Town of North Providence,
Rhode Island

Comprehensive Community Plan

2013

NORTH PROVIDENCE COMPREHENSIVE PLAN
2013

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NORTH PROVIDENCE COMPREHENSIVE PLAN

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INTRODUCTION

The North Providence Comprehensive Plan provides a long-range guide for the Town's future with a *comprehensive* look at the community as a whole. It assesses historic and current trends, presents the vision residents have for the town, and provides the framework for reaching that vision. The framework incorporates goals, policies and recommendations that are short, mid-term and long term in nature. These focus on the following eight plan elements:

- Land Use
- Housing, including affordable housing,
- Economic Development,
- Services and Facilities,
- Natural Resources,
- Cultural Resources
- Open Space and Recreation, and
- Circulation

The North Providence Comprehensive Plan was originally approved by the State of Rhode Island on September 22, 1998. This document responds to the mandate of the State Comprehensive Planning and Land Use Act that the community comprehensive plan be updated periodically. This 2012 Plan e supersedes the previous plan and is in force upon its adoption by the Town Council.

Format of the 2012 Plan

The preparation of this Plan provided an opportunity for the Town to review its progress in meeting the goals established in the 1998 Plan, review the relevancy of these goals and policies relative to changing conditions in the Town and provide a chance to revise, delete or add goals the Town feels will further support its future vision. It is also the intent of this Plan to present the public with a more user-friendly document that more clearly articulates the vision of the Town and its objectives.

This Plan presents each element from the original Plan. Within each element, there is a brief discussion of the technical information from the 1998 Plan that required updating due to data inaccuracies or changed conditions. The complete Implementation and Recommendation Program of each element is presented and amended, as needed. Changes and amendments to the original Plan are based on the public participation program which included a series of public workshops and coordinated meetings with local committees, boards and commissions.

Regional Coordination

The Town of North Providence makes conscientious efforts to coordinate with adjacent towns to ensure consistency with their local comprehensive plans and to meet regional goals. This Plan is no different. Collaborative issues include:

- North Providence is an urban fringe community that provides a transition between the high density urban environment of Providence to the south and the lower density suburban communities of Lincoln, Smithfield and Johnston to the north. This plan therefore provides for similar transition within North Providence from higher density, urban land uses south of Mineral Spring Avenue to more suburban densities north of Mineral Spring Avenue.
- The former Camp Meehan property is a significant tract of open space that straddles the boundary between North Providence and Lincoln. The Town is working to ensure that this important open space is maintained for the benefit of the public in both communities.
- The Woonasquatucket and West Rivers are important natural resources for North Providence. The Woonasquatucket also flows through Glocester, North Smithfield, Smithfield, Johnston, and Providence while the West River flows through Lincoln, Smithfield, and Providence. The Town is working with its neighbors to promote the restoration and preservation of the Woonasquatucket and West River watersheds as environmental, recreational, cultural, and economic assets.
- The campus of Rhode Island College straddles the border between North Providence and Providence. Both communities are working together to support the College and to ensure that surrounding land uses are compatible.

Consistency with State Guide Plans

This Plan has been prepared to be consistent with the State Guide Plan, including the most recently updated elements:

- Land Use 2025 (State Guide Plan Element 121)
- Transportation 2030 (State Guide Plan Element 611)
- State Housing Plan (State Guide Plan Element 421)
- Economic Development Strategy (State Guide Element 211)
- Drought Management Plan (State Guide Element 724)
- Comprehensive Solid Waste Management Plan (State Guide Element 171)

Major Initiatives of the 2012 Plan

Land Use

The Town of North Providence is rapidly reaching build-out, with more than 90% of the available land area already developed. Population growth has slowed dramatically as the supply of readily developable land has been consumed and the rate of population growth of the State as a whole has declined. The emphasis of the 1998 plan on major new developments as an approach to accommodating community growth has therefore become irrelevant. This new plan replaces the emphasis of the 1998 plan on rapid growth and new development with an emphasis on slower growth, redevelopment and in-fill development instead. The changing emphasis from new development to redevelopment has implications for each of the eight plan elements as described below.

Housing

The 1998 plan placed an emphasis on construction of new multi-family housing, as opposed to single family residences, to ensure a steady supply of available and affordable housing for a growing population, particularly in the face of declining availability of land. Encouraging new, multi-family developments, particularly condominiums and apartment complexes, was seen as the most efficient way to rapidly increase the supply of available housing while minimizing impacts on the demand for community services. In retrospect, this policy was very effective, and the available supply of land in the community was rapidly consumed by development of large scale condominium and apartment complexes. Now that the Town is approaching build-out, the supply of land is no longer adequate to support this approach to creating housing opportunities. Although new construction will remain an important part of the Town's program for increasing the supply of affordable housing, this Plan focuses on three additional approaches.

The first is a new emphasis on finding ways to make existing vacant housing more available and more affordable. North Providence, like the State and the Nation, has been confronted with an epidemic of mortgage foreclosures. Mortgage foreclosures and a tightening of lending standards have left the community with an abundance of vacant housing units. These vacant units are driving down property values and detracting from the vibrancy of the neighborhoods in which they sit. To counteract this effect, this plan includes recommendations that will place an increased emphasis of housing programs on making existing vacant units affordable and available to current and future residents.

The second approach to meeting housing needs is facilitating conversion of former industrial complexes to residential uses. This approach acknowledges that the decline of manufacturing locally is most likely irreversible. It also recognizes that underutilized and poorly maintained industrial complexes are a potential source of blight if reuse is not encouraged. This approach also allows the Town to increase the supply of available and affordable housing while protecting the limited supply of remaining open space and ensuring the protection of the historic values of the industrial buildings that were once the heart of the community.

The third approach is in-fill development in areas where larger lots provide opportunities to make more efficient use of land in compliance with all zoning and subdivision requirements. This approach is in keeping with the State Guide Plan *Land Use 2025* which identifies the Town as within the public facility service area and therefore capable of accommodating higher density development. At the same time, this Plan recognizes that the Town contains many substandard lots of record that could lead to inappropriate development. It therefore also recommends a review of substandard lots of record and consolidation of parcels to ensure that all in-fill development will conform to current zoning standards.

Economic Development

North Providence is essentially a "bedroom" community, with most of its land area occupied by residential development. The 1998 plan concluded that industrial development and industrial redevelopment offered the best opportunities for economic growth, job creation, and tax base growth in the Town. Since that time the Town, like the State of Rhode Island and the nation as a whole, experienced a steady decline in industrial activity, particularly manufacturing. Many major industries closed down, moved away, or out-sourced their manufacturing operations to

overseas producers. As a result, the emphasis of the 1998 plan on industrial uses for economic development is no longer applicable. This Plan therefore provides a new focus on commercial development and redevelopment as the most appropriate approaches to economic development, job creation, and tax base growth for the future of the community.

As with housing, this plan recommends a hierarchy of commercial development goals. The primary emphasis will be placed on putting new businesses into existing vacant and underutilized commercial properties. The secondary emphasis will be on redevelopment of outdated and moribund commercial properties, and the third will be encouraging new commercial development on the few remaining tracts of available commercial land.

Service and Facilities

The 1998 Plan placed an emphasis on updating and expanding services and facilities, particularly water supply, sewer service, police and emergency services in order to better serve an expanding population. The exception was fire protection, which was identified as an area for potential consolidation to improve service delivery. Most of the goals enunciated in the 1998 Plan for updating and expanding services and facilities have been met and the Town is presently well served by its facilities. In addition, the Fire Department has been consolidated with the closing of the Geneva station and the goals for that Department have been met as well.

This Plan recognizes that the existing services and facilities are adequate to meet existing and projected needs without further expansion. The new challenge is to find a way to continue to fund the maintenance and operation of the current systems over the long term. This Plan contains several recommendations to help improve the tax base to ensure the availability of future funding for police, emergency services and the school department and it also includes specific recommendations that will help the Town ensure necessary funding for repair and maintenance of roadways, sewers, and water systems.

Natural Resources

The 1998 Plan recognized the importance of the few remaining natural areas in the community and emphasized the importance of the Woonasquatucket and West Rivers with associated wetlands as critical natural resources worthy of protection. This Plan does not depart significantly from the approach to protection of natural resources contained in the 1998 plan, but it updates some of those approaches. In particular, this Plan places a greater emphasis on floodplain protection, natural hazard vulnerability assessment and hazard mitigation, in recognition of new state guidelines in these areas. This Plan recognizes that the Town now has a community Land Trust to acquire important properties. It also includes recommendations for implementing updated measures for the protection of natural resources short of acquiring properties including programs for purchase of development rights, transfer of development rights (TDR) and securing conservation easements.

Cultural Resources

The 1998 Plan encouraged protection of historic resources by providing a series of recommendations to improve protection. Only one of these, the recommendation to implement historic district zoning, was actually fully implemented. Other important recommendations seem to have fallen by the wayside. This Plan reiterates most of the policies and

recommendations of the 1998 plan almost verbatim with minor editorial changes. However, this Plan also includes a new recommendation that the Town require an assessment of impacts on historic and cultural resources as part of the site plan review process. This recommendation is provided to help prevent accidental damage or destruction of historical resources due to construction activities.

Open Space and Recreation

Like the 1998 Plan, this Plan seeks to ensure an adequate supply of open space for the community and to ensure that all residents have access to recreational facilities. Unlike the 1998 Plan, this plan encourages the Town to secure open space without adding formal recreational facilities, such as basketball courts, ball fields, or formal picnic areas in order to provide more opportunities for passive recreation. This plan encourages use of Town owned properties for multiple recreational uses, rather than single purpose facilities and recommends a town wide system of parks providing opportunities for both active and passive recreation.

Circulation

The 1998 Plan recognized that the private automobile is the preferred means of transportation for most North Providence residents. This Plan also recognizes that reality and includes recommendations for enhanced automobile transportation including a pavement management program, access management plans for major roadways and a reassessment of parking requirements. However, this Plan also seeks to encourage alternative modes of transportation such as measures to encourage transit use and efforts to retain and improve existing transit service despite fiscal constraints. This Plan also recommends more improvements for pedestrians and bicycles, including a multi-use trail linking residential neighborhoods with parks and recreation sites across the northern part of the town.

Public Participation Process

The preparation of this Plan involved the public through a series of public workshops and meetings. A general public workshop was held at the Town Hall in December of 2010. Several local committees were met with individually, including the Land Trust, Environmental Commission, Recreation Department, Fire Department, Police Department, Department of Education and Planning Board. Department heads were also interviewed and provided input. Prior to public hearings, a presentation was also given to the Town Council.

LAND USE

The Land Use Element presents information on historic land use trends, existing land use, potential development within the town, and future land use goals and policies. This element provides a future land use plan and recommends specific actions for the future of land use in North Providence.

Background

According to the Rhode Island Comprehensive Plan and Land Use Regulation Act, the Land Use Element designates the proposed general distribution and general location along with the interrelationship of land use for residential, commercial, industrial, open space, recreational, community facilities and other categories of public and private uses of land. The Land Use Element is based upon the other elements contained in the Comprehensive Plan and must relate the proposed standards of population density to the capacity of the land and available or planned facilities and services. A land use plan map, illustrating the future strategy and land use policy of the municipality as defined by the comprehensive plan, is required. The land use plan must contain an analysis of any inconsistencies between existing zoning districts and the future land use plan. The analysis must consider zoning district boundaries and the standards and use requirements for zoning districts compared to land use goals and policies. The land use plan must also specify the process by which the zoning ordinance and zoning map will be amended to conform to the comprehensive plan. The Act requires that the zoning ordinance be brought into conformance with the future land use plan along with a schedule for doing so.

Land Use Setting/Constraints and Opportunities

The development of a community is affected by physical, economic and regulatory influences. The combination of these influences determines how the community will grow and develop. Physical influences include topographic conditions and natural constraints. Natural constraints such as soils, wetlands, floodplains, steep slopes, shallow groundwater, bedrock, etc. all influence the rate and location of development. National, regional and local economic conditions and the pressures of supply and demand affect development trends as does the location of the community in relation to major economic activities, regional job centers, transportation networks and the availability of water supply and wastewater disposal systems. Finally, the laws that govern development, such as local ordinances and state and federal government laws and policies, will affect development.

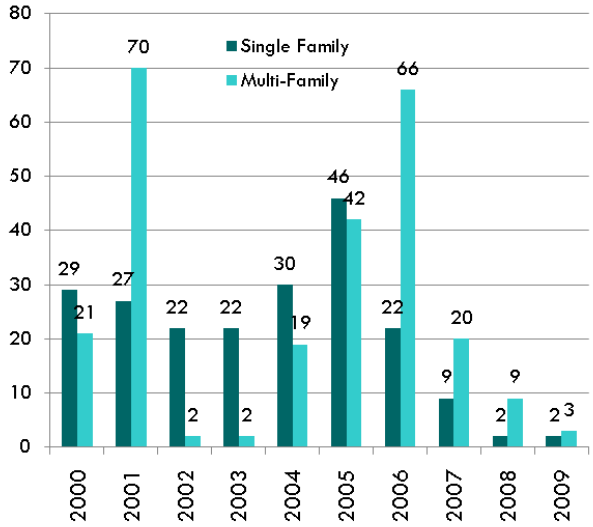
The following provides an overview of how these factors have influenced development in North Providence, particularly since the mid 1960s, when community growth was most rapid.

The 1965 Zoning Ordinance

This document, more than any other factor, most influenced the rate of growth in the town. The ordinance was in effect from 1965 to 1987, a 22 year period in which land developed for residential use increased by close to 700 acres and vacant land declined from 42% of all town lands to just 14% of that total in 1990. Liberal zoning densities and less restrictive parking and dimensional requirements resulted in the proliferation of multifamily development that resulted in the addition of 2,496 housing units from 1980 to 1988 alone.

Commercial growth, particularly along Mineral Spring Avenue, was also prevalent as commercial acreage doubled between 1966 and 1988. In 1987, significant density reductions were enacted, reducing the per acre allowances for multifamily residential development to nine units per acre. The town realized that the existing standards were creating developmental densities which were having an adverse impact on traffic congestion and the demand for town services.

Since that time, the 1987 Zoning Ordinance and restrictions on available undeveloped land have reduced the rate of new development. They also helped lead to a changeover from a primary focus on single family development to multi-family development, particularly through adaptive reuse of former industrial buildings and through redevelopment of underutilized properties. Figure LU 1 shows building permits issued between 2000 and 2009. It shows a marked downturn in housing starts after 2006. It also shows a noticeable switch from single family to multi-family permits.



Source: RI Economic Development Corporation, Town of North Providence

Figure LU 1: Building Permits Issued for New Construction between 2000 and 2009

Public Facilities

Water and sewer service have long been available in North Providence. Because both sewer and water service are readily accessible, there has never been a need for lots to have soils suitable for on-site wastewater disposal systems or the need to utilize groundwater for domestic water supply, making the development of land relatively easy. The entire Town of North Providence is located within the Urban Services Boundary as established by *Land Use 2025*; as such, residential development of 5+ units per acre is encouraged within the Town by the State as compatible with available public facilities.

The Natural Physical Setting

The topography of the town is shaped by three natural features, the Woonasquatucket River, the West River and Canada Pond. The town rises and falls from west to east forming drainage basins for these three major drainage ways. Topography rises from the Woonasquatucket River

east to Smithfield Road, declines to the West River at Douglas Avenue, rises again to Woodward Road, descends to Canada Pond and finally rises again rapidly east of Charles Street. These three watersheds are the most significant natural features in the town, accounting for its undulating topography and providing several dynamic vistas.

Metropolitan Influence

The Town of North Providence is located directly north of the City of Providence, the capital of the State of Rhode Island. It is adjacent to the economic center of the state and its economic core, including the cities of Providence and Pawtucket. Both cities border North Providence and both annexed parts of North Providence in the 1800s. Providence annexed industrial land along the Woonasquatucket River and the Old Cove Lands. Pawtucket annexed commercial and industrial land on the west side of the Pawtucket River. This left the bulk of the town with mostly rural and residential development by 1874, when North Providence's borders were finally set. What little industrial land remained was concentrated in the mill villages along the Woonasquatucket and West Rivers.

In the 1950s and 1960s, the Town of North Providence became an attractive residential community for people from Providence and Pawtucket who wished to move away from more congested settings. People from Providence moved north, while those from Pawtucket moved west to purchase single family homes, through the variety of programs made available by the federal government. The Veterans Administration and the FHA (Federal Housing Administration) were the two main agencies providing funding at that time. Commercial establishments were developed to support this growth, particularly in the older mill village of Centredale. Other development occurred in the populated areas of Fruit Hill and Marieville.

During the 1970s and 1980s development reached into formerly rural areas north of Mineral Spring Avenue. This development took the form of new single family subdivisions, apartments and condominiums. New apartment construction occurred along Douglas Avenue, while condominiums dominated the area near Smithfield Road and Louisquisset. Single family homes were primarily developed in the western part of town. Without a true town center, North Providence's commercial growth was characterized by strip development, particularly along Mineral Spring Avenue. This road, with its extensive retail and service base, is now the commercial heart of the town. It stretches roughly 2.5 miles from Pawtucket to Centredale.

North Providence is easily accessible from Providence and Pawtucket, hence the attraction for families from these areas. Access is provided along local streets such as Admiral, Smith, Charles, Douglas and Mineral Spring Avenue. Major highways also serve the town including, Route 146 (Louisquisett Pike) and Route 95 to the east and Route 295 to the west.

The 1966 Comprehensive Plan

When the Town's 1966 Plan was developed, virtually the entire northern half of North Providence was developed and Mineral Spring Avenue had begun to take shape as the town's commercial corridor. The plan recommended medium density development north of Mineral Spring Avenue, with a mix of commercial, institutional, professional, and residential uses along the roadway itself. The plan was never adopted and had limited influence upon the development that occurred after that period.

The 1998 Comprehensive Plan

In the early 1990s, the Town hired a consultant and prepared a new Comprehensive Plan that was adopted by the Town Council in 1992 and approved by the State after undergoing several revisions. This plan was the first to recognize that most of the readily developable land in the Town was already developed, focusing on infill development and on redevelopment of underutilized properties. The 1998 Plan provided detailed findings and set numerous goals and policies that have been used by Town officials to guide development and redevelopment throughout the Town. The 1998 Plan provided the original basis for this new Comprehensive Plan.

Land Use Trends - Historic Profile

In 1966, when the first land use inventory was conducted, the vacant or open space land use category represented 42% of all land within the town. A full 1,625 acres remained open at that time. Prior to 1996, development had been concentrated in the southern portion of the town and along its east and west borders. The mill villages of Greystone, Centredale, Allendale and Lymansville formed the western corridor. On the east, residential growth spread into Marieville from Providence and Pawtucket. Subdivisions were being developed in Woodhaven, Lee's Farm and Gillen Plat. In-fill development continued to occur on the vacant platted lots in the town.

North Providence has matured to an almost fully developed suburban community. This is supported by Table LU 1, which shows a comparison of major land use categories between 1988, 1995 and 2004. Three factors emerge from this comparison. One is residential development is the number one land use category, representing 65% of all land developed. The movement away from a manufacturing base to a commercial based economy is also evident as indicated by the loss of industrial acreage. Finally, vacant land has decreased over the years as infill development occurs.

Table LU 1: Summary of Land Uses, 1988, 1995 and 2004.

Land Use	1988 (acres)		1995 (acres)		2004 (acres)	
Residential	2371.8	64.0%	2451.8	66.1%	2410.1	65.0%
Commercial	317.6	8.6%	323.7	8.7%	301.0	8.1%
Industrial (including Waste Disposal, Mines, Quarries)	121.5	3.3%	119.7	3.2%	80.0	2.2%
Roads and Utilities	41.1	1.1%	41.1	1.1%	42.8	1.2%
Vacant Land/Urban Open Areas	33.5	0.9%	18.7	0.5%	13.8	0.4%
Institutional/Public Other	154.2	4.2%	159.6	4.3%	148.5	4.0%
Agriculture	29.6	0.8%	21.9	0.6%	8.9	0.2%
Forested and Vegetated Areas	319.0	8.6%	254.8	6.9%	474.9	12.8%
Water	70.7	1.9%	70.7	1.9%	80.2	2.2%
Developed Recreation	112.9	3.0%	114.7	3.1%	124.4	3.4%
Wetlands	136.1	3.7%	131.3	3.5%	23.5	0.6%
Total Acres	3708.0		3708.0		3708.0	

Source: RIGIS

Existing Use of Land

Map 1 is a map of existing land uses (2004) using data from RIGIS. The following provides a detailed description of these land uses by neighborhood. The neighborhood boundaries used in this discussion are shown on Map 2. Map 3 shows existing zoning classifications.

Centredale

Both the old and the new town halls are located in Centredale, making it the Town's informal "capital". Commercial uses are also concentrated along Smith Street and Mineral Spring Avenue in Centredale, making it an important commercial center at the intersections of Smith Street with Mineral Spring and Woonasquatucket Avenues. Industrial uses are limited to clusters along the Woonasquatucket River west of Waterman Avenue and Smith St. Most of the residential land is occupied by single family residences on small lots although there is also a large amount of elderly housing located in Centredale. Maple Gardens and Sunset Terrace are two such housing developments. Another elderly housing development is Brook Village Manor located along the Woonasquatucket River in the south of Centredale.

The Centredale School is located south of Mineral Spring Avenue and east of Smith Street. This school includes grades K-8 and occupies 7.3 acres of land. A number of retail and service establishments are also located in Centredale. The Centredale business district is located within the Centredale by-pass on Smith Street. The Old Town Hall is located on the south side of Mineral Spring Avenue. The existing Town Hall is located at 2000 Smith Street.

Mineral Spring Avenue in Centredale has numerous uses associated with it from Locust Avenue to the Centredale by-pass on both the north and south sides. The existing land use pattern consists predominantly of commercial uses with some remaining single family homes and two- to five-family dwelling units. There are also apartments east of Locust Avenue.

Greystone

Greystone is located just north of Centredale in the northwest corner of North Providence, bordered to the west by the Woonasquatucket River, which also serves as the boundary with the Town of Johnston. It is generally bordered to the east by the Wenscott Reservoir, the Riverview Meadows subdivision and Smithfield Road. The Town of Smithfield provides the northern border.

Greystone has historically been more industrial than commercial and still has the aura of a mill village. However, with the recent conversion of the mill to residences, residential uses now dominate this neighborhood. Outside of the mill village, the majority of the residential development is single family homes in older subdivisions on relatively large lots. There is a large tract of vacant land in the northeast part of Greystone. Part of that land is the Peter Randall Reservation and the balance is residentially zoned land that serves as a buffer around the former town landfill. Commercial uses encompass only a small amount of the surface area.

The existing land use patterns in this area are quite diversified in nature. The area contains a variety of residential uses, industry, open space, and business. The uses in this area range from the very dense condominiums and two- to five-family units in the older neighborhoods to

medium density housing in the Woodhaven Subdivision which contains lots of 9,000 to 12,000 square feet.

Three subdivisions in the area generally represent the majority of single family development. The first is the Woodhaven Subdivision located to the east of Waterman Avenue adjacent to the Peter Randall Reservation and Greystone Park. The Windsor Plat is another subdivision located in the area. This subdivision is situated between Woodhaven, the northern part of this subdistrict, and the Greystone School. A relatively new development in this planning district is the Riverview subdivision. This subdivision extends east from Smithfield Road along the Wenscott Reservoir. Another major housing site is the mill housing originally associated with the Greystone Mill. These homes are located along Waterman Avenue in the vicinity of Greystone Avenue and are generally represented by duplexes and multi-family structures.

The apartment developments in the area include Brentwood and Stoney Brook. Both are located on the west side of Smithfield Road south and west of the Wenscott Reservoir. Both of these developments have high unit densities. Two of the more prominent land use features of the area include the Peter Randall Reservation and the former town landfill. The Peter Randall Reservation occupies 36.6 acres of land and is located to the east of Woodhaven and south of the landfill. The former landfill is located to the south of the Smithfield town line and west of the Wenscott Reservoir. The landfill, now closed and capped, occupies 7.1 acres of land and is bordered to the west and south by a substantial amount of vacant town land.

This planning district is also home to Greystone School, which includes grades K-8, located south of the Windsor subdivision and west of Waterman Avenue. It occupies 9.1 acres of land.
A great deal of open space and recreational acreage is located in the Greystone Area. The majority of the vacant land is located adjacent to the landfill and the Peter Randall Reservation. The Town of North Providence owns approximately 40 acres of vacant residential land to the west and south of the landfill. The vacant land on the eastern side of the landfill and across Smithfield Road is privately owned.

Recreational areas include Greystone Park, Fells Park, and the Peter Randall Reservation. Greystone Park is located between Waterman Avenue and the Woodhaven Plat and occupies 11.5 acres of wooded and open space area. Fells Park is located off of Waterman Avenue on Larchmont Street and occupies .5 acres of land used for both passive and active recreation. As mentioned earlier, the Peter Randall Reservation is a prime land use feature of this area, providing bike trails, hiking paths and picnic facilities.

Woodville

The Woodville Neighborhood occupies the north central portion of town extending from Mineral Spring Avenue to the Smithfield and Lincoln town lines. The western border of this planning area is Smithfield Road and the Wenscott Meadows subdivision. The eastern border is at Woodward Road and the Louisquisett Condominium Development. Douglas Avenue cuts through the area, from Mineral Spring Avenue north and west across the Wenscott Reservoir.

There is no industry in this area. The area is predominantly residential except for a concentration of commercial activity along Douglas Avenue and Mineral Spring Avenue. The

area is dominated by single family residences on small lots, having been developed for the most part in the 1960s through 1980s. Apartment and condominium development is concentrated along Mineral Spring Avenue and along Douglas Avenue North of Mineral Spring. Apartment and condominium uses are found on both sides of Douglas Avenue and extend southwest toward the Longview Reservoir. Single family subdivision development dominates the center of this area, in the form of the Lee's Farm Subdivision. A second major subdivision is located to the south and east of Lee's Farm from Angell Road to the West River.

The eastern section of this planning area includes the largest condominium development in North Providence; the Louisquisset Condominiums. With roughly 409 dwelling units on 119 acres, the Louisquisset property is the Town's first mixed use planned development. It was combined housing with a recreational/open space use (golf course).

A number of significant recreational and open space uses exist in this area, including Governor Notte Park on the east side of Douglas Avenue at Wenscott Reservoir; Camp Meehan, a 26 acre open space parcel located adjacent to Notte Park; and Lepore's Farm, one of few remaining farms in the Town of North Providence. The Wenscott Reservoir, the largest water body in the town, provides panoramic views across the water to Camp Meehan and Notte Park from Douglas Avenue. The West River flows southward out of the Reservoir roughly parallel to Douglas Avenue down across Mineral Spring Avenue and into Geneva Pond.

Public uses in Woodville include Birchwood School, off Brookfarm Road, which occupies over 8 acres of land just south and east of Lee's Farm. The Longview Reservoir, a covered 8.25 acre water storage tank, is located on Mineral Spring Avenue at the corner of Smithfield Road.

Mineral Spring Avenue is the center of commercial development in the town, and the Douglas Avenue/Mineral Spring Avenue intersection is the center of commerce in Woodville. It is one of the busiest commercial centers in town. A variety of uses occupy the Woodville segment of Mineral Spring Avenue, ranging from apartments and condominiums to retail and service establishments. Commercial uses include shops and restaurants, convenience stores, and the recently developed Lowes Home Improvement Center.

Marieville

Marieville is the village that occupies the easternmost part of North Providence. It is bordered on the west by Woodward Road and Thelma Street. Its southern boundary is the City of Providence. Pawtucket provides the eastern boundary and the Town of Lincoln is the northern boundary. Route 146 divides Marieville into western and eastern parts while Mineral Spring Avenue bisects it east/west. The other major roadway in Marieville is Charles Street, running northwest to southeast along the eastern side of the district. The intersection of Mineral Spring Avenue and Charles Street is generally considered the center of the Marieville business district.

Despite the concentration of commercial uses on Mineral Spring Avenue and Charles Street, residential uses still predominate in Marieville. The area east of RI-146 was developed first as an extension of urban development from Providence and Pawtucket. As a result, development was fairly dense, typically with 3,000- to 5,000-square foot lots. Significant numbers of two- to five-family units were constructed, particularly along Charles Street from Providence north to

the Gillen plat area. Development to the west of Route 146 has not been as dense, except for a concentration of multi-family units along Mineral Spring Avenue.

Commercial development in this area extends along Mineral Spring Avenue from Spring Plaza, just east of Route 146, to Pawtucket and along Charles Street from the Providence line to just north of Mineral Spring Avenue. There is still a significant amount of open land in the district, mostly devoted to transportation, drainage, and utilities. Land along Route 146 provides a green belt through the area. A large amount of land, over 30 acres, is occupied by a utility easement between Route 146 and the Marieville School. Canada Pond and wetlands associated with the stream that flows from the mineral spring into Canada Pond help provide open space and visual relief in this otherwise densely developed area.

Entering North Providence from Providence on Charles Street, the area is characterized by a mix of uses dominated by commercial service activities. There are numerous two- to five-family residential structures as well, particularly in the area of Volturno Street. The Fogarty Rehabilitation Center is also located off Volturno Street in this area. Other major uses in this area include a restaurant on Josephine Street and an apartment complex at the intersection of Charlotte and Hurdis Streets. Further north on Charles Street, the mix of commercial uses continues with several automotive uses. Commercial uses intensify approaching the Mineral Spring Avenue intersection.

As noted above, the Marieville Business District is centered on the intersection of Charles Street and Mineral Spring Avenue. It is characterized by a mix of uses including restaurant, retail, service and financial institutions. Major tenants include the AFL-CIO, Citizens Bank, White Cross Pharmacy, and Walgreens. From the Mineral Spring/Charles intersection east to Pawtucket there are mixed uses (commercial/residential) including both retail and several multi-family dwelling units.

Mineral Spring Plaza, with a Super Stop & Shop and a commercial storage facility, is located on the south side of Mineral Spring Avenue on a 5.76 acre parcel adjacent to Route 146. Gillen Plat, a residential subdivision with lots ranging from 5,000 to 7,500 square feet is located off Charles Street. Residential subdivisions continue in the north, with the Longmeadow and Lojai Estates subdivisions. These developments have lots ranging from 7,000 to 20,000 square feet. Municipal uses in this area include the Marieville Fire Station and the Marieville School.

The western side of Route 146 from the Providence city line north to Mineral Spring Avenue is dominated by single family homes. There are several condominium developments located on Woodward Road (at Smart Street) and the area has significant amounts of vacant land along the City line adjacent to the former site of American Tourister in Providence. In general, lots average 4,000 square feet (11 units/acre) with the exception of a subdivision on the city line at Gale and Cassisi Courts with lots of 8,000 to 11,000 square feet on average.

Other uses in this area include the North Providence Little League East on Ivan Street adjacent to Route 146, and the Whelan Elementary School on the south side of Mineral Spring Avenue.

Mineral Spring Avenue west of Route 146 is characterized by a mix of residential and commercial uses with a significant number of two- to five-family dwelling units, particularly on

the south side of Mineral Spring Avenue. On the north side, commercial uses intensify beginning with the City View Plaza. Just north of the commercial area is a residential area that stretches from Route 146 west to Woodward Road and north to the Lincoln town line. House lots in the southern section of this area, which average approximately 7,000 square feet and lot sizes generally increase near and north of Lydia Avenue where houses are on lots of 10 to 15,000 square feet.

The Town is concerned about the deteriorated condition of some homes and buildings in Marieville along Charles Street and near the Pawtucket line. It is important to ensure that these areas are maintained and properties are addressed as issues arise.

Lymansville

Lymansville is located in the southwest corner of North Providence. It is bordered to the west by the Woonasquatucket River, which also serves as the Johnston/North Providence town Line. The eastern boundary is just west of Fruit Hill Avenue. To the south it is bordered by the City of Providence, and to the north by the stream along Humbert Street and Lawrence Road.

Lymansville is a former mill village developed in the early 1800s and exhibits land use patterns typical of an older style mill community.. The village is characterized by a mix of industrial, residential, commercial, and public uses. Although the mills that once provided the industrial cores of the village have now been redeveloped for multi-family housing, there is still some industrial land along the Woonasquatucket River west of Waterman Avenue.

There is a small commercial district along Woonasquatucket Avenue between Lyman Avenue in Lymansville and Intervale Avenue in Allendale. This shopping area serves both neighborhoods with convenience shopping south of Mineral Spring Avenue. It contains the Lymansville Plaza and other retail and service uses. Multi-family residential uses extend along Woonasquatucket Avenue mixed with some single family homes.

Two major condominium developments, Wildflower Commons and River Edge are located along Woonasquatucket Avenue. Wildflower Commons is located on the east side of Woonasquatucket Avenue near the Providence city line. River Edge is located on Eric Place along the Woonasquatucket River. Land east of Woonasquatucket Avenue contains a multitude of single family homes on lots ranging from 6,000 to 10,000 square feet in area. Further south, toward the Providence line, are more single family homes with average lot sizes of 5,000 square feet. This area also contains several vacant residential lots which have the potential for infill development.

The Town is concerned about the deteriorated condition of some homes and buildings in Lymansville. It is important to ensure that these areas are maintained and properties are addressed as issues arise.

Allendale

Allendale, like Lymansville and Greystone, is an historic mill village, having originally been developed around the Mill at Allendale. This neighborhood is bounded on the west by the Woonasquatucket River, on the north by Centerdale, the south by Lymansville and on the east

by Fruit Hill. Land use in Allendale is predominantly residential, with lot sizes ranging from 3,200 to 6,000 square feet in area. Commercial development is concentrated along Woonasquatucket Avenue and Smith Street on the north end of the neighborhood, just outside Centredale, and adjacent to Lymansville at Lymansville Plaza. There is also still a small amount of industrial land West of Woonasquatucket Ave along the river north and south of Warren Avenue. Recreational Uses in Allendale include the North Providence Little League West located located on the Woonasquatucket River in the vicinity of Rockwell Avenue. It occupies a total of six acres of land and includes a field house and concession stand. The only Town owned land in this neighborhood is the Dr. E.A. Ricci School. This Elementary School is located on Intervale Avenue and occupies 14.7 acres of land, providing open space and recreational facilities in an otherwise very densely developed neighborhood.

Fruit Hill

Fruit Hill is a predominantly residential neighborhood that extends roughly from Rhode Island College north to Mineral Spring Avenue. It includes St. Joseph's Hospital (Fatima Unit) on the eastern side, with the western border extending along Fruit Hill Avenue from Mineral Spring Avenue to Rhode Island College.

Major thoroughfares in this area include; Smith Street (Route 44), which bisects the area from northwest to southeast and Fruit Hill Avenue, which bisects it from southwest to northeast. Smithfield Road and High Service Avenue from its eastern border provide access to Fatima Hospital.

Single family residential uses cover most of the land in Fruit Hill, occupying 340 acres of the total 609 acres in the neighborhood, or 56% of the total land area. The second largest land use category is Institutional, occupying 86 acres (15%) of the area. These uses, while they occupy far less land than residential uses, are the dominant cultural features in this area. The major institutional uses are Rhode Island College, the Fatima Unit of St. Josephs Hospital, Franciscan Missionary and the St. Mary's Home.

There is a fair amount of forested land in Fruit Hill. In total, 73 acres (12% of this area) is forested, the majority of which is located between Rhode Island College and Franciscan Missionary and also to the rear of the hospital. Other vacant lands exist scattered throughout the residential neighborhoods and represent in-fill potential.

Commercial uses represent 5% of the total land area and are concentrated on Smith Street and Mineral Spring Avenue (South Side). The Town of North Providence has several public facilities in this area, including the McGuire School on Cottage Avenue, Evans Field on Smith Street and the Fruit Hill Fire Station on the south side of Fruit Hill Avenue between Rhode Island College and the Franciscan Missionary.

Along the south side of Mineral Spring Avenue the land use is predominantly single family in nature from near Raymond Avenue, to beyond Central Avenue. Commercial uses begin just west of Cottage Avenue and intensify at the Mini Mall on the corner of Cottage Avenue, including the McDonalds. From this point east, there is a mix of commercial and residential properties to the High School.

Residential development in the northern segment of Fruit Hill varies widely from relatively small lot development, west of Fruit Hill Avenue (3,200 to 5,000 square feet) to larger lot development to the east of Fruit Hill and Smithfield Avenues. Here lots begin at 5,000 square feet and increase to 7,000 square feet and even over 12,000 square feet in size. The largest lots are located in the triangle formed by Fruit Hill Avenue, Smithfield Road and Willow Street. Infill potential exists to the west of Fruit Hill Avenue.

Residential development south and west of Fruit Hill Avenue and Smith Street is dominated by typical subdivision development on lots of 8,000 to 10,000 square feet. The exception is the Adelaide Avenue, Hawkins Boulevard area, where lots are consistently over 10,000 square feet and as large as 19,000 square feet behind the St. Mary's Home.

Directly south of this area is Rhode Island College on the east side of Fruit Hill Avenue on the west side, there is residential development on lots ranging from 5,000 to 7,000 square feet near the intersections, and larger lots (10,000 to 20,000 square feet) along Fruit Hill Avenue itself.

To the east of Rhode Island College is a well laid out residential district that contains lots that average 5,000 square feet. This area stretches from the college south to the town line and east to Olney Avenue and includes streets like Femcrest, Observatory and Gardner Road. From Olney Avenue east to Smith Street, there is more of a mix of single family and two-five family dwelling units. Single family homes are typified by 4,000 to 6,000 square feet lots.

Residential development from Smith Street east, including Fruit Hill Avenue, is typified by 4,000 square foot single family home developments to Smithfield Road. An area of larger lots exists below Linwood Street where lots average between 8,000 to 12,000 square feet in the area of City View Circle, Briarwood and Redwood Drives, and J.F. Kennedy Circle. The lower end of Smithfield Road has several condominium developments and the Goldencrest Nursing Home.

Land along Fruit Hill Avenue is residential for its entire length. Single family development dominates the roadway with some of the more stately properties in North Providence existing in its northern portion. Except for the Fatima Unit of St. Joseph's hospital, High Service Avenue is also dominated by single family homes, except for a limited number of doctors' offices and other related uses in the vicinity of the hospital. Just north of Providence along Smith Street there are a number of Victorian homes on the west side of the street, with apartments, two- to five-family dwellings and mixed uses prevalent until the Fruit Hill shopping district This district stretches north from Wellesley Avenue to Lookout Avenue and includes Evans Field. It includes a wide variety of automotive, retail, service and financial uses. The dominant commercial property is the Village Plaza on the north side of Smith Street with commercial uses such as Gold's Gym, Subway, and a Shell gasoline station. Evans Field, a developed recreational site a little over four acres in size, is located at the south west corner of Smith Street and Fruit Hill Avenues. Land along Smith Street north of Fruit Hill Avenue is occupied a combination of single family, commercial and mixed uses that exist for the remainder of this district.

Geneva

Geneva is located in the south central portion of North Providence. It is bordered in the north by Mineral Spring Avenue and on the east by Thelma Street. The western border meanders

from just west of the High School along High Service Avenue east to Smithfield Road and south to the town line. The town line forms the district's south border. Major arterials in the area include Douglas Avenue (Route 7) which serves to divide the district as it passes north to south. Mineral Spring Avenue (Route 15) forms the northern border from the High School east to Thelma Street. Smithfield road is located in the western part of the village, entering just below the High School, passing to the east of Captain Stephen Olney Park and exiting the town next to the Valley View Shopping Plaza.

As with most of the districts in North Providence, residential uses make up the majority of the land use in Geneva. One hundred fifty acres, or 50% of the area is dedicated to residential use, whether it be single family homes, apartments or condos. Public and other institutional lands are the second major category and represent some of the larger uses, including the Stephen Olney Park, North Providence High School, Stephen Olney Elementary School, and the Alexander Street Ballfield. Commercial uses represent 13% of development in Geneva. These uses occur in two locations, one along Douglas Avenue and the other along Mineral Spring Avenue. A small amount of industrial use exists at the border with Providence and there is some vacant commercial and industrial land.

Beginning in the northwestern corner of this subarea on Mineral Spring Avenue, is the North Providence High School, Library and Natatorium. The site covers 19.3 acres of land which include both a football and baseball field. Moving east toward Douglas Avenue, there is a mix of commercial and residential uses which become predominantly commercial from Douglas Avenue to Terry Street. This segment of Mineral Spring Avenue is heavily settled and includes Howe Plaza and Shaw's Market.

Residential uses south of Mineral Spring Avenue and west of Douglas represent a mix of densities and housing types. Directly adjacent to the High School is an area of medium-high density housing with a number of two- to five-family dwelling units. A number of vacant lots exist in this area, which were platted with extremely small lot sizes (2,000 square feet average). This trend continues down to Smithfield Road and east to Salem Drive, where a larger lot subdivision has been developed which includes Plymouth Road, Caldar Road, and Don Avenue. Lots in this area average 10,000 square feet (1 to 4 units per acre). In the area south of Smithfield Road, just north of Stephen Olney Park, a second subdivision area was developed on lots that range from 5,000 to 10,000 square feet (medium high density).

The remaining residential area on the west side of Douglas Avenue is mid- to high-density as smaller 3,200 square feet lots were combined to form lots averaging 6,000 square feet. The southern end of Douglas Avenue is characterized by a mix of industrial, residential and heavy commercial uses. The industrial property is located at the town line with Douglas Manor located on the same side of the street. Moving north, commercial uses intensify into automotive repair and salvage operations particularly on the west side of Douglas Avenue, where they extend over 500 feet into a residential zone. Similar uses exist on the east side of Douglas up to Cushing Street. From Cushing Street north, Douglas Avenue is residential in nature until just before the Stephen Olney School where a retail complex has been built.

While Smithfield Road is generally residential in nature, it should be pointed out that the Valley View Shopping area exists just over the Providence city line. A concentration of condominiums

is located across the street, including the Golden Crest Nursing Centre. Stephen Olney Park dominates the landscape through the central portion of this roadway, with residences and condominiums located to the north.

To the west of Douglas Avenue and the West River is a medium to high density residential development with lots ranging from 4,000 to 8,000 square feet. Similar densities are present north of Alexander Street. South of Alexander Street, the densities increase with lots averaging less than 5,000 square feet in area. Although a large amount of vacant land exists, much of it is associated with the West River. Vacant commercial and industrial land associated with the former site of American Tourister forms the southern border with Providence.

Build-Out Analysis

A residential build-out analysis was done for the Town in the 1998 Comprehensive Plan. The purpose of developing a "Build-Out Analysis" for the Town is to estimate the rate of growth that can be anticipated in the future based upon a series of assumptions. The results of this analysis can then be related to the effect growth will have upon the delivering of services, while projecting its impact with respect to new or expanded facilities.

In developing the build-out for North Providence it was assumed that:

1. Development was based upon current zoning.
2. Subdividable lots were reduced by 15% to account for new roads.
3. Total build-out of approved projects that were not yet built was assumed.
4. A review of RIGIS wetland, soils, flood plain and groundwater resource mapping was made in conjunction with the development of this build-out projection. These natural resources were excluded from the calculation of build-out.
5. Replatting of older undeveloped areas was assumed.
6. Vacant tracts of land in the northern part of the town would be developed at 2.47 units per acre.
7. Common ownership of existing "lots of records" was not considered.
8. Infill development was analyzed on a lot by lot basis.

Using these assumptions, a lot by lot analysis was undertaken by the Town's consultant and the Planning Director to determine the potential number of units that could reasonably be developed.

Residential Build-Out

This build-out analysis was based on existing zoning. The build-out analysis estimated units that could be constructed on remaining buildable lots and provided a related estimate of the potential increase in population. To develop the population estimate, a household size of 2.4 persons per unit was assumed.

The analysis indicated that 958 units could be developed which would result in an increase in population of 2,281 people. This increase would represent a 7% gain in population over the 1990 Census figure of 32,090 to a build-out population of 34,371. The greatest potential for growth was found to occur in Greystone/Centredale and Woodville which had the largest

development potential as they contained most of the remaining buildable land. This was particularly true along the Town's northern border. Other areas with significant potential include the Marieville district where there was a potential for in-fill development on small lots.

The development potential in Fruit Hill and Geneva stems from the large amounts of vacant land zoned residential which is currently in institutional or recreational use. A major assumption utilized in the analysis was that all vacant land would be developed as zoned, even though that land was being used for some other purpose than the zoning would indicate.

The next step in the analysis was to estimate the growth rate that would occur and predict when build-out would be reached. This analysis reviewed building permits over a nine year period which indicated that an average of 81 lots per year was developed during that period. Realizing that development during the 1980s was fueled by a period of accelerated economic growth, the future growth rate was based upon a significant slowdown in development. A second factor considered in the growth assumption was that over time, development would slow in each successive decade due to the quality of the remaining land available. The results of these two considerations were to reduce growth by the following factors over the next three decades. Table LU 2 provides the results of this assumption in terms of the number of units per year that would be developed.

Table LU 2: Predicted Unit Development by Decade (1998 Analysis)

Decade	Decline per Decade	Units per Year	Projected Build-Out Units
1980-1990	-	81	-
1990-2000	81 units (35%)	52	520
2000-2010	52 units (40%)	31	310
2010-2020	31 units (50%)	16	128
TOTAL UNITS			958

The analysis predicted that total build-out would occur by the year 2018. The results of this build-out were applied to several of the Comprehensive Plan elements to determine the impact that projected growth would have on Land Use, Facilities and Services, Open Space and Recreation, Circulation, etc.

This build-out analysis appears to have come close although it did very slightly overestimate actual population growth. The population of North Providence as of the 2000 census was 32,411 as opposed to the 33,388 population predicted by the build-out. The US Census population estimate as of 2009 was 32,742 as opposed to the 34,082 predicted for 2010 by the build-out. As predicted by the build-out analysis, the rate of growth has slowed as available land becomes more and more scarce. It does appear likely that the predicted full build-out will actually be achieved within the next decade.

Commercial/Industrial Build-Out

The second aspect of the build-out analysis related to the potential development of commercial and industrial properties. Similar assumptions were used as for residential growth, but an additional factor was applied that related to the square footage of building area that could be developed from the land still remaining in the Town. To determine the amount of building area, a build-out factor was applied to each acre of buildable commercial and industrial land. A

review of the setback, parking and height requirements yielded a development multiple of 0.3. Applying this factor to the 71 acres of available vacant commercial and industrial land indicated a total potential building area of 21.42 acres or, in square footage, a total industrial and commercial build-out of an additional 933,055 square feet of building area.

To determine the level of growth that can be expected on a yearly basis, a review of past development trends was undertaken. For the period 1980 to 1988, 372,398 square feet of industrial and commercial growth occurred in the Town. This represents average yearly growth of 41,377 square feet. The percentage distribution of that growth was 94% commercial and 6% industrial for the period. Applying these same percentage assumptions to total build-out yielded an estimate of 900,702 square feet of commercial and 37,530 square feet of industrial growth.

