



Arctic Village Redevelopment Strategy

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Town of West Warwick

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Top: Businesses on upper Main Street
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All photos courtesy of The Cecil Group, Inc.

This planning strategy indicates how Arctic Village can and should be repositioned to take advantage of its many assets to become a successful center for West Warwick. To accomplish this, the Town must take advantage of 21st century opportunities through a focused, consistent, sequential process that uses key tools and public sector actions to reverse past trends. The time to start this process is now – the right conditions exist to implement this strategy.

Arctic Village is the historic, civic and economic center of West Warwick. As a district, however, it has endured a decades-long pattern of decline in terms of its condition, value and contribution to the community that surrounds it. Like many other New England communities, the Town's center has been subject to long-term shifts in manufacturing and employment patterns, transportation networks, retailing and housing preferences that cannot be reversed. Instead, the Town must actively find opportunities to redefine Arctic Village and establish new roles for its center. Significant reinvestment must be attracted to reverse years of deterioration and change both the perceptions and realities of the district.

This will require a concerted effort over many years to accomplish a redevelopment strategy that encompasses the entire district. It will require a well-managed, consistent program of changes including targeted municipal actions and focused assistance using many sources of grants, subsidies and innovative financing to overcome the barriers that will lead to strong, sustainable, private sector reinvestment.

This redevelopment strategy has been crafted to provide a clear plan for the future of Arctic Village. The strategy has been created through a community-based process with the active support and involvement of the stakeholders. Based on a clear-eyed view of the market opportunities and challenges within the district, this strategy describes a series of critically important actions necessary to accomplish the community's goals.

The Challenge

The challenge is to attract and direct investments and improvements that have enough impact to substantially reposition the district's image and vitality.

Although Arctic Village has a number of core businesses, housing units, institutions and municipal facilities today, there are numerous instances of vacant or underutilized parcels and buildings. Many of the buildings have fallen into disrepair, and maintenance has been deferred because of the low values and return on investment associated with basic improvements. Dominant and large retail establishments serving the community and surrounding region are concentrated along arterials and highways just a few miles from Arctic Village, and the Village cannot reasonably compete with the types of large-format, large volume retail business. Although a substantial amount of local traffic is channeled along the district's streets, the circulation patterns and intersections in some places are confusing, indirect and inconvenient. The image of deterioration and vacancies influence the real estate market and demand for uses in the area.

The Strategy

The revitalization strategy requires coordinated improvements and reinvestments in targeted locations where mixed-use redevelopment can be accomplished through public and private action. Rather than a scattered approach, this strategy recognizes the essential need to set priorities, first concentrating changes where they will have the largest positive impact on the entire area. This can be followed with subsequent initiatives as the private sector increasingly recognizes Arctic Village as a special and desirable place to shop, work, live and visit.

The strategy recognizes the many distinctive benefits associated with retaining and strengthening the district's traditional form and historic assets. Compact, walkable mixed-use districts have come back into favor in the market place, and Arctic Village's traditional characteristics – once a weakness – are now among its strengths. Much of the redevelopment will and should occur within existing buildings, many of which are historic. New buildings and site design needs to reinforce these existing patterns, and not attempt to compete with the isolated, auto-oriented, suburban types of development that exist elsewhere. Over the long-term, auto-oriented development would conflict with the ability to redevelop adjacent sites and reduce the cumulative value of the district as a whole.

The uses in Arctic Village will continue to consist of shops, services and restaurants for the surrounding community, with additional small businesses and live-work studios that provide special opportunities and destinations far different from those found elsewhere. Additional and renovated housing opportunities need to be added, shifting the mix towards a higher percentage of residences than exists today. To support this, significant improvements in the circulation patterns needs to be accomplished, along with continued improvements to the parks, open spaces, rail trail connections and distinctive riverfront.

Key Tools

There are several key redevelopment tools and methods that will be needed:

- Redevelopment Authority – West Warwick should establish its own Redevelopment Authority that fully takes advantage of the capabilities that it can provide as enabled by the State of Rhode Island. This authority should be charged with both managing and directly participating in a broad range of redevelopment initiatives to reinvest in underutilized land and buildings and to attract and focus grants, financing and funding including the State's current initiatives to assist Arctic Village as a Main Street district.
- Redevelopment Plan – West Warwick should complete the technical requirements and adopt a Redevelopment Plan as described in this report to initiate the redevelopment process and authorize the Redevelopment Authority for its initial steps. As specific projects and needs are identified, the

Redevelopment Plan should then be amended to ensure that it is consistently useful and accomplishing the Town's goals.

- Circulation Improvements – The Town needs to untangle the complex of one-way streets and awkward intersections in Arctic Village so that the street network directly supports the economic and civic revitalization of the Town Center, making it more practical, convenient, safe and pleasant.
- Tax Incentives – The Town should strongly advocate for changes in the existing legislation that establishes the Municipal Economic Development (MED) zone sales tax incentives to create appropriate incentives for existing businesses that are expanding and for renovation projects as well as new construction.
- Branding and Marketing – As part of the repositioning, a marketing initiative should be undertaken to attract investors, businesses and tenants to the district. This should begin with a branding study that may consider both the past and the future, including renaming the district or taking other bold steps to shift the perceptions and identity in positive directions.
- Stewardship – The dedication of the Town's civic, business and political leadership to the long-term process of revitalization will be an indispensable ingredient for success.

Short Term Actions and Priorities

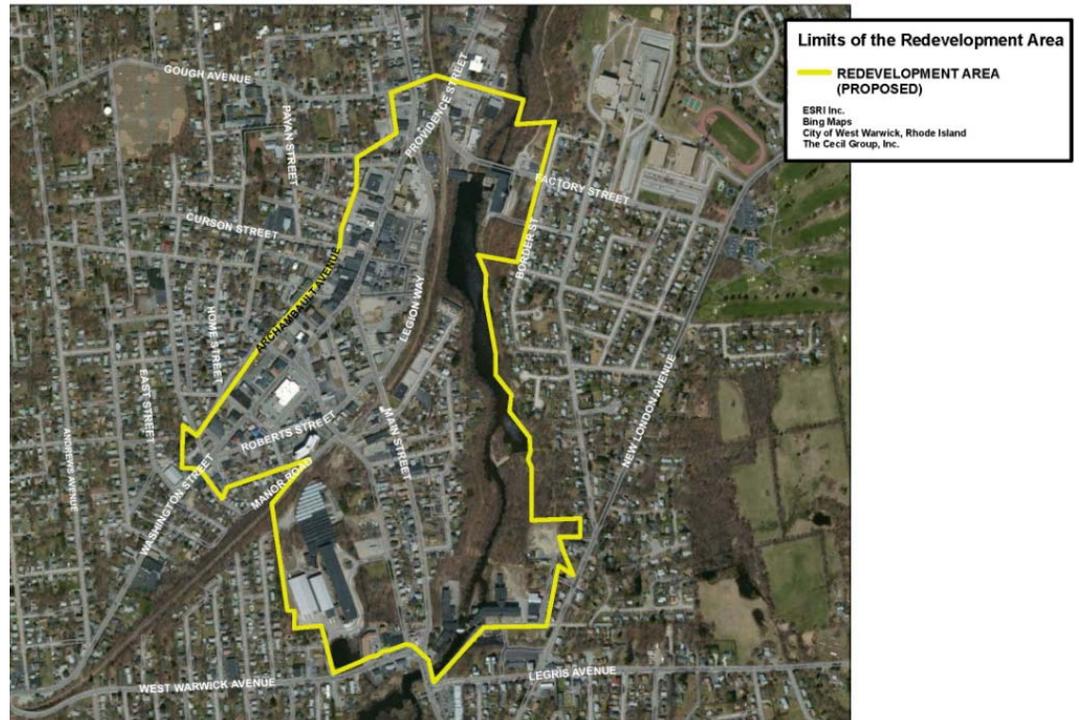
The Town should act as soon as possible to create both the Redevelopment Authority and approve its Plan. This is needed so that it can be an active participant in the redevelopment process and attract and direct appropriate redevelopment, and limit the potential for redevelopment that would diminish the Town's long-term interests in the value and success of the district as a whole.

Redevelopment efforts should immediately be focused on a “hinge block” that includes a large, vacant parcel in a prominent location between Main Street, St. Mary Street and Legion Way. Effective redevelopment of the underutilized land and buildings there will have substantial positive implications for the entire district, because of their central location, visibility and scale.

Other redevelopment initiatives should include contacting businesses identified in the retail gap analysis shown in *Figure 5* and actively marketing suitable empty or underutilized buildings to those sectors. Developers who see the village begin to change will want to move quickly to maximize their return on investment – the Town needs to be proactive in reaching out to possible partners.

Components of the Report

A complete *Report* accompanies this *Executive Summary*. It describes the process that was used to create the Arctic Village Redevelopment Strategy and includes studies and findings from the consultant team that assisted the Town and its Steering Committee. With the exception of several technical and procedural components, the *Report* also includes the draft *Redevelopment Plan*.



Boundaries of the proposed Redevelopment Area, discussed in Section 1.4.3 Recommended Actions and Section 2.2 Redevelopment Area

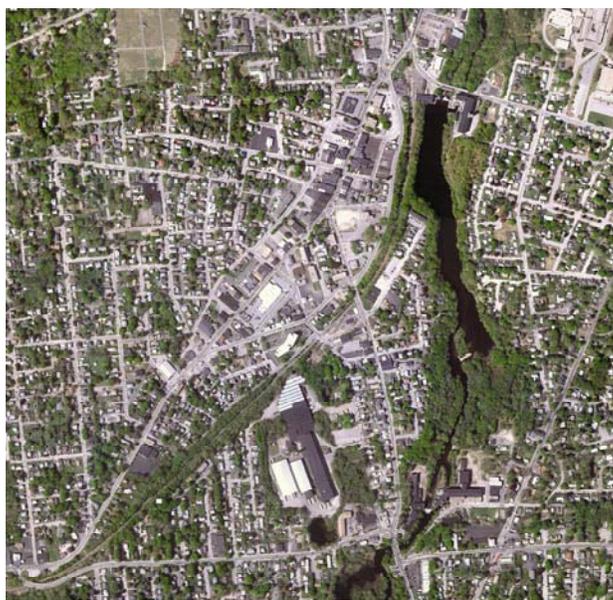
1.1 Overview

Arctic Village is the municipal center of West Warwick, Rhode Island. The village itself is geographically distinct, located in a hollow and bounded on the east by the Pawtuxet River. Although the village was a vibrant destination in the 1970's, it is less so today. Vacant lots and buildings contribute to a sense of neglect, while cars can bypass the local businesses through a system of one-way streets. A large parcel in the very center of Arctic Village is a jumbled mess of building debris from the destruction of St. James Church, contributing to the frustration many people feel about change in this village.

The people of Arctic Village are passionate about its future and are committed to a redevelopment process that would revitalize the area and create a village atmosphere that would encourage businesses, residents and visitors to once again consider Arctic Village a desirable place to live, work and play.

The State of Rhode Island authorizes the creation of a Redevelopment Authority to help communities suffering from conditions of blight to leverage public and private efforts to eliminate the existing contributing conditions and prevent the recurrence of those conditions in the future. The strategy outlined in this report will assist the Town of West Warwick in creating such an authority. Other strategies in this report will describe the steps the Town can take in the short- to mid-term to reduce the appearance of neglect and decay found in some parts of the village and make the conditions more consistent with the desires and expectations of the community.

The Town of West Warwick commissioned this report to study the current conditions of Arctic Village and to look at the different possibilities for revitalizing the area. Fred



Presley, the Town Planner, managed this study with the assistance of a Steering Group. The Rhode Island Office of Statewide Planning provided funding for this report under a Planning Challenge Grant. The Rhode Island Economic Development Corporation has been an active participant in this process. Arctic Village is part of Governor Chafee's Main Street Corridor Districts program which provides resources for five key downtown areas – Providence, Central Falls, Pawtucket, West Warwick and Woonsocket.

Figure 1: Aerial

1.2 Purpose

The purpose of this *Redevelopment Strategy* is to provide a baseline description of the current conditions in the area, to recommend actions that the town of West Warwick can take to address some of the current substandard conditions in the village, to suggest a timeline of phased improvements, and to provide the needed framework to create a redevelopment plan as described under the General Laws of the State of Rhode Island.

1.3 Study Area

The boundary of the initial Study Area was a factor of the geography and circulation of Arctic Village. The Pawtuxet River on the eastern side of the village with its associated mills creates a natural boundary; the Study Area moves just beyond that boundary in the southeastern corner to include a mill and Christ the King Church. To the north, the junction of Main Street, Providence Street and Legion Way creates a gateway into Arctic Village. The southern boundary is defined by West Warwick Avenue which connects the southeastern gateway, created by the junction of Main Street, West Warwick Avenue and Legris Avenue, and the southwestern gateway, which is the junction of Washington Street and West Warwick Avenue.

The western boundary is less geographically well-defined. Archambault Avenue acts as a secondary road to Washington Street, but the intent behind the western boundary is to include those residential neighborhoods that would be affected by changes as a result of any redevelopment of the Arctic Village downtown.

Within the Study Area boundary is the a combination of land uses that include the



Figure 2: Map of the Study Area

primary municipal facilities of West Warwick, the commercial center of Arctic Village, the underutilized historic mills, and a mix of residential, commercial and industrial uses that have been added to the built environment over time. The Study Area is larger than the proposed Redevelopment Area so that the planning team could examine the overall context of Arctic Village.

1.4 Summary of Findings and Recommendations

The Cecil Group team reviewed the current conditions within and affecting Arctic Village and discovered some opportunities and challenges for the area. The most important of the challenges include the following:

- Vacant buildings and parcels – the condition of these buildings and parcels contribute to a sense of neglect within the district and a perception of poor public safety.
- Location – access to Arctic Village appears challenging, with little signage directing visitors to the Village.
- Traffic and Circulation – one-way streets allow vehicles to bypass the business area on upper Main Street and Washington Street. Some of the intersections are perceived as dangerous for both pedestrians and vehicles.
- Lack of things to do – the West Warwick Senior Center provides services and a community gathering space, but there are few attractions for families or students.

However, there are also opportunities, as follows:

- Vacant buildings and parcels – vacant buildings and parcels provide an opportunity for infill development for both commercial and residential uses. New commercial uses would provide goods, services and jobs while new residential development will help invigorate the current housing stock.
- Location – Arctic Village is bounded on the east by the Pawtuxet River and the Washington Secondary Bike Trail. Both are underutilized and not connected with the business area but could become assets that draw visitors to the area.
- Architectural heritage – the mills and the built environment along upper Main Street and Washington Street provide architectural character that creates a unique identity for Arctic Village.
- Walkability – the business district is very compact, leading to a “park-one” strategy that would allow visitors to park in a central location and walk to other attractions.
- Geothermal initiative – the proposal to produce geothermal energy for use by businesses and residents of Arctic Village introduces an unusual asset that could be a draw for investment in the community.

