
Action ED 1. Increase City's marketing budget to assist in attracting new businesses.	ST	DPR, City Council, PBDC
Action ED 2. Continue to seek funding sources and implement the 2010 Downtown Design Plan.	Ongoing	DPR, City Council, CPC, Pawtucket Foundation
Action ED 3. Update the Redevelopment Plan.	ST	DPR, PRA, PBDC

Action	Timeframe	Responsible Parties
Action ED 4. Provide uniform signage to improve the visibility and accessibility of downtown parking.	ST	DPR, City Council, CPC, Pawtucket Foundation
Action ED 5 Improve visitor access to major attractions by developing and implementing a cohesive signage program.	MT	DPR, City Council, CPC, Pawtucket Foundation, BVTC, BHC
Action ED 6. Develop a list of vacant downtown buildings, which identifies the code and other issues that need to be addressed.	Ongoing	DPR, Pawtucket Foundation, PBDC, Northern Rhode Island Chamber of Commerce
Action ED 7. Work with RIDOT and FTA to advance the Pawtucket/Central Falls Commuter Rail Station.	Ongoing	DPR, City Council, CPC
Action ED 8. Explore the creation of a downtown Business Improvement District, including any enabling legislation that is required.	Ongoing	DPR, PBDC
Action ED 9. Investigate potential to expand availability of higher education within Pawtucket through satellite campuses.	Ongoing	DPR, Commerce RI, RI Department of Education, Library
Action ED 10. Program and implement downtown events to build activity that attracts new businesses, residents, and visitors.	ST	DPR, Pawtucket Foundation, Mayor's Office
Action ED 11. Work with the Pawtucket Foundation to implement their marketing program and social media outreach.	Ongoing	DPR, Mayor's Office, Commerce RI
Action ED 12. Investigate policies, programs, etc. to encourage redevelopment at the Conant Thread Industrial Complex.	MT	DPR, City Council, CPC
Action ED 13. Investigate local incentives and other programming around the Commuter Rail station to promote economic development.	MT	DPR, City Council, CPC
Action ED 14. Audit the Zoning Ordinance and Land Development Regulations to ensure a clear and efficient regulatory process.	MT	DPR, City Council, CPC
Action ED 15. Continue to work with local organizations to increase education and awareness of urban agriculture opportunities in the City.	Ongoing	DPR, CPC

Historic and Cultural Resources

Action	Timeframe	Responsible Parties
Action HC 1. Partner with the Pawtucket Foundation to continue to build on the public art inventory mapping to include the historic resources in Pawtucket available to the public.	MT	DPR, HDC, ACAC
Action HC 2. Pursue the ability to offer design assistance through DPR to developers and owners of historic structures in the city after the model of the Providence Revolving Fund.	MT	DPR, PSP, HDC, RIHPHC
Action HC 3. Work with Blackstone Heritage Corridor, Inc. to preserve land along the Moshassuck Canal – specifically those areas behind Lorraine Mills.	Ongoing	DPR, BVTC, RIHPHC
Action HC 4. Maintain a list of properties eligible for the National Register.	Ongoing	DPR, RIHPHC, HDC
Action HC 5. Consider expansion of the Local District tax abatement to include historic commercial properties.	Ongoing	DPR, HDC
Action HC 6. Identify a funding source for public art in Pawtucket.	Ongoing	DPR, ACAC
Action HC 7. Participate in the preparation of a management plan for the new National Historic Park.	MT	DPR, RIHPHC, HDC, BHC

Action	Timeframe	Responsible Parties
Action HC 8. Explore lead-safe guidelines that work with, as opposed to removing, historic fabric on historic properties	MT	DPR, PSP, HDC, RIHPHC

Natural Resources

Action	Timeframe	Responsible Parties
Action NR 1. Consider expanding the tree planning program to allow public trees to be allowed on private land.	MT	DPR, City Council, CPC, Zoning Board of Review
Action NR 2. Participate in the planning and development of fish ladders at the Slater Mill and Main Street dams.	Ongoing	DPR, RIDEM, NRCS
Action NR 3. Coordinate with Narragansett Bay Commission on the status of the CSO abatement project.	Ongoing	DPR, DPW, RIDEM
Action NR 4. Assess, working with the RIDEM, the water quality impacts of material salvage yards found along the Blackstone and Moshassuck Rivers and implement mitigation measures as required.	MT	DPR, CPC, City Council
Action NR 5. Investigate opportunities to restore riverfront areas, as identified through the Metro Bay Special Area Management Plan process.	ST	DPR, CPC
Action NR 6. Develop interpretive signage to promote the awareness of rare plant species identified in the Slater Park's Friendship Gardens.	MT	DPR, DP&R
Action NR 7. Develop, with the assistance from RIDEM, a program to highlight and promote awareness of native wildlife along the City's waterfront, including Festival Pier.	LT	DPR, DP&R
Action NR 8. Identify opportunities to incorporate green infrastructure into municipal properties to manage stormwater and improve water quality. Use the efforts at the pond at Friendship Gardens at Slater Park as an example.	ST	DPW
Action NR 9. Consider properties along the riverfront if there is potential for habitat restoration.	Ongoing	DPR, CPC

Recreation

	Action	Timeframe	Responsible Parties
Citywide	Action R 1. Develop a bicycle Master Plan to build links from neighborhoods to bike paths	ST	DPR, DP&R, BHC
	Action R 2. Determine location for a spray park.	ST	DPR, DP&R
Planning District #1 (Fairlawn)	Action R 3. Acquire open space along the Moshassuck River and the Blackstone Canal.	Ongoing	DPR, DP&R, BHC, City Council, CPC
	Action R 4. Develop youth summer camp program for the Fairlawn neighborhood.	MT	DPR, DP&R
	Action R 5. Investigate a walking track or path for Veterans Park.	ST	DPR, DP&R
Planning District 2 (Woodlawn)	Action R 6. Upgrade and improve recreational resources at Morley Field, Galego Court, and Slater Junior High School.	LT	DPR, DP&R

	Action	Timeframe	Responsible Parties
	Action R 7. Consider expanding to include fields for lacrosse and/or soccer.	MT	DPR, DP&R
	Action R 8. Evaluate and develop school sites for potential development of additional neighborhood recreation facilities	Ongoing	DPR, DP&R, SD
	Action R 9. Develop youth summer camp program for the Woodlawn neighborhood.	MT	DPR, DP&R
Planning District 3 (Oak Hill/West Riverview)	Action R 10. Expand bike path to include shoreline access along National Grid and Tidewater properties.	MT	DPR, DP&R
	Action R 11. Expand facilities at the Town Landing recreational area.	ST	DPR, DP&R
	Action R 12. Construct an outdoor track at Max Read Field that meets all necessary regulations to be used for scholastic track meets.	LT	DPR, DP&R
	Action R 13. Provide public access to the Seekonk River.	Ongoing	DPR, City Council, CPC
Planning District 4 (Barton Street/ Downtown Area)	Action R 14. Automate irrigation and improve lighting at Wilkinson Park.	MT	DPR, DP&R
	Action R 15. Improve safety and increase usage at Hodgson Park.	ST	DPR, DP&R
	Action R 16. Add lighting at Goff lots.	ST	DPR, DP&R
	Action R 17. Evaluate development of public access to the Blackstone River north of Exchange Street.	Ongoing	DPR, DP&R, PCFDC, BVTC, Friends of the Blackstone, RIDEM
	Action R 18. Identify new recreational opportunities in the Barton Street neighborhood.	ST	DPR, DP&R, PCFDC
Planning District 5 (Pleasant View)	Action R 19. Identify new recreational opportunities in the Pleasant View neighborhood.	ST	DPR, DP&R
Planning District 6 (Quality Hill/East Riverview)	Action R 20. Upgrade and improve facilities at Pariseau Field.	MT	DPR, DP&R
Planning District 7 (Darlington/ Pinecrest)	Action R 21. Engineer a solution to improve water quality in the pond and in Friendship Gardens at Slater Park.	MT	DPR, DP&R, RIDEM
	Action R 22. Develop parcel of land along the Ten Mile River known as Scout's Island into a picnic area (passive park).	LT	DPR, DP&R
	Action R 23. Explore other recreational/educational/revenue producing possibilities for Daggett Farm.	MT	DPR, DP&R

Community Services and Facilities

Action	Timeframe	Responsible Parties
Action CS 1. Continue to investigate opportunities for consolidating services with other Rhode Island communities to reduce costs.	Ongoing	Mayor's Office
Action CS 2. Complete the Long Term Energy and Sustainability Plan.	Ongoing	City Departments
Action CS 3. Continue to implement the recommendations of the ESCO feasibility student based on funding availability and prioritization.	Ongoing	City Departments
Action CS 4. Evaluate the sewer system capacity in the Beverage Hill drainage basin to determine the causes of hydraulic overloading and develop a program for eliminating the problem.	ST	DPW, NBC
Action CS 5. Implement through the Executive Office and the PWSB, the Watershed Protection Plan, which establishes a program of land acquisition in the watershed region; requests regional communities to incorporate watershed protection policies and actions in their zoning and subdivision regulations; urges the establishment of inter-municipal agreements for watershed protection and creates a management program to protect water quality.	Ongoing	PWSB, Mayor's Office, Town of Cumberland, Friends of Moshassuck, Blackstone River Watershed Council
Action CS 6. Establish a communications center for the Fire Department as a separate building or as a self-contained portion of a building.	MT	Fire Department
Action CS 7. Evaluate a location for a new public safety complex, including parking, municipal court, police administration and communications and the fire department.	MT	Fire Department, Police Department
Action CS 8. Implement the recommendations in "Strategy for Reducing Risks from Natural Hazard in Pawtucket, Rhode Island, A Multi-Hazard Mitigation Strategy" that address vulnerabilities to the City's infrastructure, including water supply, wastewater, and transportation network.	Ongoing	Emergency Management Agency, DPR, Department of Building and Code Enforcement, Police Department, Fire Department, Mayor's office, RIEMA, FEMA
Action CS 9. Explore grant opportunities to be a more resilient community including the Emergency Management Performance Grant, Pre-Disaster Mitigation Grants, Hazard Mitigation Grant Program, among others for hazard mitigation and emergency preparedness.	Ongoing	Emergency Management Agency, DPR, Department of Building and Code Enforcement, Police Department, Fire Department, Mayor's office, RIEMA, FEMA
Action CS 10. Investigate the feasibility of establishing satellite libraries in city neighborhoods, youth centers, or gathering places.	Ongoing	Public Library, DPR, Pawtucket Neighborhood Alliance, Library Board of Trustees
Action CS 11. Continue to be a proactive resource in the community by increasing awareness and access to library services and resources, including improvements to its website.	Ongoing	Public Library, Library Board of Trustees

Action	Timeframe	Responsible Parties
Action CS 12. Identify and prioritize the social service needs of Pawtucket residents as part of the needs assessment portion of the City of Pawtucket Federal Housing and Community Development Consolidated Plan.	Ongoing	DPR, local and state service providers
Action CS 13. Seek out available social service funding at all levels to apply to specific issues or geographic areas.	Ongoing	DPR, local and state service providers
Action CS 14. Build diverse language capacity at the Police and Fire Departments.	Ongoing	Police Department, Fire Department
Action CS 15. Develop strategies with community partners to recruit minority police officers and fire fighters.	Ongoing	Police Department, Fire Department

Transportation

Action	Timeframe	Responsible Parties
Action T 1. Work with RIDOT and the City of Attleboro, MA, to address the closed bridge at Cole Street and closed Branch Street to ensure pedestrian and vehicle safety and access.	Ongoing	DPW, Police Department
Action T 2. Work with RIDOT and FTA to advance the Pawtucket/Central Falls Commuter Rail Station.	Ongoing	DPR
Action T 3. Develop a linear greenway along the Pawtucket riverfronts.	Ongoing	DPR, BHC, DPW, DP&R, Riverfront Commission, RIDEM, RIDOT
Action T 4. Continue to cooperate with RIDOT in the development of the Blackstone River Bikeway including the development of agreements for all required private property and easements as well as construction of segments where feasible.	Ongoing	DPR, BHC, DPW, DP&R, Riverfront Commission, RIDEM, RIDOT
Action T 5. Seek funding to implement the downtown circulation improvements identified in the 2010 Downtown Design Plan.	Ongoing	DPR, Pawtucket Foundation, RIDOT, RIPTA, FHWA
Action T 6. Improve existing and create new boats landings for both motorized and non-motorized vessels along the entire riverfront.	Ongoing	DPR, DPW, DP&R, RIDEM
Action T 7. Improve visitor access to major attractions by developing a comprehensive city-wide signage program.	Ongoing	DPR, DPW, Police Department
Action T 8. Create a parking master plan for downtown Pawtucket.	MT	DPR, DPW, Pawtucket Foundation
Action T 9. Create a Cycling Master Plan for the City.	MT	DPR, BHC, RIDEM, RIDOT
Action T 10. Develop Exchange Street into a Transit Emphasis Corridor, with cooperation from RIPTA. This action relates to the movement of the current RIPTA bus hub out of 175 Main Street.	MT	DPR, DPW, RIPTA, RIDOT
Action T 12. Consider the inclusion of data concerning sidewalk and drainage conditions	ST	DPR, DPW
Action T 13. Survey and evaluate intersections with narrow turning radii for inclusion in the Capital Improvement Program to improve turning movements.	Ongoing	DPR, DPW, RIDOT
Action T 14. Evaluate intersections around downtown to be more pedestrian friendly (signal timing, crosswalk design, etc). Prioritize intersection of Broad Street and Exchange/Goff streets.	Ongoing	DPR, DPW, RIDOT
Action T 15. Evaluate the population in need of para-transit services and expand the service eligibility requirements if necessary.	ST	DPR, RIPTA