Assuming the rate of growth would remain stable, the build-out analysis predicted the total development of commercial and industrial vacant lands would occur in 22.7 years for complete build-out by 2013. The majority of the industrial growth was predicted to occur along the Woonasquatucket River, the heart of the Town's industrial zone in 1998 while commercial growth was predicted to occur primarily as infill along Mineral Spring Avenue, Smith Street, and Charles Street.

In retrospect, the build-out analysis significantly overestimated the rate of industrial development and significantly underestimated the rate of commercial development in the Town. In fact, industrial land use in the Town actually decreased from 79 acres in 1990 to 70 acres in 2008 as vacant industrial properties (especially mills) were rezoned to residential and commercial uses in order to spur redevelopment. Commercial development, in contrast, increased from a total of 169 acres in 1990 to 301 acres in 2008, an increase of 132 acres. This is significantly higher than the predicted increase of only 20 acres (21.42 acres x 96% commercial) based on the availability of commercial land. The more rapid increase in commercial development was enabled by zoning amendments that changed the zoning on properties formerly zoned for residential or industrial uses in order to permit commercial development.

Future Land Use Plan

The Future Land Use Plan is the centerpiece of the Comprehensive Plan. It portrays in written and graphic form how a community envisions it will look in the future based upon the goals and objectives of its residents. It defines what types of activities will be allowed, where they will occur and at what densities.

The Future Land Use Plan is also a reflection of the goals and aspirations the Town has with respect to the other seven plan elements which include:

- Housing
- Economic Development
- Facilities and Services
- Natural Resources
- Cultural Resources
- Open Space and Recreation

- Circulation

In effect, the Land Use Plan is the "linchpin" that holds the entire plan together, expressing in land use terms the major policies of these elements.

The development of this plan was based upon a thorough analysis of existing zoning and land use and recent development trends. Key issues relating to land use were identified through the public participation process which included a public workshop in addition to regular meetings with the planning board. The issues raised during this process included neighborhood stabilization, the revitalization of the older neighborhood commercial districts and control of future development within the Town.

The Future Land Use Plan recommends that the town's zoning map and codes be revised to provide increased control over the future use of land and the re-use of existing properties. The primary focus of the recommendations is to relate future zoning more closely to the existing character and function of the residential neighborhoods, commercial district, industrial, institutional, and open space areas. Additionally, the Future Land Use Map identifies areas of remaining natural resources in the community deserving of protection. Particular attention is to the northern areas of the community where some tracts of open land still remain containing farmland, wetlands, watersheds of surface water bodies, and designated open space properties. These areas are identified for lower density use to protect natural resources, and to conserve the very limited supply of open space remaining in the community. Adopting suburban development densities near the Town's northern border also conforms better to the existing pattern of development in the neighborhoods north of Mineral Spring Avenue and helps provide a transition from the urban density of the commercial areas along Mineral Spring Avenue to the more rural and suburban patterns of existing development in Lincoln and Smithfield to the north. Other mechanisms include the use of best management practices for new drainage systems, environmental performance standards using overlay district(s), and controls on in-fill development on substandard lots of record in residential zones.

Recommendations

Redevelopment Overlay Districts

The Town is concerned that certain areas are becoming neglected and buildings, both residential and non-residential, are deteriorating, impacting surrounding neighborhoods. Revitalizing these areas can improve property values, employment opportunities, aesthetics, and overall quality of life for residents. Areas of concern include Lymansville and areas of Marieville.

It is recommended that the Town create and implement Redevelopment Overlay Districts (RODs). RODs are designated to preserve and revitalize older residential neighborhoods and commercial areas by allowing for modifications to base zoning districts and other application regulations. It can also establish special design standards for redevelopment, all of which should be consistent with this Comprehensive Plan and with *Land Use 2025: State Land Use Policies and Plan*. A Redevelopment Plan is the basis for the ROD. It reviews existing conditions and lays out an implementation strategy to reach a desired vision for the area. This vision

should be based on a formula that improves the local tax base. At times, RODs can be used to leverage funding for investment in infrastructure and other public redevelopment activities.

The Town should conduct a study to determine areas where a ROD should be established and develop unique Redevelopment Plans for each area. A Redevelopment Agency would also have to be created. It would be the agency to implement the Redevelopment Plans. Redevelopment agencies typically have the authority, through a town ordinance, to implement Redevelopment Plans. This would include leverage funding, issuing requests for proposals, and reviewing developer submissions.

Centredale/Mineral Spring Avenue Study

The area along Mineral Spring Avenue from approximately Central Avenue west into Centredale is designated on the Future Land Use Map as high density and medium density residential. To the east, Mineral Spring Avenue is dominated by commercial uses and designated as Commercial General. There are still residential homes along Mineral Spring Avenue in this area, intermittent with offices, small restaurants, and small businesses. Over the years, however, this area has felt the pressure to intensify the amount of commercial development.

It is recommended that the Town conduct a corridor study of this area to determine the best future land uses as a transition between the commercial areas of Mineral Spring Avenue into the village of Centredale. It is important that this study include a public participation program that reaches out to the adjacent neighborhoods, both north and south of Mineral Spring Avenue, as well as to the business and property owners along the roadway. The outcome of the study should be future land use designations and perhaps design standards that can be amended to the comprehensive plan, specifically the Future Land Use Map.

Mineral Spring Avenue – Zoning Boundaries

Currently, the boundaries of commercial zoning districts along Mineral Spring Avenue are a setback from the right-of-way. This produces many lots that are split between two zoning districts, particularly a residential zone and a commercial zone. With buffer setbacks from residential uses and because these lots are not deep, this produces an area that requires zoning variances to meet development requirements. To improve the feasibility of redevelopment, it is recommended that the Town review the boundaries of commercial districts along Mineral Spring Avenue and push the boundary to the property of those parcels that abut the roadway, where appropriate.

Stormwater Management

North Providence must manage its stormwater conveyance system to reduce pollutants that enter local water bodies. This is required under the two General Permits: Rhode Island Pollutant Discharge Elimination System (RIPDES) for stormwater discharges from Small Municipal Separate Storm Sewer Systems (MS4s) and from Industrial Activities at Eligible Facilities Operated by Regulated Small MS4s. North Providence is considered a small MS4 because it is an urbanized area and its stormwater system services a population less than 100,000. Under the requirements of these General Permits, North Providence will be required, among other tasks, to develop a stormwater management policy to reduce pollutants in stormwater discharges. The Town has a Stormwater Coordinator who is responsible for

drafting and implementing this policy and advising local boards and commissions as they make decisions regarding land use and infrastructure.

A critical component to meeting the requirements of the General Permit is to make improvements to the Town's existing stormwater conveyance system. This requires retrofitting existing public and private development with new stormwater system components that better control adverse impacts to environmental resources. The Town should seek funding sources for implementation of this component.

The Town's stormwater policy should include strategies for stormwater management for new development and redevelopment projects, particularly low impact design techniques. These strategies should be consistent with the State's Stormwater Design and Installation Standards Manual. They should also be incorporated into the Subdivision and Land Development Regulations, as appropriate.

Revised Parking and Landscaping Requirements

It is recommended that the parking requirements be reviewed and more efficient on-site parking strategies be explored, including parking maximums or shared parking. Parking lots take up valuable lot area and large areas of impervious surfaces have environmental consequences such as increased pollutants in storm water runoff. Experts in smart growth concepts have suggested parking maximums as opposed to marking minimums. Maximums place an upper limit on the parking supply either at individual sites or within an area. They should reflect the market reality of local conditions. Spillover parking should also be addressed when evaluating parking maximums. Strategies to address spillover parking that may encroach upon off-street parking in neighborhoods should be considered in the equation.

There are several businesses with different operation hours that could benefit from having access to neighboring parking lots that are empty. For example, the parking lots of churches that do not have services during the week or evening hours can be used for local restaurants that have lunch and dinner patrons. The Town, along the local business community, should explore opportunities for shared parking. Cooperative agreements are typically established between businesses and property owners to accommodate shared parking.

Landscaping requirements are also recommended to be included as a part of the parking or development regulations. A percentage of the total lot area, generally between 10 to 15%, would be required to remain open and/or landscaped. Further, landscaping requirements should also be used to incorporate stormwater best management practices to reduce pollutants in runoff.

Sign Regulations

The existing sign ordinance does not adequately control signage within the town. A complete revision of the ordinance is required to control signage within the variety of districts suggested in this plan. A general reduction in the size and height of the sizes currently allowed is required to lessen the visual impact of such structures.

"Lots of Record" Policy

Numerous court decisions concerning "Lots of Record" have been rendered in recent years. Some of these decisions have contradicted previous findings by the court, leaving towns like

North Providence in somewhat of a dilemma as to what policy to embrace that will be supported by the courts. The issue is whether existing substandard lots of record in North Providence can be developed when they do not meet minimum requirements of the overlying zoning district. The Town's policy has been that the original owner may develop a substandard lot of record to the extent that the right of development on the lot pre-exists the current zoning requirements and is therefore "grandfathered". However, upon a change in ownership, prior rights become null and void and any new development of land must conform to the applicable zoning standards. This policy has recently been subjected to legal challenge in North Providence and in other communities without consistent results. Because there are a large number of substandard lots of record in North Providence, a coherent and legally defensible policy on these lots is critical to the implementation of zoning and the control of in-fill development in the Town.

Over the period that the zoning map and ordinance is to be updated to conform to this Plan, the town should inventory substandard lots of record, should have its legal staff review applicable court decisions, and should develop a consistent policy on substandard lots of record to be included in the zoning ordinance.

General Setback Requirements

A complete revision of the setback requirements is recommended to relate these requirements to the new zoning districts. Particular attention is required to setback requirements with respect to commercial and industrial uses that abut residential districts. Also, changes to commercial setback requirements is required to reflect the difference between zones and the type of development the town wishes to encourage in these districts. Also included in this revision would be changes to setback and screening requirements where larger residential complexes abut single family residential districts.

As-Built Drawings

The town should require the submission of "As-Built" drawings for all developments. This would provide the town with an accurate record of what was actually installed, particularly as it relates to on-site utilities and their location on the site.

Future Land Use Map

Map 4 shows proposed future land uses in North Providence. The main purpose of the Future Land Use Map is to guide future land uses within the town. The following provides a descriptive intent of uses.

Residential Uses

Four categories of residential zoning are presented. They reflect an analysis of existing conditions and the desire and need to control future development in a sensible manner. The four types of residential uses to be presented closely mirror existing land use in terms of the density found in these areas or districts. Table LU 3 relates the residential use to the associated density to be prescribed.

Table LU 3: Residential Land Use Proposed Categories

Category	Average Density Range	Lot Size Density Range (SF)	Classification
General Residence	7 DU/Acre	6,400	High Density
Limited Residence	5-7 DU/Acre	6,401-8,000	Medium High Density
Single Family Residence 1	4-5 DU/Acre	8,001-10,000	Medium Low Density
Single Family Residence 2	3-4 DU/Acre	10,001-15,000	Low Density

*DU- dwelling unit

General Residence

This land use category incorporates much of the older more densely developed areas of the Town and the newer condominium complexes with densities equal to or exceeding six to seven dwelling units per acre. Included in this category are neighborhoods with "infill" potential (vacant lots between homes), particularly where a large number of 3,200 square foot lots exist. This land use category requires a minimum lot size of 6,400 square feet to encourage the grouping of pre-existing "Lots of Record" for residential development. It also established a minimum lot size consistent with existing single family development.

The general residence category will serve to indicate where multi-family housing presently exists and could be encouraged on a limited basis. The general locations where General Residence land uses would occur are:

- Marieville south of Mineral Spring Avenue
- Southwest portion of Woodward Road
- West of Douglas Avenue and west of Smithfield Road
- Along Waterman Avenue and Woonasquatucket Avenue
- Areas along Mineral Spring Avenue and Douglas Avenue
- Areas bordering Bonaparte Street and Octavie Avenue

Limited Residence

This category relates to the older, established subdivisions and neighborhoods that exist in the town that have 8,000 square foot lots as the norm for development. It also relates directly to the existing town-wide zoning standard of 8,000 square foot lots and generally represents subdivision developments north and south of Mineral Spring Avenue that were constructed in the 1950s and 1960s.

This category covers those areas where "Lots of Record" are on average, 4,000 square feet. The intent is to encourage the combination of these lots to create conforming 8,000 square foot lots. Housing is limited to single family and two family dwellings. Two family dwellings would be required to be on larger lots, i.e. 10,000 square feet minimum.

The medium high or limited residential land use category is the dominant residential category in North Providence and as such is located throughout the town. The heaviest concentrations of the Limited Residence land use are south of Mineral Spring Avenue.

Single Family Residence I

This third land use category represents areas restricted to single family use only. It covers areas of town where lot sizes presently average 10,000 square feet in area. This density category relates more closely to the existing subdivision development in the northern part of Town where lots have averaged approximately 10,000 square feet in size.

Single Family Residence II

The final land use category relates to the undeveloped areas in the extreme northern part of the town. This includes the land within Lee's Farm and other land around the Wenscott Reservation. The purpose of establishing this category, which would have 15,000 square feet minimum lots, is to provide an opportunity to create a transition between the Town of North Providence and its neighbors to the north, Lincoln, Smithfield, while providing an opportunity to create buffers between residential lots and the natural features that exist in this part of the Town.

Commercial Districts

In an attempt to control and enhance the character of the future commercial development in the town, the future land use plan identifies three types of commercial use in North Providence. These commercial land use categories are:

1. Commercial General
2. Commercial Village
3. Professional Office District

The purpose for developing these three categories, which will be further defined in a following section, is to:

- Solidify and define the function of the existing commercial areas,
- Control future development and the re-uses of existing building in a manner that enhances the function of these districts,
- Define the physical limits of the districts to avoid further strip or pocket development, and
- Protect the integrity of abutting residential districts from further intrusion by commercial uses.

In terms of general commercial growth, Mineral Spring Avenue is a local shopping area that provides a wide variety of services. While this district has grown, it has resulted in a change in the role the smaller neighborhood districts provide. In the past, shopping areas like Marieville, Centredale and Fruit Hill served the needs of the Town's population. Today that need is being provided, to a greater degree, by larger commercial complexes and regional malls. As the function of these smaller neighborhood shopping areas has changed, so has the need to continue providing the wide variety of services they have in the past. The new commercial districts must represent this change.

General Business

The General Business land use category includes commercial areas that are primarily vehicle-oriented due to their location along major roadways and at major intersections within the town. These areas are characterized by larger shopping complexes and wide variety of retail and services establishments. Mineral Spring Avenue is the primary location for this land use category. General Business serves to identify and define where these general business uses would be encouraged and controlled. It will also be the intent of this plan to limit future development with tighter zoning controls concerning site access, setback requirements (particularly from residential zones) signage controls, landscaping and lot coverage requirements.

There are three areas of general business activity. They are all located on Mineral Spring Avenue. From west to east, the first district includes that area from the vicinity of Central and Pleasant Avenues east to Smithfield Road. The second location extends east and west from Douglas Avenue and represents the heart of this type of commercial activity. The area included in this district includes properties fronting on Mineral Spring Avenue from Marblehead Avenue east to Elmira Avenue. The entire Lowes property is included in this district and forms the northern border of this area. No expansion down either end of Douglas Avenue is suggested. The third and final area extends from Friendship Street to Easter Street and includes the Woodward Road intersection.

Village or Neighborhood Business

The purpose of establishing a neighborhood commercial land use category is to recognize that certain areas of the Town are characterized by smaller commercial establishments that predominantly serve a particular neighborhood or segment of the Town's population. They contain a mixture of retail and service establishments that are different in scale from those found on Mineral Spring Avenue. In many cases residential uses are present in these Village districts either as standalone properties or in a mixed use setting (residential and commercial). Centredale, Marieville and Fruit Hill represent this type of village commercial development.

The protection and enhancement of these areas will be achieved by regulating future development and re-use to limit the nature of the businesses that could occur in these areas. Business types and sizes are limited to those that are neighborhood oriented. The expansion of uses such as auto sales, repair and service stations, wholesale establishment, fast food restaurants and larger retail or service uses is not allowed. Mixed uses of commercial and residential are allowed as they characterize these areas and have so for many years. Specific setback requirements, use limitations, signage requirements and other zoning regulations will be developed.

Village and neighborhood business land uses serve to define the extent of neighborhood improvement efforts that are illustrated in the **Economic Development Element**, particularly for those areas that represent the heart of such districts, specifically the village centers of Marieville, Centredale and Fruit Hill. These land uses also include areas dominated by commercial uses along the principal roadway network within the Town, particularly along Charles Street and Smith Street. Smith Street south of Centredale to Miles Avenue is included due to the mix of uses that exist. They range from industrial to commercial to residential. While

the character of these areas will remain mixed for many years to come, an attempt will be made to slowly convert this area to uses more complimentary to adjacent residential districts.

A second area, not directly associated with a village area, is located at the southern end of Douglas Avenue just north of the industrial sites on either side of Douglas Avenue. Village and neighborhood land uses extend north to Cushing Street and include commercial uses on the east side of Douglas Avenue.

Finally, the entire length of Charles Street from the Providence city line north to the Marieville Village proper is designated in this land use category. This area is characterized by mixed uses for its entire length, including a significant number of automotive uses. The intent is to encourage the re-use of these sites for businesses more suitable to the adjacent residential neighborhoods.

Professional Office

The purpose of the Professional Office land use category is to recognize professional office uses as:

- A mechanism to provide a buffer between general business land uses along Mineral Spring Avenue;
- A way to control the apparent demand to convert larger homes for office use; and
- To identify areas where such uses should be encouraged as new development potential or where conversions are appropriate in support of larger institutional uses.

Three areas along Mineral Spring Avenue are professional office use. The first such area begins at Smithfield Road and extends to the east to Marblehead Avenue. This area, as is the case with the next two locations, is dominated by professional office uses and they should be encouraged in this area. The second area lies to the east of Douglas Avenue between Elmira and Friendship Street, with the third extending from Rt. 146 west to Easter Street. These three areas serve to provide relief from the general business districts between them, as well as introducing uses that generate traffic of a lesser intensity and duration.

The second major purpose of this land use category is to offer a mechanism to control the apparent demand to convert existing large residences in the town for office use. Several properties have been converted on lower Smith Street for such purposes. At present the means of gaining such approval for conversions to date has been through the Zoning Board. This apparently has worked to date as owners of these properties have realized the visual attractiveness of these properties. While this has been the case, it is recommended that specific development standards relative to the exterior appearance of these buildings, signage, the location and amount of parking, and minimum lot size regulations etc.

At Lower Smith Street, the Professional Office land use category expands to areas like High Service Avenue near the hospital. It also extends from the Providence City line north to the Fruit Hill Village Center and then continues above the center itself to Fruit Hill Avenue (east side only). Evans Field is not included. Designation of these areas as profession office is gauged

by the demand for such uses. If demand persists, particularly near the hospital, the zone could be extended.

Professional Office is also designated north and west of the Marieville Village District between Charles Street and Route 146. It includes the area formed by the triangle of Route 146, Charles Street and Willard Street above the Charles Apartments. This area, which includes mostly vacant land, is ideal for such uses given its accessibility to Route 146.

Institutional

There are many institutional uses in the Town which exist in residentially zoned areas. The current residential standards do not adequately regulate existing uses or new uses of this type which can be much larger in scale than residential developments. Institutional land uses include Rhode Island College, St. Josephs Hospital, the Franciscan Missionary, St. Mary's, and other religious and municipal institutional uses. Other uses also include larger health care facilities, private and public schools, dormitories, etc.

Specific standards should be developed as they relate to minimum lot sizes, landscaping, parking, buffer zones and other performance standards. A major purpose of this land use category is to control the conversion of these facilities or their expansion without adequate controls.

Open Space/Conservation

Open Space and Conservation land uses included the Peter Randall Reservation, state and town park areas such as Greystone Park, the Captain Stephen Olney Park, Fells Park, Governor Notte Park, and Camp Meehan, as well as other significantly, detached recreation sites.

Another major property included in this category is the present site of the landfill. It is officially closed and capped, per Rhode Island Department of Environmental Management regulations. There is great potential for this site to be developed for recreational uses, particularly since it abuts the Peter Randall Reservation.

In addition, there are several utility rights-of-way identified as Open Space and Conservation. One exists adjacent to Route 146 and another exists in the southeastern part of Town through residential neighborhoods near Charles Street. The purpose of including these rights-of-way is to prevent their re-use for other purposes until the Town decides if these sites could be retained as part of a potential pedestrian or bicycle path system. The protection of these areas is important to provide the Town with an option of re-use prior to the disposition of these properties.

Industrial

Industrial land uses are focused on Woonasquatucket Avenue and Douglas Avenue near the Providence line. It is apparent that the Town does not wish to expand existing industrial areas or designate other areas for new industrial growth. Many of the historic mill complexes in Town have been converted to high-density residential uses. The Town is satisfied with the existing base and will seek to improve these existing areas.

To control industrial uses in the Town, it is recommended that the Town:

- Maintain existing manufacturing zoning in the primary industrial areas within the town that have existed since the early development period of the town.
- Rezone industries that exist in predominantly residential zoned areas to residential zoning districts to prohibit the expansion of such uses.

Historic Overlay District

The Town of North Providence has extensive historic resources associated with its development as a manufacturing center. Several properties in town are listed on the National Register of Historic Places (see **Cultural Resources Element**) having been found to be eligible for inclusion as significant historic properties. Numerous other properties are eligible for the register and are at different levels of review in this process. The Town's Historic Overlay District serves to protect these properties by controlling the extent of alteration that could take place.

Zoning Inconsistencies

Map 5 shows areas where existing zoning is inconsistent with proposed future land uses. Statewide Planning regulations require the Town to develop a plan and schedule to change the zoning in each of these areas to conform to the proposed Future Land Use map.

The following describes areas where existing zoning is not consistent with the Future Land Use Plan. This section also recommends actions to bring the zoning and the plan into conformance. Areas are described by neighborhood and discussed in order generally from north to south and west to east.

GREYSTONE

1. **Landfill Buffer** - A tract of land between Charlene Road / Wendi Drive and the Town's former landfill that is presently zoned residential (R8), but is designated on the Future Land Use map as open space (OS). This land contains wetland, a marsh/pond complex that renders it essentially undevelopable and it provides important buffer area between the former landfill site and the residential property to the west. This tract should therefore be rezoned OS.

2. **Peter Randall Reservation** - The western portion of the Peter Randall Reservation bounded generally by Sherwood Ave, Bicentennial Way, and St. Johns Circle. This tract is presently zoned residential (RL10) but is dedicated open space (OS) that was originally given to the State as a State Park but later deeded to the Town by the State for public park purposes. It therefore should be rezoned to OS.

3. **Plympton St.** - The property across Mineral Spring Avenue from the High School at Plympton Street. The parcel is designated on the Future Land Use Map as residential (RG) but shown on the zoning map as Commercial General (CG). This property is controversial because of the conviction of three North Providence Council members for their roles in extortion and bribery connected to their support for changing the zoning

from residential to commercial. Resolution of the inconsistency on this parcel must await resolution of litigation that is still pending relative to the rezoning.

ALLENDALE

4. **Romano Field, 442 Woonasquatucket Avenue**, a tract of land between Woonasquatucket Avenue and the River, north of Rockwell Avenue. The property is occupied by the North Providence West Little League playing field but is presently zoned residential (RL13). This property is designated for recreational uses and shown on the Future Land Use plan as Open Space (OS). The zoning should be changed to OS in recognition of the league's intended future use of the property.

LYMANSVILLE

5. **Fogarty Center, 220 Woonasquatucket Ave**. is a tract of land along the river just north of Packard St. It is presently occupied by the Fogarty Center, a private, non-profit organization that provides to adults with developmental disabilities. The property is presently zoned for general manufacturing uses (MG) but shown on the Future Land Use Plan as residential. The Town needs to examine this parcel and determine if it should:
    - remain industrial, in which case the Future Land Use Plan should be modified,
    - be changed to residential (RG) in which case the property should be rezoned, or
    - rezoned for some other use, requiring both rezoning and a map change.

6. **Rosemont Terrace, Belair and Klondike Avenues** - This tract includes multiple parcels and several blocks in the extreme southwest corner of the North Providence presently occupied by residential uses, including both single family homes and the multi-family units at Rosemont Terrace. The area is presently zoned for general manufacturing uses (MG) but, in recognition of the actual use in the area, should be rezoned to residential (RG).

FRUIT HILL

7. **Evans Park, 1544 Smith St. –** This property is occupied by basketball courts, a baseball field, a playground, a parking lot and other recreational uses. It is presently zoned for institutional uses (IS) but, given the current uses, should be rezoned to Open Space (OS).

8. **Rhode Island College** - This tract is located along the border with Providence on the campus of Rhode Island College generally south of Belcourt Ave., Homewood Ave., and Gardner Ave. Land in this area is zoned for residential uses (RL13) but is occupied by the Varsity Athletic Complex, the Robert J. "Bob" Black Track, and the outdoor tennis courts of Rhode Island College. In view of the existing and likely continued future use of this property by the college, the zoning should be changed from residential (RL13) to institutional (IS).

GENEVA

9. **Marblehead, Andover, Eliot, and Barrett Avenues.–** This area includes multiple lots between the Town's High School and Library complex on the west and Salem Drive on the east. This tract is otherwise bounded by Smithfield Road Douglas Avenue and Mineral Spring Avenue. The area is presently zoned for commercial uses (CG) but is occupied by residential uses, predominantly single family homes on small lots. While it appears appropriate for parcels that front on major roads, such as Mineral Spring Avenue, Douglas Avenue, and parts of Smithfield Road to remain commercial, the balance of the area should be rezoned from CG to RG in recognition of the long-standing presence of an important residential neighborhood in this area.

10. **Shaw's Plaza & Douglas Ave –** This area includes Shaw's Plaza and the area generally surrounding the intersection of Douglas Ave and Lexington Avenue. It is zoned for commercial village (CV) but is presently occupied by the Plaza, Allens Avenue Auto Salvage, Town Line Towing and Recovery and a variety of other businesses with frontage on Douglas Avenue. Recognizing the current and proposed land use pattern of this area, the zoning in this area should be changed from CV to CG to conform to the future land use map.

11. **Geneva Mill –** This area is located on the border with Providence at Geneva Mill. Once a major center of manufacturing, the Mill has now been converted to residential uses. In recognition of this, the area should be rezoned from Manufacturing Limited (ML) to Residential General

WOODVILLE

12. **Camp Meehan –** This tract consists of one triangular parcel of land along the border of North Providence and Lincoln that is presently zoned RS12. The property is owned by the Town of Lincoln. It was purchased by them, along with the balance of Camp Meehan in Lincoln, using open space and recreation grant funding that limits the use of the property to open space and passive recreational uses in perpetuity. Therefore the property should be rezoned from Residential (RS12) to Open Space (OS).

MARIEVILLE

13. **Presentation Church, 1081 Mineral Spring Avenue –** This property is a very small tract located north of Mineral Spring Avenue, just west of the intersection with Charles Street. The property is presently zoned Residential Limited (RL-10) but is owned by the Diocese of Providence and is occupied by buildings associated with the Presentation of the Blessed Virgin Mary Parish. It should be rezoned from Residential Limited (RL10) to Institutional (IS).

14. **Victor, June, and Lillian St. -** this tract is a narrow diagonal of property presently zoned Residential General (RG) but designated on the Future Land Use Plan as Open Space OS due to a utility easement across the property. This tract should be changed from RG to OS to conform to the Future Land Use Map.

SCHEDULE
With the exception of the Plympton Street site, which cannot be addressed until the pending litigation is resolved, the zoning changes described above can be implemented over the short term and all proposed zoning changes are to be completed within 2 years of approval of this Comprehensive Plan.

Goals, Policies, and Action Items

Goal LU 1: Provide for the future use of vacant land within the Town in a wise and orderly manner taking into consideration environmental and topographic conditions, development potential, and the need for future space in terms of housing, recreation, commercial development and industrial growth.

Policy LU1: Provide for a variety of land use types and densities.

Policy LU2: Discourage future strip development and its negative impacts upon existing commercial nodes.

Policy LU3: Coordinate future land use directions with those of adjacent communities.

Policy LU4: Accommodate growth while ensuring the town's ability to provide services to an expanded population.

Policy LU5: Control growth and its impact upon existing neighborhoods and the environment.

Policy LU6: Do not encourage further commercial growth in undeveloped areas until the existing business zones are developed or revitalization efforts take effect.

Implementation Actions

Action LU1: Expand the number of residential districts to reflect changes in residential development trends while relating development to environmental constraints.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action LU2: Zone institutional properties and open space lands as such. Develop applicable standards.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action LU3: Develop revitalization schemes for the older commercial districts.

Responsibility: Planning Director, Planning Board, Town Council

Timeframe: Mid Term/Long Term

Action LU4: Create additional business zoning districts that control growth within the variety of existing business areas found in the town.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action LU5: Establish Professional Office Zone to buffer residential areas and general commercial zones.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action LU6: Develop landscaping and signage standards for future commercial developments.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action LU7: Develop design and development standards for both residential and commercial areas to ensure quality, visually appealing development throughout town

Responsibility: Planning Board, Town Council, Planning Director
Timeframe: Long Term

Action LU9: Rezone industrial land in residential areas to prevent development and/or expansion of incompatible uses. Identify existing non-conforming industrial uses in residential zones and develop policies to restrict their expansion.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Mid Term

Action LU10: Establish Redevelopment Overlay Districts to revitalize deteriorating residential and non-residential areas of town. Use a Redevelopment Authority to implement Redevelopment Plans associated with Overlay Districts.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Mid Term

Action LU11: Conduct a corridor study for the area between Central Avenue and the village of Centredale to determine the best future land uses and development standards for the area.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Mid Term

Action LU12: Evaluate and adjust commercial zoning district boundaries along Mineral Spring Avenue to ensure properties that abut the roadway are developable with minimal dimensional variances.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action LU13: Manage and retrofit existing stormwater management systems to reduce adverse effects on the environment.

Responsibility: Stormwater Coordinator, Planning Director, Planning Board, Town Council, Mayor's Office
Timeframe: On-going

Action LU14: Develop stormwater policy consistent with the General Permit Rhode Island Pollutant Discharge Elimination System Storm Water Discharge from Small Municipal Separate Storm Sewer Systems and from Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s.

Responsibility: Stormwater Coordinator, Planning Director, Planning Board, Mayor's Office, Town Council
Timeframe: Short Term

Action LU15: Revise Land Development and Subdivision Regulations to take into consideration environmental and topographic conditions, development potential, and the need for future space for growth. The revised regulations should incorporate stormwater best management practices, including low impact design techniques, and should require as-built drawings for all developments after completion.

Responsibility: Planning Director, Planning Board, Mayor's Office, Town Council
Timeframe: Short Term

Action LU16: Seek financing to manage development (new and existing) to better control adverse impacts to environmental resources from stormwater.

Responsibility: Stormwater Coordinator, Planning Director, Planning Board, Mayor's Office, Town Council
Timeframe: Short Term

Action LU17: Re-evaluate parking regulations and revise them to incorporate incentives for more efficient on-site parking strategies such as parking maximums, shared parking, and parking incentives for transit subsidy programs.

Responsibility: Planning Director, Town Council
Time Frame: Short Term

Action LU 18: Develop a new sign ordinance that will adequately control signage within the town and will encourage a general reduction in the size and height of allowed signs to reduce visual clutter.

Responsibility: Mayor, Planning Director, Town Solicitor, Town Council
Time Frame: Mid Term

Action LU-19: Conduct a review of all existing substandard lots of record within the community, evaluate the legal status of these lots and consolidate those that are no longer valid with adjoining properties to restrict future in-fill development.

Responsibility: Planning Board, Planning Director, Zoning Board of Review, Tax Assessor, Town Council
Time Frame: Mid Term

Action LU-20: Revise setback requirements to better correlate them with zoning districts. This should include revised setback requirements where commercial zones abut residential zones and new setback and buffer requirements between larger multi-family residential complexes and single family residential development.

Responsibility: Zoning Board of Review, Planning Board, Planning Director, Town Council
Time Frame: Mid Term

Action LU-21: Review existing development controls and institute revisions and innovations to enhance future growth.

Responsibility: Zoning Board of Review, Planning Board, Planning Director, Town Council
Time Frame: Mid Term

Action LU-22: Correct identified inconsistencies between existing zoning and the Future Land Use map.

Responsibility: Zoning Board, Planning Board, Planning Director, Town Council
Time Frame: Short Term

HOUSING

The purpose of the Housing Element is to present base line data and analysis relative to housing in North Providence. It provides information on housing and general development trends, general population projections, housing conditions, needs, affordability and a general income profile of the community. The Rhode Island Comprehensive Plan and Land Use Regulation Act requires that the Housing Element "include the identification of existing housing patterns, an analysis of existing and forecasted housing needs, and identification of areas suitable for future housing development or rehabilitation. The plan shall include an affordable housing program that meets the requirements of section 42-128-8.1, the 'Comprehensive Housing Production and Rehabilitation Act of 2004' and chapter 45-53, the 'Rhode Island Low and Moderate Income Housing Act'. The plan must include goals and policies that further the goal of subdivision 45-10 22.2-3(c)(3) and implementation techniques that identify specific programs to promote the preservation, production, and rehabilitation of housing". In very brief terms, the Housing Element of the plan must:

- Inventory and analyze existing housing stock, including age, condition, type, location, occupancy and costs (rent and sales);

- Identify the housing needs of the existing population (renters, homeowners, elderly, low and moderate income, the homeless, and special-needs persons and groups), with due consideration for the Housing Market Area and with particular attention to the relationship of needs of costs (affordability) from the housing stock inventory and analysis;

- Establish goals and policies that will:
    - Upgrade deteriorating and substandard housing;
    - Provide new housing opportunities geared to the needs of all elements of the population (the number, costs and types must be in accord with the needs of the municipality and the Housing Market Area);
    - Identify steps to be taken to enhance the affordability of housing and identify resources to be used in this regard; and
    - Identify resources and steps designed to achieve housing goals and implement housing policies:
        - Specific steps to enhance housing affordability;
        - Municipal agency responsible for housing;
        - Code and ordinance changes and innovations to encourage achievement of housing goals;
        - Public and private resources to be utilized in achievement of housing goals;
        - Sites for housing development (locations and types);
        - Potential conversion of existing structures to housing use; and
        - Financial strategies to be developed for housing.

Housing Trends

The demand for housing mirrors demographic and economic development processes. In 2005, the housing boom of the beginning of the twenty first century peaked and by 2008 the nation and the region were in an economic recession. Before the recession, Rhode Island Housing (RIH) reports that the state experienced a shortage of 13,000 housing units that were affordable to the average working family. In 2008 and 2009 only 2,000 new homes were permitted in Rhode Island, and those included high-end homes. Unemployment rates reached nearly 13% in Rhode Island in 2009 (second in the nation after Michigan) and this had a direct impact on foreclosures, which were occurring at a record-high pace throughout the region. Home sales decreased as new home construction slowed and median home sale prices dropped. Table H-1 shows the trends of select housing and economic indicators that resulted from the economic downturn in Rhode Island from 2005 to 2009.

Table H-1: Select Housing and Economic Indicators of Rhode Island, 2005, 2008 and 2009

	Median Number of Home Sales	Building Permits for New Home Construction	Median Home Prices	Foreclosures	Unemployment Rate
2005	9,711	2,836	$282,900	.42% (42nd in US)	5.1%
2008	6,662	1,058	$234,700	3.49% (10th in US)	9.4%
2009	7,720	958	$199,900	3.97% (13th in US)	12.9%

Source: Rhode Island Housing, 2011

In 2011, the nation is seeing slow economic improvements, but Rhode Island lags behind in economic gains. It is expected that the road back to prosperity will be slow over the next decade. This impacts the development of new housing, employment opportunities and the willingness of banking institutions to lend money for home financing or business development

Existing Conditions

The following provides a summary of population and development trends in North Providence.

Population Trends

As depicted in Figure H-1, the US Census showed a 10% population increase in North Providence from 1980 to 1990, but growth from 1990 to 2000 was flat. This trend continued through 2010, where the US Census reports that North Providence lost population, approximately 1%. While the Rhode Island Statewide Planning Program (SPP)[1] (2004) projected that North Providence would continue to have slow growth over the next 20 years, the current population trends indicate otherwise. North Providence's projected growth rate is comparable to both Providence County and the State, as shown in Table H-2. Due to economic conditions in the region, it is anticipated that future projections may be adjusted. The decline in housing production and loss of jobs since 2007 and 2008 have lead to low to no growth in population in the state as a whole as residents move to other areas of the region or country to find employment.

[1] *Rhode Island Population Projections: State, County, and Municipal 2000-2030*, Technical Paper No. 154. RI Statewide Planning Program. August 2004.

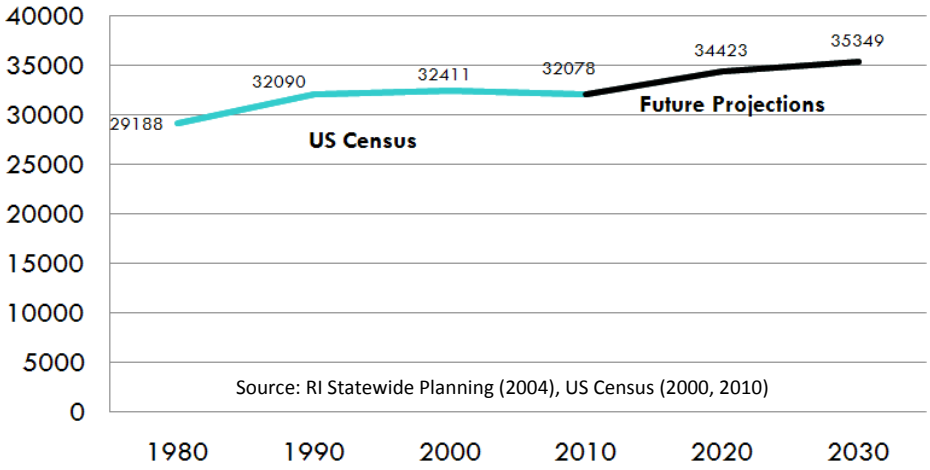


Figure H-1. North Providence Population Growth and Projections

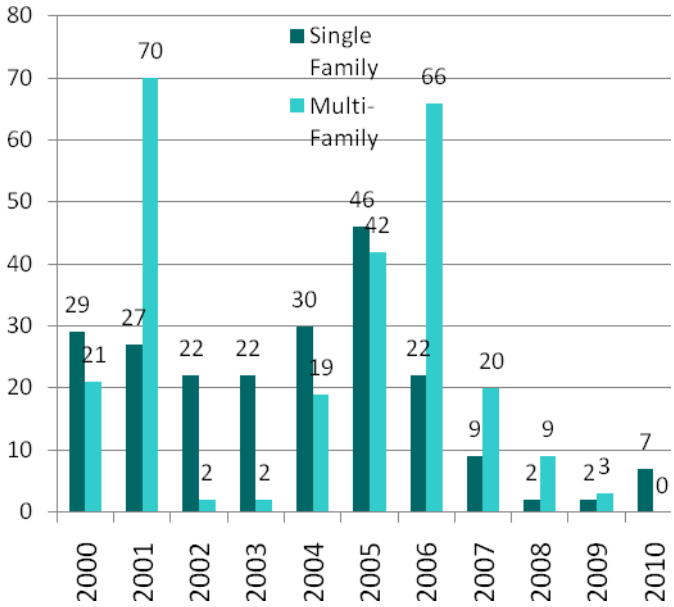
Table H-2 Population Growth Comparison of North Providence, Providence County and Rhode Island

	North Providence	Providence County	Rhode Island
1990	32,090	596,270	1,003,464
2000	32,411	621,602	1,048,319
2010	32,078	626,667	1,052,567
	-1.00%	0.80%	0.40%
2010* (projected)	33,236	634,457	1,074,199
	2.50%	2.10%	2.50%
2020* (projected)	34,423	652,970	1,111,464
	3.60%	2.90%	3.50%
2030* (projected)	35,349	667,414	1,140,543
	2.70%	2.20%	2.60%

Source: US Census (2000, 2010), *RI Statewide Planning Program (2004)

Development Trends

As shown in Figure H-2, new housing construction peaked in North Providence in the middle of the decade, around 2006. In the following years, as with other Rhode Island communities, permits issued for new construction declined. Of the 472 permits issued, slightly more were associated with multi-family structures (54%). New construction permitting does not take into consideration redevelopment of existing properties, such as historic mill buildings converted to residential uses. This would include Geneva Mills, which is a mix of condominiums (approximately 36 units) and commercial retail space. The Mill at Allendale (72 units) and Greystone Mill (150 units) are also mill buildings reused for residential.



(Source: RI Economic Development Corporation and Town of North Providence Building Department)

Figure H-2: Building Permits for New Residential Construction

Existing Housing Stock

Overall, the 2010 Census reports that the number of housing units increased 505 units (3%) from 2000, for a total of 15,372 units. Table H-3 lists select housing characteristics for North Providence. 94% of housing units are occupied. Detailed housing data are not available from the 2010 Census yet; however, the American Community Survey (ACS 2009 five-year estimates) estimates that 38% of occupied units are rental. Nearly one half of all units are estimated to be single family homes. One quarter are estimated to be buildings with 10 or more units. These statistics indicate a diversity of housing choices in North Providence.

Table H-3: Select Housing Characteristics

	1990	2000	2010
Total housing units	14,134	14,867	15,372
% occupied units	94%	97%	94%
% owner-occupied	56%	60%	62%*
% renter-occupied	44%	40%	38%*
% of units built before 1939	22%	15%	11%*
% 1-unit structures	53%	55%	54%*
% 2 to 4-unit structures	16%	15%	18%*
% 5 to 9-unit structures	4%	4%	4%*
% with 10 or more units	26%	26%	24%*

Source: US Census (1990, 2000, and 2010), *ACS 2009 Five-Year Estimates with margin of error

Housing Conditions

According to the Building Department, housing in North Providence is generally in excellent condition. The Building Department processes mainly minor violations such as rubbish removal, peeling paint and broken windows. Complaints are usually filed by a resident or neighbor.

The Minimum Housing office indicates that four areas experienced repeated violations on a more regular basis. They were located in Greystone near the mills, Lyman Avenue near Woonasquatucket Avenue, Centredale near Town Hall, and Charles Street from the Providence city line to Mineral Spring Avenue

Housing Affordability and Needs Analysis

Income Profile

An individual or family's income is a major factor affecting a household's quality of life. Our earning power dictates whether we can own a home or are required to rent, whether we can afford public or private schools or whether in some cases we can afford the basic necessities of life. In general, North Providence has been and continues to be characterized by persons and families of moderate incomes. Table H-1 lists selected income characteristics and compares available Census data of North Providence with the State. Median incomes are inflation-adjusted to 2009 dollars for comparison. The data show that North Providence incomes decreased and the percentages of families and individuals below the poverty level rose between 2000 and 2009. Conversely, the State saw an increase in income and a slight decrease in those below the poverty level. The ACS Five-Year Estimates for 2009 indicated that North Providence had an estimated median household income of $47,751 over the five-year period. It was also estimated that 6.3% of North Providence families were below the poverty level, up from the 2000 Census, which reported 5.6%. 10.2% of individuals were estimated to be below the poverty level, up from 8.1% in 2000.

Table H-4: Select Income Characteristics for North Providence and the State, 2000 and 2009

	North Providence		State of Rhode Island	
	2000	2009 (estimated)	2000	2009 (estimated)
Median Family Income (2009 dollars)	$51,655 ($64,354*)	$62,998*	$52,781 ($65,757*)	$71,037*
Median Household Income (2009 dollars)	$38,721 ($48,240*)	$47,751*	$42,090 ($52,438*)	$55,569*
Percentage of Families Below the Poverty Level	5.6%	6.3%	8.9%	8.1%
Individuals Below the Poverty Level	8.1%	10.2%	11.9%	11.6%
Individuals 65 Years and Over Below the Poverty Level	8.7%	5.9%	10.6%	9.4%

* 2009 Inflation-adjusted dollars
Source: 2000 US Census, 2009 ACS 5-Year Estimates, 2005-2009

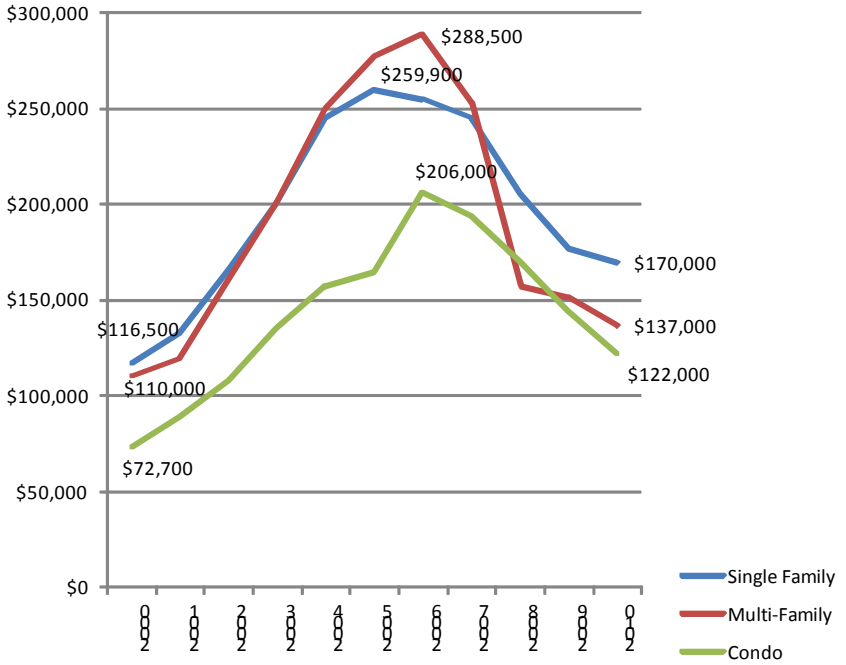
These data indicate that it will be important for the town to maintain its affordability and diversity of housing options. As income drops, so does the ability of individuals and families to purchase homes or to stay in their current homes. The Town needs to continue to support programs that serve North Providence residents and give them access to technical and financial resources for housing assistance. Assistance could include low-interest loan programs for first-time home buyers, loans for home maintenance, or rental assistance.

Housing Costs

The basis to measure the affordability of housing in a community is reflected in the average price a family must pay to either purchase a home or rent an apartment in the community.