The following are key recommendations for this Redevelopment Strategy. In-depth descriptions of each, along with supplementary recommendations, are found in *Section 1.4.3 Recommended Actions*.

- Create an identity – Arctic Village is known for its past. Rebranding is needed to let residents, business owners, potential investors and visitors

know that Arctic Village is, in the words of the Town Planner, “heating up.”

- Preserve village feel – although some of the built environment is in poor condition, the architectural heritage contributes to a unique village atmosphere which is helped by the compact area. The Arctic Gazebo is a natural destination that anchors upper Main Street and Washington Street.
- Support local businesses – many of the local business owners are committed to the future of Arctic Village and have remained invested in the community over several decades. Their commitment should be recognized and changes to the area should enhance the current businesses
- Improve visual attractiveness – the perception of neglect is due to trash, loitering, graffiti, and poorly maintained buildings and lots. Enforcement of current regulations would help residents see an immediate change. Partnerships among business owners, volunteer organization and the town of West Warwick could result in temporary and permanent landscape and streetscape improvements.
- Encourage economic development – the lack of economic development means a lack of both jobs and amenities for current residents, and the absence of a draw that would encourage visitors to come to Arctic Village.
- Improve housing options – from visual observation, it appears residential units in the area may be out-dated and/or in poor condition. New housing would give current and future residents choices and encourage current landlords to maintain or renovate their properties.

1.4.1 Vision for the Future

From the public meetings, it is clear that the residents and business owners are not trying to recreate the past history of Arctic Village. They are also not looking to radically change the area – past studies suggesting that older buildings be torn down to add big box stores have been met with disapproval by the community as a whole.

The vision for Arctic’s future incorporates three key ideas, as follows:

- Encourage a thriving downtown – a thriving downtown will serve the current residents by increasing access to goods, services and jobs, creating new housing stock to replace existing substandard stock, providing a greater sense of safety, and reinforcing a sense of pride in the village.
- Plan for future changes in use or ownership – there are several parcels whose uses are well-established now, but may change in the long-term. The Town of West Warwick should create a framework now that would allow the Town to move quickly to take advantage of a change in circumstances.



- Connect Arctic Village to the Pawtuxet River – the Pawtuxet River and the Washington Secondary Bike Trail are hidden assets that do not interact with the rest of Arctic Village. A more attractive connection between these two resources and the downtown could create more amenities for current residents, attract new residents and encourage people visiting the area to spend time and money on downtown businesses.

The recommended actions (in *Section 1.4.3 Recommended Actions*) and implementation strategies (*Section 1.5 Implementation Strategies*) in this report provide a framework to accomplish this vision.

1.4.2 Existing Conditions and Trends

Arctic Village has many assets, including the cluster of municipal buildings for West Warwick, its proximity to the Pawtuxet River and the Washington Secondary Bike Trail, the historic building stock, including the mills, and its location with respect to I-95 and other major roads. The existing conditions do not fully reflect these assets, but they do provide a base for a revitalized village district.

Historic and Cultural Context

Arctic Village should be considered in relation to its historic and cultural context. The area developed around the construction of mills on the Pawtuxet River. These mills took advantage of the free power provided by the flow of the water and the buildings are still standing, although some are in poor repair and with underutilized space.

Residential development followed the success of the mills. Both owners and workers built housing nearby. Both the historical patterns of development, showing the increasing density of the area and the remaining building stock attest to this mix of incomes and lifestyles in the area.

Washington and Main Streets became the main business strip, serving the needs of the population. By the 1970's, this was a thriving district that drew not only from the surrounding neighborhoods but from beyond. Current residents remember sailors coming directly from their ships for a night on the town. The reputation remains – one resident said that everyone knows where Arctic Village is, and current public events still bring people from beyond the immediate neighborhoods.

Current conditions along Washington and Main Streets

Top: Vacant Building on Main Street

Middle: Businesses on Main Street

Bottom: Businesses on Washington Street

All photos courtesy of The Cecil Group, Inc.

Historic Images and Current Conditions: Washington Street

These views of Washington Street show the difference between the historic pattern of development and current conditions. The historic photos show dense development of commercial use, with little or no break between buildings. The aerial view shows the loss of buildings over time, replaced by empty lots or by buildings that sit in a sea of parking.

The photo on the right was taken from the tower of St. John's Church in 1946. The photo on the left is pre-1921.



Aerial view courtesy of Bing Maps. Historic Images from *West Warwick* by Raymond A. Wolf from the *Images of America* series. The photo on the left is from page 11 and the one the right from page 32.

Historic Images and Current Conditions: Main Street

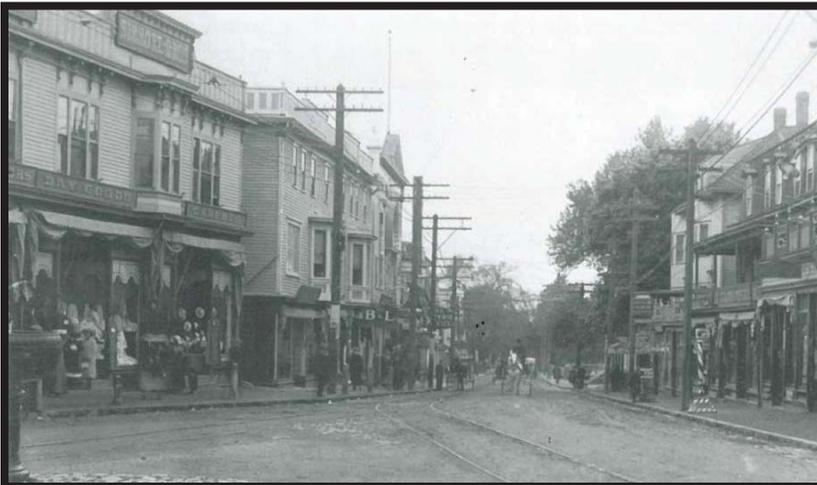


The building pattern on Main Street has been mostly preserved. New buildings replaced those that were removed, except in the case of the Majestic, a five-story building on the site of the Arctic Gazebo. This building was torn down in 1999.

There are a few empty lots and one building surrounded by parking.

The photo on the right was taken in 1948 and looks south toward the present Arctic Gazebo, the site of the Majestic which is shown in the top left of the photo. The photo on the left looks toward the Centreville Bank and is older. The aerial image includes the former St. James Church on the "hinge parcel" in the lower right-hand corner.

Aerial view courtesy of Bing Maps Historic Images from *West Warwick* by Raymond A. Wolf from the *Images of America* series. The photo on the left is from page 10 and the photo on the right is from page 35.





Current conditions along Washington and Main Streets

Top: Vacant Building on Washington Street

Middle: Centreville Bank

Bottom: Current U.S. Post Office

All photos courtesy of The Cecil Group, Inc.

Land Use and Development

Current land use patterns show commercial development along Washington Street and upper Main Street (above the junction with Washington Street). Some two-family houses and multi-family housing is also present, mostly in the lower end of Washington Street. Vacant commercial and residential space is present throughout the area.

Scattered commercial, industrial and mixed use buildings are present on the lower end of Main Street and toward the center of the village. The entire village is surrounded by residential uses, a mix of single-family and multi-family housing. Data from the West Warwick Assessors’ Office from 2009 identify vacancies scattered throughout the residential area.

Government ownership plays a large role in Arctic Village. The Town of West Warwick owns a significant amount of property in this area, including the municipal buildings on upper Main Street (Town Hall, the police station and the fire station), the Senior Center on lower Washington Street, and the West Warwick Housing Authority property on Manor Road. The State of Rhode Island has a labor training center with an apparently underused parking lot on lower Main Street.

There are two post offices in Arctic Village. The old post office on upper Main Street is vacant and no longer owned by the United States Postal Service. The newer post office on Washington Street is in use as a post office, but questions have been raised as to its future viability given the current financial challenges for the United States Postal Service.

The mills are a big presence on the eastern end of Arctic Village (Arctic Mill to the north and Centreville Mill to the south). The headquarters of the Natco Products Corporation owns a large complex in the southern part of Arctic Village; they appear to own Arctic Mill as well. Centreville Mill is listed on the National Register of Historic Places (NPS reference number 05000582).

Data from the West Warwick Assessors’ Office identify the shopping plaza on West Warwick Avenue, below the Natco Products Corporation headquarters, as the commercial real estate with the highest value in the Study Area.

Arctic Village has a strong religious presence in its building fabric. The church of St. John the Baptist has a strong presence on Washington Street, just below the junction with Main Street. Although the congregation of French Canadians dates to about 1872, the present church was consecrated in 1940.¹ The parishes of St. John the Baptist and St. James merged in 2003, according to the website of the Roman Catholic Diocese of Providence². The vacant parcel at the heart of the Arctic Village is the site of the former St. James Church. Christ the King, formed from the original parish of St. John,³ is located in the southeast corner of the Study Area on Legris Avenue. The parish was founded in 1931, according to the website of the Roman Catholic Diocese of

¹ <http://ssjohndandjames.org/parish/about/>

² <http://www.dioceseofprovidence.org/?id=101>

³ <http://ssjohndandjames.org/parish/about/>

Providence⁴. Both churches may be eligible to be listed on the National Register of Historic Places.

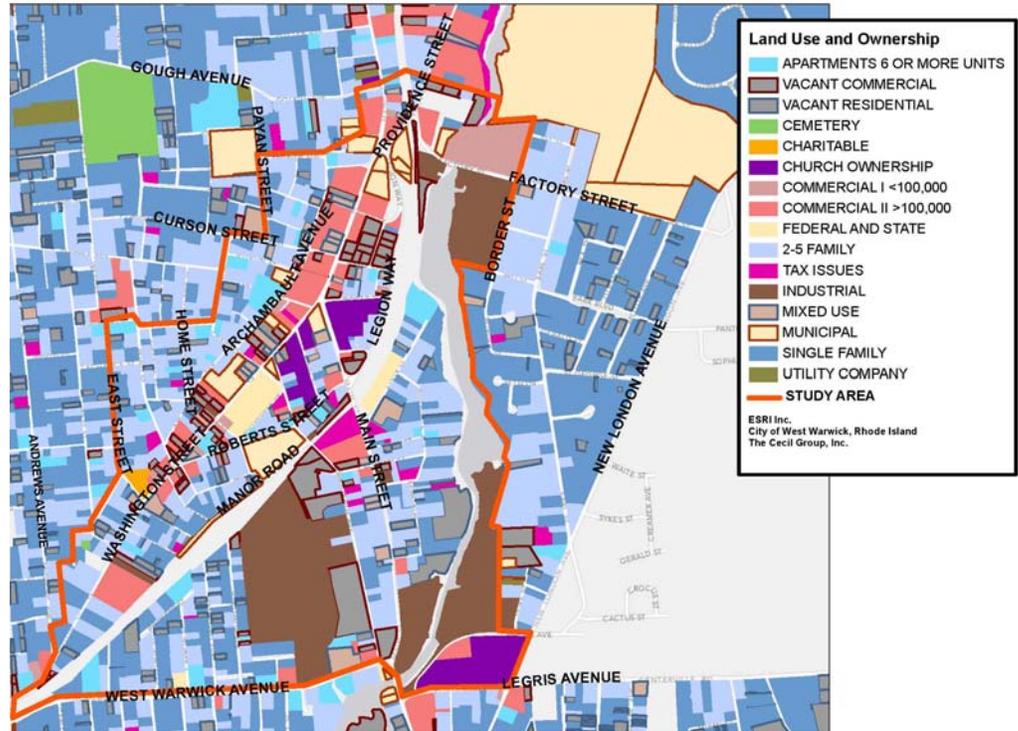


Figure 3: Land use map

Demographics

The following highlights provide an overview of the Arctic Village Study Area population, housing and business activity (2011), and are presented in more detail in the Appendix.

- The 1,608 residents represent about 6% of the West Warwick population of 29,125) and is projected to grow almost 2% over the next five years; the 742 Arctic Village households are projected to decline 3% by 2016.
- Annual median household income in Arctic Village is estimated at \$32,122, about 58% of the West Warwick median income of \$47,283. About 5% of households are family households, and 13% of these family households are classified below federal poverty level.
- Approximately 76% of residents aged 25 and older have high school level and above education, and 12% have bachelor, master, professional or advanced degrees, compared to West Warwick educational attainment of 85% and 21%, respectively.

⁴ <http://www.dioceseofprovidence.org/?id=101>

- About 20% of employed Arctic Village residents are in Office/Administrative jobs, 9% in Food Preparation/Serving and Sales/Related; the largest job categories in West Warwick are Office/Administrative (17%), Sales/Related (13%) and Management (8.4%).
- Almost 81% of residents drive alone to work, 13% carpool, 18% have no vehicle; town-wide about 84% drive alone, 11% carpool, and 9% have no vehicle. 25 minutes is the average travel time to work for residents in the Study Area and Town.
- There are 812 housing units, about 91% are occupied, and 30% are owner-occupied; the \$173,702 median value of owner-occupied housing is 91% of the West Warwick \$146,099 median owner-occupied housing value.
- Single-family structures are 19% of Arctic Village housing stock, and 45% of West Warwick housing stock; 2-unit and 3 to 9-unit structures are 22% and 27% of the Study Area, and represent 14% and 12% of housing structures town-wide.
- The 133 business establishments located in the Arctic Village employ more than 1,000 workers, generate over \$104 million in sales; and account for 16% of all West Warwick businesses, 12% of all jobs and 10% of all sales.
- Service sector businesses are 41% of all Arctic Village establishments, and 40% of all service businesses in West Warwick; and 26% are Retail business establishments that comprise about 23% of town-wide retailing.
- There are 19 Public Administration (government) establishments in the Study Area comprising 68% of all West Warwick public administration operations, employing 240 workers, and account for 58% of all government jobs town-wide.

Economics and Market Position

This section summarizes the two primary areas of economic and market analysis: the residential market and the retail gap. The *Residential Market Assessment* describes the combination of age range and housing type that would be the most likely profile for new development in Arctic Village. The *Retail Opportunity/Gap Analysis* examines the possibilities for retail in Arctic Village and what missing sectors might do well.

Residential Market Assessment

FXM Associates applied its proprietary *Housing Demand Model* to assess potential opportunities for development of market rate rental housing within Arctic Village, targeted to householders under age 35 and over age 55 who are less likely to have school-aged children and who experience has shown may be more likely to find urban rental housing attractive. The market analysis takes into account householder mobility, propensity to own or rent and housing affordability, and projects potential demand by

age and income of householder over the next five years. Figure 4 shows that projected demand at \$900, \$1,100, and \$1,300 per month rents within a 20-minute drive time of Arctic Village.