References

City Reports and Plans

Title	Author	Date
Water Supply System Management Plan 5-Year Update	Pawtucket Water Supply Board	2015
River Corridor Redevelopment Plan: RIPTA Relocation Study & Appendices	ASG Planning	2015 April
Capital Improvement Plan: FY 2011-2016	City of Pawtucket	2015 July
Strengthening Downtown	International Economic Development Council	2015 September (revised)
Festival Pier Master Plan	Fuss & O'Neill	2014 May
Mill Survey Update	ACRC	2014 September
River Corridor Development Plan (Draft)	VHB	2013 September
Growth Center Designation and Map	City of Pawtucket	2012
Presentation: Historic Preservation Tax Credits in Pawtucket	The Pawtucket Foundation/Thomas Mann	2012 May
Healthy Places by Design Final Report	Horsley Witten Group	2012 May
Pawtucket/Central Falls River Corridor Market Analysis	FXM Associates and Byrne McKinney Associates	2012 September
Blackstone River Bikeway Overview	Blackstone River Valley National Heritage Corridor	2012 September
ESCO Analysis, Renewables Analysis, Energy Reduction Plan	Source One	2011 January
Pawtucket Downtown Design Plan: Final Report	Thurlow Small	2011 May
Handlebar Survey Report: Assessment of Bicycling conditions in Pawtucket	The Street Plans Collaborative	2011 October
BVNHC Annual Report	BVNHC	2010
Roosevelt Avenue Mixed Use Redevelopment Plan: Preliminary TOD Proposal (Working Draft)	The Pawtucket Foundation	2010 January
Blueprint for Prosperity: Downtown Business Development in Pawtucket	The Pawtucket Foundation	2010 April
White Paper: Planning for commuter rail and transit oriented development	The Pawtucket Foundation	2010 August
Pawtucket/Central Falls KeepSpace Community Design Plan	RI Housing	2009
Rhode Island Intrastate Commuter Rail: Feasibility Study	Jacobs Engineering	2009 June
Broad Street Regeneration Initiative Action Plan	Maguire Group	2008 November
Pawtucket/Central Falls TOD Analysis	VHB	2007 June
Pawtucket/Central Falls Commuter Rail Facility Feasibility Study & Site Analysis	VHB	2007 July
Tidewater Redevelopment Plan	Dodson Associates	2004 August
Pawtucket Library Strategic Plan	City of Pawtucket	NA

Other References and Sources

- Centers for Disease Control and Prevention. 2015. *Rhode Island: State Nutrition, Physical Activity, and Obesity Profile*. Available from <http://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/rhode-island-state-profile.pdf>. Obtained 2015.
- HousingWorks RI. *Foreclosures in Rhode Island: Quarterly Report, Quarter 4 of 2014*. Available at http://www.housingworksri.org/sites/default/files/HWRIForeclosureReportQ4_2014.pdf. Obtained 2015
- HousingWorks RI. 2014. *2014 Fact Book*. Available at <http://www.housingworksri.org/sites/default/files/HWRI-RWU-HousingFactBook2014LowRes.pdf>. Obtained 2015.
- Markusen, Ann and Anne Gadwa. 2010. *Creative Placemaking*. Available at <https://www.arts.gov/sites/default/files/CreativePlacemaking-Paper.pdf>. Obtained 2015.
- Narragansett Bay Commission. CSO Phase III: Stakeholder Process. Available at <http://www.narrabay.com/ProgramsAndProjects/Combined%20Sewer%20Overflow%20Project/CSO%20Phase%20III.aspx>. Obtained 2015.
- PAL. 2001. *Cultural Resources Plan*.
- Policy Link and PERE. 2013. *An Equity Profile of Rhode Island*. Available at http://www.planning.ri.gov/documents/sustainable/Rhode_Island_31May_FINAL.pdf. Obtained 2015.
- The Providence Plan. Rhode Island Community Profiles. Available at <http://profiles.provplan.org/profiles/state/44/overview/>. Obtained 2015.
- Reconnecting America. *What is TOD?* <http://reconnectingamerica.org/what-we-do/what-is-tod/>. Obtained 2015.
- Rhode Island Association of Realtors. RI Home Sales Statistics: 2005-2014. Available at <http://www.riliving.com/About-Rhode-Island/HomeSales/Index.aspx>. Obtained 2015.
- Rhode Island Coastal Resources Management Council. March 2015. *The Rhode Island Sea Level Affecting Marshes Model (SLAMM) Project Summary Report*. Report and maps available at http://www.crmc.ri.gov/maps/maps_slamm.html. Obtained 2015.
- Rhode Island Department of Environmental Management. March 2015. *State of Rhode Island 2014 303(d) List: List of Impaired Waters (Draft)*. Available at <http://www.dem.ri.gov/pubs/303d/303d14d.pdf>. Obtained 2015.
- Rhode Island Department of Environmental Management. December 2010. *Rhode Island Stormwater Design and Installation Manual*. Available at <http://www.dem.ri.gov/pubs/regs/regs/water/swmanual15.pdf>. Obtained 2015.
- Rhode Island Department of Labor and Training. 2015. *Quarterly Census of Employment and Wages, City and Town Summary, 2014 Annual*.

- Rhode Island Division of Planning. April 2013. *Technical Paper 162: Rhode Island Population Projections 2010-2040*. Available at <http://www.planning.ri.gov/documents/census/tp162.pdf>. Obtained 2015.
- Rhode Island Division of Planning, Rhode Island Statewide Planning Program. March 13, 2015, as amended. *State of Rhode Island Transportation Improvement Program: FY 2016-2016*.
- Rhode Island Division of Planning. April 2006. *Land Use 2025: Rhode Island State Land Use Policies and Plan (State Guide Plan Element 121, Report Number 109)*. Available at http://www.planning.ri.gov/documents/guide_plan/landuse2025.pdf. Obtained 2015.
- Rhode Island Economic Development Corporation, Research Division. 2009. "Pawtucket, Rhode Island."
- Rhode Island Economic Development Corporation. 2010. *Major Employers in Rhode Island*.
- Rhode Island Geographic Information System data.
- Rhode Island Historical Preservation and Heritage Commission. List of Rhode Island Properties on the National Register by Municipality. Available at <http://www.preservation.ri.gov/register/riproperties.php>. Obtained December 2015.
- Rhode Island Kids Count. 2015. *Rhode Island Kids Count Factbook*.
- Rhode Island Housing. Rental Housing Survey: Pawtucket, 2000-2014. Received via email.
- Rhode Island Public Transit Authority. March 2011. *A Vision for the Future of Transit in Rhode Island: RIPTA's Five Year Strategic Plan for Keeping Rhode Island Moving*.
- Rhode Island Public Transit Authority. 2015. Ridership Data. Received via email.
- U.S. Census Bureau. Decennial Census, 1970-2010.
- U.S. Census Bureau. 2013. American Community Survey, Five-Year Estimates (2009-2013).
- U.S. Department of Housing and Urban Development. Comprehensive Housing Affordability Strategy (CHAS) Data Tabulations, Estimates from 2006-2010.
- U.S. Environmental Protection Agency. Heat Island Effect. Available at <https://www.epa.gov/heat-islands>. Obtained 2015.

APPENDIX A

Review of 2011 Pawtucket Comprehensive Plan Action Plan

APPENDIX A

2011 Pawtucket Comprehensive Plan Action Plan Review

The following review is of the Action Plan of the 2011 Pawtucket Comprehensive Plan. Items that are listed as “ongoing” or “not started” have been carried forward into the updated plan, either as stated or with slight modification to accommodate changing conditions or resources. Action item numbering will not be the same in the updated plan.

Action Item	Responsible Party	2016 Status
Land Use		
LU1. Review the City Zoning Ordinance and consider revisions to encourage appropriate mixed-use development, more flexibility in the reuse of existing mill buildings, and a more predictable review process.	DPR, City Council, CPC	Ongoing. Have reduced parking requirements for mill buildings which elect the Mill Building Reuse District zoning designation.
LU2. Designate an area of Pawtucket potentially the downtown and area around the proposed Train Station, as a Growth Center.	DPR, Pawtucket Foundation, GrowSmart RI	Complete. Pawtucket has designated a Growth Center which an amendment to the 2011 Comprehensive Plan.
LU 3. Review the Zoning within ½ mile of the proposed Commuter Rail Station to ensure that appropriate Transit-Oriented-Development would be allowed.	DPR, Pawtucket Foundation, City Council, CPC	Ongoing. Pawtucket is working with RIDOT to secure funding for a study which will review zoning around the proposed Pawtucket/Central Falls station and make recommendations around Transit Oriented Development (TOD).
LU 4. Amend the Zoning Ordinance to include specific criteria for all uses allowed by Special Use Permit (SUP).	DPR, Department of Building and Code Enforcement, Zoning Board of Review	Ongoing. Pawtucket has developed criteria for all new SUP uses, and continues to work to develop criteria for existing SUP uses.
LU 5. Review the City Zoning Ordinance and consider allowing increased density where appropriate: the downtown; mill redevelopment projects; around the proposed rail station.	DPR, Pawtucket Foundation, City Council, CPC	Ongoing. Pawtucket has removed parking requirements for the downtown. Increased density will be reviewed as part of the TOD work proposed around the station.
LU 6. Conduct a review of all buildable lots Citywide, and officially merge those which are already merged by the Zoning Ordinance.	DPR, Department of Building and Code Enforcement, Tax Assessor, City Engineering, Data Processing, CPC	Ongoing. Pawtucket has done the review and needs to work with the Administration and Assessor’s department to develop a plan for notification and plat changes.
LU 7. Consider the rezoning of unusable vacant industrial land to open space, specifically along the Moshassuck.	DPR, City Council, CPC	Not started.

BVCAP- Blackstone Valley Community Action Program
 CPC – City Planning Commission
 DPR – Department of Planning & Redevelopment
 DPW – Department of Public Works
 FEMA - Federal Emergency Management Agency
 FHWA – Federal Highway Administration