Home Sales Trends

Home sales in North Providence, as with those of the State, were influenced by the housing boom and bust of the past decade. Figure H-3 shows the rise and fall of median sales prices in North Providence for single family homes, multi-family homes and condominiums from 2000 to 2010. Single family home prices peaked in North Providence in 2005 at $259,000, a 123% increase from 2000. Multi-family homes increased 162% from 2000 to 2006, where median sales prices reached $288,500. Condominiums saw the largest percentage increase when median sales prices peaked in 2006 as well at $206,000, 183% from 2000. By the end of the decade, the median sales price of a single family home dropped 35% from the peak; multi-family homes dropped 53% and median sales prices of condominiums dropped 41%. Comparable trends were seen in neighboring communities and the State, where housing prices peaked in 2005 and 2006 at prices over a 100% higher than prices in 2000 in most cases, with the exception of Cumberland and Lincoln. Table H-5 shows single family median sales prices in communities adjacent to North Providence and the State from 2000 to 2010. Housing prices in North Providence tend to fall in the middle of the local pricing range.



Source: RI Association of Realtors

Figure H-3: Median Residential Sales Prices, 2000-2010

Table H-5: Single Family Median Sales Prices of Adjacent Communities and the State (2000-2010)

	2000	2001	2002	2003	2004
Cumberland	$163,000	$185,500	$225,000	$250,000	$297,000
Johnston	$128,500	$147,750	$169,805	$215,000	$254,900
Lincoln	$200,000	$234,750	$261,000	$296,700	$329,950
North Providence	**$116,500**	**$132,700**	**$165,500**	**$199,900**	**$245,000**
Pawtucket	$103,125	$126,950	$150,000	$182,900	$214,900
Providence	$83,000	$97,925	$125,354	$147,750	$185,000

State of RI	$135,976	$156,000	$188,150	$230,000	$264,700	
	2005	**2006**	**2007**	**2008**	**2009**	**2010**
Cumberland	$324,950	$305,000	$296,000	$258,500	$242,750	$248,000
Johnston	$270,000	$271,000	$247,900	$196,250	$174,700	$176,050
Lincoln	$341,000	$330,000	$324,000	$290,000	$241,000	$239,500
North Providence	**$259,900**	**$255,000**	**$245,000**	**$205,000**	**$177,000**	**$170,000**
Pawtucket	$231,875	$233,500	$217,500	$177,000	$149,950	$145,500
Providence	$210,000	$212,475	$197,000	$123,500	$850,000	$115,000
State of RI	$282,900	$282,500	$275,000	$234,900	$210,000	$219,500

Source: RI Association of Realtors

Rental Trends

As previously stated, it is estimated that 38% of occupied units in North Providence are rented (2009). This percentage has dropped slightly from 2000, where it was reported at nearly 40%. The values in Table H-6 are taken from Rhode Island Housing Annual Rent Survey. Rents have been adjusted (using HUD utility allowances) to include heat, cooking fuel, electricity and hot water. In comparison to its neighboring communities, North Providence consistently falls within the spectrum of rents available.

Table H-6: Comparison of Average Rents, 2-Bedroom, 2000, 2005, and 2010

	2000	2005	2010
Cumberland	$845	$1,124	$1,067
Johnston	$665	$1,102	$1,159
Lincoln	$666	$1,150	$1,133
North Providence	**$727**	**$1,098**	**$1,119**
Pawtucket	$623	$980	$995
Providence	$725	$1,097	$1,086
State of RI	$715	$1,147	$1,165

Source: Rhode Island Housing Annual Rent Survey, 2000, 2005 and 2010

* Rents have been adjusted (using HUD utility allowances) to include heat, cooking fuel, electricity, and hot water.

Housing Needs

General

Meeting the housing needs of the community means providing diversified housing choices that are affordable. In North Providence, approximately half of the housing stock is single family homes. The remaining half is a mix of apartments and condominiums ranging from duplexes to buildings with 10 or more units. There are clearly a variety of rental and homeownership opportunities in North Providence. But are these affordable or are North Providence residents paying too much for housing?

Guidelines established by the US Department of Housing and Urban Development (HUD) recommend that households pay no more than 30% of their income on housing costs. For renters, housing costs include rent paid by tenant plus utilities. For homeowners, housing costs include mortgage payment, taxes, insurance and utilities. If these costs exceed 30% of income,

this is classified as a cost burden. Residents that are more likely impacted by these cost burdens are those with low and moderate incomes. HUD defines low income as 80% or less of the median income in the area, which is the Providence-Fall River metro fair market rent area. Moderate income is defined as between 80% and 120% of the area median income. Very low income is 50% or lower. Rhode Island Housing obtains these income limits and annually provides them to municipalities. The limits are used for a variety of programs that aim to assist low and moderate income households.

According to HUD's Comprehensive Housing Affordability Strategy (CHAS) data (2000) for North Providence, roughly one quarter of low income homeowner households paid more than 30% of their total gross income on housing costs and almost 8% paid more than 50% (Table H-7). Higher percentages were seen in rental households, where nearly one third paid more than 30% of their income and more than 13% paid more than 50% of their income for housing.

Table H-7: North Providence low income households paying 30% or more of their income on housing costs

Cost Burden (% of income)	Renters					Owners					
	Elderly	Small Families	Large Families	All others	Total Renters	Elderly	Small Families	Large Families	All others	Total Owners	Total HH
Total HH	1784	1544	218	2144	5690	2441	4274	618	1305	8638	14328
More than 30%	49.3%	26.8	29.4	23.7	32.8%	32.9%	21.2	15.9	28.7	25.2	28.2
More than 50%	19.0%	11.6	27.5	9.1	13.6	13.3%	4.3%	0.6	13.0	7.9	10.2

Source: HUD CHAS Database (2000)
NOTES: **Small families:** 2 to 4 members; **Large families:** 5 or more members; **Low income:** 80% or less than the median area income; **HH**: household; **Elderly**: 62 years of age or older; **Cost burden**: Cost burden is the fraction of a household's total gross income spent on housing costs. For renter, housing costs include rent paid by the tenant plus utilities. For owners, housing costs include mortgage payment, taxes, insurance, and utilities.

Homeless

According to the 2008 RI Emergency Shelter Information Project Annual Report (July 1, 2007 to June 30, 2008), the two most important reasons for individuals seeking shelter that year were having no income and high housing costs, cited by 30% and 19% of persons seeking emergency shelter respectively. They also report the lack of affordable housing had particularly affected families that year. The nearest homeless shelters to North Providence are in Providence, which include Crossroads Rhode Island, Sojourner House, and Amos House.

With high unemployment and foreclosure rates in Rhode Island over the past four years, homeless shelters have been strained to find enough beds for people who are losing their homes because they can no longer afford them. The Rhode Island Emergency Shelter Annual Report states that 77 people identified North Providence as their last place of residence, totaling 1.2% of the homeless population in Rhode Island shelters.

Low and Moderate Income Housing

In 2004, the General Assembly passed the "Comprehensive Housing Production and Rehabilitation Act" (the Act). The Act requires that 29 Rhode Island communities that do not

have 10% affordable housing, as defined in the Act, or those that are not exempt due to the percentage of rental housing, to produce an affordable housing plan to meet the 10% requirement. ***North Providence is exempt from this requirement because it has at least 5,000 occupied rental units that comprise 25% of all housing units (as reported in the 2000 Census; this detail has not been released by the US Census Bureau for 2010) and the town's low and moderate income (LMI) rental units, as defined in the Act, exceed 15% of the occupied rental units.*** The Low and Moderate Income Housing Act (RIGL 45-53) defined LMI units as:

> "…any housing subsidized by the federal, state, or municipal government under any program to assist the construction or rehabilitation of housing as low or moderate income housing, as defined in the applicable federal or state statute, or local ordinance whether built or operated by any public agency or any nonprofit organization, or by any limited equity housing cooperative or any private developer, that will remain affordable for ninety-nine (99) years or such other period that is either agreed to by the applicant and town but shall not be for a period of less than thirty (30) years from initial occupancy through a land lease and/or deed restriction or prescribed by the federal or state subsidy program but shall not be for a period less than thirty (30) years from initial occupancy through a land lease and/or deed restriction."

Rhode Island Housing reported that in 2010 there were 1,068 LMI units in North Providence. Table H-1 lists these units. They are managed by a diverse group of either private developers or the North Providence Housing Authority, discussed below.

Table H-8: 2009 Low and Moderate Income Housing in North Providence

LMI Housing Total	Total Housing Units (2000, less seasonal)	Elderly			Total Elderly	Family	Total Family	Special Needs			Total Special Needs
		HUD Sect. 8	Public Housing	RIH Elderly		Other		Group Home Beds	HUD 811	Supportive Units	
1068	14793	49	131	742	922	14	14	94	30	8	132

Source: Rhode Island Housing, 4/19/2010

These housing units are not adequate to meet the goal of providing a minimum of 10% affordable housing in North Providence. North Providence still needs an additional 411 LMI units to meet the 10% minimum goal. This need is acute. There is also an imbalance in LMI housing type in North Providence. Of the 1,068 LMI units, 922 were elderly units. Only 14 were family units. This indicates that there is not only an acute need for affordable housing in North Providence, but also a particularly acute need for affordable family housing.

North Providence Housing Authority

The North Providence Housing Authority (NPHA) manages 146 rental units for low and moderate income households through HUD's Section 8 Housing Choice Voucher (HCV) program. HCVs are funded based on past utilization rates and costs. These units are located throughout town. The NPHA maintains a list of eligible applicants for placement as units become available. NPHA may also compete for new HCVs that are published via the yearly NOFA with other local municipalities and agencies.

NPHA also has a Section 8 Homeownership Program. The program allows HCV participants to purchase single-family homes using their Section 8 subsidy. NPHA has also utilizes HUD's Section 32 Homeownership Program, which provides low-income residents affordable

homeownership options. NPHA was able to convert 14 units that were family public housing units into condominiums.

The NPHA has a non-profit organization, Northern Housing Associates, Inc, whose primary function is to pursue affordable housing options for the elderly, low and moderate income persons, and handicapped persons with special housing needs. North Housing Associates has the ability to buy, own, and sell property. They can also construct and develop new housing. They are not restricted to North Providence and can develop housing in other communities. As a non-profit, Northern Housing Associates is able to pursue funding through HUD's Section 202 Elderly Housing grant program. Through this program, HUD provides capital advances to finance the construction, rehabilitation, or acquisition with or without rehabilitation of structures that will serve as supportive housing for very low-income elderly persons and provides rent subsidies for the project to help make them affordable. Private, non-profit sponsors are the main recipients of the Section 202 program.

Tri-Town Community Action Agency

Tri-Town Community Action Agency is a community-based, multi-purpose organization that provides housing and social services to communities in northern Rhode Island, including North Providence. Social services for low income residents include health care, education, food bank, counseling, and youth programs. They also offer financial and technical assistance for housing-related issues. The Emergency Boiler Program provides emergency boiler repair services and replacement for heating systems that are beyond repair. The Emergency Housing Assistance Program provides rental, mortgage, and security deposit assistance for eviction, foreclosure, natural disaster and domestic violence situations. The program also offers assistance with tenant/landlord disputes. Tri-Town also has a fuel assistance program to help low income residents pay for fuel bills and utilities during the winter months to reduce home-heating costs and emergency shut-off assistance. Finally, Tri-Town's Weatherization Program assists low-income individuals and families to permanently reduce their energy consumption and increase energy efficiency of their homes. Energy audits identify the need for insulation, weather stripping, pipe sealing, and replacement of storm windows and doors.

Future Housing Plan

The Future Housing Plan outlined in this section presents a plan to guide the development of future housing, protect the existing housing stock, and maintain housing affordability. It is the goal of this program to provide a wide variety of housing choices to a diverse population. New construction of affordable housing will play a role in this process. However, because North Providence has very limited land area remaining for development, opportunities for new construction are also limited. New construction is projected to be largely restricted to infill development on existing or newly subdivided lots within existing neighborhoods. While new construction can help meet affordable housing needs, the Town simply does not have sufficient land available to build its way to 10% affordable housing.

Instead, the Town must rely on reconstruction, rehabilitation, and adaptive reuse, to help meet affordable housing needs. Expanded efforts are also recommended to preserve the existing housing stock through increased enforcement efforts, to provide a suitable living environment

for all present and future residents, while stabilizing this significant aspect of the town's tax base.

While the Town is technically exempt from meeting the state's 10% affordability requirement, the Town must still provide affordable housing options to meet local needs. North Providence is an affordable community given the number of small lot residential areas combined with the availability of many less expensive condominium units. The plan recommends that non-profit agencies and the Housing Authority seek to take advantage of this existing stock to meet the needs of families and the elderly by accessing the resources made available through the State and Federal government. It also provides a strategy to preserve existing subsidized housing to keep these units affordable to existing and future tenants.

The consolidation of the many homeowners assistance programs provided through the town or other non-profit agencies is recommended to take advantage of the resources that already exist in the community.

Future Housing Development

Relationship to Future Land Use Plan

The future land use plan provides in written and graphic form the town's goals and policies with respect to land development. A major aspect of these policies relates to future residential growth in terms of where and at what densities residential uses will be allowed. In developing this plan, an effort was made to relate future growth to existing land use so that the proposed densities would relate to densities which currently exist, particularly in the older residential neighborhoods. Presently, all residential development is assigned a single minimum lot size of 8,000 square feet. This does not relate to lot sizes in the older neighborhoods in town. The Future Land Use Plan provides the opportunity to maintain the character of existing neighborhoods while providing housing opportunities to a wide variety of potential owners or renters.

Specific Zoning Recommendations

Four residential zones are recommended for North Providence in the Land Use Element. They are:

1. General Residence
2. Limited Residence
3. Single Family Residence I
4. Single Family Residence II

The first two of these categories, General Residence (GR), and Limited Residence (LR), relate to the older developed areas of town which are dominated by high density housing on smaller residential lots. These two zones would have as a minimum lot size 6,400 and 8,000 square feet respectively. Existing houses in these zones are already on lots of this size. These minimum lot sizes would serve to allow further development consistent with the established neighborhoods by encouraging the combination of existing "Lots of Record" of 3,200 and 4,000 square feet respectively into conforming new lots.

Creation of new conforming lots will provide the opportunity for construction of new family units and smaller lot sizes will provide opportunities for construction of more affordable family units. The Town can also further encourage construction by providing incentives in the subdivision code for proposals that provide affordable family housing units by combining parcels and creating new conforming lots.

These two districts would also serve to assimilate two family dwellings and a limited amount of multifamily development within those districts currently characterized by such uses. Many of the current units are in existing, non-conforming structures. Their assimilation will bring them into compliance and ensure their availability for the future.

Adaptive Reuse

The type of development with the highest potential to provide additional housing units, and therefore the highest potential for new affordable units, is adaptive reuse. In the past decade, North Providence has seen conversion of a significant amount of former industrial mill space to residential uses. In 2008, for example, construction was completed on Greystone Lofts off Waterman Avenue, adding 150 new residential units to the Town. None of these units was required to meet affordable housing criteria. Additional proposals for similar projects are anticipated in the future as the housing market recovers. Because there are so many units involved, it is imperative that the Town establish at least minimum requirements for affordable units in these large multi-family redevelopment projects. In fact, the Town should set a target for affordable units for all multi-family adaptive re-use projects and should provide incentives to the developers for meeting and exceeding those targets.

Rehabilitation

Rehabilitation of moribund, defunct and/or neglected property may also offer the opportunity to enhance the supply of affordable housing. Due to the recent decline in the housing market, and due to foreclosures associated with the banking crisis, there is presently a relatively large supply of vacant housing in the town of North Providence. For example, HousingWorksRI reports that there were 123 foreclosures in 2009 and 92 in 2010, the most recent year for which data are available. Housing units which are left vacant after foreclosure detract from the neighborhoods in which they stand. When they are poorly maintained, they also detract from surrounding property values. The Town needs to work with property owners and mortgage holders to find ways to return these properties to active use. In the process, there may be an opportunity to convert some of these homes to affordable units. The Town should attempt to use a combination of enforcement authority (see below), property tax incentives, financial incentives, and negotiation with owners or mortgage holders of foreclosed properties to put underutilized and neglected properties to use and to help meet the critical need for affordable family housing units.

Preserving Existing Housing Stock

The maintenance of the town's existing housing stock is an extremely important element in the town's efforts to preserve the integrity of its neighborhoods and stabilize this important element of the tax base. While the existing housing stock has been found to be in generally excellent condition, Marieville and Lymansville are threatened neighborhoods. They have a higher density, older housing stock, larger percentages of rental units, and higher incidences of

absentee landlords compared to other areas of town. These areas are also where the Building Inspector receives the most complaints regarding housing conditions.

There are two major elements to foster housing preservation. They include expanded enforcement authority within the minimum housing function and a continued effort on the part of the town to provide low cost financial assistance for housing rehabilitation utilizing federal Community Development Block Grant (CDBG) monies, Rhode Island Housing Home Repair Funds and other forms of assistance through the non-profit and community organizations such as the Tri-Town Community Action agency.

Expanded Enforcement Authority

To provide additional strength to the Building Inspector and Minimum Housing staff, it is recommended that the town seek approval to expand its Municipal Court function to include the prosecution of minimum housing violations. At present these cases are heard at the District Court level and may take an extended period of time before they come before the court. Bringing these cases before municipal court will result in hearing the cases in a more expeditious manner, resulting in a more timely resolution to the problem.

Such a system would also provide for flexibility in such cases where the judge could use, his or her, discretion in an attempt to help an individual who may be financially unable to make such repairs. Coordination is recommended between the judge and the community Action program to potentially assist lower income individuals in such events.

- Administrative Action:
The Mayor and his staff would be responsible to identify the legislative actions necessary to accomplish the expansion of the municipal court functions. Actions may include the need for special legislative approval at the Rhode Island General Assembly or local approval by the Town Council to change the authority of the court.

- Legislative Action:
The Town Council would be required to approve and support the administrative initiative and expand the court function.

Preservation of Affordable Housing

1. Housing Authority Units

The Capital Fund Program (CFP) funded through HUD is the primary funding source for improvements to housing authority units. Funding is provided through the Providence Service Office of HUD on a non-completive basis, although high-performing housing authorities receive additional monies. There are discretionary grants that are competitive offered through CFP that are announced in a Notice of Funds Available (NOFA)) on a yearly basis.

It is apparent that close coordination and cooperation is required between the Housing Authority and the HUD office to ensure that North Providence continues to receive its fair share of funding. Funding is limited and typically does not meet the amount sought by any one Authority.

It is recommended that continued efforts be made to access CFP funding through careful compliance with the application process and the continuation of a cooperative effort with the HUD office in other areas of federal compliance to further strengthen the authority's position relative to future funding. A second resource would be the Small Cities Community Development Block Grant (CDBG) Program through HUD. Improvement to Housing Authority units is an eligible activity under this program geared at providing assistance to lower income individuals and households.

Administrative Responsibilities - Housing Authority Executive Director

2. Section 8 Housing Choice Vouchers

The Section 8 HCV program is the mainstay of federal rental assistance to families in existing housing. It is imperative that the NPHA actively pursue the expansion of HCVs to support the town's goal to provide housing using the extensive housing stock that exists in the town. Annual applications should be made to not only pursue units on a regular basis but to also determine if units are available that may have not been used by the NPHA.

A critical element required to maintain HCVs is to ensure that the rental limits allowed under the program (fair market rents (FMR)) are realistic with respect to the existing market. The NPHA recently conducted a rental unit survey and updated their subsidy standards. Findings indicated that rents were in line with HUD's FMR for the area and NHPA is using 100% of the FMR in their HCV program.

Administrative Responsibility - North Providence Housing Authority

Populations with Special Needs

1. Elderly

New Housing Development

Given the large number of condominium developments in the town that may be in financial difficulty due to a severe slowdown in sales or inadequate operating income, there may be an opportunity to purchase some units to provide expanded housing opportunities for elderly residents in the community seeking housing of this nature. Funding for such purposes could be available through Rhode Island Housing's Tax Credit and the Targeted Loan Program. This low cost financing could be used to reduce the cost of purchase and potential rehabilitation costs; sometimes to a point where rents could be reduced to an affordable level while still covering capital and general operating costs. To further support the viability of such a project the NPHA could request a special set aside of HCV through the Providence HUD office. HUD may or may not look favorably upon this application given its primary interest in the production of family housing.

HUD's Section 202 program is another source of funding for such an effort. Northern Housing Associates, Inc., as a non-profit, is eligible to participate and the Town should support their efforts.

Administrative Responsibilities - North Providence Housing Authority, Northern Housing Associates Inc.

2. Family

• Owner Occupied Units

The major financing tool to support homeownership opportunities for moderate income families is through RIH's First Time Home Buyers Programs. This program provides assistance to families and individuals to purchase existing single family homes, income producing two and three family units in urban areas and brand new homes. The program is geared toward lower income families. North Providence residents have utilized this program extensively to purchase homes in town. The general affordability of housing in the town has made it an attractive location for first time buyers.

The marketing of North Providence as an area for first time buyers through the real estate industry is recommended. Coordination would take place with the local realtors association and possibly the Chamber of Commerce. Existing homeowners also require assistance to maintain their homes in decent and sanitary condition. It has become more difficult, particularly for the area's lower income homeowners, to afford the necessary repairs and improvements required to maintain their homes in good condition. What is particularly difficult is the financing of such repairs and the general inability to make repayments to a bank or other institution. The Town of North Providence presently operates its own loan program for lower income families. Three percent interest, 15 year loans are provided to income eligible families for home repairs. The State also provides financing through RIH's Home Repair Program.

Other forms of assistance include the housing-related programs administered through the Tri-Town Community Action Agency. These include the emergency boiler program, emergency housing assistance program, and fuel assistance program.

What is evident is that there are resources available from various sources that may not be used in the most cost effective manner: It is recommended that a Loan Review Committee be established that includes representatives from various agencies including the Welfare Department, Tri-Town Community Action Agency, NPHA, Building Inspector and other human service providers to pool and manage their resources in a more cost effective way.

It is also recommended that the town apply for additional CDBG funding and consider providing some portion of those funds for grants to low income property owners (less than 50% of median income), while retaining the balance of funding for moderate income homeowners as loans.

Coordination is also suggested with RIH to make their Home Repair Program more attractive to homeowners. At present, a higher interest rate and complicated administrative structure seem to be deterring people from applying for funding, reducing the effectiveness of this potential source of assistance.

Administrative Responsibilities – North Providence Housing Authority

• Rental Unit Expansion

Recommendations with respect to expanding the Section 8 HCV were presented above. This was geared toward preserving and possibly expanding the number of available rental units in existing housing on a scattered site basis. To further complement that effort, it is recommended that the NPHA pursue Public Housing Development Funds or Rhode Island Housing Tax Credits to purchase either single units or entire condominium developments and provide affordable rental housing for families. Developments with higher numbers of units are considered more competitive for limited tax credit funding. The strong focus of the tax credit program is the creation of family rental homes and funding is limited.

The major obstacles that exist with respect to such a program:

1. Availability of Vouchers
2. Relocation Difficulties

Vouchers are scarce and hard to come by. A special allocation would certainly help to make such a project more financially feasible. Secondly, HUD frowns on relocating individuals as part of any housing program. It would be much easier if the development was either vacant or occupied by lower income persons who could remain in their units.

Administrative Responsibility – North Providence Housing Authority, Planning Director

• Special Needs Housing

De-institutionalization has become the trend in housing persons with mental disabilities. The State Departments of Mental Health Retardation and Hospitals and Children and Families has relocated hundreds of individuals form State institutions to "Group Homes" throughout the State. Support for the continuation of these efforts is recommended.

The development of affordable housing opportunities for disabled citizens is also a critical component of this future housing plan. To promote initiatives that result in expanded opportunities for the disabled, the town will coordinate with the state department of Mental Health, Retardation and Hospitals, Rhode Island Housing and HUD to investigate existing and new program opportunities. Emphasis, where possible, will be placed on providing opportunities with existing housing stock.

The provision of housing opportunities for the homeless, particularly the provision of transitional housing should be considered in the community. The consideration of such facilities should come under the review of the NPHA and Welfare Director. Close coordination with the Planning Department, Tri-Town Community Action, Crossroads Rhode Island, RI Coalition for the Homeless and Providence Urban League.

Administrative Responsibility - Welfare Director, North Providence Housing Authority, Planning Department

• Public/Private Partnerships

The key to successfully providing for the housing needs of the community, particularly these of our most disadvantaged population requires the pooling of private and public resources. To deal with the critical need for more affordable housing units and the ever growing population of persons "in-need" the Town needs to recruit and engage a wider range of housing partners. It is therefore recommended that the Town investigate the possibility of establishing a North Providence Housing Resources Board. This board could consist of all those individuals, agencies and corporations actively involved in the provision of housing and human services including representatives from social service providers, financial institutions, religious organizations, government agencies and program recipients.

The purpose of such a board would be to bring together the resources of these organizations to develop a program to make more affordable housing available and to expand service delivery to the Town's lower income and minority households. At a minimum, the board's charge would be to investigate all financing and service alternatives using available Town resources as well as those that can be accessed through other state, federal and local agencies in the support of housing goals. This Board could assist the Authority by developing a detailed plan for expanding the supply of affordable housing through new construction, adaptive reuse and conversion to reach at least the 10% goal. The Board should become the champion for changes in the zoning and subdivision regulations to facilitate establishment of new affordable housing units. The Town's investigation should explore in more detail the potential for success of such a body and should further define the specific roles, duties, services and responsibilities of the Board members.

Administrative Responsibility - Welfare Director, North Providence Housing Authority

Goals Policies and Action Items

Goal H 1: Provide all North Providence residents with a wide range of affordable housing opportunities.

Policy H 1: Create new affordable housing units through infill development, adaptive reuse, and rehabilitation.

Policy H 1: Protect existing housing stock and seek to make existing, currently vacant housing available to more residents.

Policy H 2: Maintain housing affordability for all residents, particularly the elderly, low and moderate income households, and households with special needs.

Policy H 3: Support well planned initiatives for "Special Needs" Housing and opportunities for the homeless in the community.

Implementation Actions

Action H1. Encourage new construction of affordable units by establishing new residential zoning districts that provide for a diversity of residential lot sizes other than 8,000 square feet.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: mid-term

Action H2. Revise the subdivision regulations to include incentives for construction of affordable housing as infill development on new lots created by combining existing substandard lots.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: mid-term

Action H3. Establish minimum requirements for inclusion of affordable housing in multi-family adaptive reuse projects and provide incentives in the review process for projects that meet or exceed those requirements.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: short-term

Action H4. Seek to utilize the large number of vacant existing housing units in North Providence to help meet the Town's future housing needs. The town should attempt to use a combination of enforcement, negotiation with mortgage holders/property owners, tax incentives, and other incentives to convert existing vacant housing stock into affordable family housing. The Town should also aggressively pursue additional Housing Choice Vouchers from HUD, while utilizing other housing programs to expand its stock of affordable housing units.

Responsibility: Planning Director, Planning Board, North Providence Housing Authority
Timeframe: Ongoing

Action H5. Expand enforcement authority within the minimum housing function. Pursue legislative approval to expand the Town's Municipal Court function to include the prosecution of minimum housing violations.

Responsibility: Town Council, Mayor
Timeframe: Mid Term

Action H6. Pursue future Small Cities Program grants through HUD.

Responsibility: North Providence Housing Authority, Planning Director
Timeframe: Ongoing

Action H7. Build public-private partnerships with representatives from the government, churches, businesses (including bankers), and the community at large to form a North

Providence Community Housing Resources Board to oversee and facilitate affordable housing activities in North Providence.

Responsibility: North Providence Housing Authority
Timeframe: Mid-term

Action H8: Continue to provide low cost financial assistance for housing rehabilitation and explore ways to expand existing rehabilitation programs.

Responsibility: North Providence Housing Authority
Timeframe: Mid-term

ECONOMIC DEVELOPMENT

The purpose of Economic Development Element is to present base line data and analysis relative to Economic Development in North Providence. The element presents general information on State and local economic trends and conditions, a complete employment labor force overview, municipal fiscal trends and future employment projections. Also included is a general description of the areas where economic activity takes place, i.e. the villages and Mineral Spring Avenue. An outline of economic development goals, policies and action items conclude the element.

The Rhode Island Comprehensive Plan and Land Use Regulation Act requires that the Economic Development Element " include the identification of existing types and patterns of economic activities including, but not limited to, business, commercial, industrial, agricultural, and tourism. The plan must also identify areas suitable for future economic expansion or revitalization. The plan must include goals, policies, and implementation techniques reflecting local, regional, and statewide concerns for the expansion and stabilization of the economic base and the promotion of quality employment opportunities and job growth."

In very brief terms, the Economic Development element of the Comprehensive Plan must include consideration of the following:

Goals and policies for economic development must consider:

- The requirements of the projected population for goods and services.
- The requirements of the projected population for employment opportunities.
- The desirability of certain types of economic development in the municipality.
- The ability of the local infrastructure to provide essential facilities and services.
- The effect of economic development on the region and on neighboring uses of land in the municipality.
- The availability of suitable raw sites and the types of economic development best suited for such sites, taking into account soils capabilities, sensitive environmental factors, and local or regional infrastructure.
- The availability of existing building space and the types of economic development best suited to such space, with due consideration for compatibility with surrounding land uses.
- Possible incentives and assistance to expand economic development.

The inventory and analysis of existing economic development is be the initial step in determining the extent and character of the economic base and its potential for expansion. An inventory must be undertaken of potential sites for new economic development and of structures having potential for economic reuse. An assessment of site and structure capabilities and available infrastructure will determine the best potential use for each and will assist in determining the specific types of activity to be included in the economic development goals of the city or town. Special advantages should also be identified, such as recreation and historic areas that can attract tourist industry.

The Economic Development Element must devise implementation steps to support the formulated economic development goals and policies by:

- Identification and reservation of sites and structures planned for new or expanded economic development
- Protection of such planned sites or structures from other use by other less demanding classes of development, principally through the zoning ordinance and other local land development controls.
- Infrastructure improvements designed to support economic development
- Assignment of responsibility within the municipal government for providing guidance and assistance to new or expanded economic development. This will include continuing coordination with economic development activities of the state and municipalities in the region.
- Where deemed appropriate or necessary the development of a program of incentives to stimulate economic development

Economic Trends

State Trends

Rhode Island's economic trends of the past decade, like those nationally, influence the policies in this comprehensive plan and local economic development efforts for the next 20 years. According to the Rhode Island Department of Labor and Training (RIDLT) (2010)[2], from December 2001 through January 2007, Rhode Island experienced an economic upswing when private sector jobs grew 5.4%, outpacing all other New England states; however that momentum shifted later in 2007. The state budget crisis, increased energy costs, and the housing market and credit collapse pushed Rhode Island into a recession nearly one year before the rest of the nation. The state's unemployment reach reached its highest in 30 years in December 2009 at 12.7% and it held steady for three months. Nationally, the unemployment reached its peak of 10.1% in October 2009 and then slowly dropped. Rhode Island's rate dropped to 11.5% in September 2010; however it is still the highest unemployment rate in New England and fifth nationally. Job losses occurred in nearly all economic sectors with the largest declines in manufacturing, construction, profession and business services, financial activities, accommodation and food services, and government.

The National Bureau of Economic Research declared that the recession ended in June 2009, but in the years that followed, national job losses continued. In Rhode Island, employment bottomed out almost a year later in April 2010. This loss was exacerbated by the record-breaking rainfall in March 2010. Residents and businesses were both affected by the flooding that resulted. RIDLT reports that 240 businesses with nearly 4,900 worked experienced significant flooding, with temporary closings ranging from a few days to some still closed one year later.

The RIDLT reports that private sector job losses appear to be diminishing, but recovery from the recession in Rhode Island will be slow. Table ED-1 shows labor forces trends in Rhode Island

[2] *Rhode Island Employment Trends 2010*. A publication by the RIDLT Labor Market Information Unit. October 2010.

over the past year. Between March 2010 and March 2011, the unemployment rate only dropped 0.8% (or a -6.8% change).

RIDLT projects modest job growth at all education and skill levels. Employment is projected to increase by nearly 40,000 jobs between 2008 and 2018, driven primarily by the increased demand for products and services of the health care and social assistance; professional, scientific, and technical services; educational services; retail trade; and accommodation and food services sectors.

Table ED-1: RI Labor Force Trends, March 2011

Labor Force and Unemployment (1,000s) Seasonally adjusted	March 2011	February 2011	March 2010	% Change February 2011	% Change March 2010
RI Labor Force	571.9	573.8	575.3	-0.3%	-0.6%
RI Employed	508.9	509.8	507.5	-0.2%	0.3%
RI Unemployed	63.0	64.1	68.7	-1.7%	-7.1%
RI Unemployment Rate	11.0%	11.2%	11.8%	-1.8%	-6.8%
US Unemployment Rate	8.8%	8.9%	9.7%	-1.1%	-9.3%

Source: RI Dept. of Labor and Training, Labor Market Information Unit, 4/15/2011 (www.dlt.ri.gov/lmi/ces.htm, obtained 4/25/11)

The RIDLT notes signs of the slow recovery in 2010. From January to August, private sector employment increased by 300 jobs. The largest increase was seen in the accommodation and food service industry, where jobs increased by 1,400. Overall, however, the RIDLT states that the largest gains continue to occur in the health care and social assistance sector and project an increase of 13,000 jobs by 2018. This growth is being lead by our aging population along with medical advances and new technologies promoted by the Knowledge Economy. Continued employment declines are projected for the State's manufacturing sector, with the largest losses expected in fabricated metal products and textile mills. Small gains may be seen in a few manufacturing industries such as computer and electronic, transportation equipment, and chemical.

Local Economic Trends and Conditions

North Providence Employment Profile

North Providence, like the state, was impacted by the recession and is slowly recovering. The RIDLT[3] estimates that in 2010 North Providence's total employment figure decreased to 16,826 (from 17,472 in 2005) and the unemployment rate peaked at 11.4% (5.0% in 2005). In March 2011, the rate dropped to 10.7%, slightly lower than the state's rate of 11.0%.

Influenced by the state trends, most employed North Providence residents worked in the educational services and health care and social assistance industries (Table ED-2). These areas saw the most growth in employment opportunities for residents. Also consistent with state

[3] RIDLT, Labor Market Information Unit "North Providence Labor Force Statistics (not seasonally adjusted) 1990-Present," 2011 (http://www.dlt.ri.gov/lmi/laus/town/laus11.htm, obtained 4/25/2011)

trends, employment in the manufacturing industry fell. In North Providence, many mill complexes have been converted to residential and commercial spaces.

Table ED-2: Change in Employment Industry for North Providence Civilian Workforce 16 Years and Older

Industry	2000 % employed	2009 % employed	Change
Agriculture, forestry, fishing and hunting, and mining	0.1%	0.3%	0.2%
Construction	5.3%	4.8%	-0.5%
Manufacturing	13.2%	8.6%	-4.6%
Wholesale trade	3.8%	2.8%	-1.0%
Retail trade	13.3%	14.3%	1.0%
Transportation and warehousing, and utilities	4.5%	4.6%	0.1%
Information	2.0%	1.8%	-0.2%
Finance and insurance, and real estate and rental and leasing	8.1%	8.5%	0.4%
Professional, scientific, and management, and administrative and waste management services	7.9%	9.3%	1.4%
Educational services, and health care and social assistance	21.9%	24.70%	2.80%
Arts, entertainment, and recreation, and accommodation and food services	8.7%	9.90%	1.20%
Other services, except public administration	5.8%	5.00%	-0.80%
Public administration	5.6%	5.20%	-0.40%

Source: 2009 America Community Survey 5-Year Estimates (2005-2009)

The ACS reports that a majority of workers (85.6%) commuted to work by car and drive alone, relatively no change from the 2000 US Census; 6.1% carpooled, a drop from 9.2% in 2000; and 3.3% took public transportation, also a drop from 2000 (2.3%). Approximately 3% worked at home. The average commute was 22.9 minutes, and increase of one minute from 2000. It is anticipated that these commuting trends will continue.

Leading Employers

The leading employer of all businesses located in the Town of North Providence is Our Lady of Fatima Hospital at 200 High Service Avenue in the Fruit Hill section of town. It is part of St. Joseph's Health Services of Rhode Island. This acute care and general hospital facility employs approximately 1,340 people and is one of the largest employers in the State according to RI Economic Development Corporation[4]. When combined with St. Joseph Hospital for Special Care in Providence, it employs over 1,800. Established in 1892 the hospital provides care to nearly 90,000 patients a year, has a staff of 300 physicians and dentists and a fully accredited diploma school for nursing. Our Lady of Fatima also has a full Obstetrics Department and is a leader in neurology, neurosurgery, orthopedic surgery; psychiatry and rehabilitation services.

Table ED-3 provides a full listing of the firms employing over 50 people. Included is the company name, street address and the product or service provided.

Table ED-3: Businesses employing 50 people or more in North Providence

Name	Employees	Location	Type of Services/Business
Our Lady of Fatima Hospital	1,343	200 High Service Avenue	Hospital
The Fogerty Center (Rhode Island	225	220 Woonasquatucket Avenue	Services and programs for adults and

[4] "Top Employers in Rhode Island" March 2011

Name	Employees	Location	Type of Services/Business
ARC)			children with disabilities
Lowes Home Improvement	130	1703 Mineral Spring Avenue	Lumber and other materials
Hopkins Manor	185	610 Smithfield Rd	Nursing care facility
Golden Crest Nursing Home	165	100 Smithfield Road	Nursing care facility
Shaw's Supermarket	160	15 Smithfield Road	Grocery store
Stop & Shop	100	1128 Mineral Spring Avenue	Grocery Store
Induplate Inc.	100	1 Greystone Avenue	Plating and polishing
Deci, Inc.	75	1270 Mineral Spring Avenue	Building maintenance services
Shore's Market Inc.	60	1590 Mineral Spring Avenue	Grocery store
Jan Co., Inc.	55	1382 Mineral Spring Avenue	Restaurant
Harwood Manufacturing Co.	55	1119 Douglas Avenue	Gift, novelty, souvenir
Car McDonald's East	54	1920 Mineral Spring Avenue	Restaurant
Aro-Sac, Inc.	50	1 Warren Avenue	Jewelers materials and lapidary work
L'Image Inc.	50	9 Warren Avenue	Costume jewelry

Source: RI Economic Development Corporation

Development Trends

A majority of the businesses in North Providence are small businesses and the economic recession of the past decade has impacted these businesses. According to the Rhode Island Economic Development Corporation (RIEDC), the number of private businesses in North Providence has decreased since 2006, when the total number of establishments peaked at 748. Table ED-4 shows that this number dropped to 702 in 2009. Losses were in all establishments types.

Table ED-4: Number of Establishments in North Providence, 2000-2009 (RIEDC)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Private & Government	710	696	718	727	752	751	758	755	724	712
Total Private Only	*	*	705	714	742	739	748	744	714	702
Agriculture, Forestry, Fishing & Hunting	23	18	0	0	0	0	0	0	0	-
Mining	0	0	0	0	0	0	0	0	0	-
Utilities			0	0	0	0	*	*	*	-
Construction	75	71	69	69	72	82	83	82	84	76
Manufacturing	65	62	67	62	58	53	52	44	40	42
Wholesale Trade	51	47	41	41	44	39	41	9	34	34
Retail Trade	150	151	97	99	107	107	106	12	109	106
Transportation & Warehousing	21[2]	20[2]	18	18	18	18	16	14	14	14
Information	*	*	10	9	9	9	11	9	7	9
Finance & Insurance	45[1]	45[1]	36	37	40	40	37	39	35	33
Real Estate & Rental & Leasing			18	19	27	31	30	34	32	29
Professional & Technical Services	280[3]	282[3]	60	63	58	59	61	60	57	57
Management of Companies & Enterprises	*	*	*	1	1	*	*	*	*	*
Administrative Support & Waste Management	*	*	48	50	56	59	61	61	61	58
Educational Services	*	*	9	10	10	9	8	6	3	3
Health Care & Social Assistance	*	*	81	82	78	80	80	77	76	76
Arts, Entertainment, & Recreation	*	*	6	6	7	5	5	6	6	6
Accommodation & Food Services	*	*	65	70	73	75	77	77	67	69

Other services (except Public Administration)	*	*	79	83	88	78	82	87	87	94
Unclassified Establishments	0	0	0	1	1	*	2	1	*	*
Government	*	*	13	14	11	12	12	11	10	10

* Data not available
(1) Real Estate Employment included
(2) Public Utilities Employment included
(3) Census Bureau expanded the Services Industry into more defined categories starting in 2002
Sources: Employment & Establishments: RI Department of Labor & Training, QCEW surveys

As Table ED-4 shows, many industrial businesses have left town over the past decade. This trend is also occurring statewide. Recently, mill complexes in North Providence have been converted to residential uses, rather than being filled with new manufacturers. As a result, industrial space is being lost.

Much of the new economic development in North Providence has been focused on retail and commercial businesses. The most significant construction project during this timeframe was Lowes at 1625 Mineral Spring Avenue. Lowes redeveloped the former Rizzo Ford parcel. In general most of the commercial development was small in scale (3-5,000 sq. feet) with the majority of activity occurring on Mineral Spring Avenue and Smith Street.

With the drop in number of establishments, so has the number of employees. Table ED-5 shows that businesses in North Providence employed an average of 7,353 persons in 2009 (RIEDC), which has slowly dropped from its peak in 2002. A majority of those working in North Providence were employed in health care and social assistance, retail trade, and public administration. This correlates with the town's largest employer, Fatima Hospital, as well as the number of retail establishments along the Town's major corridors.

Table ED-5: Average Employment by Sector in North Providence, 2000-2009 (RIEDC)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Private & Government	7,369	7,327	8,778	8,746	8,692	8,649	8,492	8,341	8,035	7,353
Total Private Only	*	*	7,855	7,828	7,785	7,755	7,588	7,457	7,123	6,476
Agriculture, Forestry, Fishing & Hunting	73	55	0	0	0	0	0	0	0	-
Mining	0	0	0	0	0	0	0	0	0	-
Utilities			0	0	0	0	*	*	-	-
Construction	354	309	318	309	275	282	299	278	326	257
Manufacturing	760	729	748	634	640	601	510	459	449	366
Wholesale Trade	167	156	126	124	142	150	132	223	217	191
Retail Trade	1,955	1,833	1,218	1,206	1,215	1,259	1,184	1,078	1,046	966
Transportation & Warehousing	124[2]	124[2]	147	156	98	91	96	94	105	93
Information	*	*	31	28	32	29	31	27	27	31
Finance & Insurance	391[1]	394[1]	346	378	359	389	394	288	229	168
Real Estate & Rental & Leasing			72	82	100	124	122	131	125	111
Professional & Technical Services	3,545[3]	3,727[3]	268	256	276	250	209	183	183	165
Management of Companies & Enterprises	*	*	*	*	*	*	*	*	*	*
Administrative Support & Waste Management	*	*	629	496	471	454	484	464	400	448
Educational Services	*	*	14	21	20	14	12	7	8	4

Health Care & Social Assistance	*	*	2,642	2,774	2,767	2,808	2,851	2,926	2,825	2,591
Arts, Entertainment, & Recreation	*	*	124	120	128	105	98	105	108	51
Accommodation & Food Services	*	*	815	845	875	847	812	837	737	693
Other services (except Public Administration)	*	*	345	372	365	334	337	337	317	322
Unclassified Establishments	0	0	0	*	*	*	1	0	*	*
Public Administration	*	*	923	918	907	894	904	883	912	878

* Data not available
(1) Real Estate Employment included
(2) Public Utilities Employment included
(3) Census Bureau expanded the Services Industry into more defined categories starting in 2002
Sources: Population: US Census Bureau, Census 2000; *Population Estimates Program* for later years
Employment & Establishments: RI Department of Labor & Training, QCEW surveys

North Providence Labor Force

Table ED-6 compares the occupations of employed North Providence residents 16 years and older between 2000 and 2009. In 2009, more residents were working in the industries of retail; professional, scientific, and management and administrative and waste management services; education services, and health care and social assistance; and arts, entertainment, and recreation, and accommodation and food services. Lower percentages of residents were working in construction, manufacturing, and wholesale. By 2009, construction of all kinds slowed due to the economic downturn. As the economy improves, construction will as well. Manufacturing has been decreasing in Rhode Island over the past two decades and this trend is expected to continue.

Table ED-6: Industries of Employment for North Providence residents 16 Years and Older

Industry	2000	2009
Agriculture, forestry, fishing and hunting, and mining	0.1%	0.3%
Construction	5.3%	4.8%
Manufacturing	13.2%	8.6%
Wholesale trade	3.8%	2.8%
Retail trade	13.3%	14.3%
Transportation and warehousing, and utilities	4.5%	4.6%
Information	2.0%	1.8%
Finance and insurance, and real estate and rental and leasing	8.1%	8.5%
Professional, scientific, and management, and administrative and waste management services	7.9%	9.3%
Educational services, and health care and social assistance	21.9%	24.7%
Arts, entertainment, and recreation, and accommodation and food services	8.7%	9.9%
Other services, except public administration	5.8%	5.0%
Public administration	5.6%	5.2%

Source: ACS 5-Year Estimates (2009); 2000 US Census

Existing Economic Profile

Commercial Districts

Marieville

The Marieville retail district is located at the intersections of Charles Street and Mineral Spring Avenue. It is in the eastern most part of the Town bordered by Pawtucket to the east and RI-I46 to the west. Commercial uses extend south to the Providence city line, east to Pawtucket, north to the Route 146 entrance ramp and west to Route 146 itself.

The older commercial district at Charles Street and Mineral Spring Avenue is characterized by a variety of architectural styles. Most of the buildings are older and in need of cosmetic improvements. There are a variety of commercial uses ranging from retail to auto service to institutional. The automotive uses are concentrated south of Mineral Spring Avenue. The area has quite a few restaurants in close proximity to each other.

This older commercial area tends to serve local residents from Providence and North Providence who use Charles Street as a north/south connector and Pawtucket residents who find this area convenient to them. The Spring Plaza is located at the western end of this village area with Route 146 its western border. The plaza includes a Stop and Shop food market and numerous small retailers.

Geneva

The Geneva commercial district is located south of Mineral Spring Avenue along Douglas Avenue. At its southern extreme near Geneva Pond is the R.N. Koch Inc. building located on the Providence/North Providence line. From the town line north, the area is characterized by heavy commercial and industrial uses. There are numerous construction, automotive repair and salvage operations.

Further north there is more retail and service activities. In general this area is not a strong commercial center due to the heavy influence of the Mineral Spring Avenue commercial district.

Fruit Hill

The Fruit Hill commercial/professional district begins on Smith Street at the town line and terminates at Homewood Avenue in the vicinity of Evans Park. The lower part of Smith Street is characterized by professional offices and larger Victorian homes that have been rehabilitated and converted to offices.
The conversions to date have been well done.