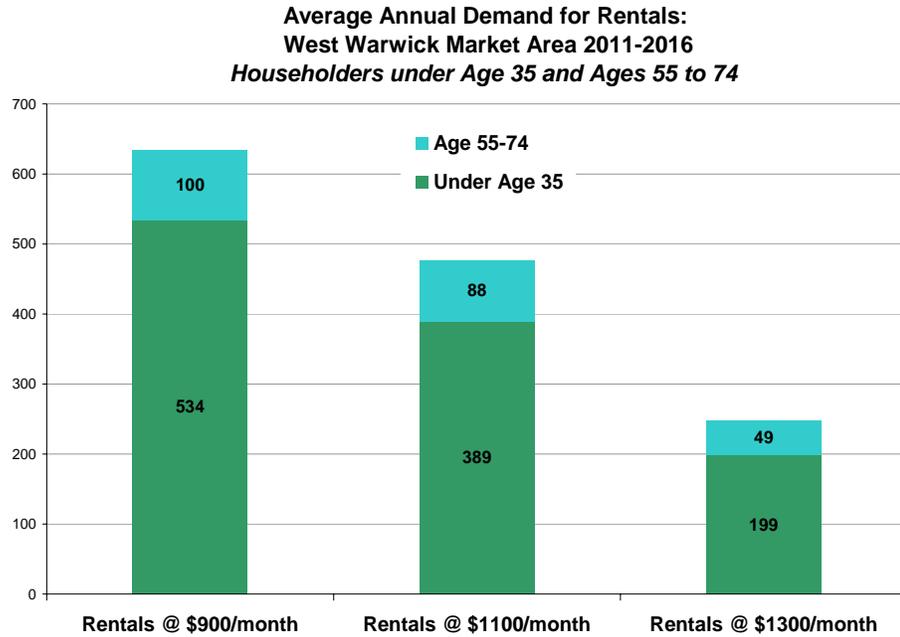


Figure 4: Average Annual Demand for Rentals

In the absence of a more detailed analysis of a specific new construction or rehabilitation program, development project amenities, pricing, unit size and features, and potential sources of below-market financing, tax credits, and so forth, as well as planned and proposed projects within the 20-minute drive-time market area, it is extremely difficult to estimate how much of overall market area demand could be served by new development or rehabilitation projects within Arctic Village. For planning purposes at this time, a range of 40 to 60 units (4% to 7% of market area demand) might be assumed for potential annual absorption over the next five years with no more than half at the \$1,300 per month price level. Detailed analysis of residential market opportunities is contained in *Appendix 3.1 Technical Memoranda*.

Retail Opportunity/Gap Analysis: Market-driven Retail Development Opportunities in Arctic Village

The retail opportunity or gap analysis shows the potential demand for various types of retail development within a defined market area by comparing estimated household expenditures in a range of retail store categories with actual store sales in those categories. Where expenditures by households in the market area exceed sales, a gap or opportunity exists for stores within the market area to “capture” more of those household expenditures. The retail gap analysis identifies current opportunities for retailers to locate new or expand facilities, and is based on established empirical evidence that people will

typically purchase comparable goods and services within the shortest available walking or drive-time from where they live. Data in Figure 5 show the results of this analysis.

Store Type & NAICS Code	Sales Volume Opportunity	Median Sales per SF	Supportable SF	Median Store Size	Hypothetical Number of Stores	Stores capturable in ArcticVillage	SF Potential
Hardware Stores-44413	\$7,108,645	\$130	54,682	13,200	4	1	13,200
Nursery and Garden Centers-44422*	\$13,937,654	\$185	75,339	1,600*	1*	1*	1,600*
Office Supplies and Stationery Stores-45321	\$2,614,214	\$175	14,938	4,000	4	1	15,000
Limited-Service Eating Places-7222	\$6,609,138	\$280	23,604	1,750	13	4	7,000
TOTALS						7	35,200

*Facility sizes vary greatly. Shown is that for a Nursery & Garden Center typical in a suburban Shopping Mall.
A much larger facility could be supported by the apparent opportunity/gap that suggests a much higher supportable sales and square footage.

Source: A.C. Nielsen *Site Reports*, 2011 data; Urban Land Institute, *Dollars and Cents of Shopping Centers*; and FXM Associates

Figure 5: Retail Gap Analysis

In the case of Arctic Village, each of the store types that emerged from the retail opportunity/gap analysis has the potential for being a “destination” that does not depend on a large amount of foot traffic or a concentration of other retailers – neither of which conditions now prevail in Arctic Village. More detailed analysis of the target businesses and recommended strategy for capturing these retail opportunities in Arctic Village is contained in *Appendix 3.1 Technical Memoranda*.

Transportation and Circulation

Roadway Network

Arctic Village is a quaint community located in the center of West Warwick, Rhode Island. The Village is surrounded by municipal buildings, commercial, retail and service industry land uses. The Village is located along Rhode Island’s longest waterway, the Pawtuxet River Valley. Legris Avenue, a principal arterial, serves the City of West Warwick and the region and provides east-west access to north-south routes into the Village. Roadways such as Main Street, Washington Street, Legion Way, and New London Avenue provide general mobility within the region. Main Street and Washington Street are two-lane minor arterials (one lane in each direction) that provide access to the core of the Village. Legion Way is a two-lane roadway that traverses one-way from its intersection with Main Street north to its terminus at the intersection of Main Street and Providence Street. New London Avenue is a two-lane minor arterial that traverses in the north-south direction east of the Pawtuxet River Valley from Main Street to Providence Street.

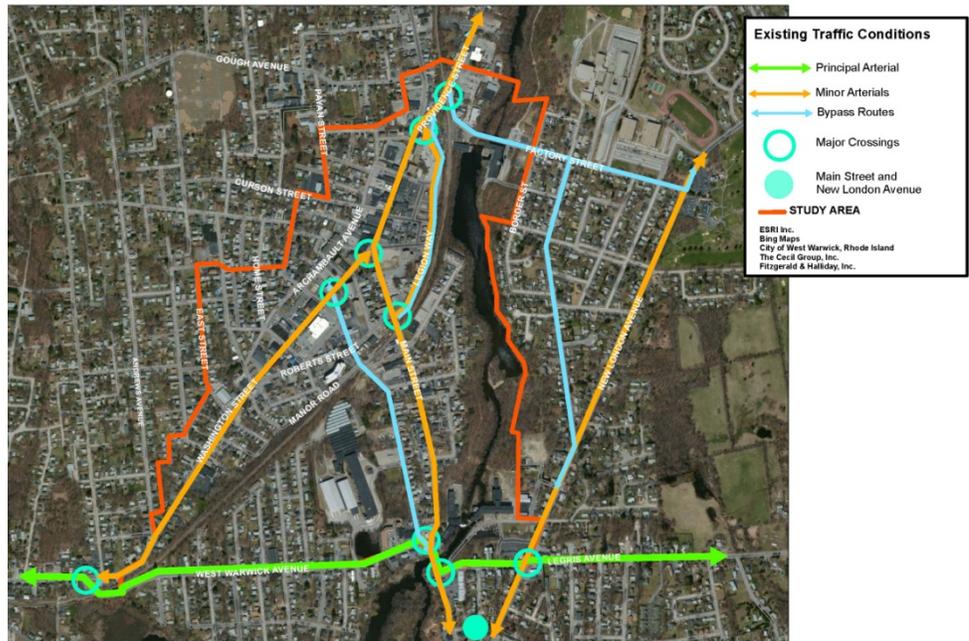


Figure 6: Traffic circulation map

Traffic Volumes

Available traffic data was obtained from the Rhode Island Department of Transportation. Average daily traffic volumes in 2009 indicate that daily traffic volumes range from 12,600 vehicles per day to 13,800 vehicles per day, as summarized in Figure 7 below.

Location	Average Daily Traffic (vehicles per day)
West Warwick Avenue (west of Washington Street)	13,800
Legris Avenue (east of New London Avenue)	12,600
Providence Street (east of New London Avenue)	12,800

Source: Rhode Island Department of Transportation

Figure 7: Average Daily Traffic Volumes (2009)

Traffic Operations

Based on available information and field observations the transportation network, in general, can support the existing travel demand. However, delays occur on the westbound approach on Route 117 approaching New London Avenue and also in the core of the Village area during the afternoon peak hour. Delay in the core of the Village area occurs on Legion Way and Main Street as a result of:

- Queuing between the closely-spaced intersections of Main Street/Providence Street with Legion Way and Providence Street with Factory.
- Left-turning vehicles into businesses and cross streets impeding through movement travel.
- Vehicles entering/exiting on-street parking spaces impeding traffic flow.

A brief summary of the existing operational issues are provided below:

- *Main Street & New London Avenue* – the intersection is a non-traditional four-legged intersection. The intersection’s skewed angle presents a decrease in visibility, impedes turning movements and creates a very large intersection that hampers the driver’s perception and reaction time to arriving vehicles.
- *Circulation/Access* – there are one-way streets in the core of the study area. Though one-way streets provide direct access, the following issues were observed in the Village area:
 - Limited direct access to businesses.
 - Higher travel speeds on one-way streets.
 - Circuitous access.
 - Less pass-by traffic in the core of the Village.

Non-motorized Transportation

The West Warwick Greenway is one of five distinct paths that travel along the former Washington Secondary rail line. In 2002, the 3-mile segment in West Warwick was constructed and paved and is between the Coventry Greenway and the Warwick Greenway. The path runs between Main Street and Providence Street along a former rail right of way which has great views of mills and the Pawtuxet River and easy access to and from commercial areas.

Infrastructure

Infrastructure in the study area includes water and sewer service and natural gas lines in addition to the roadways discussed elsewhere in this report. Information on the availability and condition of water and sewer service was obtained through consultation with the West Warwick Town Planner and from the 2011 Wastewater Facilities Plan.

Water Service

The Town of West Warwick is served by the Kent County Water Authority. Historically, their water sources have included surface reservoirs, well fields and storage tanks. The Authority has been purchasing supplemental supplies of water from the Providence Water Supply Board since 1951. The company reports that it has plenty of excess capacity for future growth. The Authority periodically evaluates the potential to expand their services further into neighboring communities and has an ongoing infrastructure renewal and replacement program. There is some concern locally that if the water system expansion is successful, it could cause capacity issues in the future.

Most notably, Kent County Water has been seeking state and federal funding to extend the water distribution system into Quonsett Point/Davisville. There are no current issues with the capacity or aging of water mains, or unmet demand for water service in the Arctic Village neighborhood.

Sewer Services

Sewer service in West Warwick is provided by the West Warwick Sewer Commission. This is an independent public agency established to control and manage wastewater collection and treatment in the Town and parts of five surrounding communities. The Town Council acts as the Sewer Commission and has the authority to assess and collect user fees.

The sewage treatment facility and collection system also have excess capacity. The Sewer Commission has just completed an extensive renovation and system expansion designed to adequately accommodate growth into the long-term future. The system consists of approximately 110 miles of gravity sewers divided into eight sewershed areas. The Arctic Village neighborhood falls in the Arctic sewer district. The wastewater treatment facility discharges into the Pawtuxet River. The study area is fully served by sewer lines, as is 95% of the Town. There are, however, upgrades needed for several sewer mains in the area. The 15” sewer pipes along Winthrop Avenue, West Warwick Avenue, and within the Agawam Mills property all have existing capacity issues.

Geothermal Initiative

Mimer Energy New England, LLC is engaging in a joint venture with the Town of West Warwick to create a village-scale geothermal plant providing heating and cooling to the businesses and residences of Arctic Village. The electrical needs for the geothermal system (heat pumps and compressors) will be energized by renewable energy potentially produced from wind, solar and hydro power, thus providing a clean and sustainable system with zero emissions and no environmental impacts. Further, the heating and cooling pricing is fixed for a minimum of fifteen years and likely will be discounted below market. Ultimately, the geothermal plant will be transferred to the Town of West Warwick after a successful operational period at no cost, allowing the profits to feed back to the community. The production of clean energy in an environmentally friendly manner at fixed prices will add substantial economic incentives towards the growth of Arctic Village. And the overall diversification of the energy source will enhance the stability of the region and will buffer the users from the volatility of conventional fuels.

Planning and Regulatory Context

Zoning

The planning and regulatory context for Arctic Village is complex. The village itself has five zoning districts and a design control district overlay.

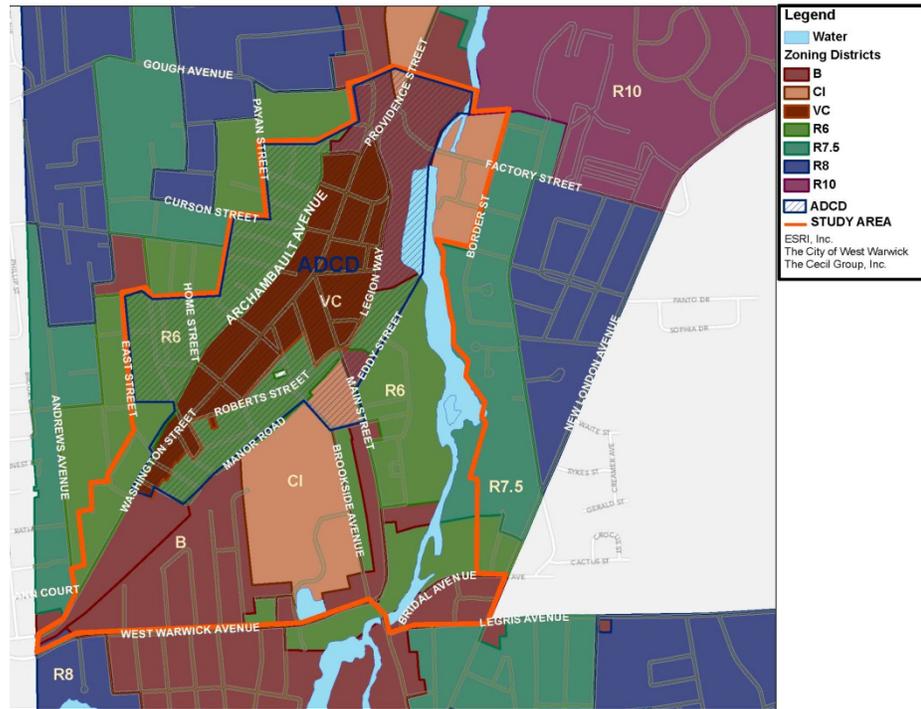


Figure 8: Zoning Map

Arctic Village has several zoning districts. They are as follows:

- Business (B) – minimum lot size of 10,000 square feet; does not allow new dwelling units; some use restrictions.
- Commercial/Industrial (CI) – minimum lot size of 40,000 square feet; significant use restrictions.
- Village Commercial (VC) – no minimum lot size; two-family and multi-family dwellings allowed by special permit; use profile similar to B but with some further restrictions.
- Residential (R-6) – minimum lot size of 6,000 square feet; allows single-family and two-family by right and multi-family by special permit; does not allow most commercial uses.
- Residential (R-7.5) – minimum lot size of 7,500 square feet; allows single-family and two-family by right and multi-family by special permit; does not allow most commercial uses.
- Arctic Design Control District (ADCD) – This is an overlay across the Village Commercial and part of R-6, CI and B; allows multi-family by

right and other specific uses compatible with a village district. Non-conforming uses are not allowed to expand and the Planning Board has discretion with regard to certain dimensional standards, parking, signage, use, density, and architectural design for applications within this district. Design standards apply to this area and should be incorporated into the redevelopment plan.