FTA – Federal Transit Administration
 JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
 NBC – Narragansett Bay Commission
 PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
 PSP – Preservation Society of Pawtucket
 RIDEM – RI Department of Environmental Management
 RIDOT – RI Department of Transportation
 RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
 RIHPHC – RI Historic Preservation & Heritage Commission
 RIPTA – RI Public Transit Authority
 WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
LU 8. Complete the review of tax title parcels and consider appropriate action to achieve the objectives of this plan.	DPR, Tax Assessors Office, Collections Department, Department of Building and Code Enforcement	Ongoing. Pawtucket is working with Opportunity Space to better manage its buildings and land, including tax title parcels.
LU 9. Prepare an Executive Summary of the 2010 Pawtucket Comprehensive Plan Update for public dissemination.	DPR, Pawtucket Foundation	Complete.
LU 10. Implement the specific recommendations within: The Pawtucket Downtown Design Plan and the Broad Street Regeneration Initiative, including the investigation of an overlay district for Broad Street.	DPR, Pawtucket Foundation, City Council, CPC	Pawtucket has moved forward on a number of initiatives from the Downtown Design Plan (PDDP): Reduction of one-ways on Broadway, East Avenue Extension, and portions of Main Street. The PDDP also helped to inform the work that Pawtucket did with RIPTA on the relocation of the bus hub to Exchange Street, which was identified in the plan as a major transportation corridor. Pawtucket continues to meet with Central Falls, Cumberland, Progresso Latino and PCFDC on continuing the Broad Street Regeneration Initiative.
LU 11. Amend the Zoning Map as identified in the Future Land Use Map.	DPR, Department of Building and Code Enforcement, CPC, City Council	Ongoing: TOD studies are planned.
LU 12. In accordance with the State of Rhode Island Zoning Enabling Legislation (PL 91-307), amend the City of Pawtucket Zoning Ordinance, commencing January 1, 2004, or sooner, and completing the process within the prescribed 18 month period.	DPR, Department of Building and Code Enforcement, CPC, City Council	Ongoing. Zoning changes are either completed or in-progress.
Housing		
H 1. Investigate housing resources available to assist moderate-income homebuyers.	DPR, BVCAP, PCDC, RI Housing	Ongoing. Federal funds have been allocated to assist with this effort
H 2. Utilize HOME funds to provide affordable housing opportunities to low and moderate-income persons and families.	DPR, BVCAP, PCDC	Ongoing. BVCAP and PCFDC produces 2-6 units a year depending on Federal funding.
H 3. Create a complete brochure of all housing related opportunities for Pawtucket residents including homeownership, rental opportunities, elderly housing and housing rehabilitation.	DPR, PRA, BVCAP, PCDC, Pawtucket Housing Authority, RI Housing	The Department of Planning and Redevelopment is working on development a brochure.
H 4. Revise the Zoning Ordinance to offer better neighborhood protection. Neighborhood boundaries should be protected from intense commercial development through zoning regulation and enforcement.	DPR, Department of Building and Code Enforcement, CPC, Pawtucket City Council	Not started. Pawtucket continues to rely on current zoning to discourage commercial "creep" into residential neighborhoods.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
H 5. Support the efforts of Pawtucket neighborhood advocacy groups including neighborhood associations and crime watch groups.	DPR, Pawtucket Police Department, Pawtucket Neighborhood Alliance, Barton Street Crime Watch	Ongoing. The City meets with advocacy groups from time to time to give guidance.
H 6. Acquire vacant and abandoned properties to stabilize neighborhoods.	DPR, BVCAP, PCDC, Housing Court	Ongoing. The Pawtucket Redevelopment Agency purchases vacant and abandoned land and gets it ready for development
H 7. Analyze 2010 Census information to determine areas of the City where there are concentrations of poverty and develop programs targeting assistance to those areas.	DPR, PCDC, WCDC	Ongoing. Pawtucket is working with the Pawtucket Housing Authority and other local stakeholders to designate Woodlawn as a Health Equity Zone.
H 8. Investigate the use of Pawtucket Housing Authority funding to rework Prospect and Galego housing developments into mixed-income developments	DPR, Pawtucket Housing Authority	Ongoing. Pawtucket Housing Authority is working with the City on a proposal to renovate Prospect Heights.
H 9. Assist neighborhood clean-up efforts by supplying waste removal and regular street cleaning.	DPR, Pawtucket Foundation, DPW	Ongoing. The DPW has continued to provide trash removal and recycling services and has implemented a street-cleaning program.
H 10. Allow the subdivision of lots with two existing primary structures into undersized lots.	DPR, Statewide Planning	Ongoing. The City and Planning Commission work to allow for one building per parcel because it encourages home ownership and neighborhood stabilization.
Economic Development		
ED 1. Seek funding sources and implement the Pawtucket Downtown Design Plan.	DPR, RIDOT, FHWA, FTA, RIPTA	Pawtucket has moved forward on a number of initiatives from the Downtown Design Plan: Reduction of one-ways on Broadway, East Avenue Extension, and portions of Main Street. The PDDP also helped to inform the work that Pawtucket did with RIPTA on the relocation of the bus hub to Exchange Street, which was identified in the plan as a major transportation corridor.
ED 2. Prepare promotional marketing materials, including a portfolio of successful adaptive reuse projects and a specialized economic development web presence.	DPR, Pawtucket Foundation, Rhode Island Historic Preservation and Heritage Commission, RIEDC	Complete. Pawtucket has worked with the Foundation on the development of folders and a packet.
ED 3. Update the Redevelopment Plan	DPR, PRA, PBDC	The Redevelopment Plan is scheduled for an update in 2016.
ED 4. Improve the visibility and accessibility of downtown parking facilities.	DPR, RIEDC, Pawtucket Foundation	Ongoing. Pawtucket is working with Opportunity Space to better manage its facilities, including parking lots and garages. Pawtucket DPW is currently working on a plan to improve safety and security at the downtown parking garage.
ED 5. Improve visitor access to major attractions by developing and implementing a cohesive signage program.	DPR, RIEDC, Pawtucket Foundation	Ongoing. Pawtucket recently received grant funding from the Blackstone Valley Corridor Commission to design and install interpretive signs. Now that the new Pawtucket River Bridge is complete, Pawtucket is continuing discussions of wayfinding at its Gateways, which was recommended as part of the Riverfront Redevelopment Plan.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
ED 6. Develop a list for vacant downtown buildings which identified the cost and other issues that need to be addressed.	DPR, Pawtucket Foundation, PBDC, Northern Rhode Island Chamber of Commerce	Ongoing. The Foundation had started this project. Pawtucket is moving forward to refine this list, and identify both costs and some funding options.
ED 7. Establish a regular local business visitation program.	DPR, Mayor's Office, RIEDC, Other City Departments	Ongoing. The Mayor and his team have conducted visits every two months for the past two years.
ED 8. Work with RIDOT and FTA to advance the Commuter Rail station.	DPR, FTA, RIDOT, RIPTA	Ongoing. The project is about halfway complete with the Preliminary Engineering phase. Pawtucket and Central Falls continue to coordinate with RIDOT and FTA to advocate for the project and seek funding.
ED 9. Explore the creation of a downtown Business Improvement District	DPR, Property Owners	Ongoing. The City has had some conversations with local merchants and property owners, but as yet, too much of the downtown remains vacant to really support a robust business improvement district.
ED 10. Create a written economic development plan.	DPR, Pawtucket Foundation	Complete.
ED 11. Identify sources of public financing/subsidy for the Roosevelt Avenue redevelopment site.	DPR, RIEDC, Pawtucket Foundation	Ongoing. Pawtucket is working with the Foundation to explore EDA funding, Tax Credits, EB-6 programs and other incentives.
ED 12. Investigate the expansion of higher education opportunities in Pawtucket.	DPR, RIEDC, Department of Education, Library	Ongoing. The Redevelopment Agency rented space to Salve Regina, for satellite classrooms. Pawtucket also continues to go after collaboration opportunities with local Universities – RI School of Design, Roger Williams University, and Brown University.
ED 13. Establish a regular monthly program for downtown events.	DPR, Pawtucket Foundation, Mayor's Office	Not Started.
ED 14. Work with the Pawtucket Foundation to implement their marketing program.	DPR, Pawtucket Foundation, Mayor's Office, RIEDC	Ongoing.
ED 15. Analyze land within Industrial Zones to determine whether additional development is feasible, or if the land is more appropriately preserved as Open Space.	DPR, BRHNNHCC	Not Started.
ED 16. Designate a Growth Center within Pawtucket.	DPR, Pawtucket Foundation	Complete. Pawtucket has designated a Growth Center which an amendment to the 2011 Comprehensive Plan.
Natural Resources		
NR 1. Continue to work with the Pawtucket Water Supply Board in implementing their Water Supply Management Plan.	PWSB, DPR, RIDEM, NBC	Ongoing.
NR 2. Continue to work with DPW to minimize the use of salt on watershed roadways.	DPW, RIDEM, DPR	Ongoing.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
NR 3. Continue to maintain and update information on unique, rare, and endangered natural resources within the City.	RIDEM, DPR	Pawtucket continues to catalogue information on unique, rare and endangered species. More were recently discovered during a project at Friendship Gardens at Slater Park.
NR 4. Continue to offer the street tree program to City residents and to enforce the landscape requirements of the Zoning Ordinance to expand the number and concentration of trees in the City.	DPR, City Council, CPC, Zoning Board of Review (ZBR)	Ongoing.
NR 5. Continue to apply for RIDEM's Targeted Brownfields Assessment grants and USEPA Cleanup Grants	DPR, RIDEM, RIEDC	Ongoing. Pawtucket continues to utilize the RIDEM TBA program, and also to seek US EPA funding. IN 2014 the cities of Pawtucket and Central Falls received a \$700,000 grant to establish a revolving loan fund for brownfields cleanup.
NR 6. Advocate for the next segment of the Ten Mile River Bikeway to the Rhode Island Department of Transportation and establish a relationship with the Ten Mile River Watershed Alliance to help move the project forward.	DPR, RIDEM, RIDOT	The Ten Mile River Bikeway is completed in Pawtucket. The cities of Pawtucket and East Providence continue to work with RIDEM to finish other segments and provide bikeway amenities.
NR 7. Continue to provide support for the development of Fish Ladders at the Slater Mill and Main Street dams.	DPR, NRCS, RIDEM	RIDEM bid this project, and received bids that far exceeded the amount of funding dedicated to the project. Pawtucket continues to support RIDEM, Blackstone Valley Tourism Council and other partners to move this project forward.
NR 8. Coordinate with the Narragansett Bay Commission (NBC) on the status of the combined sewer overflow (CSO) abatement project.	DPR, DPW, RIDEM, NBC	CSO abatement is still in the planning stages in the City of Pawtucket. DPW continues to coordinate with NBC to move this project forward.
Cultural and Historic Resources		
CR 1. Establish a cemetery commission to promote the preservation and enhancement of the city's cemeteries.	DPR, DPW, PSP	Complete.
CR 2. Map historic resources using (GIS) as part of a program to locate and identify historic sites and structures.	DPR, Engineering Department	50% complete. Pawtucket has a map layer of historic resources and needs to make the investment to make this information accessible to the public.
CR 3. Enhance the aesthetics of the historic bridges on the river by lighting their architectural details.	DPR, Rotary,	Complete. Pawtucket and Rotary have worked together to light two historic bridges in Pawtucket.
CR 4. Offer design assistance through DPR to developers and owners of historic structures in the city.	DPR, PSP, HDC	Not started. The City continues to search for funding sources/programs to help implement this effort.
CR 5. Continue to provide financial incentives for landlord occupied multi-family historic housing.	Tax Assessor, DPR	This program no longer exists.
CR 6. Continue the partnership between the City, PRA and the RIHPHC to provide low interest loans for house repairs through the Historic Properties Rehabilitation Initiative.	DPR, PRA, RIHPHC	This program no longer exists.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
CR 7. Support efforts to rehabilitate and reuse the Pawtucket Armory as a Performing Arts Center.	DPR, Gamm Theater	The Gamm Theater is located at the Armory and the City has provided tax incentives for the property, so long as it contains arts organizations.
CR 8. Work with the John H. Chaffee National Heritage Corridor Commission to preserve the land along the Moshassuck Canal, specifically the area behind Lorraine Mills.	DPR, Property Owners, JHCBVNHCC, BVTC, RIHPHC	Ongoing.
CR 9. Work with the Public Library and the Preservation Society to identify a long-term plan for the Elizabeth J. Johnson Pawtucket History Research Center.	DPR, RIHPHC, Preservation Society of Pawtucket	Ongoing. The collection now resides in the Pawtucket Public Library. The partners continue to work to identify a long-term solution for the building.
CR 10. Maintain a list of properties eligible for the National Register	DPR, RIHPHC, Pawtucket Historic District Commission	Ongoing.
CR 11. Consider expansion of the Local District tax abatement to commercial properties.	DPR, Pawtucket Historic District Commission	Ongoing.
Recreation		
R 1. Acquisition of open space land along the Moshassuck River and the Blackstone Canal for the development of a greenway/bikeway.	DPR/Parks and Recreation, RIDEM, John H. Chaffee Blackstone Valley National Her	Ongoing. With the designation of the Blackstone Valley as a National Park, Pawtucket will pursue various funding sources and partners.
R 2. Upgrade and improve recreational resources at Morley Field.	DPR/Parks and Recreation, RIDEM	Not Started.
R 3. Evaluate and develop school sites for potential development of additional neighborhood recreation facilities.	DPR/Parks and Recreation, RIDEM	Added playground at Winters School. Currently in the design phase to add a playground to Fallon Memorial Elementary School. Just finished master planning phase for a new track and artificial turf football field at Max Read Field.
R 4. Continue progress on the Blackstone River Bikeway.	DPR/Parks and Recreation, RIDEM, RIDOT	Ongoing. Pawtucket worked with RIDOT to further develop the portion of the Bikeway that runs from Town Landing to Exchange Street. Pawtucket constructed a small segment to the rear of City Hall and is working with RIDOT to move the project ahead.
R 5. Expand facilities at the Town Landing recreational area.	DPR/Parks and Recreation, RIDEM	Ongoing. Pawtucket has funding to improve the dock facilities at Town Landing. RIDOT is reviewing the proposed plans. National Grid and Pawtucket are partnering to review a redevelopment plan for both Town Landing and National Grid's land – together called Tidewater – to identify a way in which access to the river can be preserved and maximized.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
R 6. Construct an outdoor track at Max Read Field that meets all necessary regulations to be used for scholastic track meets.	DPR/Parks and Recreation, RIDEM	Ongoing. Pawtucket has secured grant funding from RIDEM on this project and is working on Master Planning.
R 7. Provide public access to the Seekonk River at Max Read Field.	DPR/Parks and Recreation, RIDEM	Ongoing. As part of the work that Pawtucket and National Grid are doing on the Tidewater project, the City is taking a comprehensive look at public access on this section of the River.
R 8. Automate irrigation and improve lighting at Wilkinson Park.	DPR/Parks and Recreation, RIDEM	Not Started.
R 9. Consider needs of the Family Y and the Pawtucket Boys' and Girls' Club in an overall parking plan for downtown.	DPR/Parks and Recreation, RIDEM, YMCA, Boys and Girls Club	Not Started.
R 10. Add lighting at the Goff Lots.	DPR/Parks and Recreation, RIDEM	
R 11. Evaluate development of public access to the Blackstone River north of Exchange Street.	DPR/Parks and Recreation, RIDEM	Ongoing. Pawtucket is continuing to work with the Blackstone Valley Tourism Council and the Friends of the Blackstone to identify an area for small craft access. Pawtucket Central Falls Development Corporation is working on a development project along the river, and will work with the City to see if an access point is feasible.
R 12. Continue field improvements at McCarthy Park including additional lighting.	DPR/Parks and Recreation, RIDEM	Field was renovated in 2013. City continues with minor improvements. Additional lighting no longer a priority.
R 13. Reconstruct/reuse tennis courts at McCarthy Park.	DPR/Parks and Recreation, RIDEM	Not started.
R 14. Develop the former State Pier (Festival Pier), as recommended by the Riverfront Development Commission into a combination of open space, river walks, boat facilities, and seasonal commercial activity.	DPR/Parks and Recreation, RIDEM	Complete. In 2014 Pawtucket finished a renovation of State Pier into a first-class docking and recreation facility.
R 15. Upgrade and improve facilities at Pariseau Field.	DPR/Parks and Recreation, RIDEM	RIDEM is currently working on design plans for a canoe/kayak launch along the bike path near Armistice Boulevard. As part of this project RIDEM has also designed a new parking lot at Doreen Tomlinson Field.
R 16. Continue to advocate for the next segment of the Ten Mile River Bikeway.	DPR/Parks and Recreation, RIDEM	Complete. RIDEM is currently working on design plans for a canoe/kayak launch along the bike path near Armistice Boulevard. As part of this project RIDEM has also designed a new parking lot at Doreen Tomlinson Field.
R 17. Request grant funding for the purchase of "Red Farms Studios" (1135 Roosevelt Avenue) to ensure its continued availability for passive recreation.	DPR/Parks and Recreation, RIDEM	Complete. Pawtucket received funding from RIDEM and provided matching funding to purchase this field as a passive recreation amenity for the neighborhood.
R 18. Upgrade facilities at Potter School.	DPR/Parks and Recreation, RIDEM	Not started.
R 19. Explore other recreational/educational/revenue producing possibilities for Daggett Farm.	DPR/Parks and Recreation, RIDEM	Not started.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
R 20. Continue infrastructure improvements within Slater Park including the construction of a new sewer line, construction of new rest room facilities, installation and of new water and fire protection services at the Loeff Carousel, automated irrigation, and lighting within the Park.	DPR/Parks and Recreation, RIDEM	Ongoing. With a fire destroying some storage buildings, Pawtucket took an opportunity to provide a Pavilion within the park. The Pavilion provides some shelter for activities and also provides offices, storages and restroom.
R 21. Engineer a solution to improve water quality in the pond and in Friendship Gardens at Slater Park.	DPR/Parks and Recreation, RIDEM	Not started.
R 22. Develop parcel of land along the Ten Mile River known as Scout's Island into a picnic area (passive park).	DPR/Parks and Recreation, RIDEM	Not started.
Community Services and Facilities		
CS 1. Investigate opportunities for consolidating services with other Rhode Island communities, to reduce costs.	Mayor's Office, Central Falls, Lincoln, Providence, East Providence, North Providence	Ongoing. Pawtucket and Central Falls work together on Building Inspection services, as needed. Pawtucket is participating in a permitting streamlining program with the State of Rhode Island.
CS 2. Identify a location for a new public safety complex, including parking, municipal court, police administration and communications and the fire department.	Police and Fire Departments, EMA	Ongoing. This project is in the feasibility state.
CS 3. Evaluate the sewer system capacity in the Beverage Hill drainage basin to determine the causes of hydraulic overloading and develop a program for eliminating the problem.	DPW- Sewer, Sanitation and Recycling Division, NBC, RIDEM	Not started.
CS 4. Reserve potential sites identified by the NBC for the location of CSO mitigation facilities.	NBC, DPW, DPR, RIDEM, EPA	DPW is participating in a steering committee for "Phase 3" of NBC's CSO program. NBC is conducting a study of alternatives to installing a massive underground basin, per cost concerns.
CS 5. Continue the composting program at the municipal transfer station and educate homeowners to compost landscape waste whenever possible.	DPW- Sewer, Sanitation and Recycling Division, Rhode Island Resource Recovery	DPW has increased the education efforts to the residents and the schools in respects to recycling.
CS 6. Continue municipal curbside collection of residential solid waste and require commercial and industrial solid waste to be handled privately.	DPW- Sewer, Sanitation and Recycling Division, Pawtucket residents	Ongoing.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
CS 7. Where feasible, separate the sanitary sewer and the storm drainage systems and prohibit new connections of storm drains to the municipal sewer system.	DPW, NBC, DPR	No significant progress on the DPW's end. DPR is participating on the steering committee of a study to assess the feasibility of establishing a regional stormwater utility. Combined sewer separation would, presumably, be one of this potential utility's target projects. DPW is participating in NBC's Phase 3 steering committee, as noted above. Combined sewer separation may be one of the options for CSO abatement considered in Phase 3.
CS 8. Implement through the Executive Office and the PWSB, the Watershed Protection Plan, which establishes a program of land acquisition in the watershed region, requests regional communities to incorporate watershed protection policies and actions in their zoning and subdivision regulations; urges the establishment of inter-municipal agreements for watershed protection and creates a management program to protect water quality.	PWSB, Mayor's office, DPR, Friends of the Moshassuck, Blackstone River Watershed Council, Town of Cumberland	The PWSB continues its policy of working with the Town of Cumberland, the Cumberland Land Trust (CLT) and the Cumberland Open Space Commission (OSC) to acquire properties or development rights of properties in the Watershed with the prime intent of water quality protection. The PWSB continues to actively maintain and manage the land surrounding the Watershed. By owning the property, the PWSB can set forth storm water management plans to ensure that the Reservoir(s) are not negatively impacted by development. All construction within the Watershed is reviewed by the PWSB, and if warranted, comments are sent to the Town or RIDEM. The PWSB also worked with the Cumberland Zoning Committee to create a watershed overlay district. This watershed overlay district helps protect both Cumberland's and Pawtucket's watersheds by prohibiting certain types of commercial and industrial activities.
CS 9. Cooperate with the State of Rhode Island in the implementation of the Drought Management Plan as a means to reduce Rhode Island's vulnerability to periods of low precipitation.	PWSB, DPR, City Council, Emergency Management Department, RIDEM	Ongoing.
CS 11. Continue to pursue funding opportunities from the FEMA to assist in helping Pawtucket to be a disaster resistant community.	Emergency Management Department, DPR, Department of Building and Code Enforcement, Police Department, Fire Department, Mayor's office RIEMA, FEMA	Ongoing. Pawtucket received \$2.6 million in CDBG-DR and NRCS funding to repair the river wall behind City Hall. Pawtucket also recently hosted a site visit, sponsored by IEDC and FEMA, to discuss the resiliency of the downtown.
CS 12. Implement the recommendations in "Strategy for Reducing Risks from Natural Hazard in Pawtucket, Rhode Island, A Multi- Hazard Mitigation Strategy".	Emergency Management Department, DPR, Department of Building and Code Enforcement, Police Department, Fire Department, Mayor's office, RIEMA, FEMA	Ongoing. Pawtucket is working on updating the Hazard Mitigation. Pawtucket is partnering with Central Falls to prepare a combined Multi-Hazard Mitigation Strategy.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
CS 13. Implement the recommendations in the City's Long Term Energy Efficiency and Sustainability Plan.	DPR, DPW, City Departments RIEDC	Completed lighting upgrades to City Hall, at the Department of Public Works, and all Recreation Buildings. Did oil to gas boiler conversions at a number of City Buildings, as recommended. Did boiler replacements with high efficiency boilers at the Senior Center, one Fire Station and Library. Converted City Parking Garage to energy efficient lighting. Traffic signals converted to LED signals.
CS 14. Continue operation of the Leon Mathieu Senior Center.	Senior Services, DPR, RIPTA, Memorial Hospital, Blackstone Health, Inc., Meals on Wheels, BVCAP	Ongoing. The City continues to provide this service.
CS 15. Create a task force of neighbors to solve parking problems near the library.	Public Library, DPR, Library Board of Trustees, Area Downtown businesses	The Library continues to discuss parking problems near the library with neighboring businesses and organizations. They have not created an official group.
CS 16. Investigate the feasibility of establishing satellite libraries in city neighborhoods, youth centers, or gathering places.	Public Library, DPR, Pawtucket Neighborhood Alliance, Library Board of Trustees	The Library had wanted to provide greater access to members of our community to the Internet by retrofitting our former bookmobile with equipment and staff. The vehicle would have been located at different parts of the City during the week. However, the vehicle proved not to be reliable and the library lost staff so this action was not achieved.
CS 17. Improve access to library resources through improvements on the library website.	Public Library, Champlin Foundation	The Library has and will continue to develop our website so the public can have access to library resources.
CS 18. Identify and prioritize the social service needs of Pawtucket residents as part of the needs assessment portion of the City of Pawtucket Federal Housing and Community Development Consolidated Plan.	DPR, Social service providers statewide	Every city has inherent public services needs that address common problems, such as, but not limited to, elderly services, low income services or activities, youth programs, feeding the hungry and educational activities. Unfortunately, the city receives funding requests from agencies that exceed the available amount of CDBG funds allocated for public services. Decisions have to be made to fund those services that best meet the needs of the city in the most effective and efficient manner.
CS 19. Continue to evaluate alternatives for the alleviation of overcrowding and the provision of necessary classroom space at schools in need.	School Department, DPR, School Committee, Mayor's office	Ongoing. The School Department prepared a Master Plan, which identifies all of the facility renovations and expansions necessary over the next 20 years. The City recently passed a bond to begin the first phase of these repairs. The City and school department have purchased a Catholic elementary school to provide some "swing space" which the School Department conducts repairs, and could provide additional space in the future.
Transportation		