The professional office development in this area is in direct response to the close proximity of St. Josephs Hospital on High Service Avenue just north of this location. The number and location of medically related facilities is a "spinoff' of the hospital itself. Beyond the location of doctor's offices in the area, there are medical supply establishments, laboratories and other similar services. The retail and service commercial district lies just to the north of the professional zone at Wellesley Avenue. The Wellesley Medical Building, a fairly substantial glass faced office building, anchors one end of the district.

From all appearances this commercial district is well established primarily serving the Fruit Hill neighborhood, Rhode Island College and Providence residents in the Smith Street area. The area is characterized by contrasting architectural styles and in general is devoid of vegetation, such as street trees and parking lot plantings.

Centredale

The commercial district and village of Centredale is located at the intersection of four major roadways, Waterman Avenue, Woonasquatucket Avenue, Mineral Spring Avenue and Smith Street. It is the home to town government and has been since the town erected its first Town Hall in 1879. The Centredale Post Office is also in the village. Centredale is home to the Yacht Club Bottling Works Inc., which has been in business since 1915. The company still uses spring water from beneath the plant to make their products.

There are also a number of commercial establishments in Centredale particularly along Smith Street from the town line to Woonasquatucket Avenue. This area includes a mix of business ranging from retail and wholesale to antique dealers to small restaurants. The buildings housing these businesses are a wide variety of architectural styles in varying stages of repair. It is apparent that the area has suffered in a physical and economic sense from competing commercial interests, particularly those on Mineral Spring Avenue.

Allendale - Upper Smith Street

From Centredale south along Smith Street there is an area of mixed residential and commercial uses which stretch from Woonasquatucket Avenue down towards Allen Avenue. Commercial development is somewhat spotty until Allen Avenue where there is a concentration of commercial uses that extend to Sampson Avenue. The shopping area serves the general neighborhood between Woonasquatucket Avenue and Mineral Spring Avenue. It contains the North Providence Shopping Center and other retail and service uses.

Mineral Spring Avenue

The center of commercial development in North Providence, Mineral Spring Avenue provides non-stop commercial shopping opportunities for 2.2 miles. The commercial area starts at the City View Shopping Plaza at the eastern end of Mineral Spring Avenue, finds its mid point at Douglas Avenue in the vicinity of the Mineral Spring and Howe Plazas and continues to Central Avenue, its western terminus in the vicinity of the Hilltop Shopping Center.

While commercial establishments are found along the entire length of this district, the heaviest concentrations occur between Woodward and Smithfield Roads. These two roads serve as high points at either end of the West River drainage basin. From Woodward Road west to Douglas Avenue the elevation drops eighty feet from elevation 210 to 130 feet above sea level. At the western end of the basin Mineral Spring Avenue rises to an elevation of 280 feet, one hundred fifty feet above Douglas Avenue. The dramatic changes in elevation serve to dramatize the intensity of commercial development in this area as a full one mile segment is visible as one drives from west to east or vice-versa. This view is compounded by a general lack of vegetation, the number of business signs, telephone poles and wires that exist. Traffic, as one might expect, is heavy through this commercial area that is served by a three lane road (center turning lane) through the heaviest areas of commercial use. In general, there are many large and small strip shopping plazas as well as individual small commercial entities.

There is a full array of commercial activity existing along this 2.2 mile district including banks, restaurants (fast food and sit down), clothing stores, convenience stores, super markets, drug stores, service stations and auto sales establishments. Some of the major commercial centers include Douglas Plaza, Lowe's and Howe Plaza.

Industrial Development

Lymansville

Industrial uses in North Providence have been diminishing as historic mill complexes are converted to residential uses. Smaller manufacturers still remain along Woonasquatucket and Warren Avenues in Lymansville. The Ronci Industrial Park is located in the historic Lymansville Mill, erected in 1817, still carries the name of its founding company. There are approximately eight tenants in this facility, which offers approximately 200,000 square feet of leasable area to potential tenants. Many tenants manufacture costume jewelry.

Future Employment Projections

As the state continues to recover from economic recession, the RIDLT expects state employment to increase by nearly 40,000 jobs between 2008 and 2018, or an increase of 7.8%. It is anticipated that this growth will be attributed to increased demand for products and services provided by the health care and social assistance; professional, scientific, and technical services; education services; retail trade; and accommodation and food services sectors. RIDLT also projects that employment will grow at all education and skill levels, including those that require on-the-job training as well as advanced degrees. More than half of job growth is expected to occur among jobs that require on-the-job training. Approximate one third will require an associate degree or higher and the remaining (14%) will require related occupation or vocational training[5].

As North Providence plans for economic development opportunities, regional and state trends should be considered when considering what types of businesses to attract to the community as well as providing the necessary infrastructure to properties that have redevelopment opportunities.

Future Economic Development Program

Given the volatile nature of the economy in the state and region, it becomes imperative that a local community do all it can to stabilize and enhance its local economic base. While the general economic condition of this State and region may be beyond the control of anyone city or town, there are things that a municipality can do to help solidify its position as an attractive place for business.

State government is responsible for the overall economic climate that Rhode Island portrays to business. Strong fiscal policies, a comprehensive marketing program, financial assistance, and other initiatives can help to support the local economy. The perception that one gains from these activities goes a long way in promoting the state as a good place to do business. While the

[5] "Rhode Island Employment Trends and Workforce Issues" A publication of the Labor Market Information Unit, RIDLT, 2010.

state may be in a better position to market this area on a regional level, the success of these efforts relies in no small part with the emphasis economic development is given by our local governments.

It is a local community's responsibility to understand its local market, interact with it and improve its local infrastructure while making public improvements to attract private investment. This is particularly true in our older commercial districts. Other activities can include zoning appropriate locations for redevelopment and seeking funds to support economic development. The Town also needs to continually coordinate with State officials to ensure that it receives its fare share of state and local funding for improvements to its infrastructure system.

The Town of North Providence has a strong retail base while its industrial base is on the decline; however, small manufacturers remain in pocket areas along the Woonasquatucket River in Lymansville. The town's Future Economic Development Program should support these small industrial businesses and encourage revitalization of the town's older business districts. Public investments in infrastructure improvements can result in private re-investment and the revitalization of these neighborhood districts.

The Future Economic Development Program provides the tools to build the local economy that is consistent with other elements of the Comprehensive Plan, including Land Use, Circulation, and Facilities and Services. In order to achieve the town's economic goals requires a strong implementation program is required. It must be multi-faceted and targeted to achieve the policies outlined by the community. The following action plan outlines the major components of the Town's plan for economic progress, which is based upon a commitment to community involvement, a strong financial and managerial component for economic growth, with the legislative actions required to ensure success. The major elements of the plan include:

- Village Commercial and Mineral Spring Avenue Revitalization Program
- Resident and Business Councils
- Redevelopment Districts
- Business Retention/Expansion Programs
- Facility and Service Improvement Program
- Other Economic Development Initiatives

Village Commercial and Mineral Spring Avenue Revitalization Program

This is the centerpiece of the Town's economic development initiatives and represents a strong commitment on the part of the Town to foster redevelopment in its commercial districts. The purpose of this program is to foster private re-investment in the village centers of Centredale, Fruit Hill, and Marieville as well as Mineral Spring Avenue. Other areas can be identified as needed. This project will also serve to foster renewed pride that will be translated into continuous improvement to building and other properties. These studies can be done in conjunction with the Centredale/Mineral Spring Avenue Study outlined in the Land Use Element, which looks to evaluate the most suitable land uses along Mineral Spring Avenue from Central Avenue west into Centredale.

The basis for improvements is the development of Master Plans for each of the three village areas and the Mineral Spring Avenue corridor. Separate Master Plans should be developed for each village district and Mineral Spring Avenue and serve to reflect the unique characteristics of those areas. The Master Plans would be developed with input from Resident and Business Councils, as described in the next initiative, and the general public. The extent and timing of these improvement programs would depend upon the specific needs of a given area and the timing of other projects that might be scheduled for these villages and Mineral Spring Avenue by the town itself or other State agencies (i.e. RIDOT, Narragansett Bay Commission).

Master Plans should include an evaluation of the following topics:

- Business Inventory
- Circulation Improvements (if required)
- Sidewalk Repair or Replacement-including the installation of drop curbs
- Street Tree Plantings
- Signage Improvements
- Crosswalk Improvements
- Parking Improvements (existing or proposed)
- Storefront Improvements
- Street Furniture Installation
- Public Space Creation
- Decorative Lighting
- Historically Significant Properties
- Site and Building Design Guidelines
- Implementation Strategies
- Funding Alternatives
- Schedule of Improvements

The implementation of the master planning process rests with the administration of the town. Town managers must initiate this process through coordination efforts with state agencies and others responsible for the related elements of the comprehensive plan, particularly the Facilities and Services Element At the appropriate time the administration would develop a scope of work for a consultant to begin the master planning process. The scope would include all items necessary to conduct such a project including but not limited to the items identified under the master plan section of this report.

In addition to this effort the town administration will be responsible for developing the financial mechanisms to support the development of the master plan and its implementation. Funding alternatives will be presented in the next section. If a bond issue is necessary, the Finance Director would be responsible for developing the bond issue for approval by the Mayor and Town Council. Special Legislation would be required from the General Assembly to present the bond referendum to the general public for their approval.

Resident and Business Councils

The success of any economic development program requires the support of the local community, its residents, and business leaders. This is particularly true with respect to efforts

by a community to implement neighborhood revitalization programs that will result from village master plans describe in the previous initiative. A public partnership must be developed that provides for the local communities full involvement in the planning effort. This involvement must begin at the initial development stages, through concept design to actual construction. It is through such a process that "pride of ownership" develops, a key element which leads to the long term improvement of an area, providing the basis for private re-investment.

Resident and Business Councils provide a mechanism for citizens and business people be involved in the planning process. It is recommended that their role be advisory to the town with respect to municipal economic development and revitalization activities. Being involved in the early stages of the process would also help for them to understand how such improvements are accomplished, the financial constraints placed upon the town in the funding of such activities, and the importance local pride can play in the long term feasibility of such efforts.

Four Resident and Business Councils are proposed to assist in the planning for future improvements to the Marieville, Fruit Hill, and Centredale commercial districts as well as the Mineral Spring Avenue Corridor. Other areas can be identified as needed. Membership would be voluntary, being drawn from area residents and merchants. Some business districts, like Marieville, already have a strong base of interested residents while others will require more work to identify potential members. In reality they would act as neighborhood improvement associations but with a more formal avenue of input to the Mayor and Town Council.

The Resident and Business Councils' role would be to solicit support for neighborhood improvements, solicit input from local businesses and residents, and foster a sense of pride in each of the respective village districts. They would help develop specific improvement plans with town officials and/or a consultant retained to develop improvement options. Additional tasks for the Resident and Business Council could include the development of events or other programs to bring attention to particular districts including the initiation of fund raising events in support of the physical improvement efforts.

The administration would work with the local neighborhood groups to solicit volunteers for the councils. It would also develop the Resolution establishing the councils for adoption by the Town Council. The Resolution would outline the purpose and function of the councils and their role in the development of improvement schemes for their particular areas. The administration would also appoint a liaison person to function as an intermediary between the Resident and Business Council and the Administration and the Town Council. This person would supply information as requested by the Councils and work with them throughout the improvement process.

Redevelopment Districts

The Master Plans can become the basis for redevelopment plans and the establishment of Redevelopment Districts. Areas of town that have become deteriorated to the point that they do not attract investment are prime candidates to be designated as redevelopment districts. See the Land Use Element for more discussion and action items associated with Redevelopment Districts. These districts can give the Town the tools it needs to reinvest in these areas.

Business Retention/Expansion Program

The primary purpose of initiating such a program is to recognize existing local businesses as the most important aspect of the town's commercial and industrial tax base. In doing so, the town will recognize the importance of communicating with business to understand their concerns and to work with them whenever possible to solve those problems in an effort to retain those businesses in the community. The most important element of this process is communication, and it must take place from the top levels of the administration. In addition to such communication, it provides a community with a better understanding of their commercial base, the market they serve and how the local economy relates to the larger state and regional economic picture.

The major objective of such a program is to clearly understand, at any given time, the status of this most important element of the tax base. For obvious reasons it would be important for a community to know, for example, that a major employer in town was closing and to be able to try to prevent such a closure, which would obviously have a devastating impact on tax revenues, support services, local and regional employment.

Point of Responsibility

While the Chief Executive Officer (Mayor) is the obvious choice for this responsibility and clearly must take an active role in this process, the day to day organization and implementation of such a strategy could lie with a team of municipal officials lead for example by the Mayor or his Executive Assistant. Other key players could include the Director of Planning and Development and the Financial Director, given their general areas of responsibility.

Organizational Structure

This process would be initiated by meetings with local industry, and commercial leaders on a regular basis (monthly). Representatives from major local employers (see Economic Development element), the Chamber of Commerce, financial institutions and other civic organizations (Rotary, Lions, etc.) could be included. This group would form the basis for an "Economic Task Force."

Initial meetings would be utilized to identify issues of concern while providing time for the Town to get a better feeling for its local market, its operation and issues. Subsequent meetings would be scheduled to discuss particular issues which may be raised.

Implementation

Organizational meetings could take place with the Chamber of Commerce and local officials to establish an outline for discussion at the first meeting of the business representatives. Goals and Objectives for these meetings could be established. This process could begin immediately after the Comprehensive Plan is adopted by the Town Council.

Facility and Services Improvement Program

A major recommendation with respect to the Facilities and Services Element of the Comprehensive Plan is the development of a Facilities Improvement Program. See the Facilities and Services Element for program details and action items. The purpose of such a program is to outline, on a priority basis, systems which should be updated such as sewer lines and drainage systems. The improvement of these systems should be scheduled in conjunction with the

commercial revitalization program outlined earlier in this section, to eliminate a situation where newly improved areas would be disturbed to accommodate another aspect of the plan. The updating of these systems would provide the town with the opportunity to upgrade services to commercial and industrial centers where older collection systems may be undersized or the distribution system may be inadequate in terms of existing or future service needs.

Other Economic Development Initiatives

Job Development Training
As a spin-off to the business retention efforts the town, with the cooperation of major employers, appropriate state officials and educational institutions, would develop a training program geared toward improving the skills of the workers in its employment base. Such a program would include addressing the changing ethnic mix of the community to help further economic opportunities for this group of residents.

Landscaping Program
To improve the visual appearance of the Town's commercial thoroughfares, the Town should initiate a landscaping program. This program would be developed to enhance sidewalks and improve the streetscape in commercial areas. Sidewalk improvements, street plantings, street furniture, and other enhancements could be provided to make these areas more attractive for pedestrians and shoppers. Grant funds and corporate donations could be solicited to offset the cost of installation. An active program of area beautification could also be started to encourage corporate participation.

Adopt-a-Spot Program
The Town, through its Economic Task Force, would solicit corporations and individuals to adopt a "strip" or "spot" or a single tree or bench along the town's major roadways where such organizations would plant shrubs and trees etc. to enhance the appearance of the commercial districts in their area. This project, similar to a program in Providence, where corporations and businesses are encouraged to install plants on traffic islands for beautification purposes. While some areas are conducive to such plantings, others are not. This is why we suggest a combination of tree planting and linear shrub planting where no islands exist.

Signage Reduction Program
Provide short term tax incentives to proprietors who eliminate larger signs to conform to a new more reasonable sign standard. The purpose is to further reduce visual pollution along major arterials.

Goals, Policies, and Action Items

Goal ED 1: Provide a balanced and diversified economy.

Policy ED 1: Rehabilitate the older commercial centers in the town to ensure their future usability.

Policy ED 2: Develop and support programs and policies that expand employment opportunities to present and future residents.

Policy ED 3: Make every effort to retain existing business and industry.

Policy ED 4: Promote a public/private partnership with businesses to benefit both parties.

Implementation Actions

Action ED 1: Develop master plans for commercial village centers and the Mineral Spring Avenue corridor to include implementation strategies that foster economic redevelopment.

Responsibility: Planning Director, Planning Board
Timeframe: Mid Term

Action ED 2: Create neighborhood resident and business councils in each commercial village center and the Mineral Spring Avenue Corridor to participate in the planning, development and implementation of economic master plans.

Responsibility: Planning Director, Town Council
Timeframe: Mid Term

Action ED 3: Establish a business retention program geared to working on a regular base with existing industry and commerce. Every effort should be made to work with the Chamber of Commerce, Rotary, leading employers, Small Business Association, universities and colleges, etc.

Responsibility: Planning Director, Town Council, Mayor's Office
Timeframe: Short Term

Action ED 4: Develop local strategies that can increase exposure of residents and businesses to RI Department of Labor and Training's job training and employment initiatives.

Responsibility: Planning Director, Mayor's Office
Timeframe: Ongoing

Action ED 5: Pursue a landscaping program along major commercial thoroughfares.
Responsibility: Planning Director, Planning Board, Town Council, Environmental Commission
Timeframe: Mid Term

Action ED 6: Develop a sign control ordinance for new construction and consider providing limited short term tax incentives to eliminate nonconforming signs.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action ED 7: Pursue funding for a "Streetscape" program that enhances the village commercial districts.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Long Term

Action ED 8: Pursue the establishment of a storefront improvement program with design controls.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Mid Term

FACILITIES AND SERVICES

The purpose of this element is to present base line data and analysis relative to Facilities and Services in North Providence. This Facilities and Services section includes information on public safety, educational resources, municipal infrastructure/public works, general government administration, senior services, and medical facilities. This element provides a basis for the development of goals and objectives for each of the departments under the umbrella of Facilities and Services and lists actions to be undertaken by each in order to achieve those goals and objectives.

Background

The Rhode Island Comprehensive Plan and Land Use Regulation Act requires that a comprehensive plan "be based on an inventory of existing physical infrastructure such as, but not limited to, educational facilities, public safety facilities, libraries, indoor recreation facilities, and community centers. The plan must describe services provided to the community such as, but not limited to, water supply and the management of wastewater, storm water, and solid waste. The plan must consider energy production and consumption. The plan must analyze the needs for future types and levels of services and facilities, including, in accordance with section 46-15.3-5.1, water supply system management planning, which includes demand management goals as well as plans for water conservation and efficient use of water concerning any water supplier providing service in the municipality, and contain goals, policies, and implementation techniques for meeting future demands."

In broad terms, this element requires the following steps in planning for municipal and related facilities and services:

- An inventory of existing public facilities and services, mapped where appropriate. This should include all publicly operated facilities and services plus quasi-public and private facilities that provide services to the general public.
- A general analysis of the effectiveness of each such facility and service, noting any deficiencies in quality of services provided.
- A forecast of current and future needs for such facilities and services, based largely upon projections of land usage and population change utilized in the other plan elements. The forecast should be based upon generally accepted standards of need or on standards developed by the city or town for his purpose and must be in conformity with local goals and policies established to govern the provision of such facilities and services.
- A program to be included in the Implementation Program element that will schedule actions designed to accomplish the following:
    - Eliminate current deficiencies and provide improvements in services and facilities.
    - Provide for expansion of facilities and services to satisfy the projected needs of future land development and population change.
    - Initiate new types of facilities and services in accordance with projections of need.

While the range of facilities and services of each municipality will be based on its peculiar characteristics, certain facilities and services will be common to most cities and towns, such as:

- Public elementary and secondary schools (local or regional)
- Protective services including police, fire and rescue, and emergency management
- Library services
- Public water supply, sanitary sewerage and surface drainage (where applicable or feasible)
- Public works facilities and services, including street maintenance, rubbish collection and disposal, etc.
- Municipal office functions including administrative, city or town clerk, assessor, tax collector, building inspector, etc.
- Special needs facilities and services for the elderly, handicapped, children, disadvantaged and other groups requiring special support services
- Federal, state and regional facilities and services established to satisfy the needs of the locality or the region
- Private and quasi-public social-service and recreational facilities and services for the general public

Public Safety

Public Safety includes police, fire, rescue and emergency services. The location of public safety facilities within North Providence is shown in Map 6.

Police

Facilities & General Operation

The North Providence Police Department is located in the Police/Fire Headquarters Building on 1967 Mineral Spring Avenue, which was built in 1973 to house the public safety function of the town. Fire headquarters shares this 14,257 foot facility with the Police Department. It is a one story brick faced building, with four bays and the fire communications center, located in the lower basement level.

The entire Police Department is housed within the Headquarters Building. The North Providence Police Department currently has a total of five command staff positions, 66 sworn police officers, and 24 civilian (non-sworn personnel). The organizational structure for the North Providence Police Department has three top ranking officials. It is headed by the Public Safety Director (Mayor), the Assistant Public Safety Director and finally the Police Chief.

Police Department Divisions

The Police Department is divided into five divisions further segmented into a variety of programs to serve the community needs.

Patrol Division consists of three primary Patrol Platoons, the Communication Center, and the Automotive Fleet. The Patrol Division is comprised of the Patrol Operations, Traffic Operations and Analysis, Parking Enforcement Abandoned/Junk Motor Vehicles, and Special Event Planning units.

Detective Division is comprised of the criminal investigators, the juvenile officer, and evidence technicians that are responsible for Criminal Investigations, Juvenile Officer, Missing Persons, Evidence Technician and BCI Lab, and the Evidence and Property Control functions of the Town.

Special Investigation Unit is responsible for the Narcotics, Vice, and Organized Crime Investigations of the Town.

Administrative Services Division oversees the Planning and Training functions for the department, the Community Policing Liaison officer, Information Technology, oversight of the Physical Plant (Headquarters), and the civilian employees (including Animal Control). The Community Policing Liaison officer is also associated with programs such as: Special Olympics – Rhode Island, Alzheimer's Alert-Registration, Citizens Police Academy, and Crime Watch.

Prosecution Division is responsible for Court Liaison Activities, Victim / Witness Assistance, Prisoner Transportation, Legal Process, and Domestic Violence Coordinator activities.

Patrol Districts

The North Providence Police Department has divided the town into four police coverage areas. Each coverage district is then divided into numerous subdistricts. A total of fifty-six subdistricts exist within the boundaries of the town. The following is a brief locational description of each of the four districts.

District I This district is located in the northwest Corner of North Providence. Its boundaries include Smithfield Road to the east and Smith Street and Fruit Hill Avenue to the south. District I contains the neighborhoods of Greystone, Woodhaven, and Centredale parts.

District II This district is found in the southwest corner of North Providence. Its boundaries include Smithfield Road to the east and Smith Street and Fruit Hill Avenue to the north. District-II is comprised of the Lymansville, Allendale, Fruit Hill, and Centredale (part) neighborhoods.

District III This district is situated in the southeast portion of North Providence. Its limits include Smithfield Road to the west and Mineral Spring Avenue to the south. Within District III are the Geneva and Marieville neighborhoods and the Louisquisset Complex. Lee's Farm is also located within the district.

District IV This district is located in the southeast section of North Providence. Its boundaries include Smithfield Road to the west and Mineral Spring Avenue to the north. Marieville and a portion of Fruit Hill are located within District IV.

Major Equipment Inventory

The North Providence Police Department currently owns and operates 37 vehicles, including 11 front line police cruisers, 4 detail cars, 4 administrative cars, 8 detective cars, 2 Special

Investigations vehicles, 3 OIC vehicles and 1 BCI van, 1 prisoner transport van, 2 police motorcycles, and 1 Mobile Command RV unit.

In accordance with the Town of North Providence Capital Improvements Program for 2010-2015, Table FS-1 lists vehicle updates proposed as part of the Police Department budget.

Table FS-1: Vehicle Updates in the North Providence Police Department Budget (2010-2015)

Program	Financing Method	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	Total
Police Cruisers (3 Marked)	Lease Purchase	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
Police Cruisers (2 Unmarked)	Grants	$52,000	$52,000	$52,000	$52,000	$52,000	$260,000
Patrol Vehicle (4x4)	General Revenue	$0	$0	$40,000	$0	$40,000	$80,000
Prisoner Transport Van	General Revenue	$40,000	$0	$0	$0	$0	$40,000

Source: Town of North Providence Capital Improvements Program 2010-2015

Programs

The North Providence Police Department is actively involved in education and special programs within the community. The North Providence Police Department's Narcotics Division has been involved in educating the young population of the community for many years. They have presented substance abuse information to the students attending public schools within the town, while also making formal visits to the senior citizens at the Senior Center and local housing developments for the elderly. The purpose of the visits with the elderly is to inform them about the key issues affecting the seniors in North Providence. These issues included improving security precautions, while making seniors more aware of fraud, con-games, and the potential for elderly abuse.

The North Providence Police Department is presently engaged in a Neighborhood Crime Watch Program. The department is responsible for initially structuring the program, while the residents of their respective neighborhood are responsible for actual surveillance. Each neighborhood that participates in the Crime Watch is responsible for selecting a representative or captain for their particular neighborhood. The captains then meet with a member of the police force periodically so they can be updated on who and what to watch for. The Police Department has been very successful with their Crime Prevention Programs and hopes it continues to expand it to every neighborhood within North Providence.

Crime

In the year 2010, the North Providence Police Department responded to 29,030 calls for service and made a total of 1,426 arrests in the year 2010. The Patrol Division investigated 1,204 motor vehicle accidents. While in 2007, members of the Police Department responded to 29,381 calls for service, making a total of 1,581 arrests. That year the Patrol and Traffic Division investigated 1,229 motor vehicle accidents. The Town has continued to follow the national trend of steep drops in the crime rate with the most current crime data being shown in Table FS-2.

Table FS-2: Crime Comparisons in North Providence, 1997 to 2006

Crime Year	Murder	Rape	Robbery	Aggrevated Assault	Burglary	Larceny	Motor Vehicle Theft	Rate
2006	1	5	11	23	139	371	91	
2005	0	7	8	26	99	384	80	2045
2004	0	5	12	38	136	364	59	1901
2003	0	5	8	48	109	383	61	1894
2002	0	7	21	44	100	415	78	2046
2001	2	6	12	32	139	419	89	2160
2000	1	8	9	44	112	310	93	1774
1999	1	11	3	26	132	305	67	1708
1998	1	8	9	35	126	321	63	1745
1997	0	7	21	23	125	309	86	1745

Source: North Providence Police Department

Service Evaluation / Issues:

The mission of the Police Department states that its members "are dedicated and committed to providing the highest quality police services to our citizens. We are dedicated to the concept of personal excellence at the highest level, uncompromising integrity, continuous improvement in order to enhance public safety, protection of life and property, and the reduction of crime and the perceptions of crime. We will fulfill this mission by developing a commitment to resolve issues and improve the quality of life for all residents."

"Members of the North Providence Police Department take pride in our professional accomplishments and abilities. We are individually accountable for the reflection of the following core values in both our professional and personal lives:

- Respect for human life;
- Treating all people with the highest regard and respect;
- Honesty and integrity through ethical behavior;
- Professionalism and excellence demonstrated in all areas of duty;
- Cooperation with all agencies of Federal, State, and Local Law Enforcement and government;
- Strengthen partnerships with the community.

Every citizen contact is an opportunity to demonstrate the mission and the values of the North Providence Police Department."

Relation to "Build-Out"

Because the Town is essentially at "Build-Out" at present, future growth is not expected to significantly increase demand for Police services.

Fire

Facilities & General Operation

The Fire Department is organized as a department under the Director of Public Safety, who is the Mayor of the Town of North Providence. The North Providence Fire Department is housed in the Police and Fire Headquarters building, built in 1973. It is located at 1951 Mineral Spring Avenue. At present the force has 89 people. The department attained full time status on January 1, 1989, prior to that it was primarily a volunteer organization.

The force includes the following personnel:

1	Chief of Department
8	Captains
21	Lieutenants
1	Director of Communications
1	Communications Lineman
4	Battalion Chiefs
48	Firefighters
5	Dispatchers

The Fire Districts

Table FS-3 lists the three fire stations that serve the Town. They are numbered stations 1, 2 and 4 by the Fire Department. The text following provides a brief description of the four fire districts.

Table FS-3: North Providence Fire Stations

Station Number	Station Name	Location
1	Headquarters	1967 Mineral Spring Avenue
2	Fruit Hill	399 Fruit Hill Avenue
4	Marieville	1080 Mineral Spring Avenue

Source: North Providence Fire Department

District 1 (Headquarters)

This district covers the northwest part of town from Smithfield Rd. west to the Woonasquatucket River. Also included in the district is that area south of Mineral Spring Ave. bordered on the west and south by Smith Street, Fruit Hill Ave., Fisher St. and High Service Ave (short leg), and on the east by Smithfield Rd. District One is located at Fire headquarters on Mineral Spring Ave. Fire headquarters contains the administrative function of the fire department, in addition to being the home of the fire department communication center. The administration offices are located on the upper level of the building. Communications, Rescue One and Station One are located on the lower level. Station one is a four bay facility which also serves as the main maintenance facility for the fire fighting fleet.

District 2 (Fruit Hill)

This district is just south of District One and is bordered on the north by Smith St., Fruit Hill Ave., Fisher St. and High Service Avenue and on the east by Smithfield Rd. The district primarily serves the areas of Fruit Hill, Lymansville and Allendale. The fire station is located at 399 Fruit Hill Avenue in a one story brick faced, building with a loft. The station has three bays

and typically houses a pump truck and communications vehicle. The station was built in 1980 and is the newest of the North Providence fire stations. The station contains a garage of approximately 4,560 square feet, offices and living space of approximately 2,160 square feet.

District 4 (Marieville)
The balance of the town is served by this fire station and district which includes everything east of Woodward Rd. to the Pawtucket City line. The district is physically split by Rt. 146. The station is located at 1080 Mineral Spring Avenue. This one story facility is home to Fire District 5 and Rescue Station 3. The facility has three working bays which house an engine, backup ladder and rescue truck. The building was constructed in the late 1950's.

The Rescue Districts

There are two rescue districts in the town of North Providence, District 1 (R-l) and District 3 (R-3). The districts split the town in half with District One covering the western part of town from Douglas Avenue to the Woonasquatucket River with District 3 covering the eastern half of town from Douglas Ave to the Pawtucket City line. Rescue District 1 (R-l) operates out of Fire Station 1 (Fire Headquarters). Rescue District 3 (R-3) operates out of Fire Station 4 (Marieville). The location of the two districts allows for fairly easy coverage to all locations within each district.

Fire Fighting Equipment and Station Assignments

The town has 10 major pieces of fire-fighting equipment, including:

- 5 engines
- 1 ladder, and
- 4 rescues,

Equipment at the Geneva station is no longer in use as that station has been closed. The following table lists the equipment in service at each of the three active fire stations and the two rescue district locations.

Table FS-4: Fire-Fighting Equipment Distribution by Location

Station	Equipment
Station 1 (Headquarters)	Engine 1, Ladder 1, Rescue 1, Marine 1
Station 2 (Fruit Hill)	Engine 2, Battalion 1, DECON 1
Station 4 (Marieville)	Engine 4, Rescue 2, Squad 1

Source: North Providence Fire Department

Fire fighting Shifts and Manning Levels

Shifts - The North Providence Fire Department operates on a four shift system (A, B, C, D). All shifts operate on an eight day schedule which consists of the following:

Schedule (eight day) Two days@ 10 hours = 20
Two nights@ 14 hours = 28
Four days off

Staffing Levels - Staffing levels relate to the number of personnel required on each piece of equipment when it is in service. Given the number and type of equipment in the system at this

time a minimum of 19 people plus one Battalion Chief are required on each shift. Table FS-5 provides a breakdown of the required manning levels:

Table FS-5: Minimum Staffing Levels/Equipment Type

Equipment Type	Personnel Required by Contract	Total
Battalion Chief	1	1
Engines 3	3 / engine	9
Ladders 1	3 / ladder	3
Rescues 2	2 / rescue	4
Squad 1	3 / squad	3
Total Personnel / Shift		20

Source: N.P. Fire Department

As Table 2.6 indicates, a total of twenty (20) firefighters must be on duty for each shift town-wide. The number of firefighters at each station is dependent on the equipment assigned to it. Table FS-6 provides the current assignment of personnel to the four fire stations and the two rescue districts.

Table FS-6: North Providence Staffing and Equipment by Station

Station	Equipment	Personnel Requirements	Location Total
Station 1 (Headquarters)	Engine 1 Ladder 1 Rescue 1 Marine 1	3 3 2	8
Station 2 (Fruit Hill)	Engine 1 Battalion 1 DECON 1	3 1	4
Station 4 (Mineral Spring Avenue)	Engine 1 Rescue 1 Squad 1	3 2 3	8
Total Personnel / Shift			20

Source: North Providence Fire Dept.

Fire and Rescue Alarm Trends

The July 2009 report entitled "A Fire and EMS Services Resources Deployment Study for the Town of North Providence" commissioned by the Town of North Providence identified the following fire and EMS service incident types during the year 2008 and the first six months of 2009.

Table FS-7: Fire and EMS Service incident types, 2008, 2009.

Type of Incident	2008	1st 5 months of 2009
Building Fires	27	17
Motor Vehicle/Pedestrian Accidents	88	35
Extrication	11	7
EMS	2,187	-
Building/Structure Collapse	2	-
Non-EMS	1,457	-

Source: *A Fire and EMS Services Resources Deployment Study for the Town of North Providence*, July 2009

Service Evaluation / Issues:

In discussions with the Fire Chief he indicated that the existing fire stations themselves were in good condition. In terms of general service, the three fire and two rescue stations provide more than adequate coverage for the town.

With regard to equipment, there is no long term replacement program in place for fire or rescue vehicles. Instead, equipment is replaced or rehabilitated on an "as needed" basis. Twenty year replacement programs are the norm. The Department should consider implementing a capital budget that reserves funds each year for equipment rehabilitation and replacement.

Relationship to "Build-Out"

Since the Town is essentially at build out now, the impact of future growth is not expected to impact staffing or equipment levels for fire and emergency services.

Emergency Operations Plan

The Town of North Providence has an Emergency Operating Plan which is on file at the Town's Emergency Operations Center. The EOC is located in the Town's Public Safety Headquarters at 1967 Mineral Spring Avenue. The plan is also maintained in the Town Clerk's office at Town Hall, at 2000 Smith Street.

The Town of North Providence has an agreement with the RI Red Cross to manage a shelter at the North Providence High School at 1828 Mineral Spring Avenue in the case of natural or man made disasters.

The Mayor of North Providence is the Emergency Management Director and the ultimate authority regarding disaster responsiveness. He is assisted by the Town's Emergency Management Officer.

Education

Public Schools

The Town of North Providence School Department Administration offices are located at 2240 Mineral Spring Avenue. The Department has nine schools within its primary and secondary educational system. Table FS-8 lists the schools within the system, their street address, and the grades covered within each facility. Public school locations are shown on Map 7.

Table FS-8: Schools within the North Providence School System

School	Location	Grades Covered
North Providence High School	1828 Mineral Spring Ave.	9 - 12
Birchwood Middle School	10 Birchwood Dr.	6 – 8
Dr. E. A. Ricci Middle School	55 Intervale Ave.	6 – 8
Centredale Elementary School	41 Angell Ave.	Pre K – 5
Greystone Elementary School	100 Morgan Ave.	Pre K – 5
Marieville Elementary School	1135 Mineral Spring Ave.	K - 5
McGuire Elementary School	55 Central Ave.	K – 5
Stephen Olney Elementary School	1378 Douglas Ave.	K - 5
Whelan Elementary School	1440 Mineral Spring Ave.	K - 5

Source: Town of North Providence website

As the table indicates these are six (6) schools which cover grades PreK-5, two (2) which include grades 6-8, and one High School.

Public School Enrollment

Total primary and secondary enrollment now stands at 3,441 for the 2011-2012 school year. The general make up of the school population is shown in the following table which provides total students per grade level. These Figures are for public schools only.

Table FS-9: Total Enrollment Profile, North Providence School System 2010-11

Grades	1990 Total Enrollment	2011 Total Enrollment	Change	1990 Percentage	2011 Percentage	Percentage Change
Pre-K	NA	61	61	NA	2%	
K-6	1,738	1,868	130	56%	54%	7%
7-8	489	503	14	16%	15%	3%
9-12	875	1,009	134	28%	29%	15%
Total	**3,082**	**3,441**	359	100%	100%	12%

Source: North Providence School Department

The *K-6* population continues to provide the largest number of students and highest percentage of the school's population at 54% of all enrollments. The K-6 population exceeds the combined total for grades 7-12 as well.

Table FS-10 provides a detailed breakdown of enrollment for each school and class grade throughout the North Providence system from K-6 to grade 12. School and grade totals are presented with these individual classrooms highlighted where overages occur. Current Special Education totals are also presented.

Table FS-10: Enrollment by School and Class 2010-11

School	Grade												
	Pre K1/2	Pre K	K 1/2	K	1st	2nd	3rd	4th	5th	6th	7th	8th	Total
Birchwood										133	135	148	416
Centredale	31	0	0	37	43	31	39	34	37				252
Greystone	56	0	3	53	49	53	59	47	39				359
Marieville	0	0	0	55	42	40	41	50	49				277
McGuire	0	0	5	41	47	44	43	45	34				259
Ricci										113	130	129	372
Stephen Olney	0	0	0	45	54	59	52	37	48				295
Whelan	0	0	0	33	39	43	33	32	28				208
SUBTOTAL	87	0	8	264	283	270	267	245	235	246	265	277	
									9th	10th	11th	12th	Total
High School									321	310	277	267	1175
TOTAL ALL GRADES													3613

Source: North Providence School Department

Projected Future Enrollment

Table FS-10 shows population projections for North Providence prepared by the Rhode Island Statewide Planning Program. These projections indicate minor decreases in school age population at the elementary and high school levels over the short term followed by larger longer term increases in elementary school population and continued decreases in the higher grades. The projections indicate that the Town should be prepared to expand kindergarten and elementary programs over the term of this Comprehensive Plan

Table FS-11: Projected School Age Population 2010-2030

Year	Age Group		
	5 to 9	10 to 14	15 to 18
2010	1,984	1,971	2,558
2015	1,932	1,982	2,313
2020	2,127	1,931	2,326
2025	2,229	2,130	2,278
2030	2,229	2,235	2,481

Source: RI Statewide Planning

Teaching Staff/Average Class Size

The following provides a summary of the North Providence School Department staff as reported for the 2010 academic year.

Table FS-12: North Providence School Department Staff 2009-10

Teachers (Full Time Equivalent)	
Total:	**276.00**
Prekindergarten:	3.00
Kindergarten:	11.00
Elementary:	118.00
Secondary:	144.00
Ungraded:	N/A

Other Staff (FTE)		
	Total:	**151.00**
	Instructional Aides:	59.00
	Instruc. Coordinators & Supervisors:	1.00
	Total Guidance Counselors:	7.00
	Elementary Guidance Counselors:	0.00
	Secondary Guidance Counselors:	7.00
	Librarians/Media Specialists:	8.00
	Library/Media Support:	1.00
	District Administrators:	2.00
	District Administrative Support:	10.00
	School Administrators:	8.00
	School Administrative Support:	18.00
	Student Support Services:	1.00
	Other Support Services:	36.00
Total Staff (FTE):		**427.00**

Source: U.S. Department of Education, National Center for Education Statistics

As the table indicates there are 3 Pre-K, 11 Kindergarten, 118 Elementary and 144 Secondary level full-time equivalent teachers in the School Department and 151 other staff for a total full time equivalent staff of 427. With a total of 276 classroom teachers (FTE) and a reported enrollment of 3,289, the 2009-2010 student/teacher ratio was 11.92.

Special Education

In the 2009-2010 school year, the North Providence School Department provided individualized education programs (IEP) for 570 students and English language learning (ELL) for 67 students [formerly known as limited English proficiency or LEP].

Service Evaluation / Issues

The Rhode Island Department of Elementary and Secondary Education reports via its *District Report Card* that the North Providence School District made adequate progress at the elementary, middle school and high school level for the 2010 school year, having met all of the targets evaluated for that school year despite demographic changes that have increased enrollment in some schools, increases in students with limited English proficiency and increases in students from low income families.

However, the School Department has been chronically underfunded and has operated at a deficit for the past few years. As a result, the Town hired a consultant to seek ways to reduce

overall school costs. The consultant expressed concern about the organization and availability of the School Department's policy documents and investigated potential cost saving alternatives. Preliminary results indicated that savings may be obtainable through adjustments to school districts and enrollment that would increase teacher utilization and allow reductions in teaching staff. As noted above, population projections prepared by Statewide Planning indicate that such savings may be possible over the short term (3-5 years), but are not likely to be sustainable over the longer term. Other recommendations include adjustments to optional program offerings, such as middle school sports and full day kindergarten and charging public and private groups for the use of school facilities during non-school hours.

Public Library

Overview

The Mayor Salvatore Mancini Union Free Public Library and Cultural Center is a semi-autonomous Town department governed by a Board of Trustees and the Town under the provisions of the Rhode Island General Laws 5A Title 29 Libraries. It is located at 1810 Mineral Spring Avenue next to the North Providence High School. The facility contains approximately 37,650 square feet of space on two floors. It was opened at its present location in 1985. The present site of the library is at the geographical center of town and is easily accessed by residents of all areas within the community. The present building is the fourth home of the library which was founded in 1869-1870. The library's hours are as follows:

Monday - Thursday:	10 am – 8:45 pm
Friday & Saturday:	10 am – 5:45 pm

Personnel Summary

The library is presently staffed by 10 full time and 23 part time employees. Table FS-13 lists current employment by position and employment status (Full/Part time).

Table FS-13: North Providence Public Library Staff (2011)

Position	Full Time	Part Time
Director	1	
Collection Development Librarian	1	
Executive Assistant	1	
Technology Coordinator	1	
Reference Librarians	2	1
Reference Associates		3
Children's Librarian	1	
Children's Programming Assistants		2
Sr. Children's Assistant		1
Children's Associates		2
Circulation Manager	1	
Assistant Circulation Manager	1	
Supervisory Clerk		1
Circulation Assoicates		12
Custodian	1	
Maintenance Assistant		1
TOTAL STAFF	**10**	**23**

Source: North Providence Public Library

Library Collections Services and Programs

Collections

The Mayor Salvatore Mancini Union Free Public Library and Cultural Center has an extensive collection of books, magazines, DVDs, audio books, music compact discs, dedicated preloaded MP3 players (Playaways), downloadable books (both e-books and audio books), as well as videos and music. The library has 39 computers available to the public for internet access. WiFi is available throughout the building and five Early Learning Station computers are available to toddlers for elementary age edutainment.

Table FS-14: North Providence Public Library Collections (Fiscal 2011)

Collection Type	Number of Units
Books	127,289
Serials	943
Subtotal – Print Materials	**128,232**
Audio – Physical Units	3,656
Audio – Downloadable Titles	5,913
Video – Physical Units	3,430
Video – Downloadable Titles	60
E-books	4,884
Licensed Data Bases	
Local	3
State	29
Other Cooperative Agreements	18
Subtotal – Licensed Databases	**50**
Other Holdings (Games, Toys, Museum Passes, Equipment)	57
Total Collection	**135,425**
Current Printed Serial Subscriptions	137

Source: North Providence Public Library

Services

The North Providence Union Free Library is a member of the Ocean State Libraries (OSL) which is a consortium of forty nine (49) public library systems serving the Rhode Island community at large. Incorporated as a non profit in 2007, the OSL was formerly the Cooperating Libraries Automated Network (CLAN). As part of the system, the North Providence Union Free Library is linked to other RI public libraries through a state-wide communications network with all of the other participating public libraries. All have high-speed Internet access through the OSL network. The combined library system offers access to a combined total of over 4.5 million items. The North Providence library hosted over 175,000 visits by patrons between January 1st and November 1st of 2011. The library provided 2,778 hours of public service and handled 42,159 reference transactions during the same period.

Programs

The library offers a wide variety of programs during the year, particularly for students during the school vacation periods. Table FS-15 lists programs provided by the library along with the number of times each program was offered and program attendance during 2011.

Table FS-15: North Providence Public Library Program Offerings (Fiscal 2011)

Program Type	Number of Programs	Program Attendance
Pre-School	121	1,728
School Age	33	2,164
Adult	292	3,128
Family	32	1,292
Elderly	16	190
Total	**494**	8,502

Source: North Providence Public Library

Circulation

As noted above, the library hosted over 175,000 visits by patrons during the period between January 1st and November 1st, 2011. According to the Director of Library Services, the library typically hosts almost 200,000 visits per year. Circulation for 2011, as of November 1st is summarized in Table FS-16 below.

Table FS-16: North Providence Public Library Circulation (Fiscal, 2011)

Circulation by Category	
Adult	97,439
Children's Materials	51,155
Other Categories	6,426
Total	**155,020**
Circulation by Format	
Print	108,036
Audio/Visual	46,855
Other Formats	129
Total	**155,020**
Interlibrary Loans to Other Libraries	
Provided to OSL Libraries	40,334
Provided to non-OSL Libraries in State	25
Provided to Out of State Libraries	0
Total	**40,359**
Interlibrary Loans from Other Libraries	
Received from OSL	24,091
Received from non-OSL Libraries in State	34
Received from Out of State Libraries	103
Total	**24,228**

Source: North Providence Public Library

Service Evaluation / Issues

As indicated by the statistics provided in the tables above, the North Providence Union Free Library is providing a broad range of services to the community. The library is very popular and is heavily used by local residents and visitors. The Library is continuing to update and expand its holdings and will continue working to keep pace with innovations in library services to ensure a continued high level of service. The library is also seeking to enhance its collections in response to demographic changes in the community, particularly increasing ethnic diversity that requires more multi-lingual offerings.

Parking continues to be an on-going problem, with only 23 public spaces and 2 handicapped spaces in the front lot adjacent to the entrance. Overflow parking is available in the rear and at the adjacent high-school lot, but there are often conflicts between parking for the library, the

natatorium and the school. The stairs from the high-school lot, the front plaza, and the portico have proven expensive to maintain and keep clean, partly due to heavy use as student after-school gathering places. The plaza and the handicapped ramp also tend to attract skate boarders, leading to occasional conflicts between skate boarders and elderly or handicapped patrons.

The library structure itself is part of a renovated steel "Butler" building that was built for a skating rink and was not really designed for its current use. Improvements were made during the renovation, but the structure still has limitations that constrain the location of shelving and limit the total number of books that can be shelved on each floor. The heating, ventilation and air conditioning (HVAC) systems are not energy efficient, are deteriorating, and are in urgent need of replacement. Physical improvements are also needed to enhance security, improve accessibility, and modernize circulation systems.

Municipal Infrastructure/Public Works

Wastewater Facilities

System Description

The Town of North Providence is one of six communities that are served by the Narragansett Bay Water Quality Management District Commission's (NBC) Field's Point Facility, located in Providence. North Providence along with Providence and Johnston are the major contributors to the system. The Town of Smithfield, Lincoln and a small part of Cranston make up the balance of the system.