A detailed chart of uses and dimensional standards can be found in *Section 3.5 Current Zoning Characteristics*.

MED Zone

Section 44-18-30.C of the General Laws of Rhode Island created a municipal economic development zone (MED Zone) specifically for the Town of West Warwick but applicable to other municipalities in the state. The boundary of the MED Zone in West Warwick is the only one defined by the legislation.

The MED Zone must be designated by the city or town council and is effective for ten years from the date of inception, which is defined by the legislation as either two years from the date of designation or the date on which the first business receives a certification of exemption.

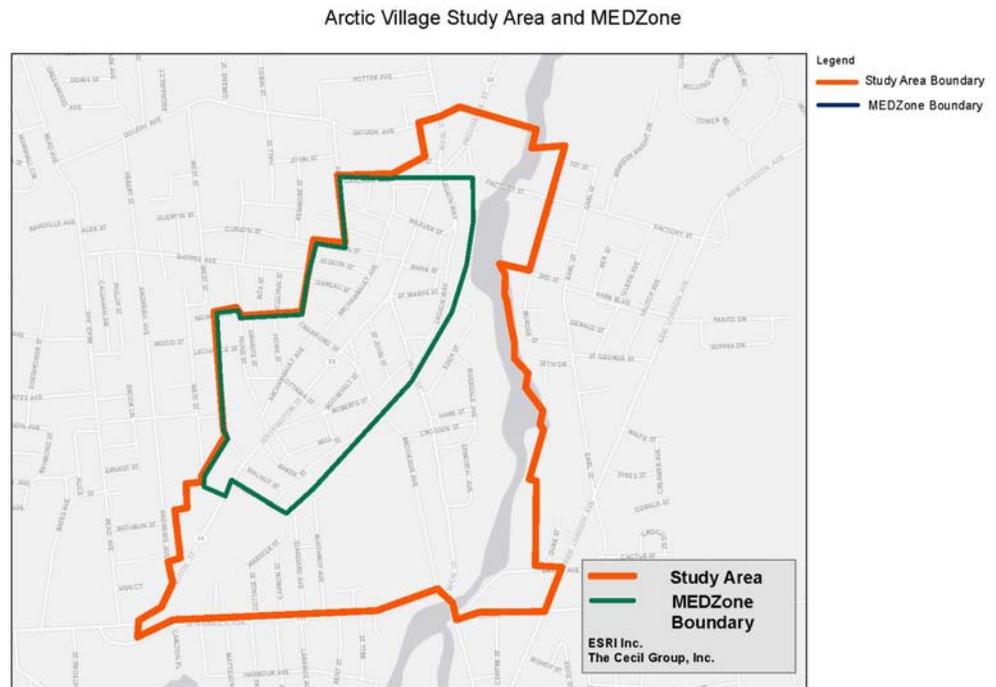


Figure 9: MED Zone Map

The incentive for businesses to locate within a MED Zone is the reduction of sales and use taxes by 50% for the ten year effective period. Businesses must meet the definition of qualifying sales and must move into new construction within the MED Zone. Businesses

cannot relocate from one part of the state to a MED Zone unless they increase employment by 50% over the two years prior to the move. A business that relocates to MED Zone and then closes an existing operation in Rhode Island will have its certification revoked.

The remainder of the sales and use taxes collected within the MED Zone are reimbursed to the town during the period the MED Zone is in effect. The town must use these funds for capital improvements within the zone itself, within a mile of the zone boundary, or to mitigate impacts from the creation of the zone. Powers granted to the town council include the powers of a redevelopment authority under Title 54 Chapter 32 and the power of eminent domain.

Comprehensive Plan

The Town of West Warwick has a comprehensive plan dated March 1992. The Town is updating this plan concurrently with the planning for the Arctic Village Redevelopment Area. The expectation is that the recommendations of this report will be incorporated into the updated comprehensive plan.

1.4.3 Recommended Actions

The following recommended actions should be viewed as elements of a larger plan. These elements can be phased in over time, but the priority and phasing of each individual recommendation should be considered in light of its effect on the others.

The recommended actions describe the general outline of creating a redevelopment authority to guide the process, establishing the boundaries of the redevelopment area, and identifying the redevelopment priorities. This section then describes specific recommendations for elements important to a successful redevelopment of Arctic Village such as the following:

- Transportation, circulation and parking.
- Public realm and public facilities.
- Uses and development patterns.
- Urban design character; historic resources.
- Sustainability.
- Open space and natural resources.
- Infrastructure and utilities.

Redevelopment Stewardship and Management

The General Laws of the State of Rhode Island Chapters 31-33 provide the governing legislation for the establishment of a Redevelopment Authority, its ability to undertake projects and the financing of those projects. Under this legislation, a redevelopment authority for each municipality in Rhode Island has already been established, but the legislative body of the community, the Town Council in West Warwick, must establish the redevelopment authority by resolution declaring that there is a need for such an Authority. The redevelopment authority, once established, would be known as the West

Warwick Redevelopment Authority. The Redevelopment Authority may be deactivated after an initial two years by a resolution of the Town Council.

Section 45-31 defines establishment of a redevelopment authority, its membership, and its actions. Five members are appointed by the president of the town council and approved by the town council. Two more members may be added by vote of the town council. Members may not be employees or elected officials of the town, but may receive compensation for their service. Members initially serve staggered terms and then terms of five years. Members may elect officers, including chairperson, vice chairperson and secretary – the secretary does not have to be a member of the authority. The members must also appoint an attorney. There is a method to suspend or remove members, and members are not allowed to acquire an interest in the properties under their review.

The town may appropriate funds to the redevelopment authority, and the authority is required to submit an annual budget and periodic reports to the town council. The redevelopment authority is allowed to make relocation payments to offset losses from displacement for individuals, families and businesses.

In order to undertake projects, the redevelopment authority must create a plan in compliance with the provisions of Chapter 45-32. Section 2.0 of this *Redevelopment Strategy* identifies those requirements and provides, for the most part, the information needed to complete a redevelopment plan for the Town of West Warwick. Section 2.0 also notes information needed for compliance with Chapter 45-32 that needs to be further studied and compiled.

Redevelopment Area

The boundaries of the proposed Redevelopment Area were determined through studies made by The Cecil Group team and input from the Steering Committee and from three public meetings (two with the general community and one with business owners). The decision was to exclude the majority of the purely residential areas from the Redevelopment Area to focus on the areas that are currently business and mixed-use. The center of the Redevelopment Area corresponds with the center of Arctic Village. The core of the Washington Street/Main Street business area is included within the proposed boundary.

The Cecil Group team looked at market demand, current land use and land ownership patterns, historic development patterns, the susceptibility of some parcels to change from one use to another and current vacancy patterns.

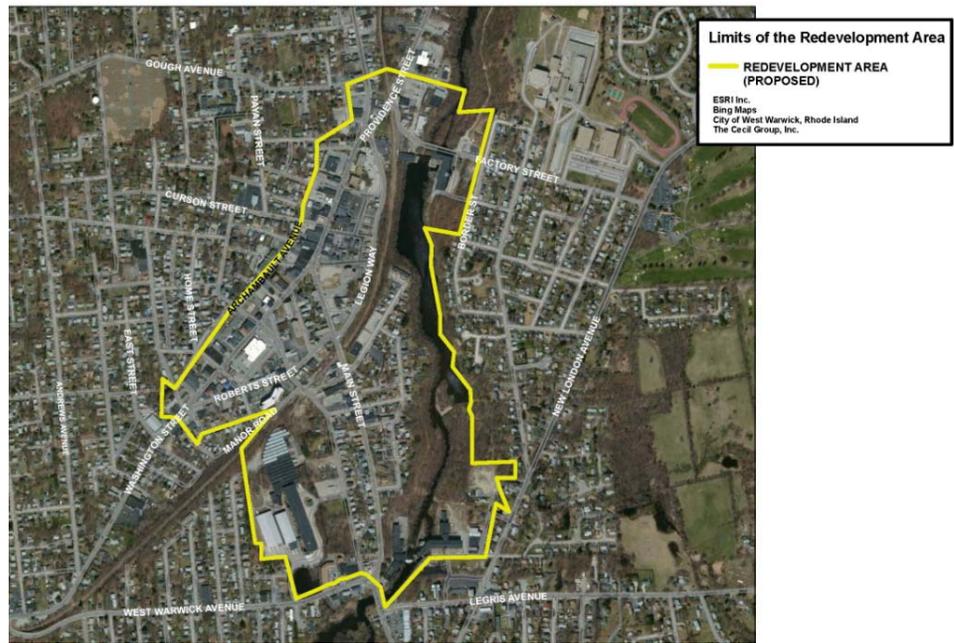
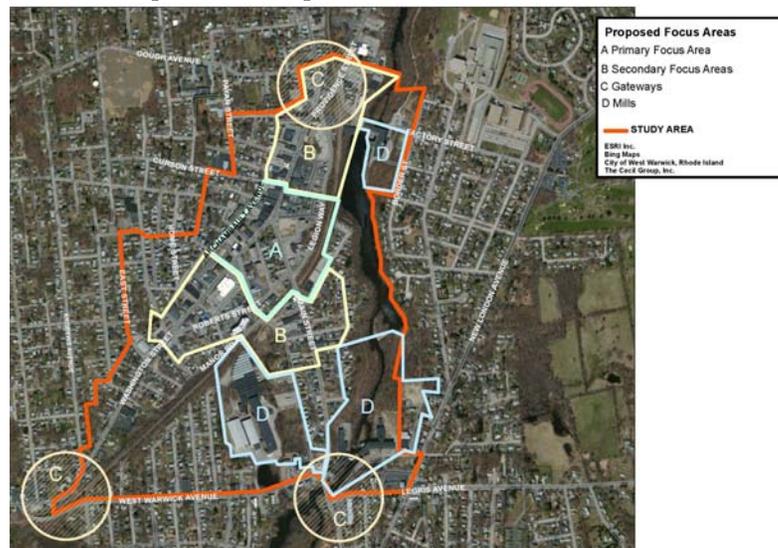


Figure 10: Redevelopment Area

The proposed Redevelopment Area extends beyond the initial Study Area in the southeast corner to include vacant land contiguous with one of the mills. It also includes the residential neighborhood to the east of lower Main Street as this area contains a mix of business uses, single-family and multi-family homes. The Pawtuxet River is a major asset to the community that would play an important role in the overall redevelopment of the area.

The initial focus of redevelopment should be in the core area centered on the Arctic Village Gazebo. Improvements to this area should spread to upper Main Street and lower Washington Street, as existing buildings are rehabilitated and empty parcels are either landscaped or developed.



Phasing Map

Figure 11: Focus Areas and Redevelopment

Redevelopment Priorities

Redevelopment priorities should be consistent with the goals of the Redevelopment Plan which are as follows:

- Undertake initiatives that accomplish the public and/or private redevelopment of vacant or underutilized land or buildings, public open space and infrastructure in a manner consistent with the other elements of this plan and of West Warwick's Comprehensive Plan.
- Develop and apply village center design criteria, standards and guidelines that support and reinforce the historic development patterns of Arctic Village.
- Preserve and protect the historic architecture and other assets which define the character of Arctic Village.

The initial priorities should include activities that will contribute to the redevelopment of Arctic Village in the short, medium and long terms. A list of specific implementation recommendations is under *1.5 Implementation Strategies*. However, it is clear that some recommendations take precedence over others, either because of the length of time or complexity to implement, or because some must be complete before others can be started.

The highest priority is to begin the process of creating a redevelopment authority and the associated governing plan as soon as possible. This requires the approval of the Town Council and must meet certain legal requirements and definitions. As part of this process, the Town of West Warwick will need to accumulate and analyze further data with regard to population density, land coverage and building intensity so as to determine both current conditions and the desired future conditions. The Town will also need to define "blighted" and "substandard" and then identify and record the current conditions that meet those definitions.

The second priority on the list should be to identify those parcels suitable for redevelopment that could be part of the newly authorized redevelopment authority's first actions. There are several vacant lots and buildings that are either abandoned or in poor condition that could be the subjects of a revised redevelopment plan.

The third priority is to look for immediate improvements that could reinforce the idea of change. Specific recommendations are under *1.5 Implementation Strategies*. This priority is important because of the level of frustration expressed at public meetings – residents see plan after plan but no action. Simple implementation steps, such as enforcement of existing regulations and creating a village identity would encourage those who do not have confidence in the planning process.

Transportation, Circulation and Parking

In an effort to address the existing and future traffic operational issues, the Village should consider the following recommendations:

- Conduct a Comprehensive Traffic Circulation Study – to optimize the circulation patterns of vehicles and pedestrians in the Village. The study will involve evaluating the balance of various conflicting aspects of the transportation system: one-way versus two-way roadways, through traffic versus local traffic, efficient movement of vehicles versus safe streets for pedestrians, short-term improvements versus long-term needs.
- Redesign the intersection of Main Street and New London Avenue – to create a safe and efficient intersection that increases drivers’ visibility and creates a narrower intersection that improves drivers’ perception and reaction time to arriving vehicles.
- Develop a Streetscape Design and Identity – to develop a vision of Washington Street between Main Street and Roberts Street that would enhance the existing strip development, promote the corridor as an attractive destination with a pedestrian friendly environment, and build connectivity to Main Street between Washington Street and Providence Street.
- Develop a Wayfinding Program – to better direct residents and visitors to destinations (places of interest, parking, etc.) in the Village.

Public Realm and Public Facilities

Along upper Main Street, the focus is on the traditional municipal complex of Town Hall, the Fire Station and the Police Station. The old U.S Post Office completes the focus on government buildings. There is parking behind the town government complex, but it is not well-laid out or in good condition. The old U.S. Post Office has green space and parking.

There is a secondary complex of government buildings on Washington Street where the new West Warwick Senior Center faces the current U.S. Post Office facility. The West Warwick Senior Center provides needed services to the residents and provides space for community meetings that is lacking elsewhere in Arctic Village. There is a cluster of parcels with varying uses between Roosevelt Street and Roberts Street sandwiched between the U.S. Post Office facility and the West Warwick Housing Authority.

Between these two book-ends the Town owns the Arctic Gazebo at the junction of Main Street and Washington Street – this serves as the center of the district and could be a natural meeting space for visitors. However, the Arctic Gazebo does need some maintenance and the presence of the vacant lot across Main Street and vacant buildings on Washington and Main Streets make this central area less inviting.

The Town of West Warwick also owns or has tax liens on scattered plots throughout Arctic Village.

Recommended actions for the public realm and public facilities include the following:

- Arctic Gazebo – Remove the graffiti and patrol regularly for trash and signs of vandalism.
- Old U.S. Post Office – this property has been vacant for some time. Available parking and the layout of the building could limit redevelopment to certain uses, but the Town should explore ways to ensure that this prominent property has a compatible use.
- Current U.S. Post Office – the financial condition of the United States Postal Service is of concern to any community hosting a distribution center. The Town should contact the USPS to determine any known future plans for this facility, and should be prepared for possible redevelopment scenarios if the functions of the facility are moved elsewhere.
- Vacant Parcels – the Town should explore ways to redevelop these parcels, perhaps by seeking partnerships with abutting property owners. In the short-term, the Town could use the vacant lots as pocket parks, partnering with local volunteer organizations and/or the West Warwick school system. Lots with vacant buildings on them are more challenging, but the Town could seek grants and/or local partners to stabilize the properties to make them safer and more visually attractive.
- Town Hall and Other Facilities – in the very long term, the Town should consider if there is another site that would be more appropriate for the town government complex as the needs of government change.