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
T 1. Maintain and regularly update the list of potential projects for inclusion in the State of Rhode Island Transportation Improvement Program (TIP).	DPR, DPW	Ongoing. Pawtucket continues to advocate for its transportation projects including the Pawtucket/Central Falls Commuter Rail project and the Blackstone Valley Bikeway.
T 2. Work with RIDOT on the reconstruction of the closed bridges at Conant Street and at Cole Street to ensure pedestrian and vehicle safety and access.	DPW, DPR, Police Department, RIDOT	Complete. This bridge was reconstructed in 2014.
T 3. Work with RIDOT and FTA to advance the Pawtucket Commuter Rail Station.	DPR, DPW, Amtrak, RIDOT	Ongoing. The project is about halfway complete with the Preliminary Engineering phase. Pawtucket and Central Falls continue to coordinate with RIDOT and FTA to advocate for the project and seek funding.
T 4. Support the implementation of RIPTA's Providence Metropolitan Transit Enhancement Study, especially plans to make Route 99 an express bus, and plans to provide a pedestrian connection to the South Attleboro Commuter Rail Station.	DPR, RIPTA, RIDOT, Pawtucket Foundation	Complete. RIPTA's 99 bus was rebranded as the R Line with fewer stops to increase efficiency of route. It continues to serve downtown Pawtucket. RIPTA installed new shelters along the route. Pawtucket, RIPTA and RIDOT were able to negotiate with MassDOT to allow RIPTA to serve the South Attleboro Commuter Rail Station.
T 5. Develop a linear greenway along the Pawtucket riverfront.	DPR, DPW, Department of Parks and Recreation, RIDEM, RIDOT, Riverfront Commission	Ongoing. Pawtucket redeveloped the State Pier, and has plans to redevelop Town Landing (across the river). Pawtucket continues to work with private property owners to negotiate access and/or easements which will connect to develop the linear greenway.
T 6. Continue to coordinate with RIDOT on the development of the Blackstone River Bikeway, including the development of agreements for all required property and easements.	DPR, Department of Parks and Recreation, Riverfront Commission, RIDOT, RIDEM	Ongoing. Pawtucket worked with RIDOT to further develop the portion of the Bikeway that runs from Town Landing to Exchange Street. Pawtucket constructed a small segment to the rear of City Hall and is working with RIDOT to move the project ahead.
T 7. Cooperate with RIDOT and East Providence on the continued construction of the Ten Mile River Bikeway.	DPR, RIDOT, RIDEM	Ongoing. The greenway was built in 2004. The new northern segment from Armistice Blvd to the Doreen Tomlinson Memorial Complex opened in 2014. The City of Pawtucket will continue to work with RIDOT and the City of East Providence to seek opportunities to extend the bike path to the north and south.
T 8. Seek funding to implement the downtown circulation improvements identified in the 2010 Downtown Design Plan.	DPR, RIDOT, FHWA, City, Pawtucket Foundation	Ongoing. Pawtucket has moved forward on a number of initiatives from the Downtown Design Plan: Reduction of one-ways on Broadway, East Avenue Extension, and portions of Main Street. RIDOT participated in the East Avenue project with Pawtucket. The PDDP also helped to inform the work that Pawtucket did with RIPTA on the relocation of the bus hub to Exchange Street, which was identified in the plan as a major transportation corridor.

BVCAP- Blackstone Valley Community Action Program
CPC – City Planning Commission
DPR – Department of Planning & Redevelopment
DPW – Department of Public Works
FEMA - Federal Emergency Management Agency
FHWA – Federal Highway Administration

FTA – Federal Transit Administration
JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission
NBC – Narragansett Bay Commission
PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))

PRA – Pawtucket Redevelopment Agency
PSP – Preservation Society of Pawtucket
RIDEM – RI Department of Environmental Management
RIDOT – RI Department of Transportation
RIEDC – RI Economic Development Corporation

RIEMA – RI Emergency Management Agency
RIHPHC – RI Historic Preservation & Heritage Commission
RIPTA – RI Public Transit Authority
WCDC – Woodlawn Community Development Corporation

Action Item	Responsible Party	2016 Status
T 9. Improve/create boat landings along the entire riverfront.	DPR, DPW, Department of Parks and Recreation, RIDEM	Ongoing. The City has expanded the boat ramp at State Pier. There are plans to improve the boat ramp at the other public access site, which are being reviewed by RIDOT.
T 10. Improve visitor access to major attractions by developing a comprehensive signage program.	DPR, Traffic Engineering Department, DPW, Police Department	Ongoing. Pawtucket recently received grant funding from the Blackstone Valley Corridor Commission to design and install interpretive signs. Now that the new Pawtucket River Bridge is complete, Pawtucket is continuing discussions of wayfinding at its Gateways, which was recommended as part of the Riverfront Redevelopment Plan.

BVCAP- Blackstone Valley Community Action Program	FTA – Federal Transit Administration	PRA – Pawtucket Redevelopment Agency	RIEMA – RI Emergency Management Agency
CPC – City Planning Commission	JHCBVNHCC – John H. Chaffee Blackstone Valley National Heritage Corridor Commission	PSP – Preservation Society of Pawtucket	RIHPHC – RI Historic Preservation & Heritage Commission
DPR – Department of Planning & Redevelopment	NBC – Narragansett Bay Commission	RIDEM – RI Department of Environmental Management	RIPTA – RI Public Transit Authority
DPW – Department of Public Works	PCDC – Pawtucket Citizens Development Corporation (now Pawtucket Central Falls Development Corporation (PCFDC))	RIDOT – RI Department of Transportation	WCDC – Woodlawn Community Development Corporation
FEMA - Federal Emergency Management Agency		RIEDC – RI Economic Development Corporation	
FHWA – Federal Highway Administration			

APPENDIX B

Open House Summary

APPENDIX B

Open House Summary

A larger city-wide open house was also held on December 4, 2015. Attendees were asked to comment on draft goals, policies and actions and to identify those that they felt were most important. Attendance was small at the open house and the City did not receive the amount of input it would have liked. Information was posted on the City's website to solicit more input.

Land Use Priorities

Policies (as ranked)

- Policy LU 9. Wherever possible, encourage pedestrian and bicycle links along the riverfront as well as throughout the City. (4)
- Policy LU 8. Implement the Riverfront Development Plan. (3)
- Policy LU 10. Implement the specific recommendations within 2010 Downtown Design Plan. (3)
- Policy LU 6. Protect and preserve environmentally sensitive areas through open space acquisition. (2)
- Policy LU 1. Protect existing residential neighborhoods from undue encroachment of conflicting non-residential uses. (1)
- Policy LU 3. Control strip commercial development by promoting small-scale neighborhood commercial areas. (1)
- Policy LU 7. Accommodate new industrial, commercial, residential and other developments through carefully considered rezoning. (1)
- Policy LU 11. Continually review the Zoning Ordinance to maintain relevancy. (1)

Actions (as ranked)

- Action LU 2. Update the Zoning around the proposed Commuter Rail Station to allow appropriate Transit-Oriented-Development. (3)
- Action LU 4. Review the Zoning Ordinance and consider allowing increased density where appropriate, including the downtown, mill redevelopment projects, and riverfront. (3)
- Action LU 5. Consider the rezoning of unusable vacant industrial land to open space, specifically along the Moshassuck. (3)
- Action LU 1. Revise the Zoning Ordinance to encourage mixed-use development where appropriate, flexibility in the reuse of mill buildings, and a predictable review process. (1)
- Action LU 3. Conduct a major review of the Zoning Ordinance Use Table. Amend the Zoning Ordinance to include specific criteria for all uses allowed by Special Use Permit. (1)
- Action LU 7. Evaluate zoning along the Blackstone and Seekonk Rivers and consider revisions to meet redevelopment objectives. (1)

Housing Priorities

Policies (as ranked)

- Policy H 1. Reduce the number of illegal and substandard units. (4)

- Policy H 2. Reduce the number of vacant/abandoned houses in residential neighborhoods. (4)
- Policy H 13. Acquire vacant and abandoned properties to stabilize neighborhoods. (3)
- Policy H 12. Support the efforts of Pawtucket neighborhood advocacy groups including neighborhood associations and crime watch groups. (2)
- Policy H 4. Ensure that a consistent portion of the City’s rental housing stock remains affordable and is in compliance with the provisions of the State of Rhode Island Low and Moderate Income Housing Act. (1)
- Policy H 6. Promote the de-concentration of affordable housing. (1)
- Policy H 7. Support appropriately scaled housing that meets the needs of the displaced and homeless population as well as the development of transitional housing. (1)

Actions (as ranked)

- Action H1. Investigate receivership option for vacant and abandoned houses. (3)
- Action H2. Investigate housing resources that are available to assist moderate-income homebuyers. (1)
- Action H3. Create a complete brochure and website for all housing-related opportunities for Pawtucket residents including homeownership, rental opportunities, elderly housing and housing rehabilitation. (1)
- Action H6. Investigate opportunities to convert underutilized and/or obsolete commercial/industrial structures to residential use at appropriate densities. (1)

Economic Development Priorities

Policies (as ranked)

- Policy ED 7. Support and encourage policies that entice artists, art organizations and art institutions to relocate to Pawtucket. (2)
- Policy ED 18. Continue to promote the Arts District as a way to attract new businesses and visitors. (2)
- Policy ED 1. Support development that creates a strong, diverse and vital commercial downtown. (1)
- Policy ED 5. Activate historic mill buildings with residential and commercial uses. (1)
- Policy ED 9. Support the efforts of the Pawtucket Business Development Corporation (PBDC) in providing assistance to area businesses through low interest loans, information, and referrals, including the allocation of CDBG funding to PBDC for secondary low-interest loans to Pawtucket companies. (1)
- Policy ED 15. Actively attract and provide resources and incentives to restaurants, galleries, grocery stores, retail and other uses which support residential development, to locate in the downtown. (1)
- Policy ED 16. Continue to support the BRVNHC through its designated coordinating entity Blackstone Heritage Corridor Inc. and capitalize on the National Park designation. (1)

Actions (as ranked)

- Action ED 4. Provide uniform signage to improve the visibility and accessibility of downtown parking. (2)
- Action ED 10. Work with the Pawtucket Foundation to implement their marketing program and social media outreach. (2)

- Action ED 5 Improve visitor access to major attractions by developing and implementing a cohesive signage program. (1)
- Action ED 7. Work with RIDOT and FTA to advance the Pawtucket/Central Falls Commuter Rail Station. (1)
- Action ED 13. Investigate local incentives and other programming around the Commuter Rail station to promote economic development. (1)

Historic and Cultural Resources Priorities

Policies (as ranked)