The NBC was created in 1980 to prevent and minimize unnecessary dry and wet weather discharge of pollution. As part of this function it owns and operates the Field's Point Wastewater Treatment Facility. NBC also regulates discharges into the NBC system by way of local piping (laterals). The Narragansett Bay Commission owns and maintains the interceptor system in the Town of North Providence. The NBC system includes approximately 54,000 linear feet of interceptors of various sizes ranging from 12 to 30 inches in diameter, which are located in four drainage districts in town. They are:

1. Woonasquatucket
2. Smith Street
3. Canada Pond
4. Douglas Avenue

These interceptors accept the waste flow from the lateral sewers in the community. The system of lateral sewer lines, those that run down the side streets that collect waste from individual homes & businesses, are owned and maintained by the town. Maintenance of these lines is done on an as needed basis. The general flow of wastewater through the sewer system is gravitational, due to the Town's topography which allows the waste to flow to low points in the system where it is collected and transported to the wastewater plant at Field's Point. No pump stations are required. For all practical purposes, the entire developed area of the town has sewer service.

Permits

Permits from the NBC are required prior to any direct sewer connection to NBC owned sewers and for any indirect connection for residential subdivision and residential structures with three or more units. All commercial, industrial and institutional uses must also apply prior to connecting. The North Providence DPW issues permits for residential connections to the gravity collection system.

An Industrial Discharge Permit is required for certain commercial uses and all industrial concerns. These permits are primarily designed to set discharge limits a part of NBC's Industrial Preliminary Program.

Major System Improvements Planned

The NBC completed an analysis of its interceptor system in North Providence. As a result of this analysis a first phase rehabilitation program was recommended to make major and minor repairs and to solve infiltration inflow (III) problems. Infiltration is defined as groundwater flow entering the system through cracked or leaking joints. Inflow is that flow which is directly attributable to illegal connections of catch basins, area drains, roof drains, sump pumps, etc.

The NBC has completed the construction of the first two phases of this rehabilitation effort. The Rehabilitation work included improvements to approximately two miles of the interceptor along the Woonasquatucket River which serves the areas of Greystone/Lyrnansville, Centreda1e, and Allendale. The NBC plans to continue subsequent phases of the rehabilitation effort.

Relation to "Buildout"

Public Works believes that the sewer system is already at build-out, essentially providing service to the entire town. Anticipated small increases in population are not expected to adversely affect the system.

Service Evaluation / lssues

While the Narragansett Bay Commission is responsible for providing wastewater collection (interceptors) and treatment for the Town of North Providence, there are issues to be considered by the town with regard the maintenance of town owned lines (laterals) particularly with respect to Inflow/Infiltration.

In March of 1990 the Narragansett Bay Commission (NBC) presented a report to the Public Utilities Commission (PUC) in response to an order by the PUC. The order stemmed from a rate increase proposed by the Division of Public Utilities and Carriers for City of Providence customers because of the assumed additional burden being placed on the system by the large number of combined sewers in the City which serve to collect both sewage and drainage. The request was tabled pending further evaluation by the NBC.

The NBC completed its report entitled "An Evaluation of Wastewater Flows (Including Infiltration/Inflow) From the NBC District Communities and the Need for an: Extra Charge for Providence." The report indicates that Infiltration/Inflow is common throughout the system and as a result the NBC could not justify an additional charge for the City of Providence or any other community at this time. The NBC is undertaking, as part of its Capital Improvement

Program, improvements to interceptors in North Providence and removal of inflow and infiltration from its lines. Interceptor improvements will make accurate measurements I/I being contributed through the North Providence lateral sewers. The DPW estimates that there are a large number of illegal connections into the sewer system via roof drains and sump pumps. Currently, enforcement is the responsibility of the Town and enforcement is required by the NBC as part of their agreement with North Providence. The DPW currently has no staff or budget to execute a program to eliminate these illegal connections

At present the town does not budget specific funds for sewer system rehabilitation or analysis and therefore the DPW has no specific funding mechanism to cover the maintenance associated with these lateral and collector lines. Repairs are provided on an as needed basis. Repair costs are borne solely by the DPW. The NBC directly bills North Providence residents for sewer service. However, there is no allotment of any kind provided by the NBC to the Town or to the DPW to cover maintenance of the laterals and collectors.

Water Systems

Overview

The Town of North Providence is served by three water systems. They are the Providence Water Supply Board, the Town of Smithfield water system and the East Smithfield Water Department located in Esmond. The three companies provide service to approximately 9,160 customers in the town. Table FS-17 provides a breakdown of those served by each of the three water supply entities. Map 8 shows the areas currently served by these entities. Map 9 shows the existing and proposed extent of public water and sewer service in the North Providence.

Table FS-17: North Providence Water Supply Customers by Supplier

Entity	Customers	Percent
Providence Water Supply Board	7,510	(82%)
Smithfield Water Department	900	(10%)
East Smithfield Water District	750	(8%)
Total	**9,160**	**(100%)**

It is evident that the Providence Water Supply Board provides for the majority of water need of the town serving eighty-two percent of all water consumers. The Smithfield Water Dept., a Department of the Town of Smithfield serves 10% of all water customers with the balance being served by East Smithfield Water Department (8%).

The following provides more detailed information concerning each water supply entity.

The Providence Water Supply Board

The Water Supply Board is a department within the City of Providence with its offices located at 552 Academy Avenue in Providence. Water for this system and the others serving North Providence is provided from the Scituate Reservoir and purified at the Boards' Purification Works in Scituate. Residential customers make up the bulk of the water users served by the Board at 96% of all existing service connections. This includes all service to single family homes and condominiums with individual meters. Commercial users represent 3% of all customers

with Fire Protection (Sprinkler Systems) and Industrial users represented one half of one percent each.

In terms of the water volume used, the total consumption by North Providence customers in the system is 144, 877,957 cubic feet per year of which seventy-five percent (75%) is used by residential customers which include all single family houses, duplexes and condominiums whose units have individual meters. The remaining usage is by Commercial and industrial concerns and would include apartment complexes and condominium developments which do not have individual meters for each unit.

The average use per service in town is 307 gallons/service/day on a per- capita basis for residential use only. The average use assumes 3/household and 100 gallons per day/person. The present rate for water sold by the Providence Water Supply Board directly to North Providence customers is $.62 per 100 cubic feet from 0-400,000 cubic feet per year and $.395 per hundred cubic feet for volumes over 400,000 cubic feet per year.

The Town of North Providence is located in what is called a "High Service" area. In simple terms it means that because of the higher elevations found in town, particularly in the Windmill Hill, Fruit Hill and Longview Reservoir areas, water must be pumped to these areas due to the higher elevations of the customers relative to the point of distribution at the Scituate Reservoir. The "High Service" system goes beyond North Providence and serves other areas like Mount Pleasant and the East Side of Providence. The Longview Reservoir, a 12 million gallon storage facility is located at the intersection of Smithfield Road and Mineral Spring Avenue. This is a major storage facility for the "High Service" system that has been expanded to 24 million gallons when construction is completed.

The Providence Water Supply Board also provides service to fire hydrants within the town. At present the system serves 466 hydrants at a cost to the town of $141.37/hydrant per year ($65,878.00).

The Smithfield Water Supply Board

The second largest supplier of water to the town is the Smithfield Water Supply Board. Approximately 900 customers are served by this system which provides service to the general area west of Douglas Avenue, north of Mineral Spring Avenue and east of Woodhaven and Brookside Avenue. Service is provided for most of Smithfield Road, north of Mineral Spring Avenue from a pump station located just north of the Longview Reservoir.

The largest customers in North Providence using this system are the St. James Apartments and Hopkins Manor. Customers are charged a minimum of $66.50 plus .90 cents/1000 gallons over the first 80,000 gallons used a year.

East Smithfield Water Department

The third provider of water service to the town, this district serves the northwestern comer of town including Greystone and Woodhaven. The system presently serves approximately 750 customers in North Providence. A pump station located on Elmwood Avenue in North Providence provides service to approximately half of the customers in the town.

Residents of the Woodhaven subdivision have complained of low pressure to their houses over the years. In an effort to address this concern the East Smithfield Water Department is looking to increase pressure by 5 lbs./square inch through Smithfield Road. The water department has expressed concerns over the amount of water used by area residents particularly that associated with lawn sprinkler systems. They feel that such uses could be over taxing the present system.

Water Emergency Response and Drought Management Planning

North Providence will promote efficient use of water and implement programs to mitigate the impacts of drought in accordance with State Guide Plan Element 724: *Rhode Island Drought Management Plan.* Each of the Town's water suppliers has a current Water Supply Management Plan which includes Emergency and Drought Management Procedures. These plans describe in detail the processes for responding to water related emergencies, including drought. The districts will continue to update their plans regularly and the Town will continue cooperate with the districts to ensure appropriate drought response and ensure water service is maintained.

The Town is also pursuing opportunities to establish emergency connections between neighboring water suppliers such as the Town of Lincoln in compliance with State Guide Plan Element 723: *Water Emergency Response Plan*. Interconnections between suppliers could provide emergency back-up supplies to North Providence residents in the event of a catastrophic incident at the Scituate Reservoir which provides water to all three North Providence Water Districts.

Water Supply System Management Plans (WSSMPs)

East Smithfield Water District

The East Smithfield Water District (ESWD) serves the village of Greystone in the Town of North Providence. It primarily provides water for residential use and calculates its safe yield at 150 gallons per capita per day. The ESWD operates the system in accordance with generally accepted standards for water systems. The ESW maintains Non-Account Water below the 15% guideline identified in the State Guide Plan Element 721, and has identified a long-term goal of maintaining its Non-Account Water below 10%, as recommended by the Water Supply Management Plan regulations. For more information, see the East Smithfield Water District Water Supply System Management Plan Executive Summary:
http://www.wrb.ri.gov/work_programs_wssmp/WSSMP_ExecSumm_ESWD_2007.pdf

Smithfield Water Supply Board

The Smithfield Water Supply Board (SWSB), through the Longview Reservoir Booster Pump Station, supplies a portion of North Providence's water. The SWSB's goals include the effective and efficient protection, development, utilization, and conservation of the water system's resources in ways that satisfy both present and future needs of the SWSB's customers. The SWSB also seeks to develop a long range program to improve the quantity and quality of water required by the citizens within the service area in the most cost effective and environmentally sound manner. The SWSB currently maintains Non-Account Water well below the 15% State guideline. For more information, see the Smithfield Water Supply Board Water Supply System Management Plan Executive Summary:
http://www.wrb.ri.gov/work_programs_wssmp/WSSMP_ExecSumm_Smithfield_2008.pdf

Providence Water Supply Board

The Providence Water Supply Board (PWSB) supplies a portion of North Providence with its water. PWSB's ultimate goal is permanent, long-term savings through efficient water use. Specifically, water savings goals include minimizing peak demand use requirements and minimizing average day demand use requirements. This may be accomplished through technologic changes, demand management procedures, and water conservation policy and practice. A combination of measures promoting efficient water use, such as recycling, conservation, retrofit and new installation of low flow plumbing fixtures, public education, and the appropriate use of fees, rates, and charges will help to achieve water savings goals. Additionally, PWSB will employ proper system management procedures including meter management, leak detection and repair, preventative maintenance, infrastructure rehabilitation, and a billing rate schedule that promotes efficient and non-wasteful water use. Other goals include maintaining a high quality and quantity of drinking water.

For more information, see the Providence Water Supply Board Water Supply System Management Plan Executive Summary:
http://www.wrb.ri.gov/work_programs_wssmp/WSSMP_ExecSumm_ProvWater_2011.pdf

Major System Improvement - Recent and Underway

Providence Water Supply Board

1. Smithfield Water Tank

The Smithfield water storage tank on Ridge Road just over the North Providence line is close to the Town boundary. This 3.5 million gallon facility costing $3.4 million was installed to improve water pressure in the Fruit Hill District, an area covering approximately a one mile radius around Fatima Hospital. The installation of this tank and the additional service created the so-called "X-Tra High Service Area", an additional area to the existing system previously described. Water pressure to Fruit Hill was almost doubled from 20-25 lbs/square inch to 55 lbs./square inch. In addition to helping the Fruit Hill area water pressure improved elsewhere as the remaining "High Service" areas were separated from the new "X-Tra High Service" zone.

A related improvement is the Fruit Hill Pumping Station located in Evans Field which will pump water to the new service area. The station was completed in 1989.

2. Longview Reservoir

A twelve million gallon expansion project has doubled the size of the previous Longview Reservoir. At a cost of $3.6 million this additional storage capacity significantly improved water service to all of the highest parts of town including Louisquisset and Windmill Hill.. The completion of this project has also improved firefighting flows as well.

Relation to "Buildout"

No concern was raised concerning the potential to supply water to the town in the future, given the limited amount of remaining building potential.

Service Evaluation / Issues

Dramatic improvements have been made to the water system in North Providence in recent years. Issues that remain with regard to water service are the complaints by Woodhaven residents concerning water pressure and whether the smaller water systems will be sold to the Providence Water Supply Board.

Currently, the water supply companies are only responsible for the rehabilitation of water pipelines. There is no paving agreement currently in place. When a water company opens a trench in a road, the responsibility of re-paving the road lies with the North Providence DPW. The DPW has placed a moratorium on road openings for the first five years after a road is paved to prolong the paving investment. North Providence is one of only three towns in Rhode Island that does not currently have agreements with their respective water companies requiring them to pay for asphalt replacement upon a roadway opening for water infrastructure maintenance.

Roads & Drainage

Current System

The Town of North Providence roadway system consists of 127.5 miles of road, of which 114 miles are paved local streets and the remaining 13.5 miles are paved streets under state jurisdiction. The DPW has requested $2.0M ($400,000) over the next five years for roadway resurfacing as part of its capital improvement program. The suggested source of funding is through grants which may or may not be available from the Federal Government and or the State of Rhode Island. The town's Public Works Department is responsible for minor roadway repairs, while major refurbishing goes through formal bidding procedures so a contractual agreement can be reached.

North Providence received $250,000 in State/Federal funds through the Rhode Island Local Equity Aid Program (RI-LEAP). Seven streets were completed through April of 2010. North Providence is also slated to receive an additional $886,000 in federal funding for additional resurfacing projects. Between the two funding sources, the following thirteen streets have been completed or are slated to be completed:

- Angell Road
- Central Avenue
- Cooper Street
- Dewey Avenue
- Elmore Avenue
- Hobson Avenue
- Leo Avenue
- Lexington Avenue
- Lookout Avenue
- Miner Street
- Smithfield Road
- Superior View Boulevard
- Woodward Road

It should be noted that the federal money can only be used on federal aid system roads. The best case start date for the remainder of the work would be late September, 2011.

In terms of Rhode Island Department of Transportation Projects within North Providence, Woonasquatucket Avenue is on the state's Transportation Improvement Plan (TIP) for the third

quarter of 2011. It is the opinion of the North Providence DPW that this needs to be more than a "1R" project.

North Providence has no budget for drainage related problems/improvements other than the DPW operating budget described above. The Town doesn't appear to have a severe drainage problem, however of the 127.5 miles of streets there are some areas of note. Poor drainage exists in the older parts of town, such as the village areas where there is no live drainage and relatively low points of elevation. A portion of Charles Street, in the Windmill Hill Area, has drainage problems. This is due primarily to the roadway geometry. The water flows directly over existing drains and basins and settles in low lying spots and washes out the side of the street itself.

North Providence is required by law to comply with the National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Program required by the United States Environmental Protection Agency. Currently the Town is utilizing the services of Fuss & O'Neill, a consulting engineering firm specializing in providing compliance services. These services are competitively procured by the Town as per state and federal guidelines.

Service Evaluation / Issues

The Charles Street drainage problem appears to be the most severe. The solution to the problem will require coordination with the State of RI Department of Transportation, Improvements to Charles St. from the Providence City line to Rt. 116 have been proposed. Early coordination and planning on the part of the town could help solve this drainage problem to a great degree. Overall maintenance of roadways in the Town is critical from a capital improvements perspective. An overall management system for the future is a consideration which provides for the systematic upgrading of roadway and drainage system.

Energy Consumption and Production

Developed primarily for commercial and residential uses, the Town of North Providence does not host major industrial scale power producing facilities at present. The Town does, however, have suitable locations for small scale energy generation, particularly hydropower at dam sites along the Woonasquatucket River and solar power at the former Town landfill site. The Town supports the State's goal of obtaining 20% of its energy from renewable sources in the future and will support public and private initiatives to take advantage of this small scale energy generation potential.

In addition, the Town is committed to reducing energy consumption in Town facilities. In 2010, the Town, along with three other Rhode Island communities, received $497,492 in EPA funding to conduct an energy audit and to develop plans to reduce energy consumption and greenhouse gas emissions in municipal and residential buildings. To date, the project has completed a baseline audit of energy consumption in North Providence[6] and has estimated savings that can be obtained by reducing energy consumption by 10%, the goal of the EPA Community Energy Challenge Program, and by 20%, considered by the authors to be a potentially attainable level of

[6] University of Rhode Island Outreach Center: *Baseline Energy Report, Town of North Providence, February 2012*

conservation. Figure SF-1 summarizes energy consumption and expenditure in North Providence as presented by the energy audit.

North Providence Consumption and Expenditure Summary				
Utility	Average Annual Consumption	Average Annual Cost	Average Annual Savings (10% Reduction)[1]	Average Annual Savings (20% Reduction)
Electricity	1,280,633 kWh	$171,823	$18,557	$37,115
Natural Gas	60,721 therms	$92,777	$11,762	$23,523
Oil	2,559 gallons	$4,356	$496	$992
Total		$268,956	$30,815	$61,632

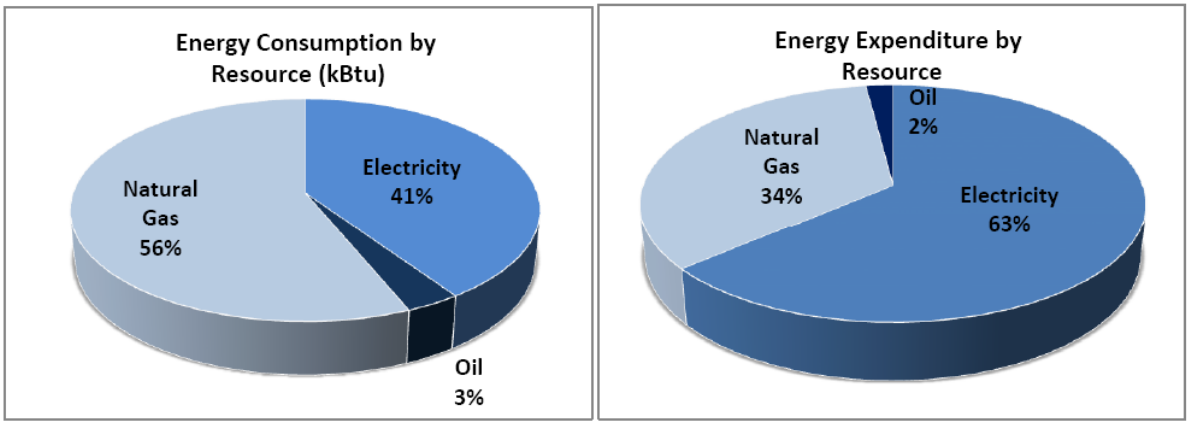


Figure SF-1 Energy Consumption and Expenditure in North Providence 2008-2010
Source: University of Rhode Island Outreach Center: *Baseline Energy Report, Town of North Providence, February 2012*

The Town now has four new initiatives underway that will either reduce energy consumption or produce energy for contribution to the regional electricity grid. First, in 2011, North Providence hired an energy management and consulting firm, SourceOne Inc., to conduct building energy audits and recommend Energy Conservation Measures (ECMs) that could improve building energy performance. SourceOne proposed eighteen ECMs including window replacements, building automation system (BAS) installation, occupancy sensors, and daylight harvesting installation. The total net cost of these projects was estimated at $293,300 with annual savings of $44,000 and a 7 year payback period. The Town is proceeding with the recommended projects to achieve the estimated savings.

The second initiative, and the first of the recommended ECM projects, is the conversion of the heating and cooling system for the Frank G. Angell Memorial Town Hall from an antiquated oil burner to a new geothermal system. This project is now nearing completion. The geothermal system is being funded by a federal grant which will also provide for replacement of the HVAC automation system, install thermally efficient windows, and make other energy saving retrofits to the Town Hall. The new system will draw energy from the groundwater under the Town Hall where groundwater remains at or near 50°F year round. As of this writing, the Town has installed 14 new wells to a depth of approximately 400' in the parking lot behind the Town Hall. Water from these wells is conducted into the basement of Town Hall through a series of

underground pipes. In the basement, a heat pump will use the groundwater to heat or cool the building as needed. According to the Mayor's office, this system is projected to save the Town $12,000 to $15,000 per year in energy costs. It will also significantly reduce the $30,000 to $35,000 per year the Town has been spending to maintain and operate the existing oil fired boiler system.

The third initiative is the reuse of the Town's former landfill as a site for a solar electricity generation facility. The Town has invited solar energy companies to develop 13 acres of the former landfill site, now closed, as a solar generation facility. The landfill has been closed for more than 17 years and the site has been permanently capped. The top of the landfill is located at high elevation, lacks trees, and is nearly flat, making it an ideal location for solar generation facilities. The proposed solar facility would be operated by an energy company that will pay rent to the Town for the use of the property. Town officials are currently considering six bids for the solar energy farm, which is expected to provide approximately $120,000 in new revenue annually and to generate between 2 and 3 megawatts or enough power to supply electricity to roughly 2500 homes annually.

The fourth initiative is the replacement of the Town's incandescent street lighting with energy saving LED lights. The Town has requested federal grant funds to replace all of the bulbs in the Town's street lighting on Mineral Spring Avenue and Douglas Avenue. According to manufacturer specifications, this project is anticipated to save up to 40% of the energy currently used for lighting these two major thoroughfares in North Providence. This project is expected to reduce energy consumption, save money, and reduce greenhouse gas emissions associated with electrical power generation. If this project is successful, the Town anticipates replacing more incandescent and mercury vapor lighting with LED lighting to continue this program of energy savings.

Solid Waste Management

Current Collection System/Services

Trash collection in North Providence is provided on a weekly basis to all households by a private contractor under an existing contract with the town. Trash collection and recycling are handled by the Town's recycling coordinator. Large metals such as refrigerators, gas grills, ranges, etc. are picked up by the Town. The town then sells these items as scrap metal to a private recycler. Automotive tires are collected by a private vendor at no cost to the town. The vendor's revenue is generated by recycling the tires. Other large items, such as mattresses and furniture, as well as electronics such as computers, televisions, and microwave

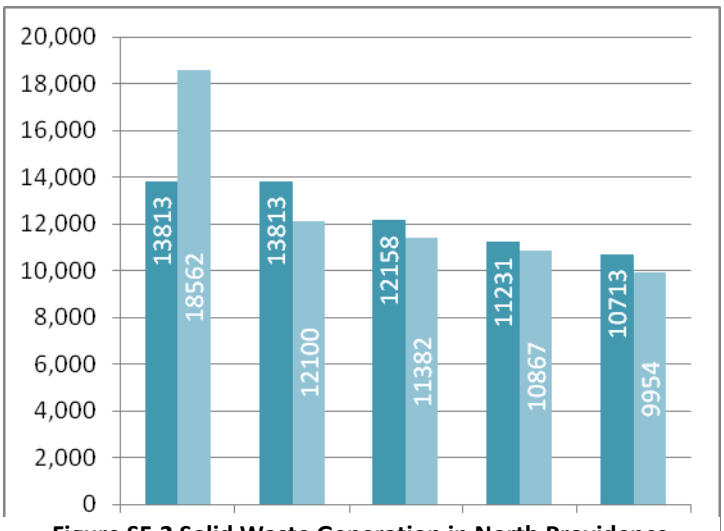


Figure SF-2 Solid Waste Generation in North Providence 2007-2011

Source: North Providence Recycling Office

ovens, may be delivered to the landfill (which charges $10.00 per item) or can be picked up curbside on request for a fee of $15.00 per item.

Recycling is mandatory in North Providence and the contractor will not pick up solid waste from a unit that does not separate recyclables and place them on the curb along with solid waste. Large items, such as mattresses and box springs, are picked up for an additional $15.00 charge. E-waste, such as televisions, computers, and microwave ovens, may be dropped off for no charge at the Town's recycling office. In addition, the Town and the Rhode Island Resource Recovery Corporation jointly sponsor an "E-waste" collection day for electronic equipment annually at the high-school.

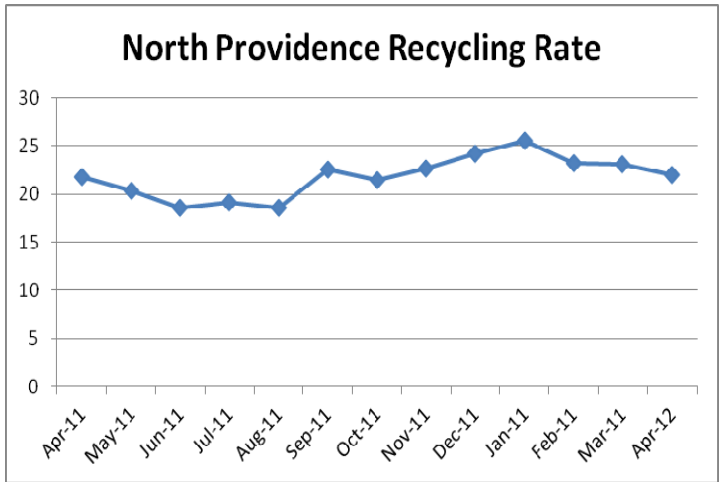


Figure SF-3 Curbside Recycling Rates 2011 to 2012
Source: RI Resource Recovery Corporation*
*note: does not include composting

The State of RI has set a two-part goal for its 39 municipalities in RIGL § 23-18.9-1. Beginning July 1, 2012 every city or town that enters into a contract with the Rhode Island Resource Recovery Corporation to dispose of solid waste shall be required to recycle a minimum of thirty-five percent (35%) of its solid waste and to divert a minimum of fifty percent (50%) of its solid waste. According to the Rhode Island Resource Recovery Corporation, North Providence presently generates 0.90 tons per household served in the collection program. North Providence recycles 20.8% of its waste via the mandatory blue and green bin recycling program. With composting of leaf and yard waste, the current recycling rate is 27.5% and the rate of overall diversion from the landfill is 28.1%.

The North Providence Landfill

The Town of North Providence once owned and operated a landfill located in the northwest part of Town bordered on the north by the Town of Smithfield, on the east by Smithfield Road, on the south by the Peter Randall Reservation and on the west by Woodhaven Plat. The property includes a total of 7.1 acres fronting on Smithfield Road. The landfill is no longer in use. The landfill was closed and capped in 1995. The property is available for re-uses that are compatible with the closed landfill. Recreation and solar power generation are some of the potential uses that the Town is currently considering. The Town is also currently in the preliminary stages of planning for a municipal composting facility and a cardboard bailing facility at the landfill site. The Town is seeking funds to complete the design and permitting of these proposed new facilities (see below).

Service Evaluation / Issues

North Providence's solid waste program includes the entire town and serves all households very effectively. All households are required to recycle as of April of 2010 when the Town implemented "total participation" mandatory recycling. However, the North Providence

School Department does not presently participate in the community recycling program. Instead, the Department contracts directly with a private waste hauler who does not provide recycling services. Implementing recycling in the schools and School Department offices has been identified by the Town Recycling Coordinator as one way the Town can significantly increase its level of recycling. In addition, recycling in the schools would help make students aware of the importance of recycling for waste management.

North Providence is not yet meeting the 35% recycling and 50% diversion goals mandated by the State. The Town's recycling coordinator is working with the DPW and residents to develop and implement plans to achieve the State's recycling and diversion goals. To help reach this goal, the DPW would like to implement two new programs. The first is construction and operation of a cardboard baler at the former landfill location. The Town would provide a baler on a slab in a protected location and would accept drop-off of cardboard from local businesses and residents. The second is a composting program similar to the City of Warwick's. All lawn refuse and leaf matter would be collected by the Town and composted at the old landfill property. The Town would also accept leaf and yard waste from local landscapers for a fee. Funds obtained through these fees would be used to sustain the composting operations. Top soil produced would be sold to private contractors, used by the Town, and provided to residents free of charge. The DPW would like to purchase a grinder to be used in the composting operation as well. The Town will be seeking funds to complete design, permitting and construction of these new solid waste facilities in the near future.

In addition, the Town would like to expand its public education programs to encourage higher levels of participation in the recycling program. The Town anticipates ramping up public education programs to encourage participation in the new "Single Stream" recycling program being implemented by the Rhode Island Resource Recovery Corporation. This could include school programs on solid waste and recycling. Some of the funds resulting from solid waste programs could also be earmarked and dedicated to advertising, public presentations, and public education on the importance of, and need for, recycling and waste diversion.

General Government Administration

Municipal Offices and Facilities

The following provides a brief overview of the Municipal offices which are located in North Providence.

Frank C. Angell Memorial Town Hall

Location: 2000 Smith Street
Plat 14 Lot 257
Area: 21,615 sq. ft. (building), 32,568 sq. ft. (lot)

Description: The Town Hall is a multi-level brick veneer building that was constt1.lcted in 1928. A new addition has since then been added to the original structure. The Town Hall serves as the center of local government and consists of the Mayor's Office and other town offices. The following is a list of offices stationed within the Town Hall on a floor by floor basis:

Ground Floor	1st Floor	2nd Floor
Planning Department	Mayor's Office	Fed. Program Coordinator
Division of Inspection	Tax Assessor	Town Council Chambers
Board of Canvassers	Tax Collection	Municipal Court Clerk
Purchasing	Finance Director	Computer Center
Personnel	Receptionist	Building Maintenance

A Municipal Parking Lot is located in the rear of the Town Hall. There is additional parking available in a lot adjacent to the Town Hall.

Old Town Hall

Location: 2226 Mineral Spring Ave.
Plat 14 Lot 245
Area: 2016 sq. ft. (building), 3194 sq. ft. (lot)

Description: The Old Town Hall designed by L.M.E. Stone was constructed in 1879 by Benjamin Sweet at a cost of $2,000. It is a two story, bevel sided Structure with a gable roof. The building houses the Town Historian on the first floor, while the second level is used as a meeting room. Attached to the first floor is a brick vault which occupies 324 square feet. The building has recently been restored and has been recommended for nomination to the National Register of Historic Places.

Senior Services

Services to the senior citizen population of the Town of North Providence are provided primarily through the Salvatore Mancini Resource and Activity Center, Inc., located at 2 Atlantic Boulevard. The mission of the center is to provide programs and services to enhance, enrich and educate the elder of the community; and to act as a community resource to elders and their families.

The corporation is a private, nonprofit entity organized under section 501(c)(3) of the Internal Revenue Service code. The center was established in this fashion in 1976 in order to take advantage of tax deductible donations while still being able to apply to private foundations for funding.

Operation

The Senior Center is open Monday through Friday 8:00 AM to 4:00 PM.

The center has an unduplicated annual user population of approximately 8,000 seniors, 55 years of age and older. Approximately 300 seniors visit the center daily.

Seniors visiting the site on a daily basis are offered a full complement of programs and services to meet their functional and social needs. These programs and services include: transportation, nutrition, health and wellness services, education and recreational activities. In addition, the Senior Center offers a comprehensive social services component. Funding is provided by the State of Rhode Island, R.I. Department of Elderly Affairs, Town of North Providence, private donations and fundraising through the Senior Center.

Facility

The current facility is a state-of-the art Senior Center built in 2004. The Senior Center was financed through a $1 million Congressional Appropriations Committee grant, Town of North Providence grant, and Senior Center fundraising. The existing facility contains 21,690 square feet of space on two floors which is organized in the following manner:

- Main Level (14,610 s.f.): nutrition center, kitchen, receptionist, computer café, volunteer office, ceramic, arts & crafts, painting rooms, storage and administration offices.

- Lower Level (7,080 s.f.): gym, salon, health center, billiards, exercise, music, card rooms and storage.

Services

Important services provided at the Center include an extensive community health program that includes an on-site health clinic staffed with a physician, nurse and receptionist through a partnership with Roger Williams Medical Center. This onsite health clinic also provides podiatry services clinical labs, weekly blood pressure screenings and annual flu clinics, as well as various health screenings and health & wellness educational workshops and seminars.

Daily nutrition services are offered Monday through Friday at 12 noon in the nutrition site. The nutrition site provides hot and cold lunches daily to an average of 120 senior per day. This program is funded through the Federal Government's Title II program of the Older Americans Act. Home delivered meals program is offered daily through a partnership with Meals on Wheels.

Social Services are provided by a full-time social worker provided with funding through the RI DEA. Social services provided include: advocacy, in-home assessments, outreach, information & referral, property tax relief, Senior Health Insurance Program (SHIP), Senior Companions, Homemaker & Home Health Aide, Caregiver respite & support and bereavement support group.

The Senior Center is also the site of a variety of Fitness & Wellness activities, as well as, recreational and educational activities that take place on a daily basis. These activities include:

- Pilates
- Nia
- Tai Chi
- Yoga
- Zumba
- Aerobics
- Line Dancing
- Chorus
- Continuing Education
- Current Events Group
- Painting
- Ceramics
- Sewing
- Card Leagues
- Game Leagues
- Stamp Collecting

In addition, an on-site Fitness Center is available. Fitness Center includes: treadmills, rowers, Cardioglide, Sci-Fit machines, stationary bicycles, and weights and resistance bands. The Fitness Center is open daily 7:30 AM – 3:00 PM and is staffed by trained volunteers / staff members.

Transportation

The Center has one handicapped accessible van to serve the senior population of the Town. The bus is used to provide transportation for North Providence residents 60 years of age and older and for disabled adults who have no means of transportation. Transportation services provided include:

- Grocery Shopping
- Banking
- Area Nursing Homes
- Senior Center (to and from)

Funding for one full-time van driver is provided through the Town of North Providence. The bus was purchased in 2004 through a grant from the RI Department of Transportation (RIDOT).

Awards

Salvatore Mancini Resource & Activity Center, Inc. has been awarded the Community Achievement Award by the United States Administration on Aging. This prestigious award that recognizes excellence in the provision of services to the elderly chose North Providence and nine other awardees nationally to receive this award. The Senior Center was cited for the public/private partnerships it has developed in the provision of services and primarily awarded the Senior Center this award because of the multi-disciplinary on-site health clinic.

Department of Human Services

The Department of Human Services is charged with the management of several federal programs geared toward assisting disadvantaged families and individuals. The following is a list of the programs administered through this office, with a brief explanation of the program and the target population it is intended to serve.

Table FS-18: Human Services Programs

Program	Assistance Provided
Aid For Families with Dependent Children (A.F.D.C.)	Financial Assistance to single parent households with children. Assistance subject to income limit verification.
General Public Assistance (Welfare) G.PA	State program to provide financial and medical assistance to single persons who are incapacitated.
Medical Assistance	Federal Programs to assist persons 65 years or older, blind and disabled.
Food Stamps/Electronic Benefits Transfer (EBT) Women Infants and Children (WIC) distributions	Assistance provided to low income families to purchase food and other items.
Pathway Program	Federal Training and Employment Programs
D.V.R. - Department of Vocational Rehabilitation Services	Other Services for disabled persons

Approximately 1,100 cases are handled through this office on a yearly basis.

The Human Services office also coordinates its activities with the Tri-Town Community Action agency, the North Providence Senior Center and the Federal Coordinator.

Close coordination between the Human Services Office and Tri-Town CAP is accomplished on an ongoing basis. Tri-Town CAP provides services that supplement the financial assistance provided by the Human Services Office. They include heating assistance, weatherization, food bank: activities, job training, etc.

North Providence Housing Authority

Extensive information concerning the North Providence Housing Authority can be found in Section 5 of Element Number 2, Housing. In general the Housing Authority is charged with the management of the Public Housing units in the town. Presently these developments include 138 elderly and 20 family units, located at eight sites in the town. The Housing Authority also manages two federal rental assistance programs, the Section 8 Existing Program and the Housing Voucher Program. Both provide financial assistance to lower income renters. A total of 99 households receive assistance under these programs (27 elderly and 72 families).

St. Joseph's Hospital - Fatima Unit

The Fatima Unit of St. Joseph's Hospital is a full service - acute care facility located at 200 High Service Avenue in North Providence. This 241 bed facility employs approximately 1000 people of which 252 are North Providence residents. Established in 1892, St. Joseph's Hospital provides care to over 70,000 patients a year (Providence/Fatima) and has a 450 member medical staff and a fully accredited diploma school for nursing. St. Joseph's Magnetic Imaging Unit is located at Fatima as is the Ambulatory Care Center providing out-patient surgical services.

Rescue services were provided to 22,000 people through the Fatima Unit, a number which approximates two thirds of the Town's population. The emergency room offers a system called Express Care which deals exclusively with minor injuries or health needs.

Capital Improvement Program (2010-2015)

Appendix A provides the Town of North Providence's Capital Improvement Program Schedule for 2010-2015. Expenditures are broken down into the following categories:

Governmental Administration
Fire Department
Police Department
Department of Communications
Division of Inspections
Parks Department
Public Works Department
Sanitation Department
Recreation Department
Public Buildings
Planning & Development
Personnel Department
Senior Citizens Center
Salvatore Mancini Union Free Library
Tax Assessor
Tax Collector
Finance Department
Board of Canvassers
School Department

Future Facilities & Services Plan

Overview

The future Facilities and Services element will present recommendations with respect to a wide variety of services provided to town residents. These recommendations are based upon the goals and policies developed as part of the Comprehensive Planning process. Whenever possible recommendations are related to the "Build-Out" analysis conducted as part of the plan development process. The year 2021 is used as the benchmark for recommendations and the presentation of anticipated service demands, personnel requirements, volume estimates and impact analyses. The following provides the recommendations for public services and facilities.

Public Safety

a. Expand Training within Fire Department

Conversations with the Department indicated the need to expand training opportunities for fire fighters. A training officer with supporting staff and budget is recommended to manage such a program. This individual would be responsible for the evaluation of training programs, the retraining of officers to respond to new federal and state regulations or new fire fighting techniques. Coordination is also suggested with other fire departments to help share the cost of purchasing Programs or exchanging ideas with regard to new firefighting and/or training methods.

Administrative Responsibility:

Public Safety Officials, Fire Chief.

c. Further Community Interaction Efforts

Develop a Community Interaction Program as part of the Public Safety function to provide assistance to local residents relative to increasing public safety in the Town. This activity has been accomplished to some degree but it appears that a full program involving both public safety groups should be involved to expand such things as:

- Fire Safety
- Neighborhood Crime Watch
- Elderly Awareness
- Drug Abuse Prevention

Administrative Responsibility: Public Safety Administrators, Police & Fire Chiefs.

d. Fire Apparatus Replacement Program

Develop a replacement or equipment update program based upon a 20 year cycle. This can be done as part of or separate from the master plan effort.

Administrative Responsibility: Public Safety Administrations, Fire Chief

Education

a. Increase funding to the School Department to meet minimum funding needs

The Town's Finance Director and the School Department both agree that the Department is underfunded for the school year ending June 2012. Estimates of the level of underfunding range from roughly $750,000 (Finance Director) to $1.4 million (School Department) for the 2011-12 school year. The Town should determine the appropriate level of funding required and ensure that funds are appropriated for this purpose.

Administrative Responsibility: School Committee, Superintendent, Mayor, Town Council

b. Review and update all School Department policies and make updated policy documents available in all libraries and/or on-line

A consultants report has recommended that School Department Policy Documents should be better organized and should be made available in local libraries and on-line for the convenience of the public.

Administrative Responsibility: School Committee

c. Assess student/teacher ratios at all grade levels and strive for higher utilization rates that may enable staff adjustments

Administrative Responsibility: School Department Administration, School Committee

d. **Evaluate the need for and cost effectiveness of program offerings such as full day kindergarten, middle school sports, and certain aspects of the response to intervention (RTI) program to see if cost reductions can be achieved.**

Administrative Responsibility: School Department Administration, School Committee

e. Develop a system to charge for public and private use of school buildings and facilities

Administrative Responsibility:
Mayor, Superintendent of Schools,
School Committee, PTA, *PTD*

Public Library

The Salvatore Mancini Union Free Library is an exceptional facility that is doing an excellent job of serving the population of North Providence. The following recommendations would ensure continued success and improved operations.

a. Improve parking and accessibility

Parking is limited in the existing lot. The North Providence High School parking area is directly adjacent to the facility. Signage and an improved connection between this lot and the library are required to increase usage of this lot.

b. Increase number and variety of holdings

Continue to expand holdings and to adjust holdings in order to adapt to the changing demographics of the community, particularly an aging population and an increase in ethnic diversity.

d. Make capital improvements to enhance security, improve access, reduce energy requirements, and increase collection space,.

Three of these are immediate needs. Security concerns require replacement of deteriorated steel doors promptly. Handicapped access requires repair of the handicapped ramp soon. HVAC replacement is needed immediately to ensure continued operation and to improve energy efficiency. The fourth recommendation is longer term. Collection space may potentially be increased by making structural improvements, by adjusting underutilized public spaces (e.g. removing the fountain, consolidating meeting rooms, reconfiguring the central stairwell, etc.) and or by expanding northward into the portico space. These options need to be further studied and implemented over the long term.

Administrative Responsibility:
Mayor, Library Board, Director of Library Services

Municipal Infrastructure/Public Works

The DPW's proposed budget for fiscal year 2011-2012 is $1,464,474. Of this budget the following allocations should be highlighted:

- Fuel and Oil = $65,000
- Snow Removal/Surface Treatment = $205,000
- Street Paving/Asphalt = $3,000

- Sewer Maintenance = $10,000
- New Equipment = $0

Recommendations in this section relate to the following public facilities
• Wastewater Collection (Sewers)
• Water
• Roads & Drainage

General recommendations are presented due to the interrelationship of these systems; Specific recommendations are also provided where required to relate that recommendation to the infrastructure element or service identified.

a. Facilities Needs Program

In order to address the needs to improve the Town's infrastructure system, it is recommended that a Facilities Need Program be developed that presents short term and long term goals to improve these systems. The initial phase of this plan would involve the development of Infrastructure Needs Assessment. This report would provide an up to date summary of the current and future needs of the town combined with a detailed implementation program. The DPW has identified immediate needs and included them within the capital improvements program preceding this section.

This needs assessment would involve a review of all existing studies, reports and planned improvements for each of the three areas listed. Based upon this analysis and implementation program would be developed which would include projects that could be done immediately (short term) as well as those that would require further investigation prior to commencing (long term). Coordination of these improvements is critical given the variety of systems and system managers involved including:

I. Narragansett Bay Commission
2. RIDOT
3. Smithfield Water
4. East Smithfield Water
5. Prov. Water Supply Board
6. Other Utilities- Gas, Electric, Telephone
7. RI Resource Recovery Corporation

The purpose of developing such a plan is to be able to prioritize improvements based upon a ranking system which would schedule improvements after a thorough review of a number of key factors including:

1. Cost/Budget Constraints
2. Coordination Requirements
3. Schedule of Planned Improvements
4. Need
5. Future Demand
6. Availability of Grants/Other Funding

As part of the implementation program, alternatives would be investigated to provide funding for the entire project or serve to enhance local funding, i.e. grants, combined efforts with other system manager etc. A key relationship exists between the development of this program and the planned improvements to be made to the Village Districts as outlined in the Economic Development element It is critical that coordination be established as soon as possible to ensure that one plan is done simultaneous with the other to maximize the potential for project coordination.

The Facilities Need Program would contain, as an element, a Pavement Management Program. The program should address requirements for cutting into roadways to perform subsurface utility work. All efforts by all utilities and associated stakeholders need to be correlated to minimize pavement cutting. Utility trenches and cuts drastically reduce the functional life expectancy of paved roads, especially in climates with routine freeze/thaw cycles.

The Facilities Need Program will outline the funding required to support this Program. A typical cycle is five years. It is anticipated that the recommended funding level for this program may exceed the present capital improvement funding levels currently in the budget. Bonding and other alternatives will have to be investigated. It is recommended that if bonds are floated that they cover more than one elements i.e. a Sewer, Drainage & Road Improvement Bond.

Administrative Requirements:
Mayor, Director of Planning and Development, Public Works Director in consultation with agencies previously outlined. There is an annual meeting between all DPW's and utility companies in Rhode Island to coordinate planned road reconstruction projects over the next year with utilities within the right of way.

b. Water Conservation Program

Promote water conservation as part of a general effort to conserve this valuable natural resources while reducing waste water volumes.

Administrative Requirements: Mayor, Utilities

Administrative Action: Mayor, Finance Director, Planning & Development Director

c. Specific Infrastructure Recommendations.

1. Wastewater

Undertake an infiltration and inflow (I/I) removal program in conjunction with the Narragansett Bay Commission as a major element of the Facilities Improvement Plan. Inflow/Infiltration (III) is the result of water entering a sewer line due to leaks or illegal connections. A systematic program for I/I removal should be established.

Administrative Action: Mayor, D.P.W. Director, and Department of Inspections in coordination with the Narragansett Bay Commission.

2. Water Pressure Improvements.

Continue to work with three water districts to improve water service and available pressure. Work to eliminate dead ends to create water loops in the system.

Administrative Responsibility: Planning and Development Director in cooperation with three water systems.

3. Roads - Pavement Management Program

A major element of the Facilities Need Program will be the establishment of a Pavement Management Program to accomplish roadway and drainage improvements in a systematic fashion. Local roads need to be inventoried, evaluated and prioritized in the order of need for improvement. This information is then fed into the larger Facilities Improvement Program to develop an overall implementation program.

4. Drainage - Stormwater Management Plan

This plan is well underway and has been since the adoption of NPDES Phase II mentioned earlier in this section. The plan inventories and monitors all stormwater outfalls throughout the Town of North Providence and reports compliance to the RIPDES program.

Administration Action: Mayor, D.P.W., RIDOT.

Solid Waste Management

a. Composting Facility

A town-wide composting program should be an integral part of future solid waste management plans. A centralized composting facility may be feasible at the closed site of the former town landfill. Composting of leaf and yard waste can reduce the volume of solid waste disposal by recycling organic materials as topsoil.

Administrative Action: Mayor, D.P.W. Director

Municipal Offices

a. Parking Plan

Parking is severely limited at the existing Town Hall. Improvements through re-design, acquisition or leasing should be incorporated in the Centredale Master Plan

Administrative Responsibility: Planning and Development Director

Social Services

a. North Providence Senior Citizens Center, Inc.

The maturing of the "baby boom" generation has been steadily increasing demand for senior services in North Providence. This increasing demand is expected to continue into the future as long-term residents continue to age and to retire. The new Senior Center is an excellent facility but parking is limited and improvements to parking will likely be necessitated by growth in demand. Similarly, increasing service demand will require proportional increases in funding to support higher enrollment in the many program offerings. The Senior Services Director in cooperation with the Mayor and the Town Council, need to develop a plan to address anticipated increases in demand, provide additional parking, and ensure that funding levels are commensurate with the level of population served.