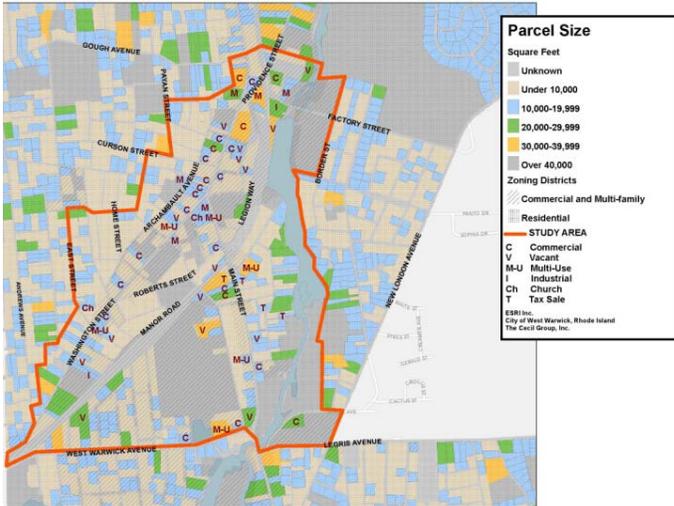
Uses and Development Patterns

The development of Arctic Village occurred over time, with the most active period between the 1870's and the 1920's after the mills were built and housing and commercial developed to support the working population. Centreville Mill appears to have been built in the 1840's and Arctic Mill in the 1850's.

Housing starts to appear in the 1880's (earlier buildings may not have survived). More housing appears in the first decade of the 1900's, along with some commercial buildings, Housing continues steadily through the teens and twenties, and more commercial buildings appear in the first half of the 1920's. Not all of the building dates along Washington and Main Street are recorded in the data received from the Assessors' Office.

In addition to government use, as described above, the uses in Arctic Village include commercial, residential and religious. Commercial buildings, along Main Street, Washington Street and in scattered locations elsewhere within Arctic Village, may include office or retail on the first floor and may include residential units on the upper floors. There are a significant number of vacancies, primarily along Washington street. Upper Main Street appears to be more fully occupied, with the notable exception of the retail buildings at the junction with Washington Street, the former St. James's Church, and the old U.S. Post Office.

Housing is mostly single family, two-family or three-family homes. There are many buildings that are rented as a series of apartments – some of these may not be legal, and the exterior condition is questionable.



The Church of St. John and its associated buildings are an important part of the building fabric on Washington Street, but the interaction between the church-owned property and the side streets (Brookside Avenue and St. John Street) is less successful – a vacant school building, parking lots that are not landscaped, and some outbuildings are in poor condition.

The mills remain an industrial presence in the area, and there are other industrial uses within the Redevelopment Area including truck and equipment facilities, an oil company, auto-related uses, and an empty lot used for depositing fill.

Recommended actions for uses and parcelization character include the following:

- Encourage parcel assembly – create a zoning incentive to encourage developers who may not be interested in a single infill lot to assemble several lots for development. There are several possibilities for combining lots to create a larger and more economically sustainable development.
- Encourage property maintenance – the Town should consider developing methods to encourage or require exterior maintenance of the buildings. This may be through enforcement of current regulations or by creating new incentives and/or penalties.
- Limit uses – uses on Main Street and Washington Village should be limited to commercial and/or mixed use (retail on the first floor and office/residential above). However, the Town might consider limiting uses even further and considering whether certain uses, such as auto-related uses or some industrial uses, should be prohibited from the Redevelopment Area in the future.
- Review zoning – the dimensional standards for the zones within the redevelopment area should be reviewed to ensure that following these standards will reinforce the village atmosphere.

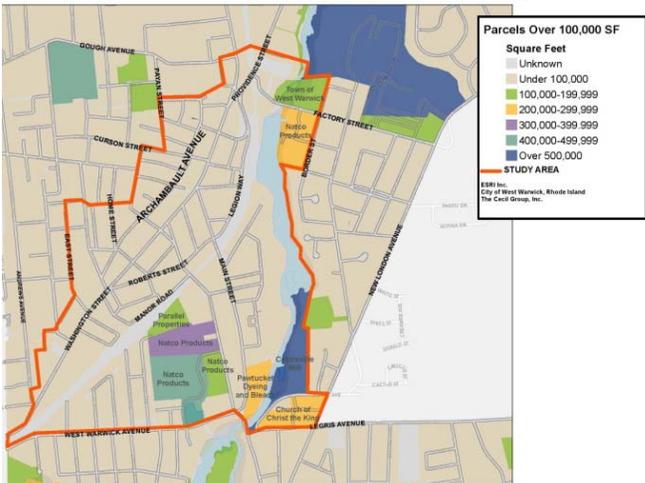
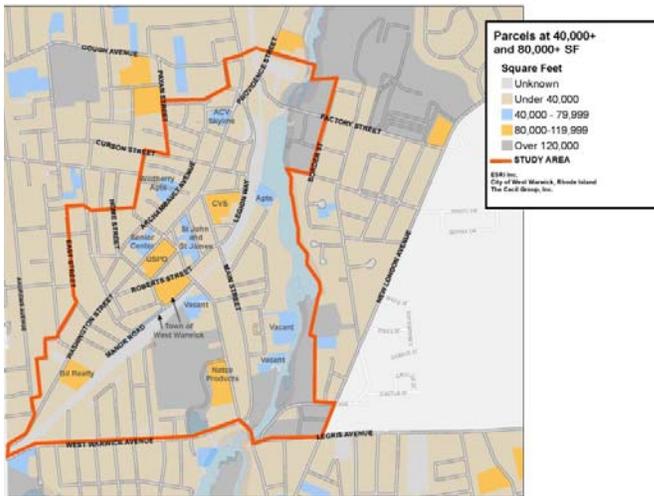


Figure 12 at left shows the pattern of parcelization over the years. The top diagram shows the smaller parcels and uses. The middle and bottom diagrams show the larger parcels and ownership as of the

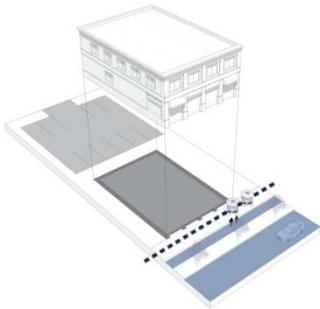
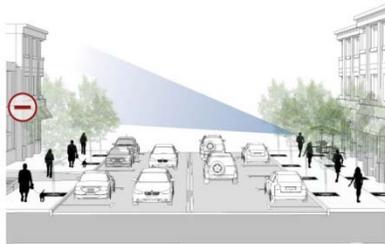
Figure 12: Parcelization Patterns

2009 data from the Town of Warwick Board of Assessors.

Urban Design Character

The current urban design character of the main streets is a mix of older buildings and newer ones. Not all of the new buildings contribute to the original village development – the current U.S. Post Office disrupts the pattern of development along Washington Street. The older buildings share common characteristics – similar height, visibility for ground floor uses, no setbacks from the front lot line (except for major buildings such as the banks, municipal buildings or the church), principal façades and entrances facing the main roads, and parking lots to the side or behind the building.

Recommended actions for urban design character include the following:



- Encourage shared parking – create a zoning incentive to encourage parking for new developments to be accommodated behind the buildings (as with the West Warwick Senior Center) so that the pedestrians along Washington and Main Streets are not confronted with long stretches of parking. Parking could be accommodated to the side of the building, but must have a landscaped buffer between the pedestrians and the parked cars.
- Encourage active uses on the ground floor – create a zoning incentive to encourage retail space on the ground floor, and office and/or residential units above to create an active streetscape.
- Respect historical patterns – create design standards and guidelines for infill development that respect the pattern of streets and architecture that has developed over time.
- Require consistent setbacks – the Rite Aid parcel across from Town Hall is an example of inappropriate setbacks in a village environment. The town should develop zoning that requires a zero setback from the sidewalk (although this could be waived in the case of an outdoor café).
- Landscaped parking – the Town should consider zoning regulations that require that parking lots have a certain amount of landscaped green space to assist with stormwater drainage and provide visual relief from asphalt. Curb cuts must be well-defined and distinct from sidewalks to protect pedestrians.
- Require consistent building standards and guidelines – the Town should establish consistent and well-defined standards and guidelines that maintain the village development and building pattern. The Arctic Design Control District is governed by a set of design standards. These standards should be applied to the entire Redevelopment Area and after a review to see if the standards need to be augmented before applying to this larger area.

Figure 13: Urban Design Character diagrams

The diagrams at left provide guidance for good urban design, incorporating landscape and streetscape elements, the location of on-site and off-site parking, and interaction between buildings and the public realm at the human scale.

Historic Resources

Development in Arctic village followed a pattern – first the mills, then housing for owners and workers, then the commercial building and more housing. The State of Rhode Island has identified four areas within Arctic Village that might be eligible to become historic districts, but there are many buildings along Main Street and Washington Street that contribute to the village character of the area without necessarily being significant enough to formally add to the National Register of Historic Places.

While it is not necessary to require full historic restoration of these buildings, preserving the exterior façade and ensuring that surrounding infill development respects the existing architectural fabric will reinforce the village development pattern and visual heritage.

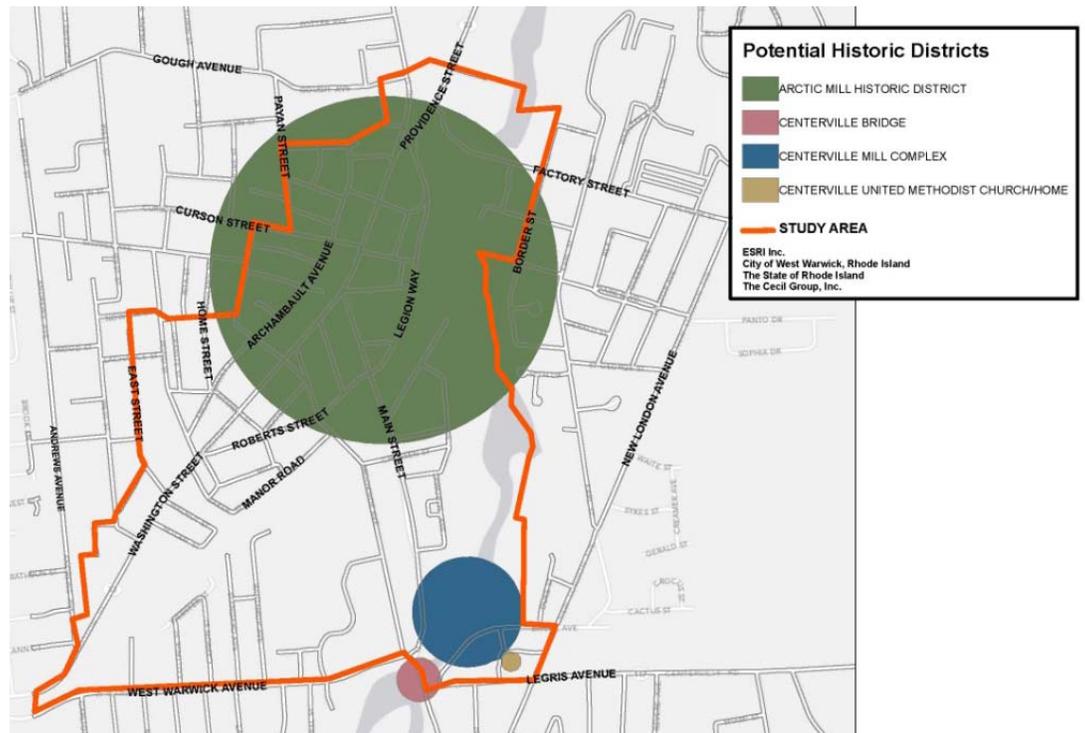


Figure 14: Map of potential historic districts

Recommended actions for Arctic Village’s historic resources include the following:

- Establish an Arctic Village Historical District Commission (or, if more practical, a West Warwick Historical District Commission).
- Create one or more historic districts within Arctic Village. The Town should consider if the districts should be limited to the main streets or include the abutting neighborhoods.
- Establish design guidelines and standards to ensure that new development or renovation of existing buildings is compatible with and enhances the village atmosphere. Standards and guidelines should be compatible with the *Secretary of the Interior's Standards for Rehabilitation*.

- Create zoning that requires review of the exterior appearance of a proposed building (either new construction or renovation) by the new Historical District Commission. This review would be triggered by new building permit requests or by special permit/site plan review applications before the Planning Board.

Sustainability

West Warwick as a whole has taken steps toward sustainability. One initiative includes the proposed geothermal plant, which would provide heating and cooling to area homes and businesses.

Recommended actions for sustainability include the following:

- Geothermal Initiative – given current energy costs, this is an attractive selling point to future developers and business owners. The geothermal system would provide both heating and cooling – initially along Main Street – to businesses and residences who would pay the developer as they would any other utility company. If implemented, this initiative would be the first in the United States and could serve as a model for other communities.
- Business Group as advocates – the Town should establish links to interested business owners and residents.
- Encourage bus use – the Rhode Island Public Transit Authority maintains three bus lines through Arctic Village, as noted below. Bus stops rarely have shelters and the signage is not striking.
 - Route 13 connects Washington and Main Streets to downtown Providence, the Roger Williams Park Zoo, and the Town of Coventry.
 - Route 29 connects Main Street to the Cowesetts Corners shopping center, the Warwick Mall, the Community College of Rhode Island- Knight Campus, the Kent Hospital and runs relatively near the Theodore Francis Green Memorial state Airport and the beach at Conimicut.
 - Route 90A is the Park-n-Ride, with two buses in the morning and two in the evening from the Arctic Center stop on Main Street to downtown Providence.
- Encourage bicyclists – the Washington Secondary Trail is part of an extensive network that begins in Providence and connects with the Connecticut system of bike trails. Bike racks would be helpful for both residents travelling from abutting neighborhood areas to the business district and for bicyclists passing through who might want to stop for lunch or a snack.

Open Space and Natural Resources

Much of the open space in Arctic Village is concentrated along the Pawtuxet River. The Arctic Gazebo, in the center of Arctic Village, provides a formal community gathering space. The gazebo itself appears to be in good condition, and the surrounding park is maintained, but the gazebo has substantial graffiti and the park has trash on the lawn.

The Pawtuxet River and the Washington Secondary Trail could be a beautiful combination, but the view of the river is blocked by scrub trees and brush and by the cliff (the trail is much higher than the water level). The lack of maintenance contributes to a perception that the bike path is not safe.

Vacant lots provide green space but are, in general, not well-maintained.