- Policy HC 6. Encourage a reuse of vacant structures of historic or architectural interest. (3)
- Policy HC 7. Coordinate activities with the BRVNHC Visitor Center to promote visitors at the Slater Mill, the National Park, and other area attractions. (3)
- Policy HC 13. Work with federal, state and other agencies to promote the creation of public art and support of the art community in Pawtucket. (2)
- Policy HC 3. Support efforts to re-establish the State Historic Tax Credit. (1)
- Policy HC 8. Continue to support the historic preservation efforts and programs of the Preservation Society of Pawtucket. (1)
- Policy HC 9. Continue to research, map and predict archeological sites throughout the City. (1)

Actions (as ranked)

- Action HC 1. Partner with the Pawtucket Foundation to continue to build on the public art inventory mapping to include the historic resources in Pawtucket available to the public. (2)
- Action HC 7. Participate in the preparation of a management plan for the new National Historic Park. (2)
- Action HC 6. Identify a funding source for public art in Pawtucket. (1)

Natural Resources Priorities:

Policies (as ranked)

- Policy NR 10. Offer the street tree program to City residents and enforce the landscape requirements of the Zoning Ordinance to expand the number and concentration of trees in the City. (4)
- Policy NR 4. To the maximum extent feasible, retain and restore the quality of the remaining natural wetlands within the City. (3)
- Policy NR 1. Use reduced salt level for winter snow and ice removal on city streets and sidewalks, and properly site and manage salt storage to prevent adverse water quality impacts. (2)
- Policy NR 2. Utilize best management practices for design of new storm water management systems and regularly maintain the existing storm water management and drainage systems through cleaning catch basins and scheduled street cleaning. (2)
- Policy NR 5. Work with the Department of Public Works to implement RIDEM's requirements for stormwater runoff. (1)
- Policy NR 7. Work with the Blackstone Valley Tourism Council, the Friends of the Blackstone, and other non-profit organizations on projects which improve the health of the City's rivers. (1)

- Policy NR 9. Maintain and update information on unique, rare, and endangered natural resources within the City. (1)

Actions (as ranked)

- Action NR2. Participate in planning and development of fish ladders at the Slater Mill and Main Street dams. (4)
- Action NR1. Consider expanding the tree planning program to allow public trees on private land. (3)
- Action NR8. Develop a program to highlight and promote awareness of native wildlife along the City's waterfront, including Festival Pier. (3)
- Action NR6. Investigate opportunities to restore riverfront areas, as identified in the Metro Bay Special Area Management Plan process. (2)

Recreation Priorities

Policies (as ranked)

- Policy R 4. Coordinate recreational facility improvements with public school site improvements and other City and privately sponsored revitalization efforts. (2)
- Policy R 8. Ensure that there are trash receptacles and bike parking at all public parks and recreation areas. (2)

Actions (as ranked)

- Action R1. Develop a cycling master plan to build links from neighborhoods to bike paths. (2)
- Action R10. Expand bike path to include shoreline access along National Grid and Tidewater properties. (2)
- Action R13. Provide public access to the Seekonk River. (2)
- Action R11. Expand facilities at the Town Landing recreational area. (1)
- Action R15. Improve safety and increase usage at Hodgson Park. (1)
- Action R17. Evaluate development of public access to the Blackstone River north of Exchange Street. (1)
- Action R18. Identify new recreational opportunities in the Barton Street neighborhood.

Community Services and Facilities Priorities

Policies (as ranked)

- Policy CS 1. Improve the water quality of Pawtucket's waterways through the elimination of combined sewer overflows by cooperation with the NBC to site combines sewer overflow treatment or mitigation facilities, as necessary. (2)
- Policy CS 10. Continue to work with neighboring businesses and organizations of the library to develop parking solutions for the area. (1)
- Policy CS 12. Allow the use of alternative pavement types on municipal parking lots, sidewalks, and other vehicular storage and travel ways to reduce stormwater runoff and to preserve architectural and landscape character. (1)
- Policy CS 16. Prohibit new connections of storm drains to the municipal sewer system. (1)

Actions (as ranked)

- Action CS 2. Complete the Long Term Energy and Sustainability Plan. (2)

- Action CS 14. Evaluate the feasibility of a new public safety complex. (2)
- Action CS 1. Continue to investigate opportunities for consolidating services with other Rhode Island communities to reduce costs. (1)
- Action CS 10. Investigate the feasibility of establishing satellite libraries in city neighborhoods, youth centers, or gathering places. (1)
- Action CS 13. Seek out available social service funding at all levels to apply to specific issues or geographic areas. (1)

Transportation Priorities

Policies (as ranked)

- Policy T 3. Evaluate the need to install sidewalks, curbs and drainage improvements in neighborhoods and on streets where these amenities do not exist. (2)
- Policy T 7. Continue to implement the 50/50 sidewalk improvement program. (2)
- Policy T 1. Continue with the street tree planting plan and implementation program which allows for the planting of new trees and the replacement of diseased and dying trees along the city's street. Plant new street trees when installing new sidewalks. (1)
- Policy T 4. Continue to improve universal accessibility at street intersections and other crosswalks. (1)
- Policy T 5. Improve the visibility and accessibility of downtown parking facilities. (1)
- Policy T 8. Establish "No Right Turn on Red" signs at dangerous intersections. (1)
- Policy T 9. Provide bicycle storage facilities at municipal buildings and other facilities and work with community businesses to establish bicycle storage facilities at places of commerce and employment. (1)
- Policy T 10. Enforce "No Parking" and other regulations and ordinances to prevent the obstruction of sidewalks and to allow for the safe passage of all pedestrians. (1)

Actions (as ranked)

- Action T2. Work with RIDOT and FTA to advance the Pawtucket/Central Falls Commuter Rail Station. (3)
- Action T3. Develop a linear greenway along Pawtucket riverfronts. (3)
- Action T7. Improve visitor access to major attractions by developing a comprehensive city wide signage program. (3)
- Action T4. Continue to cooperate with RIDOT in the development of the Blackstone Valley River Bikeway including the development of agreements for all required private property and easements as well as construction of segments where feasible. (2)
- Action T10. Develop Exchange Street into a Transit Emphasis Corridor, with cooperation from RIPTA. (2)
- Action T5. Seek funding to implement the downtown circulation improvements identified in the 2010 Downtown Design Plan. (1)
- Action T14. Evaluate intersections around downtown to be more pedestrian friendly (signal timing, crosswalk design, etc.). Prioritize the intersection of Broad Street and Exchange/Goff Streets. (1)

APPENDIX C

Pawtucket Water Supply Board Water Supply System Management Plan Executive Summary

**WATER SUPPLY SYSTEM MANAGEMENT
PLAN
5-YEAR UPDATE
FOR THE
PAWTUCKET WATER SUPPLY BOARD
VOLUME 1**

**PAWTUCKET WATER SUPPLY BOARD
85 BRANCH STREET
PAWTUCKET, RI 02860**

PREPARED BY*:

**PARE CORPORATION
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865**

**October 2007
Revised October 2014**

***Prepared by Pare Corporation October 2007 and updated by PWSB October 2014**

EXECUTIVE SUMMARY

Introduction and Goals

This Water Supply System Management Plan (WSSMP), as revised, 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 previous WSSMP was prepared in October 2007 and was officially accepted by the Rhode Island Water Resources Board (RIWRB) per correspondence dated January 27, 2009. 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 Pawtucket Water Supply Board (PWSB), 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 PWSB 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 PWSB 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 in Volume II. The Emergency Management component as it relates to the vulnerability assessment of the water system for use in emergency planning is contained separately in Volume III. It shall be incumbent upon the PWSB to implement the recommendations and procedures outlined in this WSSMP in order to comply with the overall requirements of this Act.

Water System Description

The PWSB system supplies water to a direct service population of approximately 98,120 customers in Pawtucket, Central Falls, and the Valley Falls section of Cumberland. Water is also supplied by the PWSB through a wholesale contract to the Town of Cumberland, RI. The PWSB system's source water is derived from the Abbott Run watershed and its underlying aquifer, where the PWSB operates

4 surface water reservoirs and 8 active and 2 inactive groundwater wells. The four surface water reservoirs, (in order proceeding down the watershed) include Diamond Hill Reservoir, Arnold Mills Reservoir, Robin Hollow Pond and Happy Hollow Pond and have a combined storage capacity of 4,970 MG.

In 2008, the PWSB officially decommissioned the water treatment plant at 120 Mill Street in Cumberland, Rhode Island that had been in operational service since construction in 1938. The facility which was rated for 26.4 MGD was determined to be outdated and not economically viable for rehabilitation to meet future water quality requirements. The abandoned plant was located at the south end of Happy Hollow Pond and treated the surface water from Happy Hollow Pond and the groundwater wells utilizing conventional water treatment processes including pre-chlorination, flocculation, sedimentation, filtration, corrosion control, chlorination, and fluoridation.

With the decommissioning of the old water treatment plant in 2008, the PWSB completed construction of its new water treatment facility at 87 Branch Street approximately one mile south of the old treatment facility. Raw water is now pumped from the south end of Happy Hollow Pond to this new treatment facility. The new facility was designed to treat a maximum flow of 25.0 MGD and a sustained average flow of 13.3 MGD. Water treatment consists of a series of chemical and physical processes through which taste, odor, color, turbidity and chemical and microbiological contaminants are removed or inactivated. Treatment techniques include coagulation, flocculation, and filtration mechanisms for the removal of color, turbidity, and other impurities. Following filtration, the water is treated with UV energy to deactivate *Cryptosporidium* and *Giardia Lambli*a. The finish water is then pH adjusted, disinfected with chlorine, and fluoridated before entering the 1.4 MG clear well structure or the onsite 5.0 MG storage reservoir.

High service finish water pumps at the treatment plant are designed to pump from the clear well or alternatively from the onsite 5.0 MG storage tank and into the transmission and distribution system. Once pressurized, the finished water is conveyed to the distribution system via a series of water mains departing to the north and south of the treatment plant. Two water storage reservoirs are located at the western edge of the distribution system, on Stump Hill in the Town of Lincoln. These tanks have a combined storage capacity of 13.0 million gallons.

The PWSB system operates as a single pressure zone. There is, however, one small area in the Valley Falls section of Cumberland that is isolated from the main water system and is operated at a higher hydraulic grade due to high customer service elevations.

Water Supply Sources

Description of Watershed and Surface Water Supplies

The source of the PWSB's water supply is the Abbott Run watershed, a sub-basin of the Blackstone River Valley Drainage Basin. The watershed covers an area of 27 square miles in the Town of Cumberland, RI and Towns of Wrentham, Franklin, Plainville, North Attleboro and Attleboro, MA.

Diamond Hill Reservoir: There exist a number of ponds and impoundments within the Abbott Run watershed. The first and largest is near the origin of Abbott Run near the Diamond Hill area of Cumberland and is the Diamond Hill Reservoir. The Diamond Hill Reservoir was originally constructed in 1887 and has been enlarged twice. The usable storage capacity is 3.67 billion gallons. *Arnolds Mills Reservoir:* The Arnolds Mills Reservoir is located immediately downstream from the Diamond Hill Reservoir. Constructed in 1927, its usable storage capacity is approximately 1.163 billion gallons. *Robin Hollow Pond and Happy Hollow Pond:* There are four other smaller ponds along the seven-mile length of Abbott Run. The PWSB owns two: Robin Hollow Pond and Happy Hollow Pond. The total usable storage capacity in these ponds is approximately 142 million gallons. The two other ponds, Rawson and Howard Pond, are privately owned. The total storage capacity in these ponds totals approximately 51 million gallons.

Groundwater Sources

The Pawtucket Water Supply Board owns a series of ten wells (although only 8 are currently active) along Abbott Run that can supplement the surface water supply; wells 2A through 9 are currently available for use. Wells No 1 and 2 have been abandoned and are no longer in service. Wells 10 and 11 have no power and are not connected to the water system. These wells are exercised via the generator and discharge to an adjacent stream.

All of the PWSB's eight operating wells are fed directly into the raw water intake at Happy Hollow Pond as water quality dictates. These wells are also activated when raw water quality is very poor as may occur in the spring with high turbidity and in the summer to reduce surface water temperature. Generally, at minimum 2 - 3 wells are in operation at any time to supplement surface water supply to the treatment plant.

Water Treatment Facility

The Raw Water Pump Station (RWPS) is located at 118 Mill Street in Cumberland, RI adjacent to the old Water Treatment Facility at 120 Mill Street. This pump station draws water from Happy Hollow Pond through a submerged intake. The intake consists of two, 30-inch branches; each branch separates via a tee fitting into two sub-branches that each connects to two intake screens. The individual

groundwater wells, Well No. 2A through Well No. 9, connect to a 20-inch well water header. Water from the wells passes through a cascade aerator to strip the radon prior to connection with the raw water intake line from Happy Hollow Pond. Raw water can be dosed with potassium permanganate to oxidize iron and manganese prior to reaching the treatment plant. Caustic soda can be also added to adjust the pH of the water at the RWPS.

Raw water from Happy Hollow Pond is pumped approximately one mile through two, 36-inch raw water transmission pipelines to the treatment facility at 87 Branch Street. The single 36-inch pipeline from the RWPS separates via a tee fitting into the two, 36-inch pipelines that then rejoin via a tee fitting to one 36-inch pipeline prior to entering the plant.

In 2012, the RWPS station was retrofit with a pilot system designed to feed powder activated carbon (PAC) to the raw water supply to aid in the control of seasonal taste and odor problems. These taste and odor problems have been attributed to the levels of Geosmin and 2-Methylisoborneol (MBE) which are naturally occurring organic compounds in surface waters and both of which are discernable to consumers at extremely low levels. Their occurrence is commonly associated with warmer weather and algal blooms that occur in late summer.

The introduction of the PAC at the raw water intake has proven successful in reducing the levels of these compounds and has improved the taste and odor of the finished water. A permanent PAC system is being installed in 2014 for use when the levels of these compounds are detected in the raw water at elevated levels in order to assist in controlling taste and odor of the finish water.

The new water treatment plant is designed to produce up to 25 MGD of finished water. Additionally, it was designed to allow 30 MGD to flow through the facility without major piping or structural modifications. The facility design also allows implementation of chloramines for disinfection without major modification or plant shut down.

The water treatment plant uses polyaluminum chloride (PAC)/alum as a coagulant and contact clarification to remove TOC, color, and turbidity prior to deep bed Granular Activated Carbon (GAC) filters. The water then passes through UV disinfection units and is then dosed with sodium hypochlorite and sent to a channeled 1.4 MG clear well with a contact time of 90 minutes, and either pumped directly into the distribution system or to the onsite 5 MG storage tank. The treatment plant is completely controlled by in-line process analyses and a computer based Supervisory Control and Data Acquisition (SCADA) System.