Administrative Responsibility: Senior Services Director, Mayor, Council

Goals, Policies and Action Items

Public Safety

Goal FS 1: Provide high-quality police, fire, and rescue services.

Policy FS 1: Ensure police, fire, and rescue personnel have access to necessary training to keep them up to date and effective.

Policy FS 2: Involve the public in community efforts to increase public safety.

Policy FS 3: Ensure police, fire, and rescue equipment is in good repair and can be updated or replaced when necessary.

Implementation Actions

Action FS 1: Assign a training officer with supporting staff and budget to manage an expanded training program for the Fire Department.

Timeframe: Short Term
Responsibility: Public Safety Officials, Fire Department

Action FS 2: Coordinate with other fire departments to share the cost of purchasing training programs or exchanging ideas with regard to new firefighting and/or training methods.

Timeframe: Ongoing
Responsibility: Public Safety Officials, Fire Department

Action FS 3: Develop a full Community Interaction Program to provide assistance to local residents relative to increasing public safety in the town. This program should expand efforts such as fire safety, neighborhood crime watch, elderly awareness, and drug abuse prevention.

Timeframe: Mid Term
Responsibility: Public Safety Officials, Police & Fire Chiefs

Action FS 4: Develop a replacement or equipment update program for fire apparatus, based on a 20-year cycle.

Timeframe: Short Term

Responsibility: Public Safety Officials, Fire Chief

Education

Goal FS 5: Provide high-quality public education to citizens even as demographics within the town change over time.

Policy FS 4: Ensure adequate funding to the School Department not just in the short term, but in the long term as projected numbers of students increase.

Policy FS 5: Provide adequate special programs to serve the needs of town residents, including individualized education programs (IEP) and English language learning (ELL).

Implementation Actions

Action FS 5: Determine the appropriate level of funding required for future school years so that funding to the School Department can be increase and meet minimum funding needs.

Timeframe: Short Term

Responsibility: School Committee, Superintendent, Mayor, Town Council

Action FS 6: Assess student/teacher ratios at all grade levels and strive for higher utilization rates that may enable staff adjustments.

Timeframe: Short Term

Responsibility: School Department Administration, School Committee

Action FS 7: Evaluate the need for and cost effectiveness of program offerings such as full day kindergarten, middle school sports, and certain aspects of the response to intervention (RTI) program to see if cost reductions can be achieved.

Timeframe: Short Term

Responsibility: School Department Administration, School Committee

Action FS 8: Develop a system to charge for public and private use of school buildings and facilities.

Timeframe: Short Term

Responsibility: Mayor, Superintendent of Schools, School Committee, PTA, PTD

Action FS 9: Review and update all School Department policies and make updated policy documents available in all libraries and/or online.

Timeframe: Short Term

Responsibility: School Committee

Public Library

Goal FS 6: Provide residents and visitors with a broad range of library services and a well-rounded library collection suited to town demographics.

Policy FS 6: Provide extensive library collections suited to town demographics.

Policy FS 7: Provide an accessible, safe, secure, energy-efficient, and adequately sized building to house library collections and services.

Implementation Actions

Action FS 10: Improve parking and accessibility by improving signage and connection between the North Providence High School parking area and the library.
Timeframe: Short Term
Responsibility: Public Works, Library Board, Director of Library Services

Action FS 11: Expand library holdings and adjust them to adapt to the changing demographics of the community, particularly an aging population and increase in ethnic diversity.
Timeframe: Ongoing
Responsibility: Library Board, Director of Library Services

Action FS 12: Promptly replace deteriorated steel doors at the library building.
Timeframe: Short Term
Responsibility: Mayor, Library Board, Director of Library Services

Action FS 13: Improve handicapped access by repairing handicapped ramp soon.
Timeframe: Short Term
Responsibility: Mayor, Library Board, Director of Library Services

Action FS 14: Immediately replace HVAC system to ensure continued operation and improve energy efficiency.
Timeframe: Short Term
Responsibility: Mayor, Library Board, Director of Library Services

Action FS 15: Study options to increase collection space by making structural improvements, adjusting underutilized public spaces, and/or expanding northward into the portico space.
Timeframe: Long Term
Responsibility: Mayor, Library Board, Director of Library Services

Municipal Infrastructure/Public Works

Goal FS 7: Ensure residents have adequate access to sewer, water, and other utilities.

Goal FS 8: Maintain roadways and associated drainage systems in good repair throughout the Town.

Goal FS 9: Provide waste collection, recycling, and composting services to town residents and businesses.

Goal FS 10: Reduce energy consumption and support initiatives to produce renewable energy for contribution to the regional electricity grid.

Policy FS 8: Ensure the Town's water, sewer, and other utility infrastructures are maintained, improved, upgraded, or replaced as necessary.

Policy FS 9: Conserve and protect water resources through water conservation and stormwater management.

Policy FS 10: Support the State's goal of obtaining 20% of its energy from renewable energy sources.

Policy FS 11: Promote economic development through proper maintenance of roadways.

Policy FS 12: Minimize solid waste disposal and maximize recycling and composting efforts.

Implementation Actions

Action FS 16: As the first phase of creating a Facilities Needs Program, develop an Infrastructure Needs Assessment summarizing current and future needs combined with a detailed implementation program.

Timeframe: Short Term
Responsibility: Mayor, Director of Planning and Development, Public Works Director, Utility Agencies

Action FS 17: As part of a Facilities Needs Program, implement a Pavement Management Program to address roadway cutting for subsurface utility work.

Timeframe: Short Term
Responsibility: Mayor, Director of Planning and Development, Public Works Director, Utility Agencies

Action FS 18: Outline funding required to support the Facilities Needs Program on a five year cycle.

Timeframe: Short Term
Responsibility: Mayor, Director of Planning and Development, Public Works Director, Utility Agencies

Action FS 19: Implement a Water Conservation Program to reduce water use and waste water volumes.

Timeframe: Short Term
Responsibility: Mayor, Finance Director, Planning & Development Director, Utilities

Action FS 20: Undertake an infiltration and inflow (I/I) program in conjunction with the NBC as a major element of the Facilities Improvement Plan.

Timeframe: Short Term

Responsibility: Mayor, Public Works Director, Department of Inspections, NBC

Action FS 21: Work with water districts to improve water service and available pressure and to eliminate dead ends to create water loops in the system.

Timeframe: Ongoing

Responsibility: Planning and Development Director, Water Districts

Action FS 22: Create a written Drought Management Response Policy.

Timeframe: Short Term

Responsibility: Public Works Director

Action FS 23: In support of the Facilities Needs Program, inventory, evaluate, and prioritize local roads to determine the order of need for improvement.

Timeframe: Short Term

Responsibility: Director of Planning and Development, Public Works Director

Action FS 24: Continue to comply with the Stormwater Management Plan by inventorying and monitoring stormwater outfalls and reporting compliance to the RIPDES program.

Timeframe: Ongoing

Responsibility: Mayor, Public Works, RIDOT

Action FS 25: Undertake recommended energy saving projects to reduce energy consumption for municipal buildings and public infrastructure.

Timeframe: Ongoing

Responsbility: Mayor, Public Works, Town Council

Action FS 26: Implement recycling in the North Providence public school system.

Timeframe: Short Term

Responsibility: School Department, Public Works, Recycling Coordinator

Action FS 27: Develop a town composting program including design, construction and operation of a composting facility at the former town landfill site.

Timeframe: Short Term

Responsibility: Mayor, Public Works Director, Recycling Coordinator

Action FS 28: Implement a town program for corrugated cardboard baling and recycling to include design, permitting, construction and operation of a baling facility at the former landfill site.

Timeframe: Short Term

Responsibility: Mayor, Public Works Director, Recycling Coordinator

Action FS 29: Use funds from solid waste program fees to develop and carry out an enhanced program of public education and advertising to encourage increased waste reduction, reuse, and recycling by local residents.

Timeframe: On-going
Responsibility: Mayor, Recycling Coordinator

Municipal Offices

Goal FS 10: Maintain safe, secure municipal offices with adequate parking and access.

Policy FS 12: Provide employees, residents, and visitors with adequate parking and access to municipal offices.

Implementation Actions

Action FS 30: Investigate and implement parking improvement options for the Town Hall, such as re-design, acquisition, or leasing and incorporate these elements into the Centredale Master Plan.

Timeframe: Mid Term
Responsibility: Planning and Development Director

Senior and Human Services

Goal FS 11: Provide programs and services to senior citizens to meet their functional and social needs.

Goal FS 12: Assist disadvantaged families and individuals through a variety of programs.

Policy FS 13: As the Town population ages, ensure adequate funding for and access to programs, services, and facilities for senior citizens.

Implementation Actions

Action FS 31: Develop a plan to address anticipated increases in demand for senior services, provide additional parking at the Senior Center, and ensure adequate funding levels as demand for services increases.

Timeframe: Long Term
Responsibility: Senior Services Director, Mayor, Town Council

NATURAL RESOURCES

The Natural and Cultural Resources Element provides information on natural and cultural resources in North Providence. Natural resources include water, soils, prime agricultural lands, natural vegetation systems, wildlife, wetlands, aquifers, coastal features, and flood plains. This chapter describes the Town's natural resources and summarizes conservation and preservation efforts currently being undertaken by the town. It provides the basis for the development of goals and objectives for protection of Natural Resources in North Providence and lists specific actions to be undertaken toward those goals and objectives.

Background

The Rhode Island Comprehensive Plan and Land Use Regulation Act requires that the Natural Resources Element "provide an inventory of significant natural resource areas such as, but not limited to, water, soils, prime agricultural lands, forests, wildlife, wetlands, aquifers, coastal features, and floodplains. The plan must include goals, policies and implementation techniques for the protection and management of these areas."

In very brief terms the Natural Resources Element of the plan must inventory all resource areas that are considered to have significance to both the natural and human environment. The inventory should be mapped, with accompanying information on type of area, type of ownership, etc. Many of these areas have been studied, mapped and regulated (to some degree); and data on these locations is available through the Rhode Island Soils Survey, the Rhode Island Geographic Information System (RIGIS), and the Rhode Island Natural Heritage Program. Others may be delineated by the application of specific definitions that are part of regulatory systems, as in the case of wetlands and coastal features. In such cases, the state regulatory agencies should be consulted to maximize the accuracy of the inventory and gain agency determinations with regard to water quality, wetlands significance, and coastal feature classifications, among others.

The implementation strategies to be put forth in connection with the Natural Resources Element and the Land Use Plan Element will fall into several categories, including but not limited to:

- Acquisition of land, easements or development rights to protect and preserve specific natural features, agricultural lands, aquifers, watersheds and others.
- Use of existing or new state regulatory systems to protect wetlands, streams, water bodies, and other natural resources from intrusion by inappropriate development and from point and non-point sources of pollution.
- Use of existing, revised or new local regulatory systems such as zoning, subdivision regulations, performance standards, erosion control, and others to limit or prohibit development in and adjacent to sensitive natural areas and to limit or eliminate the discharge of damaging or toxic elements into sensitive areas, watersheds, aquifers and water bodies. This includes the regulation of future development in accordance with the capabilities of the soils and the availability of water and sewer facilities.
- Development of new or improved municipal facilities and services to ease or eliminate pollution of natural resource areas. Sewerage, surface drainage, waste treatment and other improved services and facilities may be appropriate in many municipalities.

- More effective use of property taxation to protect agricultural, forest, and open space lands.

Community Natural Resources

Topography

In general, the topography of North Providence is determined by its bedrock geology as influenced by glaciation and erosion. Most of the Town, being composed of igneous rock, is typified by pronounced hills. These form a series of high ridges running roughly north and south through the town, separated by the river valleys of the Woonasquatucket, West, and Moshassuck Rivers. The sedimentary rock of the Narragansett Basin in the southeast part of town, although younger than the igneous rocks to the west, is less resistant to erosion. Therefore the southeast part of Town is more heavily eroded and is dominated by lowlands of broad, gentle hills and valleys. The interface between the igneous rocks and the Narragansett Basin is typically broad and gentle, but the edge becomes abrupt along the margin in the vicinity of Marieville.

Several different types of rock have historically been quarried in North Providence and crushed for use in road building and as aggregate for concrete and asphalt. Sandstone has been quarried at Windmill Hill on the eastern edge of Town. Dimension stone was once taken from the Esmond granite in the vicinity of Peter Randall Reservation in the northwestern part of town. This area was once an important quarry that supplied much of the granite used for building construction in Providence. There are currently no active quarries in North Providence. The most valuable mineral resources of the area are now the sand and gravel deposits located above the bedrock.

Surficial Geology

The surficial geology of North Providence is the result of glacial action and more recent fluvial deposits. Both major categories of surficial deposits - till and drift - are found within the town. Till soils are deposits of unsorted materials deposited directly by glaciation. Drift soils are composed of stratified deposits of material that have been sorted and consolidated by glacial melt water.

The majority of North Providence is underlain by till deposits known as ground moraine. Ground moraine consists of a relatively thin layer of till deposited directly over the bedrock by the retreating glacier. Drift deposits occur in the southeast part of town as outwash plain. Outwash plains consist of melt water deposits from glacial streams. Windmill Hill in the southeast part of town is ground moraine that has been surrounded by outwash plain.

Other stratified drift deposits are concentrated along the Woonasquatucket River corridor. The majority of this drift consists of valley train deposits of stratified sand and gravel. These deposits were the result of glacial streams within the valley bottom. Adjacent to the river are isolated river terrace deposits of medium to coarse sand with some thin beds of gravel deposited during the recent, or post-glacial, era.

As noted earlier, the most significant mineral deposits in the Town, from an economic perspective, are sand and gravel. These deposits correspond with the stratified drift areas. It is

within the drift areas that the mineral resources occur in beds comprised of similar sorted materials. Gravel and pebble gravel have historically been removed from pits along the Woonasquatucket River while sand and gravel have also been taken from sites along the outwash plain.

Soils

Soils in North Providence have been categorized to delineate them with regards to: hydric soils, soils having seasonal high water table, prime farmland, and farmland of statewide importance. The first two are significant because of their connection with wetlands as well as the constraints they pose on development.

Hydric Soils

Hydric soils are those soils that in their undrained state are saturated or flooded to the degree that anaerobic conditions develop. The depth to water table is 18 inches or less. The presence of anaerobic conditions fosters the growth and propagation of hydrophytic plants. That is, plant species tolerant of saturated soil that results in reduced oxygen availability. This inter-relationship between vegetation and soil conditions explains the presence of vegetated wetlands (i.e. swamps, marshes) in hydric soil areas. Approximately 8.5% of the soils within North Providence are classified as hydric. The hydric soil units are dispersed throughout the town with most in low lying areas associated with wetlands.

Seasonal High Water Table

Some soil units, while non-hydric, do have seasonal water tables between the depths of 19 to 42 inches. Although they might not support wetland vegetation, they can pose constraints to building development and the installation of individual septic systems due to the seasonal presence of water. About 4% of North Providence soils have these seasonal high water conditions. Most of these are located adjacent to the northern corporate boundary between Wenscott Reservoir and Louisquissett Golf Course.

Prime Farmland

The United States Natural Resource Conservation Service (NRCS) has classified certain soil units as having the optimum physical and chemical characteristics for production of food, feed, forage, fiber and oilseed crops. These prime farmland soils have adequate/dependable moisture, favorable temperature and growing season, acceptable pH, few rocks, and are potentially available for agricultural use.

Approximately 290 acres, or roughly 8% of North Providence, is comprised of prime farmland soil units. The largest concentration of prime farmland soils occurs in the vicinity of Longview Reservoir. The majority of this area has been developed, limiting the actual acreage available for farming.

Farmland of Statewide Importance

In addition to soils identified as prime farmland, the NRCS has designated other soil units as "Farmland of Statewide Importance." These soils, while not possessing the optimum conditions of prime farmland soils, have properties that allow for agricultural use with some modifications. 1.9% of North Providence is comprised of those soil units. These are scattered throughout the town in small parcels.

Inter-Relationships of Soils

Certain soil units are found within more than one special category. For example, 120 acres of land designated prime farmland also qualifies as having seasonal high water table. Those soil units are probably best suited for agricultural land uses as the high water table limits development potential.

Water Resources

Groundwater

The Rhode Island Groundwater Protection Act of 1985 required the Rhode Island Department of Environmental Management (RIDEM) to evaluate and classify the state's groundwater resources. Groundwater reservoirs are those areas with a saturated thickness greater than 40 feet and a transmissivity greater than 4,000 square feet per day. RIDEM mapped all groundwater reservoirs in the state and also identified and mapped groundwater reservoir recharge areas. None of the areas occurs within the North Providence corporate boundaries.

The RIDEM also classified all groundwater according to water quality regardless of whether the criteria for reservoir designation were satisfied. The groundwater north of Mineral Spring Avenue has been classified GA. The groundwater south of Mineral Spring Avenue is classified GB. GA class groundwater resources are known or presumed to be of drinking water quality. Class GB waters are resources known or presumed unsuitable for drinking water use without treatment and Class GC designates groundwater resources that are or may be unsuitable for drinking water without treatment.

Surface Water

Map 10 depicts the surface drainage and major surface resources of the Town of North Providence. The two main flowing watercourses within North Providence are the Woonasquatucket River and the West River. These watercourses are tributary to the Providence River, which ultimately flows into Narragansett Bay. The Woonasquatucket forms the western boundary of the Town, flowing from the northwest to the southeast. Four small tributary brooks drain the western part of the town westward into the River. These tributaries are located at Centerdale, Allendale, Fruit Hill, and Lymansville.

The West River flows through the central part of the Town, also from northwest to southeast, roughly parallel to Douglas Avenue. It has three small tributary streams or brooks: Geneva Brook, which runs eastward off the east side of Fruit Hill to join the River at Geneva Pond; Angell Brook, which flows southwestward from Louisquisset, crosses Mineral Spring Avenue, and joins the river near Douglas Avenue, and Marieville Brook which flows south through Marieville into Canada Pond, meeting the River near Branch Avenue in Providence.

Surface water bodies located all or partially within the Town are (east to west):

- Upper Canada Pond
- Geneva Pond
- Wenscott Reservoir
- Greystone Mill Pond (Woonasquatucket River)
- Allendale Mill Pond (Woonasquatucket River)
- Lymansville Mill Pond (Woonasquatucket River)

Water Quality

Water bodies within the Town have been classified according to water quality by RIDEM. Water Quality classifications range from AA to C, and are defined as follows:

- Class AA - These waters are designated as a source of public drinking water supply (PDWS) or as tributary waters within a public drinking water supply watershed (the terminal reservoir of the PDWS are identified in Appendix A), for primary and secondary contact recreational activities and for fish and wildlife habitat. These waters shall have excellent aesthetic value.
- Class A - These waters are designated for primary and secondary contact recreational activities and for fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have excellent aesthetic value.
- Class B - These waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value.
- Class B1 - 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.
- Class C - These waters are designated for secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value.

Within North Providence, the Woonasquatucket River and its tributaries are designated Class B1 and the West River and its tributaries are designated Class B. These classifications meet the federal Clean Water Act (CWA) requirements that all states to do the following:

- Establish water quality standards (WQS) (including Water Use Classifications and class-specific water quality criteria) for the state's surface waters;
- Monitor water quality conditions of the state's waters (i.e. lakes, ponds, rivers, streams, estuaries and other marine waters);
- Assess water quality conditions of the state's waters and develop biennial reports describing the water quality conditions (CWA section 305(b));
- Identify and list impaired waters (that is those waters that do not meet WQS with existing required technology-based pollution controls alone) in the state's 303(d) list;
- Set priority rankings (a schedule for development of total maximum daily loads (TMDLs)) for all impaired waters included on the 303(d) list;

- Determine TMDLs that establish acceptable pollutant loads from both point and non-point sources of pollution which allow the impaired waterbody to meet WQS for each listed waterbody and each cause of impairment;
- Submit the 303(d) list and all TMDLs to US Environmental Protection Agency (USEPA) for approval; and
- Incorporate TMDLs into the state's continuing planning process.

Because of their classification, RIDEM's 303(d) list includes the Woonasquatucket and West Rivers as being impaired or threatened for one or more designated uses by one or more pollutants. The USEPA and RIDEM will calculate TMDLs for waters listed as impaired. TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. In the 2008 303(d) list, RIDEM's TMDL schedule calls for studies to be complete by 2016 for both waterbodies.

Wetlands

Wetlands as defined by the federal government and states includes: open water (i.e. lakes. ponds); flowing watercourses (i.e. rivers, streams); and areas dominated by hydrophytic plants (i.e. swamps, marshes). The latter systems could be called 'vegetative wetlands', although wetland plant species are present within the other wetland types.

Wetlands are important due to the physical, chemical and biological functions that they perform. These include:

- storage of stormwater
- flood flow attenuation
- groundwater recharge
- attenuation of pollutants
- provision of wildlife habitat
- passive recreation

The existing wooded swamps in North Providence are relatively small isolated systems, most prominent in the undeveloped areas of the town's northwest section. In most cases these wetlands are red maple swamps. Ponds within the town are scattered throughout, with most being located west of Louisquisett Pike. Areas considered as deeper lakes are: Canada Pond; Wenscott Reservoir and the mill ponds on the lower portion of the Woonasquatucket River.

Within the Woonasquatucket River there are some scrub shrub wetlands, as well as scrub shrub/emergent complexes. Certain portions of that river are classified as lower perennial riverine.

Flora and Fauna

Flora

A significant portion of North Providence has been developed. However, undeveloped areas still exist, most noteworthy being the area in the northwest section, north of Mineral Spring Ave. and west of Wenscott Reservoir, along with an area between the West River and Louisquisett Golf Course. Most of this undeveloped area is comprised of either agricultural land

or forested land. The forested areas are mixed hardwood/softwood stands dominated by oak hickory hardwood forest and red maple swamp. Forested land is becoming scarce as residential and commercial development approaches build out. According to the US Department of Agriculture, urban trees help improve air quality and reduce urban "heat island" effects. By providing shade, humidity control, wind control, erosion control, evaporative cooling, sound and visual screening, traffic control, and pollution absorption, trees provide economic benefits and enhance the business climate of the community.

Protection of street trees and small pockets of urban forest in North Providence is becoming more important as forested land is consumed by development. Despite an overall high density of development, the Town still has many small forested areas and a good network of street trees. The Town should develop an urban forest management plan to conserve and protect these resources.

Fauna

Wildlife populations are limited to populations that tolerate human presence. The largest animal populations are those species who have most successfully adapted to human impacted environments. These include songbirds, possum, raccoons, skunks, squirrels, rabbits and chipmunk. Less tolerant animal populations are concentrated within the few undeveloped areas and undisturbed wetlands. Existing fauna include: passerine birds; waterfowl; small furbearers; amphibians and reptiles (within wetlands and water bodies). White tailed deer are frequently observed in the northern part of the town and wild turkeys have successfully been reintroduced along the northern boundary.

Rare and Endangered Species

The Rhode Island Natural Heritage Program collects data to determine and locate the presence of habitat areas for rare and endangered species. The Program also catalogues unique/exemplary natural communities. Present Program research and records does not indicate the presence of any habitat areas for rare and endangered species within North Providence. Likewise, no unique/exemplary natural communities have been catalogued within the Town.

Floodplains

Flood plain areas are identified by National Flood Insurance maps prepared by the Federal Emergency Management Agency (FEMA). Flood Insurance Rate Maps (FIRMs) indicate the extent of flood plains within communities. Areas prone to flooding in a 100 year storm event (a storm with a statistical probability of 1% in any given year) are designated as being in A Zones. Development in these areas is subject to local ordinance controls and regulated by RIDEM Freshwater Wetland Regulations to ensure compliance with codes that prevent adverse impacts. Map 11 shows flood prone areas in North Providence.

Protecting Natural Resources

The Town uses several tools to protect its natural resources. The North Providence Land Trust acquires and maintains open space for conservation. The North Providence Environmental Commission, in addition to promoting green infrastructure development, supports resource

conservation and protection and tree planting. The Town also uses its local zoning ordinances to reduce the impact of development on natural systems.

North Providence Land Trust

The North Providence Land Trust (NPLT) was established in 2000 to preserve open space in North Providence. Like many urban communities in Rhode Island, decades of continuous growth have put tremendous amounts of pressure on the Town and its natural and cultural resources. The impact from years of development compounded over time is more pronounced in a dense community like North Providence. At 5,686 persons per square mile, it is the fourth-densest in the state.

The purpose of the NPLT is "… to preserve open space, protect wetlands, water bodies, ground and surface water resources, farm lands, historical or cultural places on interest, scenic views, unusual, exceptional or exemplary natural habitats, provide opportunities for research and education on natural resources on land trust held properties and to secure for the town the goals and objectives established in the comprehensive plan." They have the ability to acquire land for the benefit of all North Providence residents. Table NR 1 lists the criteria used by the NPLT to prioritize land acquisitions.

Table NR 1: North Providence Land Trust Criteria for Land Acquisitions

	Points Allocated			
Criteria	**0**	**1**	**2**	**3**
Size of parcel	less than 10,000 sf	10,000 sf to ½ acre	½ to 1 acre	more than 1 acre
Proximity to other protected land or accessible sensitive habitats	greater than 500 feet	200 to 500 feet	less than 200 feet	Abutting or connecting
Ecologically significant habitat	None or less than average habitat	Average habitat	Above average habitat	Prime habitat
Farmland Preservation	N/A	Inactive farm	Active farm less than 2 acres	Active farm greater than 2 acres
Potential to offset development (number of housing units)	0 or N/A	1	2 - 5	5 or more
Potential to offset development (rentable sf of commercial building)	0 or N/A	less than 5,000 sf	between 5,000 to 20,000 sf	more than 20,000 sf
Historic value if any	No value	Low	Medium	High

sf – square feet; N/A – not applicable

In 2010, the NPLT acquired its first two properties: one on Hobson Avenue and the second on Ivan Street. The Hobson Avenue property is a wooded lot about a quarter acre. The property on Ivan Street is a wooded area adjacent to the Ivan Street Park and just over a half acre.

One of the NPLT's recent efforts is to acquire town-owned, vacant properties that meet their criteria. In doing so, they will be able to use land trust funds to maintain the spaces, keeping them clear of illegal dumping that may occur and make them meaningful open space that can be used by residents. The NPLT developed a list of all town-owned properties. Larger lots that are vacant, listed in Table NR 2, will be further evaluated for possible uses.

Table NR 2: Large vacant parcels owned by the Town of North Providence (Source: NPLT)

Plat/Lot	Street/Access
19/289, 290, 291; 19/358, 359	Andover Street
20/31 and 20/643	Waterman Avenue
21a/923	Marwell Drive
21a/1116	Howard Road
23c/739; 23c/1465, 1466, 1467	Charles Street
24c/848	Oakdale Avenue

The NPLT is in the process of taking ownership of Greystone Park from the Town of North Providence. They will be able to make improvements in the park that include trails, benches, and other amenities.

North Providence Environmental Commission

The mission of the North Providence Environmental Commission (NPEC) is to improve their community by:

- Helping to create green infrastructure,
- Spearheading environmental education,
- Conserving the town's natural resources,
- Involving neighborhoods in beautification and recycling efforts, and
- Helping residents understand the value of a pleasant, healthy and beautiful place to live.

In 1995 the Town issued a Tree Ordinance mandating the hiring of a Tree Warden (licensed arborist). The ordinance, as described below, outlines the Town's commitment to the care and maintenance of trees on municipal properties. In 1997 the NPEC was established with the intent to create an urban forest and beautify the Town.

The NPEC has made several accomplishments. Since 1999, the NPEC has planted 400 trees. They have installed plantings and landscaping at the RIPTA bus turn-around property on Smith Street and they have planted flowers at the WWII monument in Centredale. The primary goal of the NPEC is to develop a well-managed urban forest master plan for North Providence. Other current and proposed projects are:

- Plan community cleanups involving high school students
- Beautify the area surrounding the water supply land at Mineral Spring Avenue and Smithfield Road
- Encourage/expand small-business landscaping on major streets
- Actively support Camp Meehan as open space
- Maintain war memorials by planning for their enhancement with plants and flowers
- Encourage the enforcement of the Town's sidewalk snow removal ordinance
- Support a pure recycling plan which will save taxpayers thousands of dollars in tipping fees

Zoning Ordinance

The North Providence Zoning Ordinance provides tools the town can use to reduce impacts to natural resources.

The Flood Hazard District requires a permit to be issued by the Building Inspector for all proposed construction, development, or storage of equipment and/or materials within a floodplain or flood hazard area. Flood-carrying capacity within the floodplain, flood hazard area, or watercourse cannot be altered or relocated. Hydrological and hydraulic analyses must be performed to demonstrate that that the proposed project will not increase flood levels within the town during the occurrence of the base flood discharge. FEMA's FIRMs are used by the ordinance to identify floodplain and flood hazard areas.

Future Natural Resources Plan

The Future Natural Resources Plan presents recommendations to increase the level of protection offered to the existing natural systems within the Town of North Providence. Several recommendations are made varying from amendments to the Zoning Ordinance to the establishment of a local Woonasquatucket River Corridor Committee to work with the Woonasquatucket River Watershed Council to help promote the protection and improvement of this important and historically significant water body. Many of the recommendations with respect to natural resource protection are also discussed in the Land Use Element. They include the establishment of an Open Space/Conservation Zone and an Environmental Overlay District. In addition to these regulatory requirements it has also been recommended that the town make every attempt to control important open spaces areas by purchase, lease, donation or other means. This relates to sensitive natural areas and others with recreation potential. Specific recommendations are included in the Open Space and Recreation Element.

Woonasquatucket River Corridor

Establish a local Woonasquatucket River Corridor Committee comprised of Town board members and concerned private citizens to work with the Woonasquatucket River Watershed Council to help promote the protection and improvement of this important and historically significant water body. Responsibilities to include: review of Federal and State permits for discharge and construction within corridor; procurement of grants to formulate a water quality monitoring program; and, establish a citizens awareness (educational) program, identification of recreational opportunities and potential open space acquisition.

Expanded Drainage Regulations

Within the Site Plan Review Process and the Subdivision Regulations include expanded drainage requirements to include the use of Low Impact Design (LID) along with detention and retention structures, sumps and other measures to reduce the impact of point and non-point discharges of stormwater drainage to receiving waters. These same measures should be used when making improvements to local drainage systems as part of the Facilities Improvement Program.

Groundwater Protection

Add groundwater protection as an additional element of Site Plan Review Process. Work with RIDEM to identify known sources of potential contamination and address issues utilizing current regulations.

Protection of Surface Water Resources

Develop an overlay zoning district that provides additional water quality protection to surface water resources within the Town of North Providence. Include provisions in the Site Plan Review process or as a stand-alone provision of the zoning ordinance.

Floodplain Protection

The record-breaking rainfall of March 2010 caused many of Rhode Island's rivers to overflow and many residents and businesses were flooded. Throughout the state, these historic flooding conditions closed roads because they were under water or the structural integrity was compromised, with the roadway itself or bridge structures. A Major Disaster was declared by the Governor and President.

The historic flooding impacted many North Providence properties. The Federal Emergency Management Agency (FEMA) is evaluating the floodplain elevation at Gillian's Plat. The Town should work with FEMA and look for other areas that may also need the floodplain elevation reevaluated. (See Natural Hazards below)

Dams and Waterbodies

Many dams in North Providence are in poor condition. Dam failure can adversely affect water quality, threaten public health and safety, and result in ecological disaster. There are two key structures that raise concern. The first is the dam on the north side of Putnam Pike in Centredale (41' 51.576N, -71' 29.263W). It is on the border between Johnston and North Providence. This dam collapsed, flooded the road, and created a large rubble field north of the highway. The second is on the West River (41' 51.383N, -71' 26.559), at the point where the river passes under Douglas Avenue. This dam is technically in Providence but it held Geneva Pond (aka "Whipple Pond") in North Providence. In April of 2010, the dam failed and the pond emptied. Douglas Avenue was closed because of damage to the bridge abutments. The pond drained out and left the sediment exposed. While the roads have been repaired, the damage to the water bodies has yet to be repaired at either location, with or without new dams.

The Town is concerned about what other dams in town where this might happen. Therefore, it is recommended that the Town develop a Dam Management Plan. This plan will inventory the location and conditions of dams in North Providence. The plan should evaluate what dams have been maintained, how they have been maintained, and prioritize those pose a threat to public safety and/or will have an ecological impact.

Natural Hazards

Natural hazards have the potential to impact the natural resources, built environment, property, and people of North Providence. The goal of this section is to create a safer community by identifying natural hazards and encouraging planning to reduce or eliminate the threats they pose to life and property.

Natural Hazard Threats

The Town of North Providence lies in Providence County, Rhode Island, within the northeastern climate region. National Oceanic and Atmospheric Administration (NOAA) data from 1981-2010 shows that Providence County averages 52.56 inches of precipitation per year, including an average annual snowfall of 46.65 inches. NOAA records also indicate that the average annual temperature for Providence County is 49.2 degrees Fahrenheit. North Providence has no coastline, but several streams, ponds, wetlands and dams exist within the town.

Flooding

North Providence contains approximately 380 acres of Federal Emergency Management Agency (FEMA) flood zone, 10.3% of the entire area of North Providence. This flood zone is generally associated with the two rivers within the City, the Woonasquatucket River and the West River, and their tributaries. Much of this floodplain is developed and therefore at particular risk due to flooding.

The Town's older mills and associated villages such as Greystone, Allendale, Lymansville, and Geneva were all located close to the river for access to water power and at low elevation, where they are very vulnerable to flooding. Several residential neighborhoods were also developed prior to the adoption of restrictions on construction in floodplains and are also vulnerable. In particular, homes in the vicinity of Gillen Avenue, Evergreen Parkway, West River Parkway, Brown Ave. and Humbert Street have experienced problematic flooding.

The Rhode Island Department of Environmental Management, Dam Safety Program lists seven dams in North Providence Table NR-X list these dams. Their locations are shown on Map 11. Two of these, the Wenscott Reservoir Dam and the Louisquisset Flood Control Dam, are classified as high hazard dams. A dam is a High Hazard dam if failure or mis-operation may cause loss of life. The other five dams listed are all Low Hazard dams. Failure or mis-operation of Low Hazard dams would result in no loss of human life and low economic losses.

RIDEM LISTED DAMS IN NORTH PROVIDENCE

River/Stream	Dam Name	Hazard
Shippee Brook	Shippee Pond	Low
West River	Wenscott Reservoir	High
West River	Geneva Sportsmen's Club Pond	Low
West River	Douglas Terrace Pond	Low
West River - Tributary	Louisquisset Flood Control	High
Woonasquatucket River	Allendale Pond	Low
Woonasquatucket River	Centredale	Low

There are at least 50 dams in the Woonasquatucket watershed. Six of them are listed as high hazard dams. These high hazard dams (Waterman Lake dam on Stillwater River, Slack Reservoir Dam on the Stillwater River tributary, Sprague Lower Reservoir Dam on the Stillwater River tributary, Sprague Upper Reservoir dam on Stillwater River tributary, Georgiaville Pond dam on the Woonasquatucket River, and Stillwater Reservoir dam on the Woonasquatucket River) are all upgradient of North Providence. Failure or mis-operation of any one of these upstream dams would very likely cause flooding of the Woonasquatucket River in North Providence.

In addition, six dams on the Woonasquatucket are listed as significant hazard dams in which an unreasonable risk of failure exists (Belknam Pond dam on Assapumpset Brook, Caesarville Pond dam on Assapumpset Brook, Hawkins Pond on Reaper Brook, Hopkins Pond dam on Slack Reservoir Brook, Capron Pond dam on the Woonasquatucket River and Stillwater Pond dam on the Woonasquatucket River). Failure of any one of these dams could also potentially affect North Providence.

Geneva Pond after the dam ruptured in March of 2010.

The town has experienced several flooding events due to dam failure. The first, in 1991, was the breaching of the Dam at Allendale Pond, which drained the pond and transported PCB laden sediment from the Centredale Manor Superfund Site into waters downstream. That dam was replaced in by the USEPA in 2001.

The second resulted from the failure and collapse of the Centredale Worsted Company dam on the Woonasquatucket River just north of Route 44 in Centredale. Catastrophic failure of that dam resulted in downstream flooding and discharge of sediment into the river, exacerbating problems with contamination on downgradient properties. That dam has not been replaced.

Most recently, in March of 2010, heavy rainfall caused flooding in several parts of the Town and flooding ruptured the Geneva Pond dam on the West River near the Providence/North Providence boundary. When the dam ruptured, water from Geneva Pond rushed into the West River below the dam. It washed out the bridge carrying Route 7 across the West River and flooded numerous downstream properties, severing the State highway and separating the two towns for several weeks.

The Town cooperates with RIDEM and FEMA to prepare for and respond to flooding events. To mitigate adverse impacts of flooding, the Town restricts development within floodplains. Older developments, particularly industrial developments that relied on water power, were often located in floodplain areas and are therefore especially vulnerable to flood impacts. The Town's policy is that all development and redevelopment projects in floodplains must be designed to reduce the potential for flooding, reduce the frequency of damage resulting from flooding events, and reduce the cost of flood damage to the maximum practical extent.

Hurricanes & Tornadoes

Although North Providence is not a coastal community, hurricanes still pose hazards due to high winds and heavy rainfall. High winds can be particularly damaging to trees, utility lines, and structures. Wind-borne debris presents a hazard to health and safety as well as to property. Heavy rainfall associated with hurricanes can cause flood hazards like those described above. Though relatively rare, tornadoes can occur in the area and cause damage due to high winds and wind-borne debris.

Hurricanes affect North Providence almost every year. In 2012, hurricane Sandy left almost half of the population without electricity. It was several days before power could be fully restored. In 2011, hurricane Irene brought heavy rain and wind gusts up to 71 miles per hour. It caused widespread flooding and numerous power outages. In 2010 Earl brought even more rain, although not as much wind. Most storms cause heavy rainfall, localized flooding and high winds which bring down trees, block roadways and damage power lines.

Most of the electrical and communications transmission facilities in North Providence are above ground on poles, where they are particularly vulnerable to storm damage. To minimize damages, North Providence encourages citizens to make storm preparations when hurricane conditions threaten. North Providence cooperates with State officials and with neighboring towns to warn citizens of impending storms, make preparations for hurricanes and respond to emergencies both during and after hurricanes.

Winter Storms

Winter storms can result in heavy ice and snow accumulation, the weight of which can damage buildings, utility lines, and trees. In extreme cases, this accumulation can even cause buildings to collapse. Often, these storms are accompanied by high winds, which can create hazards similar to those of hurricanes. Winter storms also pose a hazard because they often restrict or prevent travel along roadways. When snow and ice melts, flooding can be a problem. In particular, flooding can be made worse by ice jams, which block natural drainage and occur most often at constrictions along rivers.

The "Blizzard of '78" is perhaps the most memorable example of winter storm damage in North Providence, but there have been more recent incidents as well. In 1993, a massive spring storm[i] that became known as "the storm of the century*" brought 13 inches of snow to North Providence in mid March, bringing the community, the state and most of the eastern seaboard

to a standstill. Heavy snow accumulations that late in the season are rare, but the Town typically experiences several significant winter storms each year.

The Town makes preparations for these winter storms by stockpiling sand and salt and securing personnel and equipment for snow removal. Road and parking surfaces are treated before winter storms and all major roads are kept clear during winter storms for safety and emergency response.

Drought

Drought occurs when there is an extended period of consistently below-average rainfall. This can have negative effects on natural resources, such as vegetation, waterbodies, and wetlands. It can also negatively impact public and private drinking water supplies. Agricultural businesses, golf courses, private lawns, and town sports fields can be damaged by prolonged drought.

Drought has threatened North Providence as recently as spring of 2012, when below normal rainfall for three successive months caused streamflows to drop near record lows in April[ii]. The year before, in March of 2011[7], the lack of winter precipitation threatened water supplies and severe drought appeared imminent. Fortunately early summer rains alleviated both these drought conditions within the following few months, but recurrence of drought is inevitable.

To mitigate impacts of drought, the Mayor and the DPW take an active role in the drought management process and coordinate municipal government efforts during stages of drought preparation, water conservation and water emergencies. The Town has local ordinances to provide guidance and regulations to manage drought at the community level. Municipal officials enforce local regulations/restrictions and state emergency orders. including watering restrictions as needed. The Town also coordinates with the water providers, state officials and other municipalities to ensure that the WSSMPs properly address drought and emergency preparedness and are incorporated into the Community Comprehensive Plan.

Extreme Temperatures

Extreme heat, often referred to as a "heat wave", is caused when high atmospheric pressure moves into an area and increases temperature, inhibits winds, and prevents cloud formation - resulting in additional heating from the intense sunlight. Periods of extreme high heat typically last two or more days and can have significant effects on human health. Heat stroke and hyperthermia caused by extreme high temperatures can result in death, particularly among the elderly and infirm. Heat waves can also be accompanied by or exacerbate droughts, causing additional hazards as described above. Heat waves can also tax power systems as people run air conditioners which can overload power circuits causing brown outs and/or power failure.

A heat wave, meaning daily maximum temperatures reaching or exceeding 90°F for three days in a row, affected the Town in of July 2010. Surface temperatures approaching 100°F were experienced in North Providence while Boston, Providence and Philadelphia all saw

[7] http://www.ncdc.noaa.gov/sotc/drought/2011/3

temperatures in the 100s that broke records.[8] The Town issued health advisories encouraging residents, especially the elderly and the sick, to reduce activity and urging them to find air conditioned spaces wherever possible.

Extreme cold, often associated with winter storms, also presents a hazard to human health. Hypothermia and frostbite can occur if precautions are not taken to stay warm during periods of extreme cold temperature. Outdoor workers, users of public transportation who must wait outside, and lower-income citizens without access to sufficient warm winter clothing or heating fuel are particularly at risk. Damage can occur to roadways and building foundations due to frost heaving. Frozen pipes can cause damage to utility infrastructure and buildings.

The Town experiences a few weeks of extreme cold in most winters and a few weeks of extreme heat in most summers. The Town works with Tri-Town Community Action Agency to make information, heating assistance and related services available to the elderly and to persons in need during very hot and very cold weather. The Town also maintains public buildings, such as the senior center and the library, that provide climate controlled places for citizens during the day.

Earthquakes

Earthquakes are relatively rare and of minor severity in Rhode Island, but have been known to occur. Typically they cause little to no damage, but can frighten citizens, rattle windows, and shift objects and furnishings. The most recent earthquake that could be felt in North Providence was a magnitude 4.5 quake that occurred near Hollis Center, ME on October 16th 2012. Effects of the quake were felt throughout New England. The quake caused no damage in North Providence.

Climate Change

Research shows that climate change will have far-reaching impacts for Rhode Island. Some changes North Providence should anticipate include:

- **Hotter, drier summers:** Increases in temperature and more frequent days above 100 degrees Fahrenheit can increase the risks of health problems such as heat stroke.

- **Warmer, wetter winters with more rainfall:** While snowfall may decrease, wetter winter storms can cause flooding and potentially damage structures, infrastructure, and dams.

- **Higher intensity storms:** Increased rainfall per storm can cause problems with flooding; intense electrical storms can damage utility lines and trees, cause fires, and pose a health risk; increased wind can damage trees, utility lines, and buildings and increase the damage done by wind-borne debris.

[8] http://www.nytimes.com/2010/07/07/nyregion/07heat.html?pagewanted=all&_r=0

- **More frequent droughts:** As mentioned above, droughts have the potential to negatively impact natural resources, drinking water supplies, and land uses dependent upon healthy vegetation.

Vulnerable Resources

Natural Hazard	Vulnerable Resources
Flooding	Floodplains, dams, older mill buildings, residential areas, storm sewers, sanitary sewers
Hurricanes & Tornadoes	Flood prone areas, Power and communications networks, roads, bridges and dams
Winter Storms	Power, communications and transportation networks
Drought	Water supply system, population, plant and animal communities,
Extreme Temperatures	Elderly, persons with health problems, energy system
Earthquakes	Buildings, structures, utilities
Climate Change	As described above

Resource Prioritization

Of the hazards described above, flooding is the one most likely to cause the most significant harm in the near term. Therefore the Town's highest priority should be reducing the potential for flooding, the frequency of flooding, and resilience to flooding events. Flood events are relatively infrequent compared to some other natural hazards listed, but the damage floods can do is much more serious with potential longer term consequences. In addition to flood control and response for weather related flooding, the Town needs to consider in more detail the potential for dam failure on the Woonasquatucket River to cause flooding and must cooperate with State officials to both reduce that potential and to prepare for response to resultant flooding.

Hurricanes are the next most serious hazard, again occurring relatively infrequently, but with a significant potential for adverse impacts. Hurricanes often cause flooding, with the attendant impacts described above, but they also cause road blockages and outages of power and communications networks which can leave parts of the population isolated. The Town needs to be prepared for hurricane events and should encourage improvements in power and communications networks (such as underground systems) which will make them less vulnerable to outages.

Other natural hazards described above are less likely to result in serious harm in North Providence. The Town has developed effective mechanisms to respond to winter storms,

drought, and extreme temperatures. Climate change remains a persistent global problem with causes and impacts that are still not fully understood. The Town needs to continue to evaluate climate change and assess its potential impacts further.

Goals, Policies and Action Items

Goal NR 1: Protect the Town's natural resources for current and future residents of North Providence.

Goal NR 2: Improve the water quality of surface water bodies, including rivers, streams, ponds and lakes.

Goal NR 3: Stabilize the Town's overall forest cover at or near the present level and ensure its forest canopy meets the level recommended for proper ecological functioning.

Goal NR 4: The Town of North Providence should be resilient and resistant to adverse impacts of flooding and other natural hazards.

Policy NR 1: Maintain hydric soil areas in their natural state.

Policy NR 2: Establish good management practices that restrict development within or adjacent to hydric soils and soils with seasonal high water tables.

Policy NR 3: Work with the Narragansett Bay Commission, Department of Environmental Management, and Woonasquatucket River Watershed Council to ensure compliance with all laws and regulations pertaining to the storage of materials, the discharge of waste and remediation of hazardous materials to reduce contamination of surface waters and groundwater in North Providence.

Policy NR 4: Minimize conversion of undeveloped land so as to maintain natural areas in their present state.

Policy NR 5: Minimize construction of impervious surfaces, especially areas in proximity to important soil units and wetland areas.

Policy NR 6: Improve control of drainage and direct discharges into surface waters.

Policy NR 7: Expand enforcement efforts to lessen the potential impact of development upon the remaining natural systems.

Policy NR 8: Consider water quality impacts when redesigning existing drainage systems.