Recommended actions include the following:

- Clean-up – property owners (including city, state and federal) should be encouraged to clear trash and weeds from their lots. A grant would be necessary to open up views of the Pawtuxet River from the bike trail near the upper end of Legion Way. A lot on Brookside is being used to dump fill – the Town should consider the appropriateness of both this use and the quality of the fill that is being added to that site.
- Consider pocket parks – in the short-term, the Town should work with owners to landscape some of the vacant lots as either pocket parks or community gardens. In the long-term, the Town should consider how it would incorporate green space to the business area and what they might require of developers regarding preserving such space. Visible and well-maintained pocket parks could contribute to the attractiveness of the village downtown to visitors
- Encourage volunteers – public and private parks may have volunteer committees who donate labor (such as Old North Church in Boston). Volunteer organizations frequently aid community-building efforts and provide both watchful eyes and a sense of pride in the appearance of the neighborhood.

Infrastructure and Utilities

A redevelopment plan for the Arctic Village has the potential to result in increased demand for water and sewer capacity there due to a greater intensity and density of activity. In addition, redevelopment may create an opportunity to upgrade sewer mains as well as other utilities in the area providing residents and businesses access to the most current technologies such as via underground telecommunications cable. It is recommended that as design plans for the area are developed, the local utility companies including those for power, water, and sewer be included as stakeholders in the process. The redevelopment design would benefit from ongoing coordination with these providers to ensure that opportunities to upgrade the neighborhood infrastructure are considered and funding opportunities to do so are explored.

1.5 Implementation Strategies

There are two separate levels of implementation for improvement to Arctic Village. The creation of a redevelopment authority and the establishment of its role, authorization of its activities and development of the controlling Redevelopment Plan will take some time to accomplish. In the meantime, certain improvements can be made that will enhance Arctic Village and provide a sense of progress and assurance that the longer-term goals are underway.

Implementation Tools

As the Town of West Warwick begins to encourage the development and revitalization of Arctic Village, there are many tools it can use in the short, medium and long terms. Some of these tools, such as the creation of a redevelopment authority, should begin immediately as they will take time to implement. Other tools, such as banners and wayfinding signs, can be done when funding is available. The redesign of roadways and intersections could take several years to complete and might be tied to the various actions of the redevelopment authority or to further initiatives from the Town of West Warwick or the State of Rhode Island.

Short-term (0-6 months)

- Establish a Redevelopment Authority – the **primary recommendation of this strategy is to create a Redevelopment Authority with its associated responsibilities and actions**. These capabilities are described in *Section 2.1.2* below. The establishment of this Redevelopment Authority will require the completion of technical components required for the Redevelopment Plan under the General Laws of the State of Rhode Island. These components are as follows:
 - Technical evaluation of population density and building intensity recommended for the district and estimates of population growth correlated with the land use plan.
 - Technical evaluation and documentation of the areas of blighted and substandard conditions used as the basis for the redevelopment area designation to meet the legal test standards.
 - Legal description of the corporate powers of the Redevelopment Agency.
 - Conducting and documenting the required public hearings and approvals including finding of conformity with the Master Plan.
 - Preparation of regulatory processes and responsibilities for the Redevelopment Agency.
 - Official language to create the Redevelopment Authority in a form to submit to Town Council.

- Specialized legal reviews of technical procedure to determine blight and substandard conditions, and other legal descriptions including corporate powers, regulatory processes, responsibilities and official language for approvals.
 - Transfer of municipal land – the Town of West Warwick would transfer municipal land suitable for redevelopment to the newly established Redevelopment Authority.
 - Initial project definition – the newly established Redevelopment Authority would need to define its first project and undertake the necessary studies to support that project. The Redevelopment Plan would be amended to provide the required information for this first project and subsequent ones.
- Investigate rehabilitation potential – concurrent with the establishment of the Redevelopment Authority, the Town should work with property owners and affected businesses/tenants of underutilized buildings to determine which buildings could be rehabilitated and the available funding sources. There are current empty buildings that might be suitable for the uses identified in the retail gap analysis.
 - Rocky Ace Hardware is expanding in this area and has a hardware store/garden center model. The Town should reach out to this firm because there is a significant current sales gap for both hardware stores and garden centers and there is at least one building within the Redevelopment Area that may be suitable for rehabilitation and has parking or vacant land suitable for parking.
- MED Zone – the current MED Zone regulations, as currently constituted, do not benefit Arctic Village for a number of reasons. The Town should consider petitioning the Rhode Island legislature to amend the legislation to make it more applicable. The Town should consider the following amendments that would encourage current business owners to improve their properties and expand their business within the MED Zone area.
 - Allow the MED Zone incentives to apply to the expansion and rehabilitation of existing buildings
 - Require business/property owners to substantially invest in their properties and businesses to receive the benefits of the MED Zone.
 - Create a “sunset provision” that, once triggered, would allow businesses to have five years in which to apply. The MED Zone incentives would run for ten years from the date of approval. Arctic Village would receive substantial investment within a relatively narrow time

frame which would increase the likelihood of significant economic benefits to the area.

- Enforcement – members of the public expressed frustration at the lack of enforcement of current bylaws and laws. Simple steps such as enforcement of signage rules, discouraging loitering, painting over areas with graffiti, and requiring property owners to maintain their vacant buildings would create a more positive visual effect on residents, business owners and visitors. A visible police presence – walking the beat – would reinforce the idea that the Town cares about Arctic Village.
- Banners – a quick way to provide a sense of progress would be to hang banners identifying Arctic Village along Washington Street from Main Street to Roberts Street and along Main Street from Legion Way to Crossen Street on the south side. These banners should be distinctive and contribute to the village identity.
- Wayfinding – The only sign directing people to Arctic Village that The Cecil Group team found was just before the junction of Legris Avenue and Main Street. Signs welcoming visitors to Arctic Village should be placed at the junction of Legris Avenue and Main Street, at the junction of Main Street and Providence Street, and along Washington Street, just past the junction with West Warwick Avenue. A welcome sign should be placed at each end of the Washington Secondary Trail as it passes thorough Arctic Village. Signs directing people to Arctic Village and identifying it as a destination should be placed further back along 117, 115, and 33.
- Streetscape improvements – in the short-term, streetscape improvements might be limited to developing a contest for property owners to improve and beautify the façades of their buildings. Successful contests include those sponsored by a local community group to national contests which provide recognition for the entire community.
- Encourage bicyclists – the Washington Secondary Trail is part of an extensive network that begins in Providence and connects with the Connecticut system of bike trails. Providing bicycle racks near West Warwick businesses and advertising relevant businesses at the entry and exit points as the bike trail passes through West Warwick could make it an attractive stop for lunch or a snack. Clearing the brush and weeds between the bike path and the Pawtuxet River would increase the visibility of the river and encourage more people to view both river and path as assets.

Mid-term (6-18 months)

- Amend current ADCD design standards and guidelines – the expansion of the current Arctic Design Control District design standards should

be accompanied by a review of those standards to see if they need to be changed or augmented to reinforce the village pattern of land use and building stock that is vital to maintaining a cohesive identity for Arctic Village.

- Remove one-way streets – Legion Way should be discontinued as it creates a way for drivers to bypass the business district.
- Streetscape improvements – mid-term improvements might include reorganizing the current system of one-way streets (Legion Way, St. Mary's, Bank Street and Roberts Street) that allows vehicular traffic to bypass the commercial area, encourages higher speeds and encourages cut-through traffic along residential streets.
- Historic Districts – creating one or more historic districts that cover some or all of Arctic Village would reinforce the historical development pattern and architecture while potentially making property owners eligible for grants and other assistance. The State of Rhode Island Historic Preservation and Heritage Commission would be able to assist the Town of West Warwick.
- Main Streets Program – there are many organizations, such as the National Trust for Historic Preservation's Main Streets program, which would make effective partners for residents and local business owners to revitalize the Washington Street/Main Street commercial area. These national organizations frequently provide technical tools and training to local groups to enable them to make change happen at a grass-roots level.
- Urban agriculture – the Rhode Island Land Trust Council could help West Warwick develop its own land trust. Although land trusts are thought of as preserving large areas of open space, some local land trusts, such as Southside Community Land Trust, have urban agriculture groups that create small farms on vacant lots in urban areas. Land owners who do not yet wish to improve their properties might be willing to allow a local group to create urban gardens on their property. In some communities, these groups are inter-generational, drawing local residents in to an activity that promotes public health as well as beautifying vacant lots.

Long-term (18 months or more)

- Redesign Legion Way – this road allows drivers to bypass the businesses in Arctic Village, thus diminishing the impact of attracting people to this area. Removing this Legion Way as a public road and integrating it into the overall redevelopment strategy would make more sense, especially given its proximity to the Washington Secondary Bike Trail and the Pawtuxet River.

- Redesign the intersection of Main Street and New London Avenue – Fitzgerald & Halliday identified this as a dangerous intersection that impedes traffic flow to and from Arctic Village.

Funding Resources

The initial primary funding source will need to be the Town of West Warwick itself. Funding can be accomplished in three separate ways – an infusion of funds, bonding, and the transfer of municipal properties.

In many cases, state and federal funding is available as matching grants. The Town of West Warwick should be prepared to appropriate sufficient funds for the newly established Redevelopment Authority so that it can reasonably leverage those funds to apply for grants or to conduct needed technical studies for the first few projects.

The Town can borrow funds for the Redevelopment Authority and offer the income stream from projects to secure the funding. Banks would most likely require a business plan for each property offered as security for the bond payments – again, reinforcing the need for an initial funding source.

Finally, the Town owns property in Arctic Village. These properties are a combination of municipally-owned properties and those that have been taken, or could be taken, because of tax issues. The Town should transfer surplus properties to the Redevelopment Authority which would allow it to begin certain capital improvements and receive income from rentals or funds from sales that would provide further funds for future activities.

Federal

The rounds for some of these grants may have closed, but the list of types should be similar to others that departments and agencies of the federal government will sponsor in future years.

- Community Development Block Grants/Brownfields Economic Development Initiative
- Department of Commerce Economic Adjustment Assistance
- Department of Commerce Investments for Public Works and Economic Development Facilities
- Department of Agriculture Community Food Projects
- Department of Agriculture People's Garden Grant Program
- Department of Agriculture Farmers' Market Promotion Program
- DHCD Choice Neighborhoods
- EDA Public Works and Economic Adjustment Assistance Programs Opportunity
- HUD Multifamily Energy Innovation Fund
- HUD Economic Development Initiative-Special Project, Neighborhood Initiative and Miscellaneous Grants

- HUD Assisted Housing Stability and Energy and Green Retrofit Investments Program
- NEA Challenge America
- Tax Incentives for Preserving Historic Properties

State of Rhode Island

- Governor Chafee’s Main Street Corridor Districts program which provides resources for five key downtown areas – Providence, Central Falls, Pawtucket, West Warwick and Woonsocket.
- Rhode Island Enterprise Zone and Mill Buildings tax incentive programs
- MED Zone
- Tax Incentives for Preserving Historic Properties – although this is currently unfunded, there are efforts to reinstate funding.

Town of West Warwick

- Municipal Tax Incentive Program
- Community Development Block Grant

1.6 Process and Participants

The process used for this study has incorporated intensive public input. Fred Presely, the Town Planner, managed this process with the assistance of a Steering Committee that included residents and members of the Arctic Village business community.

The Rhode Island Office of Statewide Planning provided funding for this report under a Planning Challenge Grant. The Rhode Island Economic Development Corporation has been an active participant in this process. Arctic Village is part of Governor Chafee’s Main Street Corridor Districts program which provides resources for five key downtown areas – Providence, Central Falls, Pawtucket, West Warwick and Woonsocket.

The Cecil Group led the planning team, which included FXM Associates and Fitzgerald & Halliday, Inc. Team members reviewed existing plans and documentation, and visited Arctic Village several times to get a sense of current conditions. The Cecil Group met with the Steering Committee several times to review progress and discuss the public meetings.

There were three well-attended public meetings. The first, on January 24, 2012, was a charrette to introduce the project and the retail gap analysis, and for those attending to break into workgroups to identify current conditions, opportunities and challenges for Arctic Village.

The second meeting was on March 7. The Town Planner and a representative from The Cecil Group met with the Arctic Village Business Association to discuss the project and receive comments and questions.

The third meeting, and the second public meeting, was held on March 8 to discuss the development of the focus areas and traffic and circulation. Participants were able to comment on the studies conducted to date and offer their own observations.

1.7 A Guide to this Report

The remainder of this report is divided into two sections – *Section 2.0 Redevelopment Plan Components* and *Section 3.0 Appendices*.

Section 2.0 Redevelopment Plan Components contains the elements required by Rhode Island State General Laws Chapter 45, Sections 31 to 33. These elements would be used as part of the Redevelopment Plan adopted by the Town of West Warwick. This section includes most of the information and statements of conformance and consistency that would be required for the final Redevelopment Plan, however, further detailed analysis on blight and substandard conditions and recommendations on population density, land coverage and building intensity will need to be researched and prepared prior to the process of creating the Redevelopment Plan.

Section 3.0 Appendices contains the supporting memos, materials and research that underlie the findings of this report. This includes the technical memos from FXM Associates on demographics and their market studies for both retail and residential units; the prototype development analysis; a chart of current zoning requirements; and recommendations of case studies that provide further information on some of the suggested initiatives and how they have worked for other communities.

2.1 Purpose of the Redevelopment Plan

A statement of purpose is required under 45-32-8 (12). The purpose of this Redevelopment Plan is to eliminate and prevent the recurrence of blighting factors, and to provide improved housing conditions, increased economic activity and to create a well-planned, stable, safe and healthful village.

2.1.1 Goals

The goals of the Redevelopment Plan support the purpose of eliminating current conditions of blight and preventing their recurrence. These goals are as follows:

- Undertake initiatives that accomplish the public and/or private redevelopment of vacant or underutilized land or buildings, public open space and infrastructure in a manner consistent with the other elements of this plan and of West Warwick's Comprehensive Plan.
- Develop and apply village center design criteria, standards and guidelines that support and reinforce the historic development patterns of Arctic Village, while allowing for creative innovation that both supports energy efficiency and accommodates alternative usage demands
- Preserve, protect and restore the historic architecture and other assets, which define the character of Arctic Village.

2.1.2 Capabilities and roles of a Redevelopment Authority

A redevelopment authority has certain capabilities that are consistent with the enabling legislation, (Section 45-32-5) including:

- Property acquisition and disposition.
- Use of eminent domain if necessary to facilitate acquisitions needed to implement this Plan.
- Execution of contracts to accomplish its purposes.
- Accomplishing real estate development activities, including renovation, site development or improvements and demolition.
- Using property as described in the Redevelopment Plan.
- Accomplishing infrastructure improvements to support redevelopment goals.
- Borrowing and lending of funds.
- Code enforcement projects.
- Providing technical assistance.
- Undertaking planning.

These capabilities should be established as part of the Redevelopment Plan.