Each contact clarifier is back flushed every 4 hours of operation using a raw water/air scour flush. The GAC filters backwash with potable water and air every 24 to 48 hours. The flush and backwash waste water flows into equalization basins located under the filters. From the equalization basins, the combined residuals waste is pumped to two dewatering lagoons via a 12-inch force main at the site of the old treatment plant lagoon. These lagoons are lined and have an underdrain system for proper dewatering of the PAC/alum sludge

Emergency generators are provided at the Raw Water Pump Station and the Water Treatment Plant to allow full production of up to 25 MGD during extended power outages. With diesel fuel deliveries at 48-hour intervals, the entire water treatment process could operate indefinitely on the auxiliary power system.

Storage Facilities

The water system maintains two distribution storage facilities located in Lincoln; a clear well at the treatment plant and a finish water supply storage tank at the location of the treatment plant. The total distribution system storage including the finish water tank system storage is 20.9 million gallons.

Pump Stations

The PWSB system owns and operates four pump stations. The facilities are identified as Branch Street – Station 1, Branch Street – Station 4, the Raw Water Pump Station for the treatment plant and the high lift finish water pumps at the water treatment plant.

Branch Street (Station 1)

Located at 85 Branch Street, Station 1 serves as an emergency transmission station to Station 4, consisting of one 9 MGD pump coupled to a diesel engine. This pump is run periodically during power outages.

Branch Street (Station 4) Emergency Water Treatment Plant Effluent

Located at 85 Branch Street in Pawtucket, this station was formerly the main pumping station for the PWSB when the old treatment facility was in service. This station is now utilized as a backup for the high lift service pumps at the new water treatment plant at 87 Branch Street. Five pumps were installed in 1983 at this facility (three 9 MGD pumps, one 6 MGD pump, and one 3 MGD pump).

Raw Water Pump Station

This pump station was constructed in 2007 and is located at 118 Mill Street in Cumberland adjacent to Happy Hollow Pond. It is designed to deliver raw water approximately one mile south to the water treatment facility. The station is equipped with three (3) 13.2 MGD pumps, for a total reliable

pumping capacity of 26.4 MGD. The 200 HP pump motors are scheduled to be retrofit with variable frequency drives (VFD's) in 2014 in order to optimize efficiency of the facility.

Finish Water Pump Station

This pump station was constructed in 2007 and is located at 87 Branch Street at the water treatment plant. The pump station consists of four (4) 13 MGD pump, for a total reliable (one spare) pumping capacity of 39 MGD. Two of the 900 HP pump motors were retrofit with variable frequency drives (VFD's) in 2012 in order to optimize efficiency of the facility.

Transmission System

The PWSB's current system consists of approximately 284 miles of water main with approximately 24 miles of transmission mains (16-inch water main and greater). Pipe sizes range from 2-inch diameter to 12-inch for distribution mains. Transmission mains are 16-inch diameter to 48-inch diameter. These mains transport water from the water treatment plant, the 5.0 million gallon storage tank at 87 Branch Street and the two distribution system storage tanks at Stump Hill to the entire water distribution system. The transmission and distribution system is comprised predominantly of cement lined cast iron, cement lined ductile iron and a limited amount of unlined cast iron water main.

Transmission and Distribution Main Lining and Replacement

The Rules and Regulations for WSSMP define transmission lines as the pipes that are 16 inches in diameter or greater and are the pipes required to carry potable water from a water source to or throughout an area served or to be served by a water supply system for the specific purpose of supplying water to support a general population. The PWSB owns and operates a total of approximately 24 miles of transmission water main. Less than 1% of these transmission mains are unlined pipe.

Since 1988, the PWSB has undertaken an aggressive approach to replacing or rehabilitating the entire distribution system with a goal of either cement lining or replacing all unlined cast iron water mains. By 2018, the PWSB will have completed its goal of replacing or rehabilitating the entire distribution system in Pawtucket, Central Falls and the Valley Falls section of Cumberland.

Interconnections to Neighboring Water Systems

The PWSB can supply water to six neighboring municipal water systems including the Town of Cumberland, Town of Lincoln, City of East Providence, and Providence Water Supply Board in Rhode Island, and the Towns of Seekonk and Attleboro in Massachusetts. There is a contract to supply water to Cumberland although it is expired. However, both parties continue to honor the contract and

Cumberland continues to purchase water under the terms of the original contract. The remainder of the interconnections are currently for emergency use only.

Service Area

The PWSB provides water service to approximately 98,120 customers as of 2012 within a service area that includes the cities of Pawtucket and Central Falls, and the Valley Falls section of the Town of Cumberland. Bordering cities and towns include: East Providence, Providence, North Providence and Lincoln in Rhode Island, and Attleboro and Seekonk in Massachusetts. The service area is almost fully developed and includes medium to high-density residential, commercial and industrial zoning. There is little undeveloped land in the service area.

Service Connections

In 2012, there were 22,875 service connections. Since 2006, there has been an overall increase of 0.9% in the total number of service connections. The number of service connections and the percent change in each category are depicted in the following table.

Number of Service Connections and % Change

CATEGORY	2006	2012	% Change
Residential	20,951*	21,153*	0.9
Commercial	1,315	1,267	(-3.6)
Industrial	192	193	0.5
Other	206**	262**	27.0
Total	22,664	22,875	0.9

*Includes Multi-Family and Trailer Parks

**Includes Hospital, Nursing Home, and Public Facilities

Present Population Served

The PWSB serves the entire population of the City of Pawtucket, the City of Central Falls, as well as the Valley Falls region of the Town of Cumberland. The 2010 U.S. Census determined the population for Pawtucket to be 71,148 and the population of the City of Central Falls to be 19,376.

The service population in Valley Falls was calculated using the number of service accounts of 2,752 multiplied by the 2010 US Census Data of 2.76 persons per household. This equates to a total service population of 7,596 in Valley Falls. The resulting combined service population for the City of Pawtucket, the City of Central Falls, and the Valley Falls region of the Town of Cumberland is 98,120.

Future Population Estimate

The population information depicted in the table below was taken from the population estimate provided by the State of Rhode Island Department of Administration Office of Statewide Planning. Census data for Valley Falls was used to determine the population of Cumberland served by the PWSB. The projection for the next 20 years is slightly declining overall.

Projected Population for Communities Using PWSB Water

Year	2012 Present Population	2015 5 – Year Population	2030 20 – Year Population
Pawtucket	71,148	69,596	67,898
Central Falls	19,376	19,403	20,325
Valley Falls, Cumberland	7,596	7,693	8,334
Total:	98,120	96,692	96,557

Source: RI Statewide Planning Program

Source and Distribution Metering***Master Meters***

In 2008, the PWSB installed a 36 inch “turbine” water meter at the raw water pump station at Happy Hollow Pond to meter flows being pumped to the treatment plant. At the water treatment plant there exists a 36 inch magnetic flow meter that is used to record flow produced by the treatment plant and distributed to the transmission and distribution system.

Distribution System Meters

The PWSB meters 100 percent of its customer service base and as of 2012 included 22,875 residential, commercial, industrial and government customers service accounts. The PWSB also maintains a Meter Installation, Maintenance, and Replacement (MIMR) Plan that is funded through the Infrastructure Replacement Fund (IFR). Typically, meters are replaced on a 12-15 year basis; however this is premised on available funding of the IFR account.

The PWSB undertook an aggressive in-house meter replacement program whereby all water system meters (Neptune ARB style meters) within the distribution system were replaced and fitted with a remote read meter interface unit (MIU). This was completed over a three year period from 2005 – 2008. The MIU is a two-way radio frequency (RF) read device that is designed for use by the water utility to quickly and accurately record a customer’s meter reading.

Since 2008, the PWSB has maintained a monthly billing program for the entire customer service territory and which has been proven tremendously successful and well received by the customer base. The monthly billing permits customers to budget for water use on a regular basis, reduces water loss and accelerates leak detection and prevention.

The PWSB maintains an ongoing program of meter replacement which targets meters that have been in service for 10 years or longer. These “older” meters are routinely replaced by in-house staff on a daily basis (average of 6 – 8 per day) and will continue through the IFR program. The PWSB averages approximately 1,600 to 1,800 meter replacements per year.

System Water Production Data

Water Production

Over the past eleven years (2003 – 2012), the water withdrawn from all supply sources (water production) for the system has ranged from 3,148.6 to 4,470.6 million gallons per year. PWSB produced 3,424.6 million gallons in the year 2012 with an average day demand (ADD) of 9.38 million gallons per day (MGD). During the past eleven years, 2003 – 2012, the ADD has decreased at a steady rate from 11.97 MGD in 2003 to 9.38 MGD in 2012. In 2012, the maximum day demand (MDD) was 14.07 million gallons (MG) and the peak hour (PH) demand was 18.64 MG. The MDD has ranged from 21.5 MG in 2002 to 14.07 MG in 2012 over the past twelve years, 2001 – 2012. The MDD over the past five years has been in a range of 14.07 MG to 17.49 MG.

Wholesale Water Supply Contracts

Currently, there is a contract with the Town of Cumberland in Rhode Island. This contract is expired however the terms and conditions are still honored by both parties with respect to the wholesale purchase of water.

Water Use

System Water Use Data

The current Average Day Demand (ADD) for calendar year 2012, based on the total volume of water metered at the point of sale is 9.38 MGD. The average system per capita demand for total water purchased in 2012 was calculated at 76.71 gallon per capita day (gpcd) with a high of 100.67 gpcd in August and a low of 65.07 gpcd in January.

The RIWRB has established a target of 65 gallons per capita per day (gpcd) for the residential component of the annual average water use. As indicated in the PWSB’s Demand Management Strategy (Appendix N), based on the data from fiscal year 2012, the PWSB residential average water

use is 54 gpcd. This number has been fairly consistent in recent years and was determined to be 59 gpcd in fiscal year 2011 and 56 gpcd in fiscal year 2010.

Major users which are defined as those customers using more than 3 million gallons per year as supplied by the PWSB total forty-one (41). The total usage of these major users represents 10.2% of the total system demand.

Non-Account Water Use

The PWSB has maintained an average of 8.9% non-account water since 2002 and 7.2% for the year 2012. This rate is below the goal of 15% set forth in *Water Supply Policies for Rhode Island*, State Guide Plan Element No. 721.

Future (Wholesale) Water System Demands

The PWSB wholesale water supply to the Town of Cumberland will continue to the Cumberland requires the supplemental water supply. For the past several years, the Town of Cumberland has become more self-reliant upon its own available water resources including surface water from Sneece Pond and several groundwater supply wells. In addition, the Town has implemented a groundwater exploration and development program which is aimed at gaining further independence of water supply. It is uncertain to what degree this may impact the future wholesale water volumes to the Town of Cumberland.

Additionally, there is interest among other abutting communities for the purchase of wholesale water from the PWSB. This could be to potentially gain added “emergency” redundancy from other current wholesale purchase suppliers, to potentially purchase water at reduced rates or to maintain a new source of viable water supply. Preliminary interest has been expressed from East Providence, Bristol County Water Authority and the Town of Lincoln, Rhode Island. This is only at the conceptual stages and would require additional efforts including possible significant infrastructure improvements should this move forward at some point in the future. The results of this would likely have a significant impact on the wholesale water currently sold by PWSB and the exact volumes cannot be quantified at this time.

Summary of Planned Capital System Improvements

The PWSB is proactive in identifying areas in which the water supply, treatment and distribution system can be maintained and improved. PWSB commitment to providing safe, reliable, and adequate water supply to its customers is demonstrated in the recent replacement of its water treatment facility.

The PWSB has also developed and maintains a Capital Improvements Plan to forecast and provide needed system improvements. The contents of this WSSMP details system improvements including dam and well rehabilitation, reports and studies, main replacement projects and cleaning and lining projects over a 20-year planning period.

A summary of the planned capital improvements, funding source, anticipated schedule and an estimated cost is presented in the following table. The implementation of these improvements is subject to comprehensive study of policy and financial decisions that is required for the actual implementation of the improvements to the water supply distribution system.

Capital Improvement Program Projects

Project	Funding	Timing	Estimated Cost (\$)
Diamond Hill Dam and Spillway and Emergency Action Plan	IFR	2014	8,000
Diamond Hill Dam and Spillway rehabilitation	SRF/IFR	2014-2015	300,000
Happy Hollow Dam and Spillway Emergency Action Plan	IFR	2013	10,000
Happy Hollow Dam and Spillway rehabilitation	SRF/IFR	2018-2018	300,000
Millers River Water Quality Basin Design	IFR	2014	55,000
Millers River Water Quality Basin Construction	SRF/IFR	2015	300,000
Abbott Run Stream Bank Rehabilitation	SRF/IFR	2013-2014	200,000
Storm water Controls Pollution Management Program	IFR	2012-2027	600,000
Replace valves Wells 3,4,5,6,7,8, & 9	IFR	2014	28,000
Replace well building/housing at Wells 6,7,8, & 9	IFR	2014	160,000
Well 8 Rehabilitation (redevelopment)	IFR	2013	30,000
Well 9 Rehabilitation (redevelopment)	IFR	2014	30,000
Well 6 Rehabilitation (redevelopment)	IFR	2015	30,000
Well 7 Rehabilitation (redevelopment)	IFR	2016	30,000
Repaint Stump Hill Tank	IFR	2015	1,200,000
Distribution System Water Quality Monitors	IFR	2014	100,000
Ralco Way Pump Station Demolition	IFR	2014-2015	1,000,000
Main Replacement Improvements 8-10, 36,000 L.F. per year	SRF/IFR	2012-2016	9,000,000

Main Replacement Improvements 11-16, 6,400 L.F. (bi-annual maintenance)	IFR	2017-2027	7,905,000
Meter Replacement	IFR	2012-2027	5,318,200

Water Quality Protection

The PWSB continues its policy of working with the Town of Cumberland, the Cumberland Land Trust (CLT) and the Cumberland Open Space Commission (OSC) to acquire properties or development rights of properties in the Watershed with the prime intent of water quality protection.

The PWSB continues to actively maintain and manage the land surrounding the Watershed. By owning the property, the PWSB can set forth storm water management plans to ensure that the Reservoir is not negatively impacted by the development. All construction within the Watershed is reviewed by the PWSB, and if comments are warranted, the comments are sent to the Town or RIDEM.

The PWSB also worked with the Cumberland Zoning Committee to create a watershed overlay district. This watershed overlay district will help protect both Cumberland's and Pawtucket's watersheds by prohibiting certain types of commercial and industrial activities.

Source Water Assessment

Volume II of the WSSMP fulfills the requirements of the water quality protection component of the Plan. An update of the Source Water Assessment for the PWSB was developed in accordance with the Guide to Updating Source Water Assessments and Protection Plans, October 2007. The final risk ratings for the Happy Hollow, Abbott Run, Arnold Mills, and Diamond Hill Reservoir Protection Areas were determined to be consistent with the 2003 ratings. The final risk rating for the Pawtucket Wellhead Protection Area increased from moderate to high. The PWSB is currently in the process of reviewing the 2007 source water assessment and shall make appropriate revisions where necessary.