Policy NR 9: New critical public facilities shall not be sited in areas that are subject to flooding or other natural hazards unless there is no practicable alternative.

Policy NR 10: All critical public facilities must be made capable of functioning effectively to protect public health and safety in hazard and disaster situations.

Implementation Actions

Action NR 1: Revise land development regulations to require the use of Low Impact Design (LID) along with detention basins, deep sump catch basins and other techniques to reduce impacts of non-point stormwater discharges on receiving waters.

Timeframe: Short Term
Responsibility: Planning Director, Town Council

Action NR 2: Control by purchase, easement or other legal means, properties of natural areas and other significant vacant lands such as prime farm lands, open space areas, and lands adjacent to major wetland systems including acquisition of the former camp Meehan property adjacent to Governor Notte Park as soon as is practicable.

Timeframe: On-going
Responsibility: Land Trust, Town Council

Action NR 3: Prepare an Urban Forestry Master Plan.

Timeframe: Short Term
Responsibility: Environmental Commission, Public Works Director, Planning Director, Town Council

Action NR 4: Prepare a dam management plan.

Timeframe: Long Term
Responsibility: Planning Director

Action NR 5: Prepare a Natural Hazard Mitigation Plan.

Timeframe: Short Term
Responsibility: Planning Director

Action NR 6: Implement procedures recommended by the Hazard Mitigation Plan to ensure that the Town can adequately respond to natural disasters, protect infrastructure from natural hazards, and make adaptations to reduce vulnerability to natural disasters.

Timeframe: Short to Mid Term
Responsibility: Mayor, Town Council, DPW Director, Engineer, Emergency Services

Action NR 7: Make a conscious effort to reduce global climate change through implementation of sustainable transportation options, utilization of renewable energy sources, requiring "green" building techniques and implementing water and energy conservation measures.

Timeframe: on-going
Responsibility: all Town officials and residents.

Action NR 8: Establish a local Woonasquatucket River Corridor Committee to work with the Woonasquatucket River Watershed Council and help promote the protection and improvement of the river in North Providence.

Timeframe: Short Term
Responsibility: Mayor, Town Council

Action NR 9: Add groundwater protection as an additional element of Site Plan Review Process. Work with RIDEM to identify known sources of potential contamination and address issues utilizing current regulations.

Timeframe: Mid Term
Responsibility: Planning Director, Town Council

Action NR 10: Develop an overlay zoning district that provides additional water quality protection to surface water resources within the Town of North Providence.

Timeframe: Mid Term
Responsibility: Planning Director, Town Council

Action NR 11: Work with RIDEM Division of Dam Safety to develop a Dam Management Plan including an inventory of dams and dam conditions, and establish priority actions for those dams that pose a threat to public safety or the environment.
Timeframe: Mid Term
Responsibility: Department of Public Works, Environmental Commission

CULTURAL RESOURCES

Cultural resources include Historic Sites, Buildings, and Districts. This local plan element includes consideration of cultural resources of the town, with specific reference to historic resources. Historic resources have been well documented in Rhode Island municipalities by the Rhode Island Historical Preservation and Heritage Commission in local historic surveys and in studies of individual sites and structures. Historic cemeteries have been inventoried and marked by the State of Rhode Island. The commission and local historic groups should be consulted for recommendations on the most appropriate strategies to be implemented for each site or structure. In addition, any area that has been designated as a historic district under the authority of the historic zoning enabling act must be inventoried and consideration must be given to the designation of expanded or additional areas where appropriate.

The Town's history centers on the development of the mill villages along the Woonasquatucket River, the western town border, while the rest of town remained agricultural. These mill villages grew to milling enterprises: Lymansville, Greystone, Centredale, Allendale, Woodville, Geneva and Marieville. With the exception of Centredale, where the last mills were demolished in the 1960s, mill buildings and mill housing survive at all principal sites.

There are many sites in town that have been recognized as national and locally significant and have been placed on the National Register of Historic Places as well as the State Register. There are also many other sites that are eligible for nomination to the National Register as well as local historic districts and individual sites, historic cemeteries, historic landscapes and archaeological resources. Map 12 shows the locations of historic sites and districts in North Providence.

National Register of Historic Places and the State Register

The National Register of Historic Places, maintained by the National Park Service in Washington, D.C., is the nation's official list of properties determined to be of national, state, or local (town) significance and worthy of preservation. All places selected from Rhode Island for the National Register are also placed on the State Register.

Historic properties or districts are placed on the National Register only after a formal nomination process is completed. Potential entrees to the National Register are reviewed against specific criteria, established by the National Park Service. In 1978, a preliminary survey of North Providence was performed by the Rhode Island Historical Preservation Commission (RIHPC). The survey was accomplished by driving all public rights-of-way in Town and making notations of each building or site of particular architectural, visual, cultural or historic significance. Each property was photographed and recorded on a standard data sheet which includes a physical description and historical information. Other studies, histories and reports are also reviewed as well as interviews with local planners and historian to ensure that all appropriate historic sites and structures have been included in the study. The significance of each property is determined in a preliminary fashion and properties are designated as being in one of the following three categories:

- Properties listed on the National-State Register
- Properties Nominated for the National Register

- Sites Recommended for the Register
- Other Significant Historic Sites

In order for a property to be nominated by the State Historic Preservation Commission to be included in the National Register, the Commission must notify the Local Historic Preservation Commission, the chief elected official, and the owner of the property. After providing an opportunity for public comment, the Local Historic Preservation Commission, if one exists, can make a report as to whether it meets the criteria for the National Register. If it is not deemed suitable for nomination to the Register, the property will be formally determined ineligible.

Properties Listed On the National Register of Historic Places and the State Register

North Providence currently has four historic sites and two historic districts which have been placed on the National and State Registers of Historic Places. The following is a list of these properties and the date they were entered on the Register:

- Joseph Smith House/Smith - Cushing House *(11/28/78)*
- Captain Stephen Olney House *(5/1/74)*
- Allendale Mill *(5/7/73*)
- Whipple-Angell-Bennett House (7/28/1995)
- Greystone Mill Historic District (4/28/04)
- Greystone Historic District (1/02/08)

Below, is a brief description of each property. Map 12 also illustrates the location of these sites.

Smith Cushing House - 109 Smithfield Road

The Smith Cushing House, located at 109 Smithfield Road, is the only North Providence example of the typical seventeenth and early eighteenth century Rhode Island "stone-ender." It is a one-and-a-half story; gable roofed structure with massive brick chimneys. The actual building of the present home site began in 1705 as a one room structure with a two story type plan. The stone base of the present house built by Joseph Smith is said to be from the original house built before the King Philip's War of 1675-1676. It is six bays wide, two and one half stories high, with a gable roof, and a rear lean. There is also an exposed, stone and brick, end wall with a restored chimney.

Captain Stephen Olney House -138 *Smithfield Road*

The Captain Stephen Olney House, built in 1802, near the old Olney Homestead, is located at 138 Smithfield Road. The house is a 2 ½ story, five bay house with a gable roof. The house also consists of a central-hall plan and a 2 ½ story side wing. Captain Olney is one of Rhode Island's Revolutionary War Heroes, renowned for his prominence in the Battles of Long Island, Princeton and Yorktown.

Allendale Mill- Woonasquatucket Avenue

The Allendale Mill Complex was originally constructed in 1822 by the renowned Providence architect/contractor John Holden Green for mill owner Zachariah Allen. The Mill, located in the Village of Allendale, is one mile south of Centredale adjacent to the Woonasquatucket River. It

is historically renowned as the first to use power looms for the manufacture of broadcloth. It was also the site of the first use of a rolling process to produce a glossy finish to cloth.

The stuccoed, stone-rubble structure stands four stories high and is capped by a domed gable roof. Zachariah Allen was a pioneer in the development of a method of "fireproofing" industrial buildings. Thus, the Mill is well preserved with several original out-buildings and later additions. The dry-laid masonry raceways still exist, however they are not in use. Additions to the Mill thereafter include storage buildings in 1844, an engine room in 1864, the stone number two mill in 1880, and a brick addition in 1910.

Whipple-Angell-Bennett House - 157 Olney Ave
Constructed in 1767, remodeled ca 1820, remodeled and enlarged ca 1850, and enlarged again ca 1890, the Whipple-Angell-Bennett House is the only colonial-era center-chimney gambrel-roof house remaining in North Providence and one of only two documented pre-Revolutionary houses in the town.

Greystone Mill Historic District - Greystone Avenue
Located between Waterman Avenue and the Woonasquatucket River in the town's northwest corner, the Greystone Mill complex includes the main mill, a weave shed, a dye house, a finishing building, a singe house, a tank house, a heater house, a bonded warehouse, and an auto house and stable. The complex, designed by noted mill designer Frank P. Sheldon, was constructed by Joseph Benn & Sons, a woolen-manufacturing company based in Bradford, Yorkshire, England; completed between 1904 and 1911, the complex manufactured wool products until 1938, and most of employees were English immigrants. From 1940 until 1999, Worcester Textile Company produced fine worsted fabrics here.

Greystone Mill Village Historic District
An intact 28-acre neighborhood of industrial, residential, social, and commercial buildings constructed by the Joseph Benn & Sons Company, this district includes the mill complex (listed in the National Register in 2004) as well as the workers' housing on 1-16 Beckside Road, 1-29 Greystone Avenue, 1-40 Langberries Avenue, 2-20 Larchmont Avenues, 1-24 Oakleigh Avenue, and Waterman Avenue.

Properties Determined Eligible for Listing in the National Register

Three properties in the town have been determined eligible for the National Register through Consensus Determinations of Eligibility: Soldiers & Sailors/Civil War Monument, at the intersection of Fruit Hill and Olney Avenues; the Esmond-Georgiaville Bridge, Farnum Pike; and Old Town Hall, 2226 Mineral Spring Avenue.

Properties in the National Register Nomination Process

Review of preliminary material by the State Review Board suggests several properties in North Providence may be eligible for the National Register. Three such places, the Allendale Mill Village Historic District; the Fruit Hill Historic District; the Fruit Hill School (Veterans of Foreign Wars Post), 354 Fruit Hill Avenue; St James Episcopal Church, 474 Fruit Hill Avenue; and the World War I Monument, Smith Street and Woonasquatucket Avenue are all considered potentially eligible for inclusion in the National Register of Historic Places.

In addition to this list and the other properties that have been identified as being on the National Register or being evaluated for the Register, the R1 Historic Preservation Commission has developed a full listing of historic resources that include other properties not mentioned to date. In a report entitled "Historic and Architectural Resources of North Providence, Rhode Island, a Preliminary Report (April 1978), the Commission lists by street and village area all of the resources they inventoried as part of this extensive evaluation. They list eighty-two "houses", numerous mill properties, schools, churches and other structures as having historical significance.

Historic Cemeteries

North Providence has nine cemeteries which have been identified by the State as being historic. Four additional cemeteries have been identified by the Town Historian as having historical significance. These cemeteries include small family burial plots, as well as larger burial grounds, some of which are associated with a nearby church. The locations of these cemeteries are shown on Map 13. A list of these cemeteries appears in Table CR below along with the state number, location, and size where available. These cemeteries are an important historical record of the Town's past. These cemeteries contain the graves of some of North Providences earliest citizens and mill workers.

Table CR 1: North Providence Historic Cemeteries

No.	Name	Location	Size
1	Intervale Avenue Cemetery	Intervale Avenue	unidentified
2	Peach Hill Avenue Cemetery	Peach Hill Avenue	150 ft by 75 ft
3	Angell and Morgan (Forest Hill) Cemetery	Morgan Avenue	60 ft by 125 ft
4	Sunset Avenue (Smith's) Cemetery	Sunset Avenue	30 ft by 30 ft
5	Hutchinson Family Cemetery	Forestwood Drive	75 ft by 50 ft
6	Captain Stephen Olney Cemetery	Stephen Olney Park	25 ft by 50 ft
7	Angell Lot	Birchwood Drive	50 ft by 50 ft
8	Old Town Poor Farm Cemetery	North of Asylum Road	40 ft by 25 ft
9	South Lot	Salem Drive	125 ft by 125 ft
10*	Franciscan Sisters Convent Cemetery	Fruit Hill Avenue	unidentified
11*	Olney and Brown Cemetery	Falco street	unidentified
12*	Olney Street Cemetery	Olney Street	unidentified
13*	Anthony Cemetery	Waterman Avenue	unidentified

* Identified by Town Historian (1998)

Two Historic Cemeteries were bulldozed in 1988 to give way to development. One was located on Packard Avenue, while the other was located in the same area to the west of Allendale Avenue. The Packard Avenue cemetery contained the graves of mill workers and the other was an Indian Burial Ground. The destruction is evidence that there is little or no protection for historical cemeteries. The Rhode Island Historic Cemetery Commission is studying a variety of "Removal Ordinances" and is in the process of recommending legislation to protect historic cemeteries.

Prehistoric Archaeological Resources

Field surveys and research conducted by professional archaeologists and Rhode Island Historic Preservation and Heritage Commission staff in Rhode Island have recorded more than 2,000 prehistoric archaeological sites in the State. The Commission regulates archaeological investigations on state lands and under state waters. No prehistoric occupation sites have been identified in North Providence to date. Because most of the land in the Town has already been developed, previous disturbance may have displaced any prehistoric archaeological resources.

Cultural Facilities & Programs

The Salvatore Mancini Union Free Library and Cultural Center

The Union Free Library and Cultural Center located at 1810 Mineral Spring Avenue, the geographical center of Town, provides cultural activities in addition to providing basic library functions. The Union Free Library and Cultural Center offers a wide variety of programs during the year particularly during the school vacation periods for students. The programs include: Children's Arts & Crafts, Children's Story Hour, Summer Activities and tours. All of the stated programs have a high attendance rate and are highly regarded.

Current Historic Preservation Efforts

Zoning Ordinance

The Town has a Historic Overlay Zone. This overlay district is intended to preserve districts and specific buildings of North Providence which reflect elements of its cultural, social, economic, political, and architectural history. It is designed to stabilize and improve property values in historic districts, preserve specific buildings, foster civic beauty, strengthen the local economy, and promote the use of historic districts and historic buildings for the education, pleasure and pride of North Providence Residents.

Town Historian

With an office in the Old Town Hall on Mineral Spring Avenue in Centredale, the Town Historian promotes the preservation and recognition of historic properties. This includes lectures to local residents and organizations. A historic building marker program which identifies important properties with a wooden plaque has been initiated by the Town Historian.

Future Cultural Resource Plan

This segment of the Comprehensive Plan presents a program geared at the preservation of historic sites, structures and records while making Historic Preservation an area of concentration in the future. The Town is blessed with many historically significant properties that are a reflection of its rich agricultural and manufacturing past. In all, 82 properties have been identified as having significance by the RIHPHC. Five properties are listed on the National Register. This plan provides a mechanism to ensure the long term preservation of these sites in addition to realizing the value of historic documents as a direct connection to the past. The plan presents a variety of preservation "tools" that include legislative action, zoning amendments, educational and community activity programs to foster historic preservation.

This plan provides a program that will serve to preserve the work undertaken by the Town Historian, while providing mechanisms to control the future use of historic town landmarks. It also strives to make the history of North Providence a part of the school's regular curriculum to introduce the importance of local history and historic preservation to the youth of the community. The establishment of a record keeping system for important town documents is also recommended to preserve these important papers, plans and meeting minutes for future residents of the town.

The inclusion of historic properties in the town-wide recreation path system will serve to identify these sites as playing an important role in the town's history. The pathway, described in the Open Space and Recreation Element, describes the route of that path with a map describing the resources located along it.

Preservation Planning Efforts

The Rhode Island Historical Preservation & Heritage Commission administers a Certified Local Government (CLG) Grant Program for municipal historical preservation activities. North Providence achieved Certified Local Government status in October of 1999. To qualify for CLG status, a community must have a historic district zoning ordinance and a historic district commission. CLG communities may participate in the nomination of properties to the National Register of Historic Places, and are eligible to apply for federal 50% matching grants for survey and planning projects. Eligible projects for grant funding include identification and evaluation of significant historic and archaeological properties, the nomination of eligible properties to the National Register, historic preservation plans and certain education-related activities. All projects must be carried out in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

Town Record Center and Historic Inventory

Dovetailing with an effort on the national level to preserve historic records, the Town should establish a Records Center in the Town library where important meeting records (i.e. Town Council Meetings, reports and other important papers and documents) are stored and updated consistently to preserve a permanent record of the Town. Records of this nature tend to be lost or destroyed making it difficult in future years to compile complete accurate records.

At the same time, it is recommended that the Town seek a student intern from the History Department of Rhode Island College to work with the Town to establish its Records Center while also assisting in documenting and preserving the vast inventory of news articles and other memorabilia that has been collected over the years. Perhaps a location could be found, that is accessible to the public, where these items could also be displayed for review.

The intern could also be utilized to develop a historic structure and site inventory for the Town, possibly to be included in the computer system. This would provide an easy reference to identify properties that may be threatened due to development, road construction, etc.

Community Activity Program

Town-wide Park and Heritage System

It is recommended that a town-wide corridor be established that links recreational sites and historic landmarks through a defined path system. Such a system would be well signed to provide information concerning the history of these sites. A more detailed description of this system and its layout is provided in the Open Space and Recreation Plan Element. Map 15, also referenced in the Recreation and Open Space Element, shows the location of the proposed system.

Education Program

As a standard component of elementary education, the Town should include as part of its American History Curriculum, a segment on North Providence History. An additional element of this effort should include teachings related to the importance of historic preservation as an element of one's life.

Relation to Other Plan Elements

The Cultural Resources Element has a strong relationship to four other Comprehensive Plan components. A clear relationship exists between the preservation of historic sites and the Land Use Plan, where the Historical Overlay Zoning District provides a means of preserving these sites and structures.

The Economic Development Element recognizes the importance of preservation as an integral part of its economic base given the character historic structures add to the community.

Housing has been a common land use associated with the re-use of historic mills as is the case with the Greystone and Allendale Mills. Historically sensitive conversions can serve to enhance these properties and help to guarantee their preservation for an extended time. Tax credits, when they are available, have made this an attractive alternative for developers.

As mentioned in an earlier section of this report the Town is seeking to establish a Town-wide Park and Heritage Corridor which complements the Open Space and Recreation goals expressed in that element.

The following describes the actions to be taken in the Cultural Resources Implementation Program with respect to the goals and policies of the Town.

Goals, Policies and Action Items

Goal CR 1: Preserve the rich history of North Providence and the historical resources that still remain for current and future residents.

Policy CR 1: Support historic preservation efforts and provide the tools necessary to accomplish preservation goals.

Policy CR 2: Make historic preservation a priority.

Policy CR 3: Ensure that significant historic resources are fully protected and maintained.

Implementation Actions

Action CR 1: Designate an individual to assist the Town in preservation efforts, including the development of grant applications, or the use of student interns.

Timeframe: Short Term
Responsibility: Planning Director, Town Council, Town Historian

Action CR 2: Establish a Historic Pathway through the Town as an educational and recreational resource tied into the Town-wide park system.

Timeframe: Mid Term
Responsibility: Planning Director, Town Council, Town Historian, Recreation Director, Public Works Director

Action CR 3: Include Town History as a part of the K-6 curriculum.

Timeframe: Mid Term
Responsibility: Town Historian, School Department

Action CR 4: Inventory historic records and store them in a climate controlled location.

Timeframe: Long Term
Responsibility: Planning Director, Town Council, Town Historian, Director of Library Services, Town Clerk

Action CR 5: Amend the subdivision regulations to require that land development proposals include an evaluation of impacts on cultural resources and provide mitigation for identified adverse impacts on cultural resources.

Timeframe: Short Term
Responsibility: Planning Director, Town Council

OPEN SPACE AND RECREATION

The Open Space and Recreation Element provides information on open space and recreational resources in North Providence.

Background

Open space is defined by the RI Department of Environmental Management (RIDEM) as

> "…undeveloped or partially developed real property owned by an agency of the State of Rhode Island that includes, but is not limited to, the following: conservation land, forested land, wetlands, recreation land, management areas, agricultural land, critical habit, recreational areas, and corridor parks. Such lands may include amenities such as small parks, green buffers along roadways, or any open area that is owned by an agency. While many parcels are specifically designated as open space, open space may also refer to undesignated, undeveloped land with particular conservation or recreation interest."

Recreation can be classified different ways based on the level of site development needed to partake in the opportunities available. Based on *State Guide Plan Element 152, Ocean State Outdoors: Rhode Island's Comprehensive Outdoor Recreation Plan* (SCORP), recreation opportunities are divided into *developed recreation* and *natural areas*:

> **Developed recreation** offers some site development with amenities. Examples include game fields and courts, pools, boat ramps, campsites, picnic areas or shelters, paved trails, restrooms, meeting rooms, etc. Some level of organization or programming can also be provided.
>
> **Natural areas** are open spaces and other sites that allow for walking, hiking, biking, fishing, bird watching, kayaking/canoeing, etc. with little or no public facilities. Parking may be provided, but typically these sites do not offer additional amenities to the users. Examples include forested areas, beaches, riverways, open fields and other wildlife habitats.

The Rhode Island Comprehensive Plan and Land Use Regulation Act (the Act) requires that the Open Space and Outdoor Recreation Element "be based on an inventory of outdoor recreational resources, open space areas, and recorded access to these resources and areas. The plan must also contain an analysis of forecasted needs, policies for the management and protection of existing resources and areas, and identification of areas for potential expansion. The plan must include goals, policies, and implementation techniques for the protection and management of existing resources and acquisition of additional resources if appropriate." The Act requires four basic items:

- an inventory of existing open space and outdoor recreation facilities, including consideration of access to such areas;

- an analysis of municipal policies for the provision, management, and protection of open space/recreation opportunities;
- development of municipal policies for the provision, management, and protection of open space/recreation opportunities; and
- an implementation program designed to achieve local open space/recreation goals and satisfy forecasted needs.

This element is closely related to the Natural Resources Element, especially when open space areas have both natural resource and recreation opportunities. Further, this element will consider indoor as well as outdoor recreation and is also related to Public Services and Facilities in the development and management of recreation facilities and programs.

The Open Space and Recreation Element should be aimed at the development of a community-wide recreation and open space system that addresses needs and opportunities for active recreation and the enjoyment of open space. It should identify steps to meet needs and capture opportunities in the following areas:

- Open space requiring preservation and protection or forming an element in the local land use plan designated for walking and hiking, nature, study, bird watching and other compatible passive activities.
- Coastal, scenic river, and other water-based recreation opportunities including public access thereto.
- Active recreation areas and facilities including playlots, playgrounds, sports fields, parks and others including public school play facilities.
- Special recreation facilities including ski areas, sliding hills, cycle trails, jogging trails, tennis courts, golf courses, hiking paths, skating rinks and others that are available to the public.
- Community centers designed to provide a range of indoor recreational and social activities.
- Special facilities for senior citizens, handicapped persons and other groups with special recreational needs or with limited physical capabilities.

North Providence intends to be innovative in formulating its Open Space and Recreation Element to fully comply with the requirements of the Act and the Rhode Island Department of Environmental Management's Recreation Resources Review Committee (RRRC) guidelines for participation in open space/recreation facility funding programs.

The North Providence Recreation Department oversees the town's recreation programs and facilities. The Department has established a mission statement:

- To improve the health and wellness of our community through the provision of programming and facilities that encourages maintaining an active and fitness-conscious lifestyle.
- To be efficient stewards of the public facilities under our care and keep these facilities clean, safe, well maintained and environmentally friendly.
- To develop new facilities that will improve the quality of life in our community.

- To provide a wide variety of activities that encourages all segments of our population to use their free time in a positive and productive manner.
- To attempt to connect all citizens to our community by offering programs, facilities and special family events that welcome inclusion, and both active and passive participation.
- To make the service to our patrons a high priority by creating user-friendly procedures, and treating them, as we would like to be treated.

Staffing of the Recreation Department includes the Department Director, Aquatics Director, Barracuda Swim Team Head Coach and Fitness Coordinator.

Maintenance of the Town's parks is done through the Parks Division of the Public Works Department.

Local Open Space and Recreation Facility Inventory

Table OSR 1 and Table OSR 2 provide an inventory of the open space areas as well as outdoor and indoor recreational facilities in North Providence. Map 14 shows the locations of these facilities.

Table OSR 1: Outdoor Recreation Facilities, North Providence

Facility Name	Location	Ownership	Type of Facility	Area	
Greystone Park	Waterman Avenue	Town	Conservation	Land: 11.5 acres Wetland: 0 acres	Wooded and open space area
Fells Park	Larchmont Street	Town	Playground/ Play lot	Land: 0.5 acres Wetland: 0 acres	Basketball court, tot lot, shelter
Peter Randall Reservation	Smithfield Road	Town	Conservation	Land: 36.6 acres Wetland: 0 acres	Walking and bike trails
Greystone School	Morgan Avenue	School Dept.	Athletic fields	Land: 9.0 acres Wetland: 0 acres	Baseball fields (60′ and 90′), football field, 2 lighted basketball courts, parking area
Centredale School	Angell Avenue	School Dept.	Athletic fields	Land: 6.0 acres Wetland: 0 acres	60′ baseball field, open field, 2 basketball courts
Centredale School	Angell Avenue	School Dept.	Playground/ Play lot	Land: 1.2 acres Wetland: 0 acres	Paved play area, court, slide, swings
Dr. EA Ricci Elementary School	Intervale Avenue	School Dept.	Athletic fields	Land: 14.0 acres Wetland: 0 acres	90′ baseball field, 4 basketball courts, soccer field, track
No. Providence Little League West	Rockwell Street	Town	Baseball field	Land: 6.0 acres Wetland: 0 acres	Lighted 60′ baseball field, field house, concession stand, PA system, 4 sets of bleachers
Capt. Stephen Olney Park	High Service Avenue/ Smithfield Road	Town	Town Park	Land: 28.3 acres Wetland: .5 acres	2 60′ baseball fields, 90′ baseball field, football field (60′ baseball field off season), basketball court, 4 tennis courts, playground, skating pond, ski hill open area, picnic area
Evans Park	Smith Street/ Fruit Hill Avenue	Town	Athletic fields	Land: 4.0 acres Wetland: 0 acres	60′ baseball field, 2 bleacher stands, concession stands w/ toilet facilities, lighted basketball courts, bleachers, bubblers, benches, parking

Facility Name	Location	Ownership	Type of Facility	Area	
					area
Evans Park Playlot	Smith Street/ Fruit Hill Avenue	Town	Playground/ play lot	Land: 0.5 acres Wetland: 0 acres	Play structure
Central Avenue Playground	Central Avenue	School Dept.	Playground/ play lot	Land: 0.5 acres Wetland: 0 acres	Play structure
McGuire School	Cottage Avenue	School Dept.	Playground	Land: 1.6 acres Wetland: 0 acres	Play area, basketball court
Governor John Notte Memorial Park	Douglas Pike	Town	Town park (entrance fee required)	Land: 13.3 acres Wetland: 38.9 acres	Beach, pond, wooded area, picnic area, concession stand, lighted tennis courts, lighted Little League Field, parking areas
Camp Meehan	Asylum Road (easterly off Douglas Avenue)	Private	Special	Land: 26.4 acres Wetland: 30.1 acres	Wooded area, camping sites
Capt. Joseph, DeNino Memorial Field	Alexander Street	Town	Baseball field	Land 2.5 acres Wetland: 0 acres	60′ baseball field
North Providence High School	Mineral Spring Avenue	School Dept.	Special	Land: 16.0 acres Wetland: 0 acres	Football field, 90′ baseball field, 60′ baseball field, 2 bleachers, concession stand, sportscaster booth, toilet facilities, electronic scoreboard
Birchwood School	Helm Street	School Dept.	Athletic fields	Land: 7.7 acres Wetland: 0 acres	90′ baseball field, 2 open play fields
Birchwood School	Helm Street	School Dept.	Playground/ play lot	Land: 0.5 acres Wetland: 0 acres	Shuffleboard court, tennis court, basketball court
Stephen Olney School	Douglas Avenue	School Dept.	Playground/ play lot	Land 2.8 acres Wetland: 0 acres	Basketball court, paved play area
Dr. Joseph Whelan Elementary School	Terry Street	School Dept.	Playfield	Land: 3.7 acres Wetland: 0 acres	Playfield
Dr. Joseph Whelan Elementary School	Terry Street	School Dept.	Playground/ play lot	Land: 0.5 acres Wetland: 0 acres	2 basketball courts, swings, open play area
Ivan Street Playfield (Little League East)	Ivan Street	Town	Baseball field	Land: 0.5 acres Wetland: 0 acres	2 60′ baseball fields, lighted concession stand, sportscaster booth, tennis court, 3 bleachers
Ivan Street Play Area	Ivan Street	Town	Playground/ play lot	Land: 0.5 acres Wetland: 0 acres	Play structure, 3 benches, basketball court, swings
Remington Street Playground	Mineral Spring Avenue	School Dept.	Playground/ play lot	Land: 0.2 acres Wetland: 0 acres	Basketball court, paved play lot
Marieville School	Mineral Spring Avenue	School Dept.	Playground/ play lot	Land: 2.0 acres Wetland: 0 acres	Paved play lot

Table OSR 2: Indoor Recreation Facilities, North Providence

Facility Name	Location	Ownership	Type of Facility	
North Providence Pool and Fitness Center	Mineral Spring Avenue	Town	Pool and fitness center (membership required)	Indoor 25-meter pool, whirlpool, weight room, cardio room, aerobics, water aerobics, yoga, 2 saunas, and other exercise rooms, locker rooms
Governor Notte Park Recreation Hall	Douglas Avenue	Town	Day Camp	Meeting room, game room

Neighboring Community Recreation Facilities

Neighboring community recreation facilities accessible and within close proximity to North Providence include Lincoln Woods in Lincoln, Wanskuck Park located along the North Providence town line in the City of Providence; and Rhode Island College, which is located along both sides of the North Providence and City of Providence boundary.

Recreation Programming

The Department offers a wide variety of year-round programming and events at its facilities.

- Annual Christmas Tree Lighting and Pictures with Santa
- Pumpkins in the Park

Youth Leagues

The following list includes all youth sports organizations throughout the Town of North Providence:

- Girls Recreation Softball
- Babe Ruth Baseball
- Senior Babe Ruth Baseball
- Little League East
- Little League West
- St. Anthony's T.I.P.
- Youth Basketball
- Youth Soccer
- Jets Football
- Jets Cheerleading

Summer Recreation Programs

The Recreation Department runs a summer camp program held at Governor Notte Park from 9AM to 3PM, Monday through Friday. It is offered to children 6 to 12 years old. Two-week sessions are offered and there is a fee associated with the program. Events during the camp session include field trips and swimming at the North Providence Pool and Fitness Center. Also available during the summer to North Providence residents are activities for a fee:

- Gymnastics
- Tennis
- Challenger British Soccer Camp
- Ernie DeGregorio Basketball Camp
- Hershey Track and Field
- Learn to Swim Program

Open Space and Recreation Needs

In order to project the impact growth will have on the use of land and the need for expanded services a "build-out" analysis was prepared as part of the Land Use Plan. This analysis estimated the total number of additional units that could be developed in the town based on existing zoning with consideration being given to development restrictions such as wetlands,

steep slopes etc. The results of this analysis were that a total of 958 additional units could be developed in the town (see Land Use) and that total build-out would occur by the year 2018. The result, assuming 2.4 persons per unit, would increase the town's population by 2,281 people. Adding this figure to the 1990 population yields a total potential population of 34,371. Growth was fairly well distributed between the six planning districts used for this analysis.

This projection overestimated actual population growth. The population of North Providence as of the 2000 census was 32,411 as opposed to the 33,388 population predicted by the build-out. Additionally, the American Community Survey (ACS)[9] estimates the 2009 population (5-year estimate from 2005 to 2009) was 32,742 as opposed to the 34,082 predicted for 2010 by the build-out. As predicted by the build-out analysis, the rate of growth has slowed as available land becomes more and more scarce. It does appear likely that the predicted full build-out will actually be achieved within the next decade.

National quantitative standards have been adopted for planning purposes by the Rhode Island Recreation Resources Review Committee (RI RRRC). RI RRRC encourages communities to plan recreation and open space systems which exceed these minimum standards. According to this classification of the National Recreation and Park Association (NRPA), local demand or need is analyzed on a per capita basis. The NRPA suggests that a park system, at a minimum, be composed of a "core" system of parks with a total of 6.25 to 10.5 acres of developed open space per 1,000 persons in the population. These standards were used to assess recreational needs in North Providence.

For the purposes of relating build-out to future recreational needs, we have selected the year 2020, as opposed to 2010 in the original analysis, as a planning target build-out projected that 830 units would be developed. In 1988, the town did a recreational facilities needs analysis, that was subsequently updated in 1998. The analysis was updated for this Plan, but there was little change. The Town has not added facilities and the population has not growth at the rate projected. Table OSR 3 and Table OSR 4 provide an overview of the increased need as a result of build-out, playgrounds/playlots and playfields.

Table OSR 3: Needed playgrounds and playlots based on needs assessment

Year	Population	Standard 1.25 acres/1,000 popn	Existing	Need
1990	32090	40.1	10.8	+29.3
2000	32411	40.5	10.8	+29.7
2010 (2009[1])	32742	40.9	10.8	+30.1
2020[2]	34423	43.0	10.8	+32.2

[1] ACS 5-year estimate, 2009

[2] Statewide Planning Program, RI Population Projections (2004)

[9] The American Community Survey is conducted by the US Census Bureau every year to provide period estimates that represent characteristics of the population and housing over a collection period. Data is released as 1-year estimates for areas with populations of 65,000 and greater; 3-year estimates for areas with populations of 20,000 and greater; and 5-year estimates for all areas. The decennial census (every 10 years) obtains official counts of the population and housing.

Table OSR 4: Needed playfields based on needs assessment

Year	Population	Standard 1.25 acres/1,000 popn	Existing	Need
1990	32090	40.1	58.9	0
2000	32411	40.5	58.9	0
2010 (2009[1])	32742	40.9	58.9	0
2020[2]	34423	43.0	58.9	0

[1] ACS 5-year estimate, 2009

[2] Statewide Planning Program, RI Population Projections (2004)

It is evident that a significant deficiency exists for playgrounds/playlots between the recommended acreage and that which currently exists. Build-out however does not significantly alter or add to this deficiency as the need increases by two acres in 2020. Meeting the need will be a challenge, given the lack of available land. One way to create new playgrounds/playlots can be to expand on existing parks and playfields the Town and School Department already manage. Overall there will be a surplus of playfield areas through the year 2020. Currently, a total of 118 acres of playground areas exist in the Town. A possibility exists to use some of these acres for playground/playlot uses to lessen the deficiency in that category.

With the rise of gas prices and struggling economy, Town residents will be looking to spend summers at the Town's beaches rather than driving to ocean beaches. Water quality has been an issue at Governor Notte Park and it has led to closing the beach to swimming. The Town should consider studies to develop best management practices for drainage and runoff to improve water quality for swimming.

Future Open Space and Recreation Plan

In order to meet future demands of North Providence residents, the future Open Space and Recreation Plan requires regulatory changes, system improvements, acquisition and control measures, including projects in the Town's capital improvement program.

Regulatory Changes

The major vehicle to protect environmentally sensitive areas from development is the Zoning Ordinance. In the Land Use Element two specific recommendations were made to enhance the preservation of open space and recreational lands. They included the creation of an Open Space/Conservation Zone and an Environmental Overlay district.

Open Space/Conservation Zone

The plan recommends the establishment of such a zone for all detached recreational sites (Evans Field, Governor Notte Park), conservation lands, and large tracts of town-owned land. The purpose of creating this zone is to prevent the conversion of these sites to other uses. At present these areas are generally zoned for residential use or open space and recreation. Major properties to be included in this district are the following:

- Gov. Notte Park
- Peter Randall Reservation

- Fells Park
- Greystone Park
- Evans Field
- Capt Stephen Olney Park
- The Landfill and adjacent town owned land
- Ivan Street Playground
- Little League West
- Central Avenue Playground
- Remington Street Playground
- Capt Joseph DiNino Field
- Camp Meehan

Other properties may also exist that could be included which are not listed or are privately held.

Utility rights-of-way should also be included to provide for area reuse opportunity should they cease to be used for power or utility links.

Environmental Overlay District

To provide for increased protection beyond that offered through the RIDEM, an overlay district would be established that identifies flood plain areas and major water sources as areas of protection. Buffers will be created that prohibit work with a set area from the wetland or waterway edge to protect these natural features. The town has enacted a floodplain protection ordinance. Protection of other natural features should also be considered.

System Improvement

Town-wide Recreation System

The Town has expressed a wish to establish linkages between its recreational facilities on a town-wide basis. This system would help the Town comply with *State Guide Plan Element 155: A Greener Path…Greenspace and Greenways for Rhode Island's Future*. This linkage would serve as a means of travelling through the Town from one site to the other while providing ample opportunity to enjoy a mixture of active recreation and natural area opportunities. The system would be developed over time to develop a pedestrian and bicycle linkage path system which would be well marked and identified as part of this town-wide system. An additional attraction would be the identification of historic sites as part of this system to add a cultural element to the trip.

Map 15 provides a preliminary design of the direction such a system could take. The final design would require field reconnaissance to determine the feasibility of such a system.

System Description - Beginning in the Northwestern part of town the system would begin at the Greystone Mill, go through Greystone Park then follow Sherwood Avenue to the Peter Randall Reservation. From the Reservation the system would go along the southern shore of the Wenscott Reservoir crossing Douglas Avenue to Governor Notte Park. From there the system heads east through Camp Meehan and Lee's Farm to Angell Road where it heads south then north around Louisquisset to Atlantic Avenue. Atlantic Avenue is followed over to Charles Street where the system heads south through Marieville to Volterno Street. Here the system

crosses or goes around Canada Pond east under Route 146 to Washington and Tingley to the Ivan Street Playground.

From here the system heads west across Olney Street south to Elena and west on John Street to Woodward Road. It heads north on Woodward to Alexander Street making two stream crossings to Douglas Avenue. The System dips south on Douglas to Cushing Street then flows to Smithfield Road and Stephen Olney Park. It cuts through the park to High Service Avenue heads north cutting across Willow Street to Fruit Hill Avenue. The system then heads southwest across Smith Street past Evans Field to Newton Street then connects to Woonasquatucket Avenue.

The system heads north along Woonasquatucket Avenue past the Allendale Mill through Centredale up Waterman Avenue to its point of beginning.

In developing this system the main objectives were to stay away from Mineral Spring Avenue and to connect as many recreational and cultural facilities as possible.

Water Quality

The Town should consider studying the sources of water contamination at the beach at Governor Notte Park and develop best management practices to improve water quality. These practices can be related to drainage, stormwater runoff, and impervious surfaces.

Acquisition/Control Mechanisms

As discussed in the Natural Resources Element, the North Providence Land Trust (NPLT) is looking for opportunities where it can acquire vacant, town-owned property in its name. By having properties under their ownership, they can use their funds to make improvements and maintain these open spaces with the intent of them being used by residents and visitors to North Providence. The Natural Resources Element lists properties that provide opportunities for the NPLT.

The acquisition or control of property does not necessarily mean that the Town has to purchase properties outright. There are numerous ways to control property in an attempt to prevent its use or re-use for something inconsistent with the goals of this plan.

It is recommended that the Town seek to control property it has identified as critical with respect to open space and recreation. This can be accomplished through zoning controls, the acquisition of easements, or the purchase of development right from the current owner. This would be done with and/or through the NPLT. Funding for such projects can be sought through the RIDEM, local bonds, foundations, and other non-profit agencies interested in the preservation of open space areas. In some cases property owners may even be willing to denote property for such uses.

What is critical to any acquisition and control program is to prioritize what the Town wants to purchase and/or control. Using the criteria established by the NPLT, the Town will be able to maximize the best use of funds and benefits for North Providence.

To accomplish these goals the Town should apply for all available funding sources. It must also dedicate Town funds (general revenue or bond) to be able to take advantage of opportunities as they present themselves in the future with respect to property acquisition and control.

Goals, Policies and Action Items

Goal OSR 1: Improve, maintain, and expand open space areas and recreational opportunities for all segments of the population in North Providence.

Policy OSR 1: Develop a balanced system of developed recreation and natural areas.

Policy OSR 2: Encourage recreation as a part of every resident's daily life.

Policy OSR 3: Plan for recreation and open space through a comprehensive approach that considers development trends and demands for all segments and age groups.

Policy OSR 4: Use the Capital Improvement Program to schedule, in a systematic manner, acquisition and development of recreation facilities and open space areas within the Town's financial capabilities.

Policy OSR 5: Increase emphasis on preserving valuable natural resources such as streams and wetlands to more adequately protect the environment of the community.

Policy OSR 6: Make more effective use of existing town facilities to reduce overuse and congestion.

Policy OSR 7: Cooperate with RIDEM in the development of recreation facilities and open space areas to avoid duplication of facilities.

Policy OSR 8: Make recreation and open space areas accessible to all residents and incorporate handicap accessibility improvements in all new and renovated recreation facilities and open space areas.

Policy OSR 9: Acquire and develop recreation sites in order to provide for the needs of all segments of the community at large.

Policy OSR 10: Develop multi-purpose and multi use recreational complexes rather than single purpose recreational facilities.

Policy OSR 11: Preserve, where possible, land for recreational, conservation and open space purposes through zoning and/or land use regulations.

Policy OSR 12: Develop recreational resources on school grounds and other Town owned properties that will both meet the needs of school children and provide recreation programs and activities for Town residents.

Implementation Actions

Action OSR 1: Explore and implement alternative means for obtaining and preserving recreation, conservation and open space besides outright purchase, including changing development regulations to provide for transfer of development rights, conservation easements, innovative zoning approaches, and other changes to the regulations for land development and/or the requirement that payments in lieu of open space dedication be made to the Town.

Timeframe: Short Term
Responsibility: Planning Director, Land Trust, Town Council, Recreation Director, Public Works Director

Action OSR 2: Develop a town-wide park system for North Providence that includes recreation facilities, open space areas, historic sites, districts, etc.

Timeframe: Mid Term
Responsibility: Planning Director, Land Trust, Town Council, Recreation Director, Public Works Director

Action OSR 3: Adopt an Environmental Overlay Zone and Open Space/Conservation Zone to ensure their future protection of recreation and open space areas.

Timeframe: Short Term
Responsibility: Planning Director, Town Council

Action OSR 4: Acquire the former Camp Meehan property for recreational and open spaces uses and acquire property or development rights for other properties where practicable to preserve open space areas.

Timeframe: Short Term
Responsibility: Planning Director, Land Trust, Town Council

Action OSR 5: Preserve lands along the Woonasquatucket River, Canada Pond, and other water bodies for conservation and preservation of natural open spaces through acquisition of tax properties and rights-of-way to the river and through conservation programs.

Timeframe: Mid Term
Responsibility: Land Trust, Town Council

Action OSR 6: Use existing town parks to develop needed playgrounds/playlots in all areas of Town.

Timeframe: Mid Term
Responsibility: Town Council, Planning Director, Recreation Director

Action OSR 7: Invest in studies to find ways that can improve water quality at Governor Notte Park.

Timeframe: Short Term
Responsibility: Public Works Director, Recreation Director

Action OSR 8: Assess recreational development alternatives for the Peter Randall Reservation and adjacent capped landfill.

Timeframe: Mid Term
Responsibility: Town Council, Planning Director, Recreation Director, Public Works Director

CIRCULATION

The Circulation Element provides information on transportation, functional classification system, roadway improvements, traffic concerns, accident history, and mass transit specific to North Providence. In this element, goals and objectives are established with specific policies developed for the future of circulation in Town. According to the Rhode Island Comprehensive Plan and Land Use Regulation Act, the Circulation Element "must be based on an inventory and analysis of existing and proposed major circulation systems, including transit and bikeways; street patterns; and any other modes of transportation, including pedestrian, in coordination with the land use element. Goals, policies and implementation techniques for the provision of fast, safe, efficient, and convenient transportation that promotes conservation and environmental stewardship must be identified". Therefore, the policies developed must be consistent with other elements of the Comprehensive Plan, including the Land Use, Open Space and Recreation, and Economic Development Elements.

One of the most vital elements of an urban community, such as North Providence, is its transportation system. Streets, highways and public transit are essential to the orderly functioning of an urban area. Highway and transit systems provide for mobility throughout the community as well as access to local and regional markets. Planning for these facilities involves a comprehensive analysis of the ability of the transportation network to accommodate future changes in demand, while minimizing the negative impacts on the community. The development of future circulation plans is based upon the way North Providence presently functions as a community and the role of transportation in its future.

North Providence Roadway System

Functional Classification System

For planning purposes, it is important to classify each roadway in the existing highway system into its functional classification. This process involves grouping streets and highways into classes or systems according to the character of service they provide. In general, there are two basic functions of a road: access to property and travel mobility. Some roadways will not fit a category perfectly, but it nevertheless is a useful guide. By designating the role that each existing or future roadway will play in the overall highway network, it is then possible to determine if it meets a certain standard. The three major classifications are:

- Local - Emphasizes the land access function.
- Collector - Offers a balanced service for both functions (access and travel).
- Arterial – (including Freeways and Expressways) Emphasizes a high level of mobility for through movement.

In addition to the access/mobility relationship, two major area types, urban and rural, must also be considered. North Providence is classified as an urban community. In urban areas the functional system is broken down into the following major subclasses:

- Principal Arterial Street
- Minor Arterial Street

- Collector Street
- Local Street

Map 16 shows the functional classification of highways in North Providence for the time frame of 2005 to 2015. It reflects a number of classification changes from earlier studies. These data were obtained from the Technical Paper Number 155, Highway Functional Classification System for the State of Rhode Island 2005-2015, adopted January 2005. Also included is the Functional Classification mileage for the existing roadway system, as presented in Table C-1.