2.1.3 Conformance with Chapter 31 to 33

The Redevelopment Plan must conform to the requirements of the Rhode Island General Laws Chapters 31 – 33, which are the governing legislation for Redevelopment

Agencies (Chapter 31), Redevelopment Projects (Chapter 32) and Redevelopment Financing (Chapter 33).

2.1.4 Conformance with the Comprehensive Master Plan

In accordance with Section 45-32-8, the Redevelopment Plan must be consistent with the *Town of West Warwick, Rhode Island Comprehensive Plan*. The current plan is dated 1994; the Town of West Warwick is in the process of updating this plan. It is expected that the updated Comprehensive Plan and the Redevelopment Plan will be mutually consistent and a statement to that effect should be included in the language of the Redevelopment Plan.

2.2 Redevelopment Area

The boundaries of the proposed Redevelopment Area were determined through studies made by The Cecil Group team and input from the Steering Committee and from three public meetings (two with the general community and one with business owners). The decision was to exclude the majority of the purely residential areas from the Redevelopment Area to focus on the areas that are currently business and mixed-use. The center of the Redevelopment Area corresponds with the center of Arctic Village. The core of the Washington Street/Main Street business area is included within the proposed boundary.

The Cecil Group team looked at market demand, current land use and land ownership patterns, historic development patterns, the susceptibility of some parcels to change from one use to another, and current vacancy patterns. The proposed Redevelopment Area extends beyond the initial Study Area in the southeast corner to include vacant land

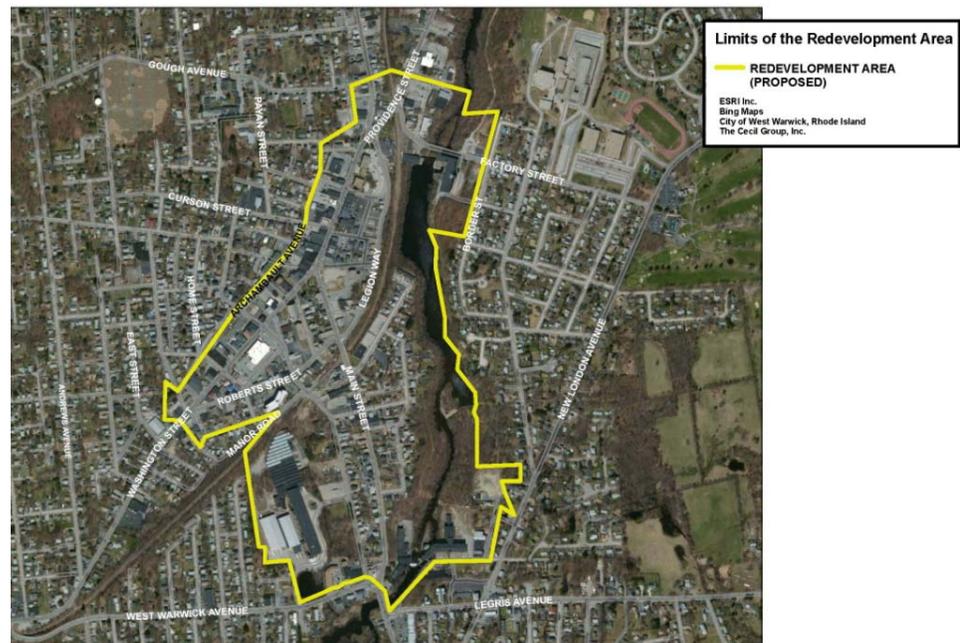


Figure 15: Map of the Redevelopment Area boundaries

contiguous with one of the mills. It also includes the residential neighborhood to the east of lower Main Street as this area contains a mix of business uses, single-family and multi-family homes. The Pawtuxet River is a major asset to the community that would play an important role in the overall redevelopment of the area.

2.2.1 Description of the Redevelopment Area

That certain tract of land shown on Figure 17 situated in the Town of West Warwick, Kent County, the State of Rhode Island, which contains the following parcels as designated on the Town of West Warwick Assessors’ Map updated as of 2009 as well as the public and private rights-of-way adjacent thereto.

Assessor’s Map Number	Lot Number
5	1-25, 27, 29, 38, 43, 49, 148, 163, 189, 201, 217, 346-348, 350, 352, 357, 358, 396, 398, 558, 572, 595, 620, 626, 627, 652, 657, 658, 662, 663, 671
6	1, 2, 3, 6, 7, 8, 11-14, 16-19, 23, 26, 31-33, 36-39, 41-43, 46-48, 50, 52, 53, 56-58, 61-63, 67, 68, 71-73, 77, 78, 81-83, 86, 88, 92, 152, 153, 156, 172, 176, 177, 178, 184, 185, 187, 188, 189, 191, 198, 201, 203, 206, 207, 212, 213, 216-218, 221-224, 236, 241, 253, 254, 262, 271, 273, 278, 281, 286-288, 291, 302, 306-308, 312, 313, 318, 321-323, 326-328, 331, 347, 351, 355, 357, 358, 362, 363, 366-368, 371-373, 376, 377, 381-383, 386, 391, 393, 396, 397, 403, 412, 413, 417, 419, 420, 421, 423, 425-428, 436, 437, 456, 461, 471-478, 481, 482, 486, 488, 503, 507-509, 511-513, 516, 517, 521-523, 526, 528, 531-533, 779, 780, 784, 785, 1029, 1037, 1045, 1057, 1059-1061, 1067, 1069, 1070, 1079, 1102, 1115, 1130, 1136, 1138, 1139
7	266, 268-279, 292, 295, 308, 374, 390, 399, 471, 480, 486, 498, 499, 533, 638, 639
15	51, 70-74, 76, 77, 79-83, 85-88, 91, 95, 97, 98, 99, 101, 104, 106-109, 130, 141, 142, 146, 149, 162, 164, 166, 168, 467, 468, 477, 480, 482, 483, 484, 486, 490, 491, 497-500
16	21, 22, 25-28, 30, 31, 33-35, 38, 45, 48-50, 54-56, 58-60, 68, 69, 70, 73,74, 75, 76, 78, 79, 80, 83-93, 95, 96, 105, 107-111, 113, 115, 118-123, 129, 130, 131, 312, 314, 318, 334, 373, 374, 385, 390, 405, 424
17	3, 5, 8, 9, 13, 15, 18-20, 22, 24-27, 61, 122, 123, 127, 129, 140, 141, 144, 181, 188, 189, 190,192-194

2.2.2 Summary of Existing Conditions

The following is a summary of existing conditions including current land uses, zoning, circulation, population density, and coverage, building intensity and blighted and substandard conditions.

Land Use

Current land use patterns show commercial development along Washington Street and upper Main Street (above the junction with Washington Street). Some two-family houses and multi-family housing are also present, mostly in the lower end of Washington Street. Scattered commercial, industrial and mixed use buildings are present on the lower end of Main Street and toward the center of the village. The entire village is surrounded by residential uses, a mix of single-family and multi-family housing. Data from the West Warwick Assessors' Office from 2009 identifies vacancies scattered throughout the Study Area.

The Town of West Warwick owns a significant amount of property in this area, including the municipal buildings on upper Main Street (Town Hall, the police station and the fire station), the West Warwick Senior Center on lower Washington Street, and the West Warwick Housing Authority property on Manor Road. The State of Rhode Island has a labor training center with an apparently underused parking lot on lower Main Street.

The mills are a big presence on the eastern end of Arctic Village (Arctic Mill to the north and Centreville Mill to the south). The headquarters of Natco Products Corporation owns a large complex in the southern part of Arctic Village; they appear to own Arctic Mill as well. Centreville Mill is listed on the National Register of Historic Places (NPS reference number 05000582).

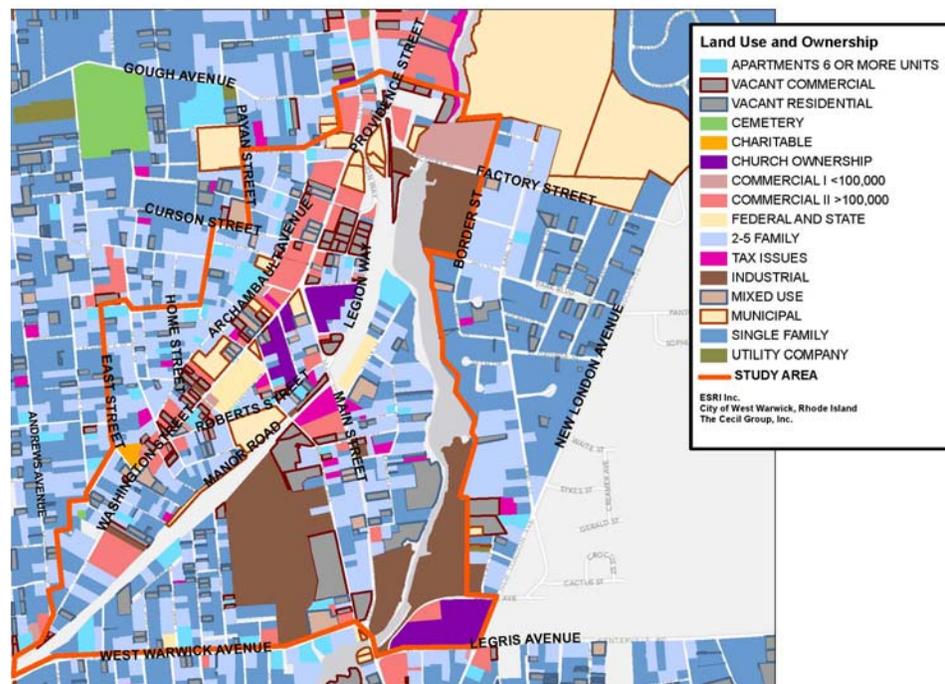


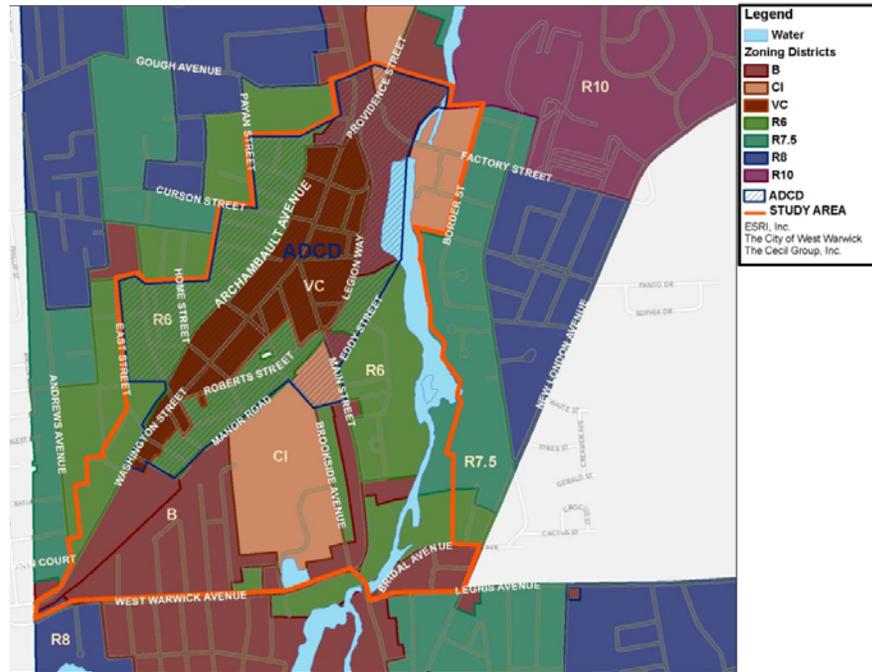
Figure 16: Land Use map

Arctic Village has a strong religious presence in its building fabric. The church of St. John the Baptist, containing the merged parishes of St. John and St. James, has a strong

presence on Washington Street, just below the junction with Main Street. The vacant parcel at the heart of Arctic Village is the site of the former St. James Church. Christ the King is located in the southeast corner of the Study Area on Legris Avenue.

Zoning

The planning and regulatory context for Arctic Village is complex. The village itself has five zoning districts and a design control district overlay.



17: Zoning map

Figure

Arctic Village has several zoning districts. They are as follows:

- Business (B) – minimum lot size of 10,000 square feet; does not allow new dwelling units; some use restrictions.
- Commercial/Industrial (CI) – minimum lot size of 40,000 square feet; significant use restrictions.
- Village Commercial (VC) – no minimum lot size; two-family and multi-family dwellings allowed by special permit; use profile similar to B but with some further restrictions.
- Residential (R-6) – minimum lot size of 6,000 square feet; allows single-family and two-family by right and multi-family by special permit; does not allow most commercial uses.
- Residential (R-7.5) – minimum lot size of 7,500 square feet; allows single-family and two-family by right and multi-family by special permit; does not allow most commercial uses.
- Arctic Design Control District (ADCCD) – This is an overlay across the Village Commercial and part of R-6, CI and B; allows multi-family by

right and other specific uses compatible with a village district. Non-conforming uses are not allowed to expand and the Planning Board has discretion with regard to certain dimensional standards, parking, signage, use, density, and architectural design for applications within this district. Design standards apply to this area and should be incorporated into the redevelopment plan.

Existing Major Thoroughfares

Route 117 (Legris Avenue and West Warwick Avenue) is the major principal arterial that serves West Warwick and the region. Washington Street, Main Street and West Warwick Avenue form a triangle that includes much of the commercial area of Arctic Village. These roadways also provide the main access to and through the village, connecting to Providence and Factory Street at the north end of Main Street and to Legris Avenue at the junction of Main Street and West Warwick Avenue. Washington Street continues beyond Arctic Village after it passes the junction with West Warwick Avenue.

Brookside Avenue is a secondary means to travel through the village, while Legion Way allows traffic to bypass upper Main Street. Outside Arctic Village, the combination of Factory Street, New London Avenue and Legris Avenue allow traffic to bypass the entire village; while Factory Avenue, Earl Street and Legris Avenue provide a secondary bypass.

Major crossings in the area include the following:

- Main Street and New London Avenue
- Main Street and Legris Avenue
- Main Street and West Warwick Avenue
- Main Street and Washington Street
- New London Avenue and Legris Avenue
- Main Street, Roberts Street and Legion Way
- Main Street and Washington Street
- Washington Street and West Warwick Avenue
- Providence Street, Main Street and Legion Way
- Providence Street and Factory Street

Current operational conditions show that the current transportation network can support existing demand. However, delays have been noted westbound on Route 117 approaching New London Avenue and Legion Way and Main Street during the afternoon peak hour. Other problems include closely-spaced intersections that create queuing issues (Main Street and Legion Way; Providence Street and Factory Street). Left-turning vehicles and vehicles using on-street parking also impede traffic flow.

The intersection of Main Street and New London Avenue, south of the Study Area, is a non-traditional intersection that creates problems with visibility, reaction time, and turning movements for drivers.

The three areas of entry make access to Arctic Village difficult, and the ease of bypassing the main commercial area is a challenge to businesses trying to attract customers. In addition, there are at least three separate ways to access Arctic Village from the highway with no signage to direct motorists who may be looking for the area. Legion Way, Bank Street, St. Mary's Street and Roberts Street are all one-way streets that allow traffic to bypass the businesses on Main Street and create an incentive for higher travel speeds.