Updated Well Head Protection Area Mapping

Volume II addendum provides an update of the mapping of the well head protection areas for PWSB's 8 (numbered 2A, 3, 4, 5, 6, 7, 8 and 9) existing active groundwater well supply sources as well as its 3 existing "inactive" (numbered 2, 10 and 11). These redefined wellhead areas are as depicted in the State of Rhode Island and Providence Plantations, Department of Environmental Management – Office of Water Resources "*Ground Water Quality Rules*", June 2010. (Groundwater Rules).

The PWSB shall in accordance with 18.6.2 of the Ground Water Regulations maintain conformance to the requirements of the Rhode Island Water Resources Board “Rules and Procedures for Water Supply System Management Planning” that are determined to be in compliance with the Water Quality Protection Component of the “Rules and Procedures for Water Supply System Management Planning”.

Available Water

Most Recent Safe Yield Analysis

The PWSB’s most recent safe yield analysis was completed in 1996 by Camp, Dresser & McKee. The safe yield was determined to be between 18.6 MGD and 20.6 MGD. This safe yield was not based on the Abbott Run watershed directly but rather the analysis was based on a watershed that is hydrologically similar to Abbott Run.

The PWSB safe yield calculated by CDM in 1996 was based on the longest and most severe period of drought on record for New England, the drought of the 1960's. Watershed parameters and data were adapted from PWSB records for the Abbott Run watershed, as well as from the Nipmuc River USGS stream gage near Harrisville, RI. The full text of the 1996 CDM report is contained in the Appendix. According to the 1996 CDM Safe Yield report, the safe yield range for the surface water supply from the Abbott Run watershed is between 15 and 17 MGD. The PWSB has elected to adopt the results provided by the Abbott Run gage, which provides a yield of 16 MGD. This value is considered valid for safe yield determination and planning purposes.

The 1996 CDM Safe Yield report states that the potential yield of the groundwater reservoir under Abbott Run is significantly affected by the amount of induced recharge available from Abbott Run. For example, 12 MGD can be pumped provided that adequate stream depth is maintained, but only 5 MGD can be pumped if no recharge is available from Abbott Run. Using the results of these studies, the system reliable safe yield of 19.6 MGD is currently considered to be that used in planning studies.

It is important to note that although different methods were used to analyze the safe yield of the PWSB system, all have been completed by using data from other basins thought to be comparable; no flow gauges have ever been installed within the Abbott Run sub basin in order to complete such a study.

Comparison of Available Water and Water Demand

The current reliable safe yield of the PWSB system is greater than the demand and wholesale water demand projected in both the five and twenty year projections. The comparison is summarized in the following table. Note that safe yield is only comparable with average daily demand, and not maximum daily demand, as the reliable safe yield represents the sustainable yield from a water source over an extended period of time.

Projected Average Annual System Yield and Demand for PWSB

	2012 (MGD)	2015 Year Projections (MGD)	2030 Year Projection (MGD)
System Safe Yield	18.6 - 20.6	18.6 - 20.6	18.6 - 20.6
System Demand	(9.38)	(9.24)	(9.23)
Wholesale Water Sales (Cumberland)	(1.09)	(1.09)	(1.09)
Total Demand	(10.47)	(10.33)	(10.32)
System Surplus (Deficit)	8.33 - 10.13	8.27 - 10.27	8.28 - 10.82

Drought of record reservoir safe yield equal to 15 – 17 MGD; Groundwater well safe yield equal to 3.6 MGD. Reference *PWSB Safe Yield Report for the Pawtucket Water Supply System, November 1996 as prepared by Camp Dresser & McKee*.

Demand Management***Residential Retrofit Program (RRP)***

The PWSB has previously participated in the Statewide RRP Program that was jointly developed by the RIDEM and the Rhode Island Water Works Association (RIWWA). The purpose of the program was to allow Rhode Island water suppliers to take advantage of economies of scale for purchasing retrofit kits and to minimize duplication of efforts in establishing individual programs. While the program was active around 2004 – 2007, the demand for the kits was limited and active program was stopped due to the limited community demand and funding from the PUC. The PWSB customer service department continues to maintain the retrofit kits at the main office and they are available to any customer free of charge upon request.

Major Users Technical Assistance Program (MUTAP)

The PWSB does not currently have an active major user technical assistance program. The PWSB does have a Backflow Prevention Program and employs a Cross Connection Control Technician. The Backflow Prevention Program consists of review of existing and new service connections for backflow prevention and recommending and implementing necessary corrective measures. The responsibilities of the Cross Connection Control Technician include the following:

- Responsible for all cross connection control surveys and recommended devices to be installed as to type and location for all customers of the PWSB,
- Maintains all records for cross control surveys, backflow prevention devices installed and for all periodic testing, notification, and inspection reports,
- Assists in the development, implementation, and evaluation of a water conservation program,
- Assists in the review of application for all types of existing, new, and temporary water services,
- Assists in the review of plans, specifications and construction methods to be used on installation to insure compliance with the approved project and as-built record for all customer side service installations.

System Management

Meter Installation, Maintenance, and Replacement (MIMR) Plan

The PWSB is a 100% metered system with cold-water meters for all homes, stores, small businesses, etc. Master meters are used at the raw water pump station, the water treatment plant and at the sites for wholesale delivery. When water is used from fire hydrants for temporary construction purposes, special meters with backflow preventers are required. The PWSB coordinates with all fire departments to review all fires, hydrant use, and other miscellaneous fire flows.

All commercial and small industrial accounts are 100% metered. The PWSB has ownership of all meters on accounts up to 2" meters. The PWSB system currently consists of Neptune MIU style meters and has purchased radio read capabilities for all their meters. The PWSB has upgraded all existing meters to radio read capabilities within the last five years using in-house staff.

The PWSB has been replacing, cleaning, and lining mains as part of its Capital Improvements Plan since 1988. Through this program the PWSB has had the ability to review and evaluate water mains within its system and has resulted in over 93% of the PWSB water mains in good or new condition. The implementation of this aggressive improvement plan has ultimately achieved the objective of a leak detection and repair plan; the identification and correction of water main defects.

Preventative Maintenance (PM) Plan

The primary (preventive) maintenance is related to the mechanical and process equipment at the water treatment plant, pump and well stations. The PWSB maintains a long-term Contract for Operations and Maintenance for these facilities with United Water. United Water in order to effectively manage these assets utilizes a computerized maintenance management system (CMMS) software provided by MVP Plant.

This program maintains information about the water treatment plant, raw water pump station and well station assets. This includes when the asset was purchased, its expected lifetime, warranty information, the upkeep history, costs, depreciation and more. The program allows maintenance staff to track parts, tools and other materials required to perform routine upkeep. The software also aids in managing the work order process. This includes scheduling repairs, assigning personnel to the job, reserving materials, recording costs, tracking the cause of the problem, tracking downtime and making recommendations for future action.

Emergency and Drought Management

The Emergency Management section, Volume III, of the WSSMP establishes the responsibilities and authority within the PWSB for responding to emergencies, and outlines specific tasks for carrying out functional and constructive solutions based on a review of the potential emergencies and risks. This includes but is not limited to both natural and manmade emergencies including mechanical and equipment failure; infrastructure system failure; electrical and energy supply interruption; water system supply contamination; drought conditions; environmental factors including acts of God (hurricanes, earthquakes, etc.) 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 procedures outlined in the Emergency Management section are consistent with the goals of the State Emergency Water Supply 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. In addition, the PWSB has also prepared a document titled "Drought Management Plan" that is contained in the appendix of the WSSMP. This Plan details the protocols including triggers, actions and responsible parties for the various phases of a drought which include normal, advisory, watch, warning and emergency phases of a drought condition.

Water Efficiency and Demand Management Strategy

The RIWRB adopted the Rules and Procedures Governing the Water Use and Efficiency Act for Major Public Water Suppliers, Adopted May 16, 2011 (Rule), Section 5.2. Pursuant to meeting this requirement, the PWSB prepared a Demand Management Strategy in August, 2012. RIWRB subsequently provided comment on the DMS and PWSB issued follow up correspondence to address these issues. A copy of the DMS and follow up documentation / response is provided in the Appendix of the WSSMP.

Implementation, Financial Management, and Coordination***Implementation***

The purpose of the WSSMP is to outline goals relative to water supply management planning for the PWSB water supply system and to serve as a general guide for decision-making procedures. The WSSMP details an implementation schedule developed from the Capital Improvements Plan. The implementation schedule includes projects, funding sources, timing and estimated costs for impoundments, well rehabilitation, reports and studies, main replacement and cleaning and lining projects.

Financial Management

The PWSB is a semi-autonomous extension of The City of Pawtucket. It is operated as an enterprise fund agency and is self sufficient, funding its operations through water rates and charges to its users. No subsidization exists between the City and the PWSB. The financial management of PWSB is vested in its Board of Directors. The Board establishes all rules and regulations and determines the rates to be charged for water and all miscellaneous related services. The rules and regulations and rates and charges are subject to the approval of the PUC. The Chief Engineer and Chief Financial Officer report the financial position of PWSB to the Board at its scheduled meetings.

Rate Structure

The existing Tariff schedules for PWSB were approved by the Rhode Island Public Utilities Commission in Docket No. 4171 and the effective date of the tariff is January 1, 2011. The complete tariff schedule is included as Appendix K. The metered sales rate varies by meter size. The rate is a uniform rate by class and does not vary by consumption.

Bills for metered sales are rendered monthly to all customers, in arrears and are due and payable in full when rendered. In addition to the metered sales tariff, customers are charged a Customer Service Charge which varies with meter size. All customers are billed on a monthly basis. Payment in full is required within 24 days of the billing date.

Coordination

The PWSB coordinates with the City of Pawtucket, City of Central Falls, and the Town of Cumberland on a routine basis. The PWSB is an agency of the City of Pawtucket and therefore has regular coordination and contact with all city departments including the Planning Department. This WSSMP Update once again details and gives examples (Cumberland Land Trust, Cumberland Zoning Committee, protection efforts, etc.) of the coordination efforts made with the Town of Cumberland.

The majority of the watershed of the PWSB is within the Town of Cumberland. In addition, the PWSB is responsible for supplying more than half of the Town of Cumberland's water supply. Therefore both the PWSB and the Town of Cumberland recognize the need for coordination on the protection of their main water supply sources.

PWSB's commitment to coordinate with neighboring systems and fostering strong working relationships is further reflected in the recent development of the Mutual Aid Agreement with Cumberland Water Department and the Lincoln Water Commission. Additionally, the PWSB is a participating member in the RIWARN mutual aid and assistance program. RIWARN is a Water / Wastewater Agency Response Network that allows water and wastewater systems in Rhode Island to receive rapid mutual aid and assistance from other systems in RI to restore facilities damaged by natural or manmade incidents.

PAWTUCKET WATER SUPPLY BOARD

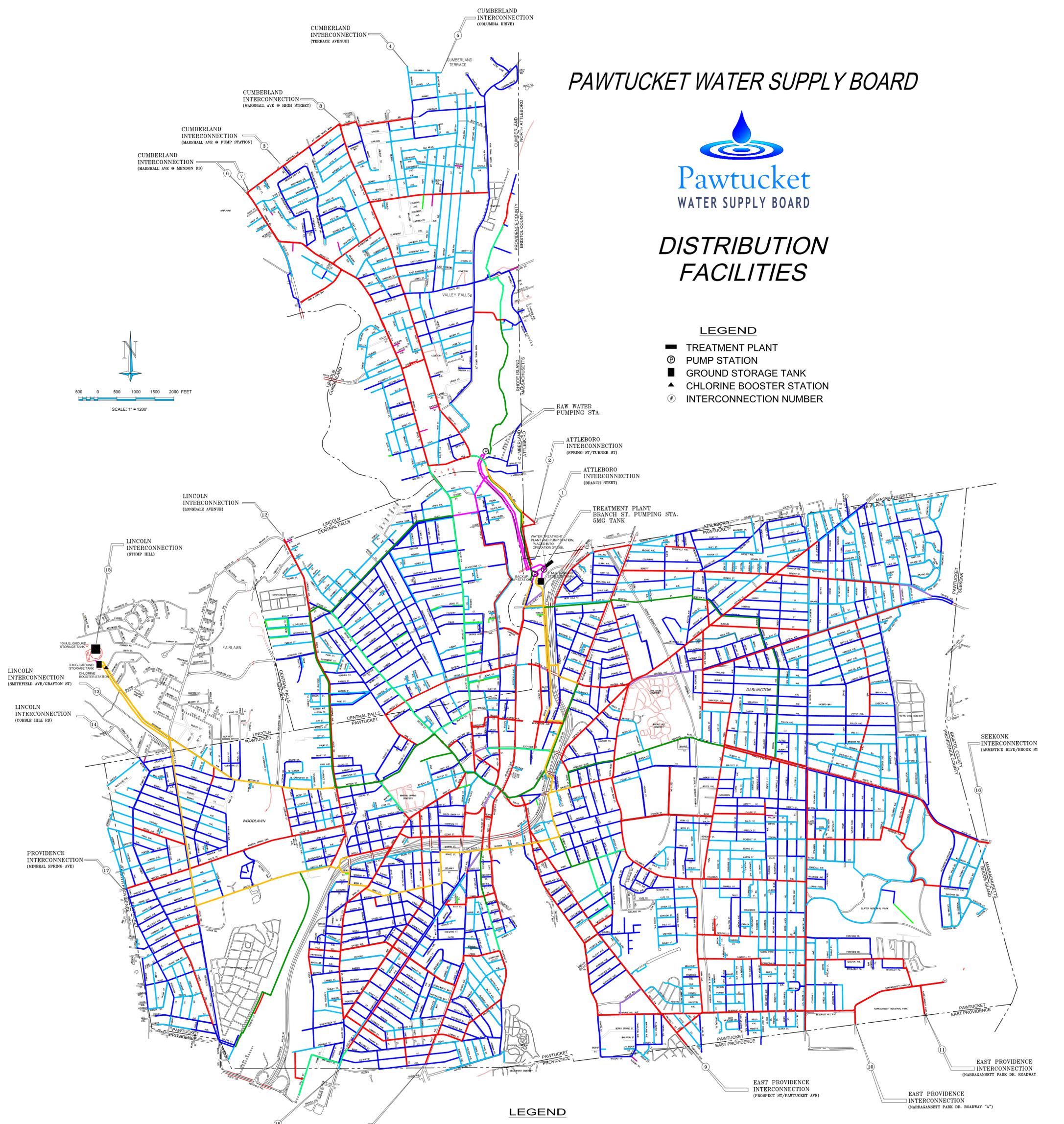
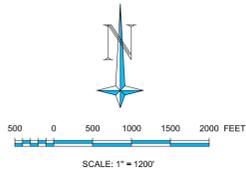