Table C-1: 2005-2015 Roadway Classification

Roadway Classification	Miles	Roadway Classification	Miles
Freeways and Expressways (urban)			
State Highway 146	1.2		
TOTAL	**1.2**		
Principal Arterial (urban)			
Centredale Bypass	0.33	Smith Street (Route 44)	1.81
Smith Street	0.01	Douglas Avenue (Route 7)	1.70
Mineral Spring Avenue (Route 15)	3.54		
TOTAL	**7.39**		
Minor Arterial (urban)			
Admiral Street	0.01	Woonasquatucket Avenue	1.55
Fruit Hill Avenue	1.62	Waterman Avenue (Route 104)	0.84
High Service Road	0.74	Charles Street (Route 246)	1.26
Smithfield Road	1.10	Louisquisset Pike (Route 246)	0.15
TOTAL	**7.27**		
Collector (urban)			
Allen Avenue	0.36	Lookout Avenue	0.22
Angell Road	0.31	Lubec Street	0.03
Bennett Street	0.20	Lydia Avenue	0.20
Bicentennial Way	0.41	Miner Street	0.06
Central Avenue	0.07	Olney Avenue	0.45
Cooper Street	0.20	Rhode Island College	0.03
Dewey Avenue	0.07	Sherwood Avenue	0.07
Elmore Avenue	0.08	Smithfield Road	1.05
Gentian Avenue	0.05	Superior View Boulevard	0.37
Goldsmith Street	0.05	Toledo Avenue	0.03
Hennessey Street	0.11	Windmill Street	0.01
Hobson Avenue	0.30	Woodcliffe Avenue	0.14
Humbert Street	0.51	Woodhaven Boulevard	0.13
Leo Avenue	0.12	Woodward Road	1.19
Lexington Avenue	0.85	Smith Street	0.01
Locust Avenue	0.38		
TOTAL	**8.06**		
TOTAL MILES OF ROADWAY	**23.84**		

Transportation Improvement Program (TIP)

The Division of Planning of the Rhode Island Department of Administration in conjunction with Rhode Island Department of Transportation, the Rhode Island Public Transit Authority, and cities and towns in Rhode Island continually update their series of Transportation Improvement Programs (TIPs). This document was last published/approved in August of 2008

and has since been amended twelve times. It presents a four-year program of transportation projects and funding schedules for the period from October 1, 2008 to September 30, 2012. In order to qualify for this program, a proposed item or project must meet the criteria established by RIDOT and be defined as a capital improvement project, to be included in the Capital Budget - Capital Improvement Program. The TIP incorporated only two projects for the Town of North Providence, reflective of a financially constrained short-term budget.

- 1R Improvements to Fruit Hill Avenue, $1.1 million, completed
- 1R Improvements to Woonasquatucket Avenue, $2.25 million, awaiting funding

Relatively recent improvements, such as the Centredale circulator, have attempted to address many of the previously-identified roadway inadequacies for intra-town traffic as well as inter-city travel. With the continued commercial development and redevelopment along Mineral Spring Avenue in the period from 2000 to 2010, demand upon existing roads has intensified. Thus, it is necessary to evaluate the present performance of the transportation network relative to the projected conditions which initially drove the recent improvements.

Local Traffic Control Devices

The Town of North Providence contains more than 20 traffic signal-controlled intersections, predominantly owned and maintained by the State of Rhode Island. Some of these are flashing beacons at fire stations. Eighteen of these locations are shown on Map 16. Periodic review of signals is necessary to ensure that they are timed correctly and operating properly.

Traffic Volumes

Average daily traffic volume data (ADT) for North Providence was obtained from the Planning Division of the Rhode Island Department of Transportation. Figure C-1 shows the most current ADT volumes. As can be seen, the highest volumes occur throughout the length of Mineral Spring Avenue (Route 15), ranging from about 15,000 to 24,000 vehicles per day.

Traffic volumes were recorded by RIDOT several times over recent years and were found to vary dramatically from year to year, indicating that the variations are not as much keyed to regional growth as to other factors such as changes in key employment or retail centers.

The authors further believe that some of these volumes were based on relatively small counting windows during which traffic patterns may have been experiencing temporary disruptions (e.g., ongoing construction in other areas).

Table C-2 – Comparative Average Daily Traffic (updated to 2011)

Segment	First Data (year)	Low Volume (year)	High volume (year)	2011 Volume
Centerdale Bypass to Smithfield Road	15,000 (1982)	12,000 (2011)	25,400 (1994)	12,000
Route 7 to Lexington	20,600 (1988)	20,600 (1988)	28,200 (1994)	24,600
Lexington to Woodward	24,100 (1993)	20,300 (2008)	24,100 (1993)	---
Charles to Pawtucket T/L	16,500 (1996)	15,100 (2008)	17,500 (2011)	17,500

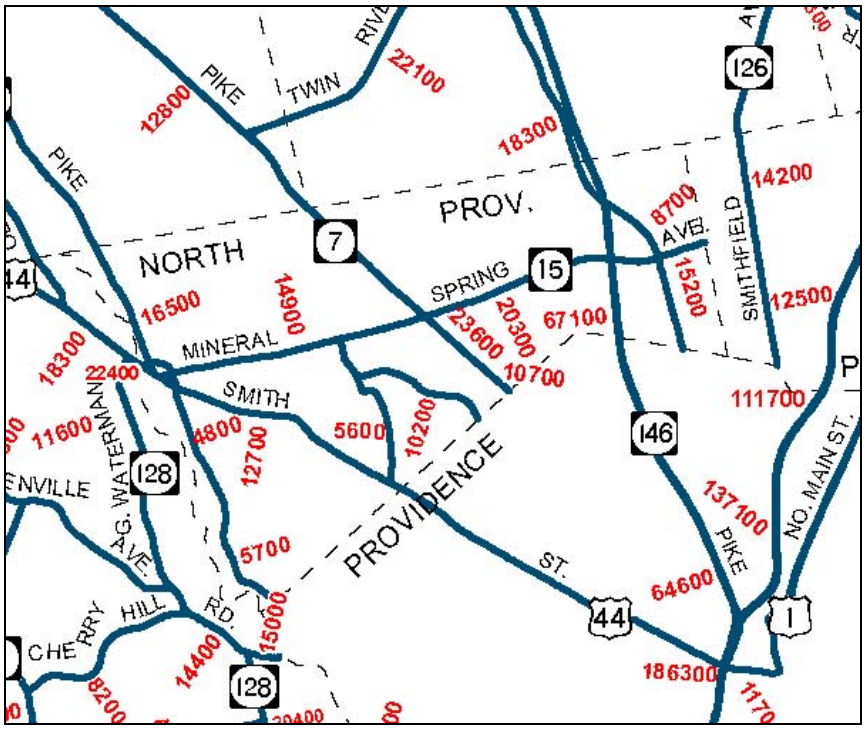


Figure C-1: Average Daily Traffic (Source RIDOT and RI Division of Planning)

The absence of alternative east-west routes, means that traffic that otherwise would not use the Mineral Spring Avenue corridor are forced to do so, whether travelling to and from southern parts of the Town, or to/from northern parts of the Town. Thus, in the absence of a complete restructuring of the local highway system, Mineral Spring Avenue will continue to be the spine of the town transportation network, providing essential communication with the limbs, the major north/south collectors such as Smithfield Road, Woodward Road, Douglas Avenue, Charles Street and Angell Road.

Mineral Spring Avenue is characterized by commercial establishments, resulting in a continuous, high influx and outflow of vehicles to and from many types of adjacent commercial and residential uses.

Accident History

Traffic Accident Data for the Town of North Providence were acquired from the North Providence Police Department for the three-plus year period from 2008 thru February 2011. They reported that:

- In 2008, there were 1189 Motor Vehicle Crashes
- In 2009, there were 1120 Motor Vehicle Crashes
- In 2010, there were 1146 Motor Vehicle Crashes
- To date (as of Feb. 28), there have been 224 Motor Vehicle Crashes in 2011

These data were graphically presented in Figure C-2. An overwhelming proportion (around 40%) of the accidents occurred on either Smith Street or Mineral Spring Avenue. This is not necessarily a "warning flag" indicating poor road conditions, as it can be demonstrated that the

vehicle-miles traveled on these roads are similarly disproportional. A facility that carries three times the traffic volume of another will likely have three times (or more) the accident frequency. The explanation, however, does not provide an excuse to be anything less than vigilant in considering any kind of change of access affecting a busy highway. Mineral Spring Avenue's high frequency and broad distribution of accident locations is consistent with an area with a high density of commercial uses with multiple curb cuts (driveways).

This average of nearly 100 accidents per month is relatively significant given the size of the Town, and the rate of accidents has in fact doubled in the last 20 years. A closer look at the data and transportation infrastructure shows us that:

- There are five freeway ramp intersections associated with Route 146.
- North Providence as of the year 2000 was the 4th most densely populated of Rhode Island's 39 cities and towns.

In addition to the numerous conflicts associated with turning vehicles at driveways, minor side streets also play a role in accident frequency. Unlike major intersections, side streets offer few visual clues to main road traffic to expect entering or braking vehicles.

Not to be lost in the discussions of conflict points for driveways and small side streets above, is the presence of pedestrian users in the corridor, whose sidewalk path is repeatedly disrupted by the driveways and side streets. Pedestrian paths introduce another level of travel conflicts, with more one-sided results. Clearly the high number of side streets and driveways introduces a greater burden of caution with the pedestrian population.

Table C-3 below provides a summary of accident history in North Providence from 2008 to the present.

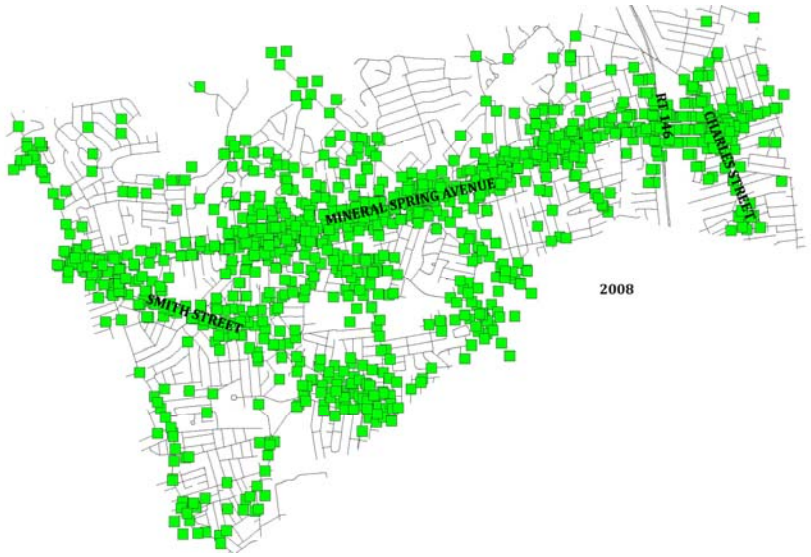
Table C-3 – Motor Vehicle Accidents in North Providence 2008 – 2012 (partial)

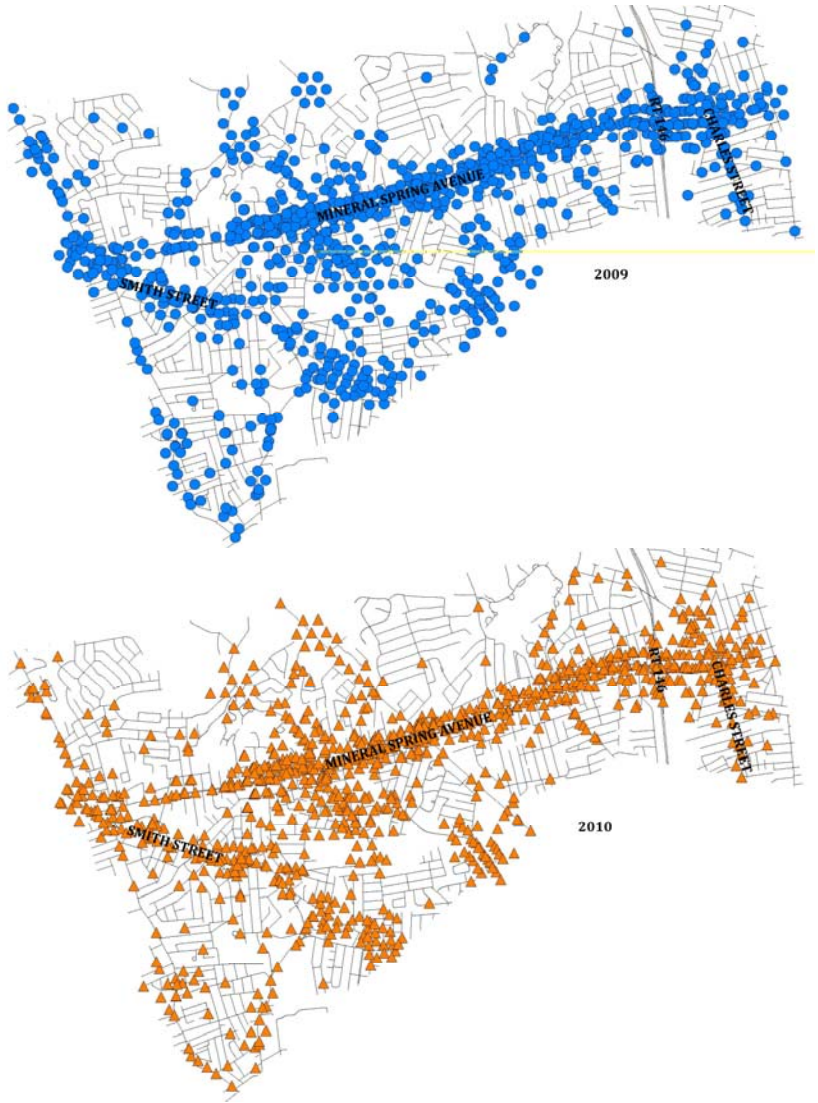
	2008	2009	2010 originally reported	2010* Revised	2011	2012 (partial)
Accidents per month	99	93	96	98	101	85
Percentage involving personal injury or fatality				17%	14%	22%
Intersection crashes				15%	12%	12%

*Route 7 intersection completed in late 2010
1 fatality - 2011

Source: North Providence Police Dept.

- The number of crashes involving personal injuries or fatalities ranged from 14% to 22% of all reported accidents. Ironically, the sole reported fatality in the project review period occurred in 2011, which was the period of the lowest reported injury-accident proportion.
- Specific locations of crash data are not readily available, beyond the scatter plots in Figure C-2. It is noteworthy that the proportion of accidents attributed to intersections went down in the year following the completion of the Mineral Spring Avenue / Route 7 improvements.
- As noted above, an intersection improvement associated with the commercial development of the property in the northwest corner of the intersection of Mineral Spring Avenue and Route 7 was completed in 2010 and may have contributed to an overall drop in intersection accidents. There wasn't, in fact, any significant drop in accident frequency between Smith Street and Smithfield Road, although the graphical symbols used in the annual incidence plots appear to create this illusion.
- The improvements to the Route 7 intersections appear to have provided positive safety benefits, and it is reasonable to conclude that similar treatments at the other major intersections (e.g., Mineral Spring Avenue at Smithfield Road, at Angell Road, at Charles Street) could result in similar benefits. These benefits would probably be realized through better controlled turning movements and improved advance signing. In future redevelopment scenarios, aggressive *Access Management* strategies aimed at the reduction of the density of uncontrolled curbcuts/driveways on major roads would provide benefits to residents, drivers, and merchants.





(Source: North Providence Fire Department)

Figure C-2: Locations of Motor Vehicle Crashes Reported, 2008, 2009 and 2010

Accident Remedial Measures – Access Management

It is news to few that Mineral Spring Avenue suffers from high volumes of thru-traffic, and high volumes of turning traffic, causing the accident history described above. The classic solution in developing neighborhoods involves employing one or more access management tools. Access management is an approach to traffic engineering where, rather than reducing traffic (viewed as counterproductive in commercial/retail areas), the agency tries to direct it to the safest, least disruptive paths. The major goal of access management is to provide access to land development while still preserving traffic flow in terms of safety, capacity, and speed.

Access management tools may include the following:

1. Consolidating driveways by allowing businesses to share a single driveway and eliminating redundant multiple curb-cuts where they exist.

2. Encouraging installation of driveways onto side streets rather than the main road, again consolidating access points.
3. Connecting adjacent parking areas so that a multi-destination trip need not necessarily re-enter the road to go from one destination to another.
4. Turning lanes to remove turning vehicles from the thru path of traffic on a busy highway.

These strategies are planning tools, and are far more difficult to implement in mature corridors like Mineral Spring Avenue, where the development paths are well worn and established. Nonetheless, town planners and zoning officials should consider such strategies when considering new construction or changes in use within the corridor, when owners are more motivated to be good neighbors and to support the Town in improving the community, as well as their own accessibility and the safety of their visitors and patrons.

Mass Transit

Bus Service

Map 17 shows public transit in North Providence. At present, the Rhode Island Public Transit Authority (RIPTA) has seven routes servicing North Providence on a daily basis. The routes are as follows:

- Douglas Avenue Line
- Smith Street line
- Mineral Spring Line
- Pawtucket via Mineral Spring Line
- Woonsocket Line
- Branch Avenue Line
- Charles Street Line

RIPTA also provides a summer "Trip to the Beach" program in North Providence. This program runs for six weeks between early July and mid-August.

Transportation for Those with Special Needs

Salvatore Mancini Resource and Activity Center

The Salvatore Mancini Resource and Activity Center (senior center) provides transportation services to all senior center registered members who are North Providence residents, handicapped, or disabled adults. Reservations are required and there is a nominal fee. Trips run to a variety of locations, including events sponsored by the senior center as well as trips for weekly grocery shopping, banking and nursing home visits.

RIde Program

Through the RI Department of Elderly Affairs, the RIde Program provides transportation services to those 60 years of age and older as well as handicapped persons under 60 who meet specified criteria. Transportation is available for doctor appointments, therapy, medical tests, senior day care, kidney dialysis, cancer treatments, and meal site lunches. The RIde Program

brings clients to the senior center's nutrition site and personal medical appointments within an eight-mile radius of the senior center.

Future Circulation Plan

The Future Circulation Plan provides a program of circulation improvements for vehicular and pedestrians that is based upon the goals and policies outlined in this comprehensive plan. There are shared objectives between other elements of the Comprehensive Plan and that which will be outlined here. Program recommendations for state and local roadways, pedestrian circulation, mass transit, and special needs transportation are presented. Particular attention has been given to circulation improvements in areas where the public has expressed an elevated level of concern, particularly Mineral Spring Avenue and Centredale. Other suggestions have been incorporated as well with respect to the stated need for more sidewalks and the general improvement of town roads.

The major focus of the future circulation plan is to increase pedestrian and vehicular safety on a town-wide basis, while improving local roads in a systematic manner. Close coordination with the State of Rhode Island will not only improve state roads but ensure that the town's objectives, particularly as they relate to the planned neighborhood improvement projects, are met and supported by the state whenever possible. The future circulation plan also envisions the establishment of a town-wide recreation and cultural network using local streets and new pathways to provide its residents with a system that connects the town's recreational facilities and cultural resources in a well defined system. Given that North Providence is essentially at build-out, new systems of roadways are not anticipated.

The periodic re-evaluation of Mineral Spring Avenue corridor from a safety and functional viewpoint by RIDOT is recommended, with special consideration to pedestrian safety and the establishment of a coordinated signage program.

Relation to Other Plan Elements

A clear relationship exists between the goals of the town relative to roadway improvements and those contained in the Land Use, Open Space and Recreation Elements.

1. Land Use Element - The major connection to this element involves the potential to reduce street width requirements for local residential streets. Such a reduction supports the desire to protect natural features through the lessening of run-off area. Somewhat narrower streets are more in character with the adjacent communities to the north Smithfield and Lincoln. Also related to land uses is the parking requirement. Finding ways to creatively address parking will reduce impervious surfaces and subsequently pollutants in stormwater runoff. Alternative parking requirements can also allow land owners to maximize development potential of a parcel. Strategies are discussed in the Land Use Element. Finally, improving pedestrian safety and mobility in high-traffic areas also links the elements. Consideration of existing and future lands uses will help determine the need for additional crosswalks or sidewalks that provide linkages.

2. Open Space and Recreation Element - The key relationship involves the potential to develop a town-wide park system and how the goal for such a system might impact the priority system of

scoring assigned to each local roadway. It is assumed that roadways on such a system would receive a higher ranking given their secondary use as a travel way between the town's parks and historic features.

3. Economic Development Element - The key relationship to this element involves the coordination of access to development sites, managing additional traffic, and easing the impacts of new development projects on the local roadways. Access management strategies are one way to ease conflicts and congestion. Also related to the Economic Development Element is the need for parking, as described under Land Use. Reviewing parking requirements may allow developers to maximize the potential of their land. It will also reduce the environmental impact of impervious surfaces.

Local Roadway Improvements

Pavement Management Program

The main ingredient in any well managed roadway improvement program is a comprehensive Pavement Management Program. A pavement management program (PMS) can be acquired through the URI Transportation Center's Technology Transfer Program. Populating the PMS with both highway and pedestrian facilities, as noted in the Pedestrian/Parking Improvements section, can be an ongoing process and can help contribute to the development of a capital budget program by determining when facilities are most economically improved. Programs of this nature are used to establish and prioritize an improvement schedule based upon the consideration of many factors which can include:

- general pavement conditions and anticipated life
- traffic volumes (existing and anticipated)
- pedestrian usage
- accident history and frequency
- adequacy of pavement width
- inadequate drainage
- relationship to other town priorities (sewer improvements and other circulation alternatives)

A weighted scoring system is established which ranks each town roadway using the above mentioned factors. Improvements are scheduled based upon the ranking developed. Budgeting priorities would be developed to systematically improve roadway, sidewalks and drainage based upon a linear cost factor. Programs of this type can be done manually or by using computer software programs specifically designed to develop pavement management systems.

Cost Factor/Time Element - The implementation of a Pavement Management Program begins with the development of a physical inventory of all local streets and infrastructure. It is estimated that one year will be required to develop such a program. The cost to implement such a program can vary widely, depending on the nature of the improvements to be made. Costs escalate dramatically if sewer and drainage lines need to be repaired or replaced, or a roadway requires widening or complete rehabilitation. Overall, pavement and infrastructure improvements are expensive. Budgeting for such programs is typically the subject of bond referendum.

Administrative Responsibilities - The development of this program is generally the responsibility of the Director of the Department of Public Works (DPW) who is charged with the maintenance of local roadways, drainage system and other municipal facilities. The DPW Director either on his or her own or in coordination with a consultant would be charged with the development of such a program.

Other Regulatory Recommendations

Subdivision Street Design/Roadway Improvements

The American Association of Highway and Transportation Officials (AASHTO) has developed standards for all roadway types by functional classification. These include standards for residential street collectors, arterials and industrial roadways. These standards/design recommendations provide for roadway pavement widths, shoulders, sidewalks and right-of-way.

Table C-3 provides a general profile of recommended roadway widths for residential streets in North Providence. The design widths are based upon streets with or without parking and the ultimate function of the road itself.

Table C-3: Recommended roadway width by design function

Function	Right-of-Way Width (feet)	Pavement Width (feet)
Residential	40	26
Residential with 1-side parking	40	32
Residential with 2-side parking	50	38
Residential collector	50	38

Source: AASHTO

Table C-3 is meant to provide a general guide only. Any changes in the Town's Subdivision Regulations would require a more in depth review of the AASHTO guidelines, but there is clearly the opportunity to allow for a reduction in the width of residential streets below the currently required 40 foot pavement width.

Access Management Plan

Developing an access management plan can help the town manage traffic congestion that leads to conflicts and roadway accidents. An access management plan should establish areas where access management is needed now and in the future, an analysis of access management alternatives, and selecting the most appropriate for North Providence that can be implemented in both the short and long term. Overall, selected alternatives or strategies should result in:

- Improved public safety,
- Extended life of major roadways,
- Reduced congestion and delay,
- Support for alternative modes of transportation, and
- Improved appearance and quality of the built environment.

While Mineral Spring Avenue can be a focus area of studying and applying access management strategies, the town should look at other areas of town that could also benefit from better management. A town-wide access management plan should be developed that offers a menu of strategies and tools that can be used by developers and the town to mitigate adverse impacts of and on local traffic circulation. If the plan is amended to the comprehensive plan and subdivision regulations, it will incorporate access management as a town policy.

Administrative Responsibilities – Planning Department, Zoning Officer, Department of Public Works, and Police Department

State Roadway Improvements: TIP

The State of Rhode Island, through RIDOT, manages an extensive program of highway improvements throughout the state. This program discussed earlier in this report, provides funding to improve both state roads and other roads on the state-aid system. This work is accomplished through a program called the Transportation Improvement Program (TIP).

Local communities can petition the state to improve roads on the system which are then included in a six-year program. Some municipal-level effort should be required to assure that the town's portion of the TIP accurately reflects the goals of the town. The Town could, for instance, perform preliminary studies to identify potential east-west routes between major north-south roadways. An example of such a route could be the extension of Twin River Road in Smithfield to Route 104 or even to Route 44, to lessen the traffic burden on the west segment of Mineral Spring Avenue. Such studies could well identify mitigation projects appropriate for TIP-funded preliminary design.

Pedestrian/Parking Improvements

Sidewalks and Crosswalks

North Providence does not have a comprehensive sidewalk system. It is recommended that as part of the Pavement Management Program inventory, pedestrian usage be recorded to determine where sidewalks are required particularly in the areas of schools, elderly housing, shopping areas etc. Locations of crosswalks, near these locations as well as those that cross roadways with high traffic volumes at signalized intersection, should also be evaluated for safety, usage and frequency of pedestrian-related accidents. New crosswalk locations and pedestrian ways to link existing and future land uses should be determined. This work should be done in connection with a pedestrian network improvement program.

A sidewalk maintenance plan will ensure that sidewalk conditions are safe. Regular maintenance to repair damaged pavement and concrete will ensure public safety and access. Equally important is snow removal, particularly on high-volume roads like Mineral Spring Avenue. Sidewalks that are not cleared of snow forces pedestrians to walk in travel lanes.

Administrative Responsibilities - Department of Public Works - Pavement Management Program, Planning Director

Pathways/Bike System

The development of a town-wide park system will be the basis for such a system. It will provide for both active and passive recreational opportunities. See Open Space and Recreation Element for more details.

Administrative Responsibilities – Recreation Department, Planning Department, Department of Public Works

On-Site Parking Improvements

As discussed in the Land Use Element, parking requirements should be reviewed to explore more efficient parking strategies, including parking maximums and shared parking. Developing a parking management plan will allow the town to evaluate the most appropriate strategies for North Providence. Incorporated into the plan should be increased pedestrian and bike access as well as other opportunities for public transit that would reduce the number of vehicles on local streets.

Public Transit

RIPTA Service Expansion

It is recommended that the town continue to work with representatives from RIPTA to assure continued service consistent with the Town's needs.

Administrative Responsibilities - Mayor, Planning Department

Private Streets

The town does not allow the development of private streets. All new roadway development is subject to approval of the Planning Board.

Goals and Policies

Goal C1: Provide safe and efficient circulation system through a variety of transportation choices.

Policy C1: Improve traffic circulation to and through the Town's business districts, creating a business environment supported by efficient and safe traffic flow.

Policy C2: Improve circulation throughout the Town but in particular on state highways.

Policy C3: Improve local roads and drainage in a systematic, prioritized, cost-effective manner.

Policy C4: Evaluate future development plans with particular attention to their potential traffic impacts.

Policy C5: Improve pedestrian safety, particularly for students and the elderly.

Policy C6: Continue the practice of not allowing private streets in the subdivision regulations.

Implementation Actions

Action C1: Obtain a "Pavement Management Program", populate the program with data on both highway and pedestrian facilities, and apply the program to assure optimal use of limited street paving and sidewalk repair funds.

Responsibility: Director of Public Works
Timeframe: Mid Term

Action C2: Develop a Town wide pedestrian access plan linking residential and commercial areas , seamlessly connecting roadside sidewalks with walking trails, and interfacing effectively with public transit stops.

Responsibility: Planning Director, Director of Public Works
Timeframe: Mid Term

Action C3: Amend the Town's land development ordinances to reduce the minimum required roadway width in residential areas and minimize requirements for impervious parking surfaces.

Responsibility: Planning Director, Planning Board, Town Council
Timeframe: Short Term

Action C4: Re-evaluate parking demand in Centredale as part of any private or public proposal for future development/improvements to the village.

Responsibility: Director of Public Works, Planning Director
Timeframe: Short Term

Action C5: Investigate the potential to acquire future parking areas in Centredale for municipal uses.

Responsibility: Director of Public Works, Planning Director
Timeframe: Mid Term

Action C6: Develop a pedestrian network improvement and maintenance program to improve pedestrian safety accessibility.

Responsibility: Director of Public Works, Planning Director
Timeframe: Mid Term

Action C7: Request reviews of signalization at state-owned signals on Mineral Spring Avenue and Douglas Avenue to assure they are functioning safely, especially for pedestrians.

Responsibility: Director of Public Works
Timeframe: Mid Term

Action C8: Develop a town-wide access management plan with strategies appropriate for North Providence.

Responsibility: Director of Public Works, Planning Director
Timeframe: Long Term

Action C9: Develop a priority listing of necessary improvement and repair projects on state roads and on roads on the state-aid system in North Providence. Petition the State to list the highest priority projects on the TIP. Advocate for funding priority, design and construction.

Responsibility: Mayor, Director of Public Works, Town Council
Timeframe: Mid Term

IMPLEMENTATION

The Comprehensive Planning Act requires that plans include an Implementation Program "which defines and schedules the specific public actions to be undertaken in order to achieve the goals and objectives of each component of the comprehensive plan". The following table provides the implementation program for this plan.

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
LU	**LAND USE**					
LU1	Expand the number of residential districts to reflect changes in residential development trends while relating development to environmental constraints.	✓				Planning Director, Planning Board, Town Council
LU2	Zone institutional properties and open space lands as such. Develop applicable standards.	✓				Planning Director, Planning Board, Town Council
LU3	Develop revitalization schemes for the older commercial districts.			✓		Planning Director, Planning Board, Town Council
LU4	Create additional business zoning districts that control growth within the variety of existing business areas found in the town.	✓				Planning Director, Planning Board, Town Council
LU5	Establish Professional Office Zone to buffer residential areas and general commercial zones.	✓				Planning Director, Planning Board, Town Council
LU6	Develop landscaping and signage standards for future commercial developments.	✓				Planning Director, Planning Board, Town Council
LU7	Develop design and development standards for both residential and commercial areas to ensure quality, visually appealing development throughout town.			✓		Planning Director, Planning Board, Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
LU9	Rezone industrial land in residential areas to prevent development and/or expansion of incompatible uses. Identify existing non-conforming industrial uses in residential zones and develop policies to restrict their expansion.		✓			Planning Director, Planning Board, Town Council
LU10	Establish Redevelopment Overlay Districts to revitalize deteriorating residential and nonresidential areas of town. Use a Redevelopment Authority to implement Redevelopment Plans associated with Overlay Districts.		✓			Planning Director, Planning Board, Town Council
LU11	Conduct a corridor study for the area between Central Avenue and the village of Centredale to determine the best future land uses and development standards for the area.		✓			Planning Director, Planning Board, Town Council
LU12	Evaluate and adjust commercial zoning district boundaries along Mineral Spring Avenue to ensure properties that abut the roadway are developable with minimal dimensional variances.	✓				Planning Director, Planning Board, Town Council
LU13	Manage and retrofit existing stormwater management systems to reduce adverse effects on the environment.				✓	Stormwater Coordinator, Planning Director, Planning Board, Town Council, Mayor's Office
LU14	Develop stormwater policy consistent with the General Permit Rhode Island Pollutant Discharge Elimination System Storm Water Discharge from Small Municipal Separate Storm Sewer Systems and from Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s.	✓				Stormwater Coordinator, Planning Director, Planning Board, Mayor's Office, Town Council
LU15	Revise Land Development and Subdivision Regulations to take into consideration environmental and topographic conditions, development potential, and the need for future space for growth. The revised regulations should incorporate stormwater best management practices, including low impact design techniques, and should require as-built drawings for all developments after completion.	✓				Planning Director, Planning Board, Mayor's Office, Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
LU16	Seek financing to manage development (new and existing) to better control adverse impacts to environmental resources from stormwater.	✓				Stormwater Coordinator, Planning Director, Planning Board, Mayor's Office, Town Council
LU17	Re-evaluate parking regulations and revise them to incorporate incentives for more efficient on-site parking strategies such as parking maximums, shared parking, and parking incentives for transit subsidy programs.	✓				Planning Director, Town Council
LU18	Develop a new sign ordinance that will adequately control signage within the town and will encourage a general reduction in the size and height of allowed signs to reduce visual clutter.		✓			Mayor, Planning Director, Town Solicitor, Town Council
LU19	Conduct a review of all existing substandard lots of record within the community, evaluate the legal status of these lots and consolidate those that are no longer valid with adjoining properties to restrict future in-fill development.		✓			Planning Board, Planning Director, Zoning Board of Review, Tax Assessor, Town Council
LU20	Revise setback requirements to better correlate them with zoning districts. This should include revised setback requirements where commercial zones abut residential zones and new setback and buffer requirements between larger multi-family residential complexes and single family residential development.		✓			Zoning Board of Review, Planning Board, Planning Director, Town Council
LU21	Review existing development controls and institute revisions and innovations to enhance future growth.				✓	Zoning Board of Review, Planning Board, Planning Director, Town Council
LU 22	Correct identified inconsistencies between existing zoning and the Future Land Use Map		✓			Zoning Board of Review, Planning Board, Planning Director, Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
H	**HOUSING**					
H1	Encourage new construction of affordable units by establishing new residential zoning districts that provide for a diversity of residential lot sizes other than 8,000 square feet.		✓			Planning Director, Planning Board, Town Council
H2	Revise the subdivision regulations to include incentives for construction of affordable housing as infill development on new lots created by combining existing substandard lots.		✓			Planning Director, Planning Board, Town Council
H3	Establish minimum requirements for inclusion of affordable housing in multi-family adaptive reuse projects and provide incentives in the review process for projects that meet or exceed those requirements.	✓				Planning Director, Planning Board, Town Council
H4	Seek to utilize the large number of vacant existing housing units in North Providence to help meet the Town's future housing needs. The town should attempt to use a combination of enforcement, negotiation with mortgage holders/property owners, tax incentives, and other incentives to convert existing vacant housing stock into affordable family housing. The Town should also aggressively pursue additional Housing Choice Vouchers from HUD, while utilizing other housing programs to expand its stock of affordable housing units.				✓	Planning Director, Planning Board, Housing Authority
H5	Expand enforcement authority within the minimum housing function. Pursue legislative approval to expand the Town's Municipal Court function to include the prosecution of minimum housing violations.		✓			Housing Authority, Planning Director
H6	Pursue future Small Cities Program grants through HUD.				✓	Housing Authority, Planning Director
H7	Build public-private partnerships with representatives from the government, churches, businesses (including bankers), and the community at large to form a North Providence Community Housing Resources Board to oversee and facilitate affordable housing activities in North Providence.		✓			Housing Authority

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
H8	Continue to provide low cost financial assistance for housing rehabilitation and explore ways to expand existing rehabilitation programs.		✓			Housing Authority
ED	**ECONOMIC DEVELOPMENT**					
ED1	Develop master plans for commercial village centers and the Mineral Spring Avenue corridor to include implementation strategies that foster economic redevelopment.		✓			Planning Director, Planning Board
ED2	Create neighborhood resident and business councils in each commercial village center and the Mineral Spring Avenue Corridor to participate in the planning, development and implementation of economic master plans.		✓			Planning Director, Town Council
ED3	Establish a business retention program geared to working on a regular base with existing industry and commerce. Every effort should be made to work with the Chamber of Commerce, Rotary, leading employers, Small Business Association, universities and colleges, etc.	✓				Planning Director, Town Council, Mayor's Office
ED4	Develop local strategies that can increase exposure of residents and businesses to RI Department of Labor and Training's job training and employment initiatives.				✓	Planning Director, Mayor's Office
ED5	Pursue a landscaping program along major commercial thoroughfares.		✓			Planning Director, Planning Board, Town Council, Environmental Commission
ED6	Develop a sign control ordinance for new construction and consider providing limited short term tax incentives to eliminate nonconforming signs.	✓				Planning Director, Planning Board, Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
ED7	Pursue funding for a "Streetscape" program that enhances the village commercial districts.			✓		Planning Director, Planning Board, Town Council
ED8	Pursue the establishment of a storefront improvement program with design controls.		✓			Planning Director, Planning Board, Town Council
FS	**FACILITIES AND SERVICES**					
FS1	Assign a training officer with supporting staff and budget to manage an expanded training program for the Fire Department.	✓				Public Safety Officials, Fire Department
FS2	Coordinate with other fire departments to share the cost of purchasing training programs or exchanging ideas with regard to new firefighting and/or training methods.				✓	Public Safety Officials, Fire Department
FS3	Develop a full Community Interaction Program to provide assistance to local residents relative to increasing public safety in the town. This program should expand efforts such as fire safety, neighborhood crime watch, elderly awareness, and drug abuse prevention.		✓			Public Safety Officials, Police & Fire Chiefs
FS4	Develop a replacement or equipment update program for fire apparatus, based on a 20-year cycle.	✓				Public Safety Officials, Fire Chief
FS5	Determine the appropriate level of funding required for future school years so that funding to the School Department can be increase and meet minimum funding needs.	✓				School Committee, Superintendent, Mayor, Town Council
FS6	Assess student/teacher ratios at all grade levels and strive for higher utilization rates that may enable staff adjustments.	✓				School Department Administration, School Committee
FS7	Evaluate the need for and cost effectiveness of program offerings such as full day kindergarten, middle school sports, and certain aspects of the response to intervention (RTI) program to see if cost reductions can be achieved.	✓				School Department Administration, School Committee

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
FS8	Develop a system to charge for public and private use of school buildings and facilities.	✓				Mayor, Superintendent of Schools, School Committee, PTA, PTD
FS9	Review and update all School Department policies and make updated policy documents available in all libraries and/or online.	✓				School Committee
FS10	Improve parking and accessibility by improving signage and connection between the North Providence High School parking area and the library.	✓				Public Works, Library Board, Director of Library Services
FS11	Expand library holdings and adjust them to adapt to the changing demographics of the community, particularly an aging population and increase in ethnic diversity.				✓	Library Board, Director of Library Services
FS12	Promptly replace deteriorated steel doors at the library building.	✓				Mayor, Library Board, Director of Library Services
FS13	Improve handicapped access by repairing handicapped ramp soon.	✓				Mayor, Library Board, Director of Library Services
FS14	Immediately replace HVAC system to ensure continued operation and improve energy efficiency.	✓				Mayor, Library Board, Director of Library Services
FS15	Study options to increase collection space by making structural improvements, adjusting underutilized public spaces, and/or expanding northward into the portico space.			✓		Mayor, Library Board, Director of Library Services
FS16	As the first phase of creating a Facilities Needs Program, develop an Infrastructure Needs Assessment summarizing current and future needs combined with a detailed implementation program.	✓				Mayor, Director of Planning and Development, Public Works Director, Utility Agencies

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
FS17	As part of a Facilities Needs Program, develop a Pavement Management Program to address roadway cutting for subsurface utility work.	✓				Mayor, Director of Planning and Development, Public Works Director, Utility Agencies
FS18	Outline funding required to support the Facilities Needs Program on a five year cycle.	✓				Mayor, Director of Planning and Development, Public Works Director, Utility Agencies
FS19	Implement a Water Conservation Program to reduce water use and waste water volumes.	✓				Mayor, Finance Director, Planning & Development Director, Utilities
FS20	Undertake an infiltration and inflow (I/I) program in conjunction with the NBC as a major element of the Facilities Improvement Plan.	✓				Mayor, Public Works Director, Department of Inspections, NBC
FS21	Work with water districts to improve water service and available pressure and to eliminate dead ends to create water loops in the system.				✓	Planning and Development Director, Water Districts
FS22	Develop a written drought management response strategy in cooperation with water suppliers.		✓			Public Works Director
FS23	In support of the Facilities Needs Program, inventory, evaluate, and prioritize local roads to determine the order of need for improvement.	✓				Director of Planning and Development, Public Works Director
FS24	Continue to comply with the Stormwater Management Plan by inventorying and monitoring stormwater outfalls and reporting compliance to the RIPDES program.				✓	Mayor, Public Works, RIDOT
FS25	Undertake additional energy saving projects to reduce energy consumption for municipal buildings and public infrastructure.				✓	Mayor, Public Works, Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
FS26	Implement recycling in the North Providence public school system.	✓				School Department, Public Works, Recycling Coordinator
FS27	Develop a town-wide composting program and determine if the former town landfill site can be utilized as a central composting facility.	✓				Mayor, Public Works Director
FS28	Implement a town program for corrugated cardboard baling and recycling to include design, permitting, construction and operation of a baling facility at the former landfill site.	✓				Mayor, Public Works Director, Recycling Coordinator
FS29	Use funds from solid waste program fees to develop and carry out an enhanced program of public education and advertising to encourage increased waste reduction, reuse, and recycling by local residents.				✓	Mayor, Recycling Coordinator
FS30	Investigate and implement parking improvement options for the Town Hall, such as re-design, acquisition, or leasing and incorporate these elements into the Centredale Master Plan.		✓			Planning and Development Director
FS31	Develop a plan to address anticipated increases in demand for senior services, provide additional parking at the Senior Center, and ensure adequate funding levels as demand for services increases.			✓		Senior Services Director, Mayor, Town Council
NR	**NATURAL RESOURCES**					
NR1	Revise land development regulations to require the use of Low Impact Development techniques to reduce impacts of stormwater discharges on receiving waters.	✓				Planning Director, Town Council
NR2	Control by purchase, easement or other legal means, properties of natural areas and other significant vacant lands such as prime farm lands, open space areas, and lands adjacent to major wetland systems including acquisition of the former camp Meehan property adjacent to Governor Notte Park as soon as is practicable.				✓	Land Trust, Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
NR3	Prepare an Urban Forestry Master Plan.	✓				Environmental Commission, Public Works Director, Planning Director, Town Council
NR4	Prepare a dam management plan.			✓		Planning Director
NR5	Prepare a Hazard Mitigation Plan.	✓				Planning Director
NR6	Implement procedures recommended by the Hazard Mitigation Plan to ensure that the Town can adequately respond to natural disasters, protect infrastructure from natural hazards, and make adaptations to reduce vulnerability to natural disasters.		✓			Mayor, Town Council, DPW Director, Engineer, Emergency Management
NR7	Make a conscious effort to reduce global climate change through implementation of sustainable transportation options, utilization of renewable energy sources, requiring "green" building techniques and implementing water and energy conservation measures.				✓	all Town officials and residents
NR8	Establish a local Woonasquatucket River Corridor Committee to work with the Woonasquatucket River Watershed Council and help promote the protection and improvement of the river in North Providence.	✓				Mayor, Town Council
NR9	Add groundwater protection as an additional element of Site Plan Review Process. Work with RIDEM to identify known sources of potential contamination and address issues utilizing current regulations.	✓				Planning Director, Town Council
NR10	Develop an overlay zoning district that provides additional water quality protection to surface water resources within the Town of North Providence.		✓			Planning Director Town Council

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
CR	**CULTURAL RESOURCES**					
CR1	Designate an individual to assist the Town Historian in preservation efforts, including the development of grant applications, or the use of student interns.	✓				Planning Director, Town Council, Town Historian
CR2	Establish a Historic Pathway through the Town as an educational and recreational resource tied into the Town-wide park system.		✓			Planning Director, Town Council, Town Historian, Recreation Director, Public Works Director
CR3	Include Town History as a part of the K-6 curriculum.		✓			Town Historian, School Department
CR4	Inventory historic records and store them in a climate controlled location.			✓		Planning Director, Town Council, Town Historian, Director of Library Services, Town Clerk
CR5	Amend the subdivision regulations to require that land development proposals include an evaluation of impacts on cultural resources and provide mitigation for identified adverse impacts on cultural resources.	✓				Planning Director, Town Council
OSR	**OPEN SPACE AND RECREATION**					
OSR1	Explore and implement alternative means for obtaining and preserving recreation, conservation and open space besides outright purchase, including changing development regulations to provide for transfer of development rights, conservation easements, innovative zoning approaches, and other changes to the regulations for land development and/or the requirement that payments in lieu of open space dedication be made to the Town.	✓				Planning Director, Land Trust, Town Council, Recreation Director, Public Works Director

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
OSR2	Develop a town-wide park system for North Providence that includes recreation facilities, open space areas, historic sites, districts, etc.		✓			Planning Director, Land Trust, Town Council, Recreation Director, Public Works Director
OSR3	Adopt an Environmental Overlay Zone and Open Space/Conservation Zone to ensure their future protection of recreation and open space areas.	✓				Planning Director, Town Council
OSR4	Acquire the former Camp Meehan property for recreational and open spaces uses and acquire property or development rights for other properties where practicable to preserve open space areas.	✓				Planning Director, Land Trust, Town Council
OSR5	Preserve lands along the Woonasquatucket River, Canada Pond, and other water bodies for conservation and preservation of natural open spaces through acquisition of tax properties and rights-of-way to the river and through conservation programs.		✓			Land Trust, Town Council
OSR6	Use existing town parks to develop needed playgrounds/playlots in all areas of Town.		✓			Town Council, Planning Director, Recreation Director
OSR7	Invest in studies to find ways that can improve water quality at Governor Notte Park.	✓				Town Council, Planning Director, Recreation Director
OSR8	Assess recreational development alternatives for the Peter Randall Reservation and adjacent capped landfill.		✓			Town Council, Planning Director, Recreation Director, Public Works Director
C	**CIRCULATION**					
C1	Obtain a "Pavement Management Program", populate the program with data on both highway and pedestrian facilities, and apply the program to assure optimal use of limited paving budgets.		✓			Director of Public Works

REF. NO	ACTION	TIMEFRAME				RESPONSIBLE PARTY(IES)
		6mo	6mo - 2yrs	2yrs - 5yrs	On-going	
C2	Develop a Town wide pedestrian access plan linking residential and commercial areas , seamlessly connecting roadside sidewalks with walking trails, and interfacing effectively with public transit stops.			✓		Planning Director Director of Public Works
C3	Amend the Town's land development ordinances to reduce the minimum required roadway width in residential areas and minimize requirements for impervious parking surfaces.		✓			Planning Director, Planning Board, Town Council
C4	Re-evaluate parking demand in Centredale as part of any private or public proposal for future development/improvements to the village.	✓				Director of Public Works, Planning Director
C5	Investigate the potential to acquire future parking areas in Centredale for municipal uses.		✓			Director of Public Works, Planning Director
C6	Improve pedestrian safety through a pedestrian network improvement and maintenance program.		✓			Director of Public Works, Planning Director
C7	Request reviews of signalization at state-owned signals to assure they are functioning safely, especially for pedestrians.		✓			Director of Public Works
C8	Develop a town-wide access management plan with strategies appropriate for North Providence.			✓		Director of Public Works, Planning Director
C9	Develop a priority listing of necessary improvement and repair projects on state roads and on roads on the state-aid system in North Providence. Petition the State to list the highest priority projects on the TIP. Advocate for funding priority, design and construction of those projects.				✓	Mayor, Director of Public Works, Town Council

[i] New York Times: March 14, 1993 THE BLIZZARD OF '93: The Overview; STORM PARALYZES EAST COAST; SNOW COVERS SOUTH; 33 KILLED

[ii] http://www.wpri.com/dpp/on_air/green_team/taunton-lack-of-rainfall-pushing-southern-new-england-into-a-drought