Pawtucket
WATER SUPPLY BOARD

DISTRIBUTION FACILITIES

LEGEND

- TREATMENT PLANT
- ⊕ PUMP STATION
- GROUND STORAGE TANK
- ▲ CHLORINE BOOSTER STATION
- ⊙ INTERCONNECTION NUMBER



LEGEND

- | | |
|-----------|-----------|
| 2" Water | 16" Water |
| 4" Water | 20" Water |
| 6" Water | 24" Water |
| 8" Water | 36" Water |
| 10" Water | 48" Water |
| 12" Water | 54" Water |

WATER DISTRIBUTION SYSTEM MAP

NOVEMBER 2014

FIGURE 2-5

APPENDIX D

Non-Local Roads, Functional Classification, and Eligibility for Federal Aid

PAWTUCKET

Rhode Island Highway Functional Classification

Name	Functional Classification	Urban/ Rural	NHS	Federal Aid	Miles
EXIT 25	Principal Arterial - Interstate	Urban	Yes	Yes	0.21
EXIT 26	Principal Arterial - Interstate	Urban	Yes	Yes	0.19
EXIT 27**	Principal Arterial - Interstate	Urban	Yes	Yes	0.53
EXIT 28	Principal Arterial - Interstate	Urban	Yes	Yes	0.16
EXIT 29*	Principal Arterial - Interstate	Urban	Yes	Yes	0.56
EXIT 30*	Principal Arterial - Interstate	Urban	Yes	Yes	0.39
I 95 N	Principal Arterial - Interstate	Urban	Yes	Yes	3.54
ON RAMP I-95 N***	Principal Arterial - Interstate	Urban	Yes	Yes	1.02
ON RAMP I-95 S †	Principal Arterial - Interstate	Urban	Yes	Yes	1.18
BEVERAGE HILL RD	Principal Arterial - Other	Urban	Yes	Yes	0.32
BROAD ST	Principal Arterial - Other	Urban	Yes	Yes	0.26
BROADWAY	Principal Arterial - Other	Urban	Yes	Yes	1.17
CENTRAL AVE	Principal Arterial - Other	Urban	Yes	Yes	1.84
COTTAGE ST	Principal Arterial - Other	Urban	Yes	Yes	0.01
DEXTER ST	Principal Arterial - Other	Urban	Yes	Yes	0.41
EAST AV EXT	Principal Arterial - Other	Urban	Yes	Yes	0.05
EAST AVE	Principal Arterial - Other	Urban	Yes	Yes	0.10
EXCHANGE ST	Principal Arterial - Other	Urban	Yes	Yes	0.40
GEORGE ST	Principal Arterial - Other	Urban	Yes	Yes	0.72
GOFF AVE	Principal Arterial - Other	Urban	Yes	Yes	0.18
LONSDALE AVE	Principal Arterial - Other	Urban	Yes	Yes	0.67
MAIN ST*	Principal Arterial - Other	Urban	Yes	Yes	0.25
MINERAL SPRING AVE	Principal Arterial - Other	Urban	Yes	Yes	1.11
NEWPORT AVE	Principal Arterial - Other	Urban	Yes	Yes	2.58
PARK PL	Principal Arterial - Other	Urban	Yes	Yes	0.03
PARK PL E	Principal Arterial - Other	Urban	Yes	Yes	0.14
PAWTUCKET AVE	Principal Arterial - Other	Urban	Yes	Yes	1.30
PLEASANT ST	Principal Arterial - Other	Urban	Yes	Yes	0.10
POWER RD	Principal Arterial - Other	Urban	Yes	Yes	0.05
PROSPECT ST	Principal Arterial - Other	Urban	Yes	Yes	1.34

PAWTUCKET
Rhode Island Highway Functional Classification

Name	Functional Classification	Urban/ Rural	NHS	Federal Aid	Miles
ROOSEVELT AVE	Principal Arterial - Other	Urban	Yes	Yes	0.22
SCHOOL ST	Principal Arterial - Other	Urban	Yes	Yes	1.20
SMITHFIELD AVE	Principal Arterial - Other	Urban	Yes	Yes	1.49
WATER ST	Principal Arterial - Other	Urban	Yes	Yes	0.38
ARMISTICE BLVD	Minor Arterial	Rural	No	Yes	0.00
COTTAGE ST	Minor Arterial	Rural	No	Yes	0.02
ARMISTICE BLVD	Minor Arterial	Urban	No	Yes	3.57
BARTON ST	Minor Arterial	Urban	No	Yes	0.61
BEVERAGE HILL RD	Minor Arterial	Urban	No	Yes	0.71
BROAD ST	Minor Arterial	Urban	No	Yes	0.10
BROADWAY	Minor Arterial	Urban	No	Yes	0.30
CENTRAL AVE	Minor Arterial	Urban	No	Yes	0.35
CHURCH ST	Minor Arterial	Urban	No	Yes	0.20
COMSTOCK ST	Minor Arterial	Urban	No	Yes	0.18
COTTAGE ST	Minor Arterial	Urban	No	Yes	2.04
DENVER ST	Minor Arterial	Urban	No	Yes	0.05
DIVISION ST	Minor Arterial	Urban	No	Yes	1.29
E PAWT INDUSTRIAL HWY	Minor Arterial	Urban	No	Yes	2.28
EAST AVE	Minor Arterial	Urban	No	Yes	0.90
EAST ST	Minor Arterial	Urban	No	Yes	0.41
EXCHANGE ST	Minor Arterial	Urban	No	Yes	0.06
GARDEN ST	Minor Arterial	Urban	No	Yes	0.55
GEORGE ST	Minor Arterial	Urban	No	Yes	0.07
GOFF AVE	Minor Arterial	Urban	No	Yes	0.16
GRACE ST	Minor Arterial	Urban	No	Yes	0.11
GROVE ST	Minor Arterial	Urban	No	Yes	0.07
HIGH ST	Minor Arterial	Urban	No	Yes	0.12
KIDS WAY	Minor Arterial	Urban	No	Yes	0.02
LONSDALE AVE	Minor Arterial	Urban	No	Yes	0.23
MAIN ST	Minor Arterial	Urban	No	Yes	1.83

PAWTUCKET
Rhode Island Highway Functional Classification

Name	Functional Classification	Urban/ Rural	NHS	Federal Aid	Miles
MARRIN ST	Minor Arterial	Urban	No	Yes	0.11
MINERAL SPRING AVE	Minor Arterial	Urban	No	Yes	0.41
N MAIN ST	Minor Arterial	Urban	No	Yes	0.10
PARK PL	Minor Arterial	Urban	No	Yes	0.06
PEARL ST	Minor Arterial	Urban	No	Yes	0.28
PINE ST	Minor Arterial	Urban	No	Yes	0.66
POWER RD	Minor Arterial	Urban	No	Yes	0.83
ROOSEVELT AVE	Minor Arterial	Urban	No	Yes	0.38
SPRING ST	Minor Arterial	Urban	No	Yes	0.17
SUMMIT ST	Minor Arterial	Urban	No	Yes	0.23
THURSTON ST	Minor Arterial	Urban	No	Yes	0.12
UNDERWOOD ST	Minor Arterial	Urban	No	Yes	0.19
WALCOTT ST	Minor Arterial	Urban	No	Yes	0.19
WEEDEN ST	Minor Arterial	Urban	No	Yes	1.28
ALFRED STONE RD	Major Collector	Urban	No	Yes	0.25
BEECHWOOD AVE	Major Collector	Urban	No	Yes	0.29
BENEFIT ST	Major Collector	Urban	No	Yes	1.59
BLACKSTONE AVE	Major Collector	Urban	No	Yes	0.09
BLOOMFIELD ST	Major Collector	Urban	No	Yes	0.04
CEDAR ST	Major Collector	Urban	No	Yes	0.32
COBBLE HILL RD	Major Collector	Urban	No	Yes	0.01
COLUMBUS AVE	Major Collector	Urban	No	Yes	0.95
CONANT ST	Major Collector	Urban	No	Yes	0.24
DAGGETT AVE	Major Collector	Urban	No	Yes	1.79
E PAWT INDUSTRIAL HWY	Major Collector	Urban	No	Yes	0.13
FOUNTAIN ST	Major Collector	Urban	No	Yes	0.98
GRACE ST	Major Collector	Urban	No	Yes	0.15
HIGH ST	Major Collector	Urban	No	Yes	0.33
MIDDLE ST	Major Collector	Urban	No	Yes	0.66
MONTICELLO RD	Major Collector	Urban	No	Yes	0.51

PAWTUCKET
Rhode Island Highway Functional Classification

Name	Functional Classification	Urban/ Rural	NHS	Federal Aid	Miles
N BEND ST	Major Collector	Urban	No	Yes	0.45
OAK HILL AVE	Major Collector	Urban	No	Yes	0.07
PIDGE AVE	Major Collector	Urban	No	Yes	0.44
PLEASANT ST	Major Collector	Urban	No	Yes	1.27
POND ST	Major Collector	Urban	No	Yes	0.44
POWER RD	Major Collector	Urban	No	Yes	0.58
QUINCY AVE	Major Collector	Urban	No	Yes	0.21
RANDALL ST	Major Collector	Urban	No	Yes	0.17
RHODE ISLAND AVE	Major Collector	Urban	No	Yes	0.16
RIDGE ST	Major Collector	Urban	No	Yes	0.27
ROOSEVELT AVE	Major Collector	Urban	No	Yes	0.66
S BEND ST	Major Collector	Urban	No	Yes	0.36
SAYLES AVE	Major Collector	Urban	No	Yes	0.63
SUMMER ST	Major Collector	Urban	Yes	Yes	0.16
SUMMIT ST	Major Collector	Urban	No	Yes	0.16
WALCOTT ST	Major Collector	Urban	No	Yes	1.12
WEEDEN ST	Major Collector	Urban	No	Yes	0.08
WEST AVE	Major Collector	Urban	No	Yes	0.78
YORK AVE	Major Collector	Urban	No	Yes	1.10
LYMAN ST	Minor Collector	Urban	No	Yes	0.18

*Contains 2 geographically separate roads

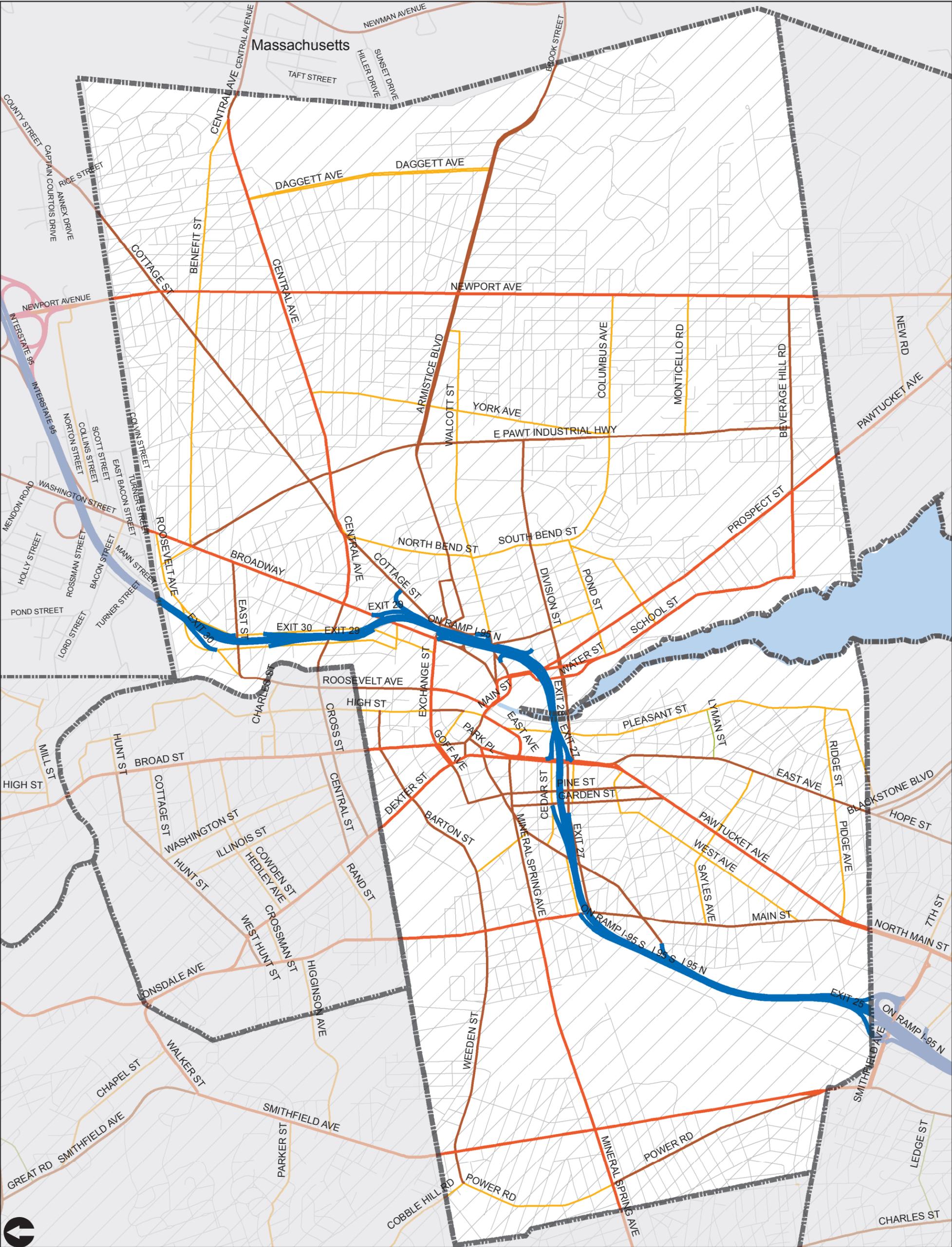
**Contains 3 geographically separate roads

***Contains 4 geographically separate roads

†Contains 5 geographically separate roads

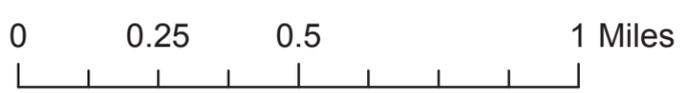
State of Rhode Island Highway Functional Classification

City of Pawtucket
Map Created on March 9, 2015



- Legend**
- Interstate
 - Other Freeways and Expressways
 - Principal Arterial
 - Minor Arterial
 - Major Collector
 - Minor Collector
 - Local

2013 Transportation Urban Area Boundary



This map is not the product of a Professional Land Survey. It was created by RI Statewide Planning Program for general reference, informational, planning and guidance use, and is not a legally authoritative source as to location of natural or manmade features. Proper interpretation of this map may require the assistance of appropriate professional services. RI Statewide Planning Program makes no warranty, express or implied, related to the spatial accuracy, reliability, completeness, or currentness of this map.