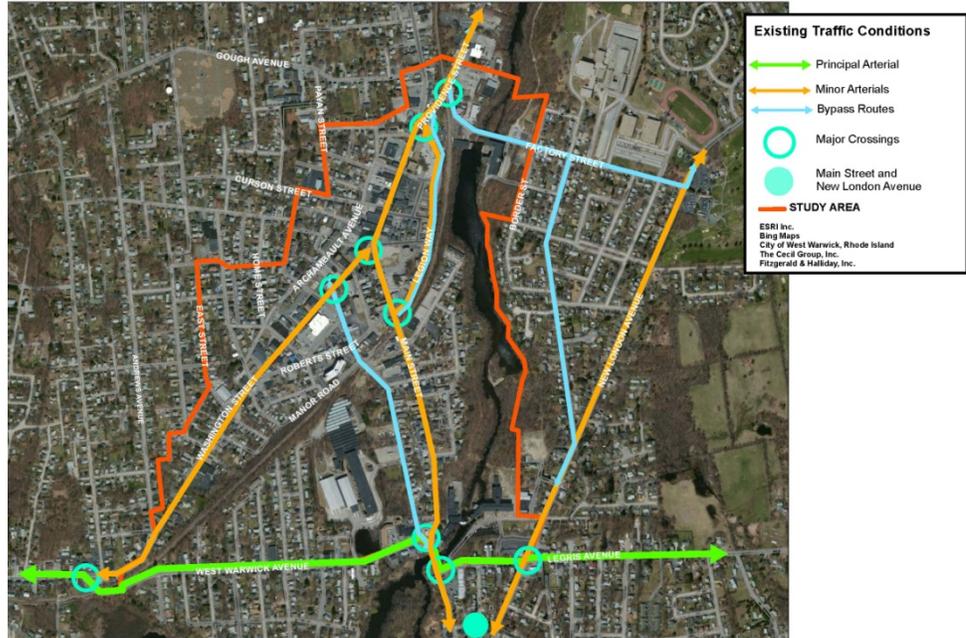


Figure 18: Circulation map

Population Density, Land Coverage and Building Intensity

This section requires additional technical studies.

Blighted and Substandard Conditions

This section requires additional technical studies.

2.3 Project Requirements

Once the Redevelopment Authority is established, it will begin to undertake projects. These projects could either consist of redeveloping parcels that have been transferred to the Redevelopment Authority by the Town of West Warwick, acquiring other parcels, assisting the redevelopment of parcels under private ownership, or a combination of any of these approaches. The Redevelopment Authority will need to amend the Redevelopment Plan for each project based on the technical requirements listed in *Section 2.3.1* as a result of the studies listed in *Section 2.3.2* below.

2.3.1 Technical Requirements

These technical requirements assume that the City would transfer control of its existing parcels that are not needed for municipal use to the Redevelopment Authority for future

development activities, and that the Redevelopment Authority would seek the ability to acquire scattered parcels and conduct a program of façade and other property improvements. The technical requirements include the following:

- General descriptions of the proposed project.
- General statement and mapping regarding proposed conditions, covenants and other restrictions that may be associated with the project
- General relocation approach and proposed method.
- Statement of proposed project cost and financing methods for the project.
- Description of general program concept for voluntary repair and rehabilitation.
- Description of general intent associated with acquisition of scattered parcels of real property.
- Specialized legal reviews of these segments.
- Review of design guidelines for the Redevelopment Area and on a project-by-project basis.

2.3.2 Project Planning

For each project, the Redevelopment Authority would undertake planning initiatives in order to advance the project. These planning initiatives would need to provide the enhanced technical studies to support the range of negotiated agreements, approvals, and possible actions that the Redevelopment Authority would contemplate. These include the following:

- Development Studies – additional detailed development studies would need to be undertaken to confirm the site capacity and overall development direction. This task assumes that a collaborative effort is undertaken with one or more of the existing property owners who may be participants in the redevelopment effort.
- Survey – for any anticipated acquisition or construction of roadways or infrastructure, a survey will be needed to advance detailed planning.
- Engineering Studies – engineering studies would be needed to establish the approach to off-site improvements, including roadways, intersections, sidewalks, and infrastructure.
- Acquisition and Relocation Plan – the acquisition and relocation planning would undertake the initial estimation of the value of land to be acquired and all associated costs, including relocation.
- Financial Analysis – a more advanced financial analysis would need to be undertaken to establish the assumptions concerning the public sector costs and sources of funding and financing.
- Agreement Structure – draft agreement structures for joint public/private development actions would be created and revised in concert with negotiations and discussions with potential development participants.

2.4 Plan of Land Use and Development

The following is a summary of elements required under Chapter 45-32-8, including proposed changes to land use and/or zoning; proposed changes to streets and/or utilities; and standards of population density, land coverage and building intensity. This section also contains projected acquisitions, restrictions on disposal and future use and cost information.

2.4.1 Proposed Land Use

No changes are suggested at this time, but the Redevelopment Authority should consider restricting certain types of land uses that are currently allowed but incompatible with village development. The newly restricted land uses could include auto-related uses and other uses that are restricted within the Arctic Design Control District, but not within the entire Redevelopment Area.

2.4.2 Proposed Population Density, Land Coverage and Building Intensity

This section requires additional technical studies.

2.4.3 Proposed Changes in Streets and Utilities

There are no changes to the streets and utilities at this time. Once established, the Redevelopment Authority should review streets and utilities on a project-by-project basis to determine likely impact and needed mitigation.

2.4.4 Proposed Zoning

No zoning changes are proposed at this time. However, there are a few areas that the newly established West Warwick Redevelopment Authority should explore. These include the following:

- Demolition delay – the creation of a demolition delay bylaw should be explored and evaluated as a method of supporting the retention of key historic properties that contribute to the building fabric of Arctic Village
- Historic districts – the Redevelopment Authority should explore creating one or more historic districts
- Design guidelines and standards – there are design standards in place for the Arctic Design Control District. These standards should be reviewed, augmented and implemented for the entire Redevelopment Area.
- Dimensional standards – as part of the zoning review, the Redevelopment Authority should consider evaluating the current zoning for the Redevelopment Area to ensure that the dimensional standards are consistent with the overall strategy.

- Land use – the Redevelopment Authority should consider potential restrictions on land use to ensure the continuation of the village atmosphere.

In addition, the Redevelopment Authority should review zoning on a project basis.

2.4.5 Proposed Major Thoroughfares

There are no changes to the major thoroughfares at this time. The Redevelopment Authority should review the system of one-way streets and major intersections and conduct a study to evaluate the impact of development according to this strategy on traffic flow.

2.4.6 Acquisitions and Demolition

No acquisitions are proposed at this time nor are there any planned demolition projects. Should the West Warwick Redevelopment Authority, once established, choose to amend the Redevelopment Plan to incorporate a specific project or projects, the amendment should include, as required by 45-32-8 (8), a list of land to be acquired and buildings to be demolished.

2.4.7 Restrictions on Disposal and Land Use

There are no restrictions on disposal and land use at this time. Once established, the Redevelopment Authority should review restriction either on a project-by-project basis, in terms of financing, or by establishing an overall policy.

2.4.8 Relocation Requirements

No requirements for relocation are anticipated at this time. Should the West Warwick Redevelopment Authority, once established, choose to amend the Redevelopment Plan to incorporate a specific project or projects, the amendment should include, as required by 45-32-8 (10) a “general statement of the extent of relocation resulting from the proposed redevelopment of the area and the proposed method for re-housing of displaced persons.”

2.4.9 Financial Plan

No financial plan is required at this time. Should the West Warwick Redevelopment Authority, once established, choose to amend the Redevelopment Plan to incorporate a specific project or projects, the amendment should include, as required by 45-32-8 (11) a “statement of the estimated cost of carrying out the redevelopment plan, and a description of the method of financing the proposed redevelopment project.”

3.1 Technical Memoranda

- Retail Opportunity/Gap Analysis
- Residential Market Analysis
- Demographics

3.2 Prototype Development Study

3.3 Current Zoning Characteristics

3.4 Case Studies

Appendix 3.1

Technical Memorandum

Arctic Village Revitalization Study

Prepared by **FXM** Associates
May 2012

Social and Economic Characteristics of the Arctic Village Study Area

The following highlights and charts provide an overview of the Arctic Village Study Area population, housing, and business activity compared to the Town of West Warwick. This summary was derived from secondary data sources and is augmented by descriptions of existing conditions in the Study Area contained in other sections of this report. More detailed secondary source data and tables are presented in the Appendix to this report. ¹

Population and Households

- In 2011, the estimated 1,608 residents in the Arctic Village Study Area represented 5.5% of the West Warwick population (29,125), and was projected to grow 1.7% reaching 1,543 by 2016 compared to 1.3% population growth town-wide (28,754) over the next five years.
- • An estimated 742 households in Arctic Village comprised about 6% of all West Warwick households (12,607); the number of households was projected to decline 3% in the Study Area and .04% town-wide by 2016.
- Annual median household income in Arctic Village was estimated at \$32,122, about 58% of the West Warwick median income of \$47,283 in 2011.
- About 5% of Arctic Village households were family households (372), and 13% of these family households were classified below federal poverty level compared to 8% town-wide.
- Arctic Village residents had a slightly younger median age than the Town overall at 37 years and 40 years, respectively; about 25% of the Study Area population was 17 years or younger and 20% was 55 years and older compared to 21% and 26% town-wide in same age groups.
- Approximately 76% of Arctic Village residents aged 25 and older had high school level and above education, and 12% had bachelor, master, professional or advanced degrees, compared to West Warwick educational attainment levels of 85% and 21%, respectively.
- An estimated 1,246 residents aged 16 and older (78%) accounted for 5% of the West Warwick labor force, 700 workers (54%) were in civilian jobs, and 40% were not in the labor force compared to 32% town-wide.

¹ Nielsen *SiteReports* 2011 Demographic Snapshot

- Approximately 48% of employed Arctic Village residents held jobs classified as White-collar occupations, 29% Blue-collar, and 23% Service/Farm compared to town-wide occupations classified as 60% White-collar, 22% Blue-collar and 19% Service/Farm.
- About 20% of employed Arctic Village residents were in Office/Administrative Support jobs, followed by Food Preparation/Serving and Sales/Related at 9% each; the largest job categories in West Warwick overall were Office/Administrative (17%), Sales/Related (13%) and Management (8.4%).
- About 81% of Study Area residents drove alone to work, 13% carpooled, 18% had no vehicle and 50% owned one vehicle; town-wide about 84% drove alone, 11% carpooled, 9% had no vehicle, and 40% owned one vehicle.
- The average travel time to work was 25 minutes for residents in the Study Area and Town.

Arctic Village & Town of West Warwick

Population & Households	Arctic Village Study Area	% of Study Area	Area % of Town	Town of West Warwick	% of Town
Population					
2016 Projection	1,543		5.4%	28,754	
2011 Estimate	1,608		5.5%	29,125	
<i>Projected Growth 2011 - 2016</i>	-4.04%			-1.27%	
<i>Estimated Growth 2000 - 2011</i>	-7.59%			-1.09%	
Households					
2016 Projection	720		5.7%	12,553	
2011 Estimate	742		5.9%	12,607	
<i>Projected Growth 2011 - 2016</i>	-2.96%			-0.43%	
<i>Estimated Growth 2000 - 2011</i>	-5.24%			1.38%	
2011 Estimated Median Household Income					
Household Income Less than \$25,000	\$32,122		67.9%	\$47,283	
Household income more than \$150,000	272	36.7%	8.6%	3,173	25.2%
	11	1.5%	2.5%	447	3.5%
2011 Estimated Population Age 25+ by Educational Attainment					
Less than 9th grade	1,086			20,826	
High School Graduate (or GED)	112	10.3%	11.0%	1,021	4.9%
Bachelor's degree or above	396	36.5%	5.6%	7,127	34.2%
	129	11.9%	3.0%	4,342	20.8%
2011 Estimated Population Age 16+ by Employment Status					
Civilian - Employed	1,246	77.5%	5.3%	23,603	81.0%
Not in Labor Force	703	56.4%	4.9%	14,493	56.4%
	493	39.6%	6.5%	7,576	32.1%

Source: Nielson *SiteReports* 2011 and FXM Associates

- The 812 housing units in Arctic Village comprised about 6% of the West Warwick total housing stock (13,363 units); about 91% of the Study Area housing was occupied compared to 94% in West Warwick overall, and 30% was owner-occupied housing compared to 59% town-wide.

- Median value of Arctic Village owner-occupied housing was estimated at \$173,702 in 2011, about 91% of the West Warwick median owner-occupied housing value of \$146,099.
- Single-family structures were 19% of Arctic Village housing stock, and 45% of West Warwick housing stock; 2-unit and 3 to 9-unit structures were 22% and 27% of the Study Area, and represented 14% and 12% of housing structures town-wide.
- More than 56% of all Arctic Village housing units were in structures built before 1938, compared to 24% in West Warwick overall, and about 8% of Study Area housing was built since 1980 compared to 27% town-wide during the same period.

Business Activity and Employment

- An estimated 133 business establishments located in the Arctic Village Study Area employed more than 1,000 workers, generated over \$104 Million in 2011 sales; and accounted for 16% of all West Warwick businesses, 12% of all jobs and 10% of all sales.
- Service sector businesses accounted for 41% of all Arctic Village establishments, and 40% of all service businesses in West Warwick; retailing represented about 26% of Study Area business establishments, and about 23% of town-wide retailing.
- The 19 Public Administration establishments in the Study Area comprised 68% of the public administration (government) sector in West Warwick, and employed 240 workers, representing 58% of all such jobs town-wide in that sector.
- Justice Public Order & Safety establishments provided 15% of employment in the Study Area, followed by Social Services at 13% and Food Stores at 9%; the largest categories of employment town-wide were Insurance Agents Brokers & Services (12%), Eating & Drinking Places (9%), and Educational Services (7%).

Arctic Village & Town of West Warwick

Business Activity Summary	Arctic Village Study Area			Town of West Warwick		
	Number of Businesses	Number of Jobs	Annual Sales (Million \$)	Number of Businesses	Number of Jobs	Annual Sales (Million \$)
Industries, Jobs and Business Sales						
All Industries	133	1,042	\$104.2	848	8,574	\$1,008.5
All Manufacturing (SIC 20-39)	5	51	\$2.8	56	1,280	\$96.1
All Retailing (SIC 52-59)	34	275	\$34.5	195	1,969	\$253.2
All Services (SIC 70-89)	54	327	\$32.6	338	2,420	\$206.9
Public Administration (SIC 90-97)	19	240	0	28	413	0

Source: Nielson *SiteReports* 2011 and FXM Associates

Technical Memorandum

Arctic Village Revitalization Study

Prepared by **FXM** Associates
May 2012

Retail Opportunity/Gap Analysis: Market-driven Retail Development Opportunities in Arctic Village

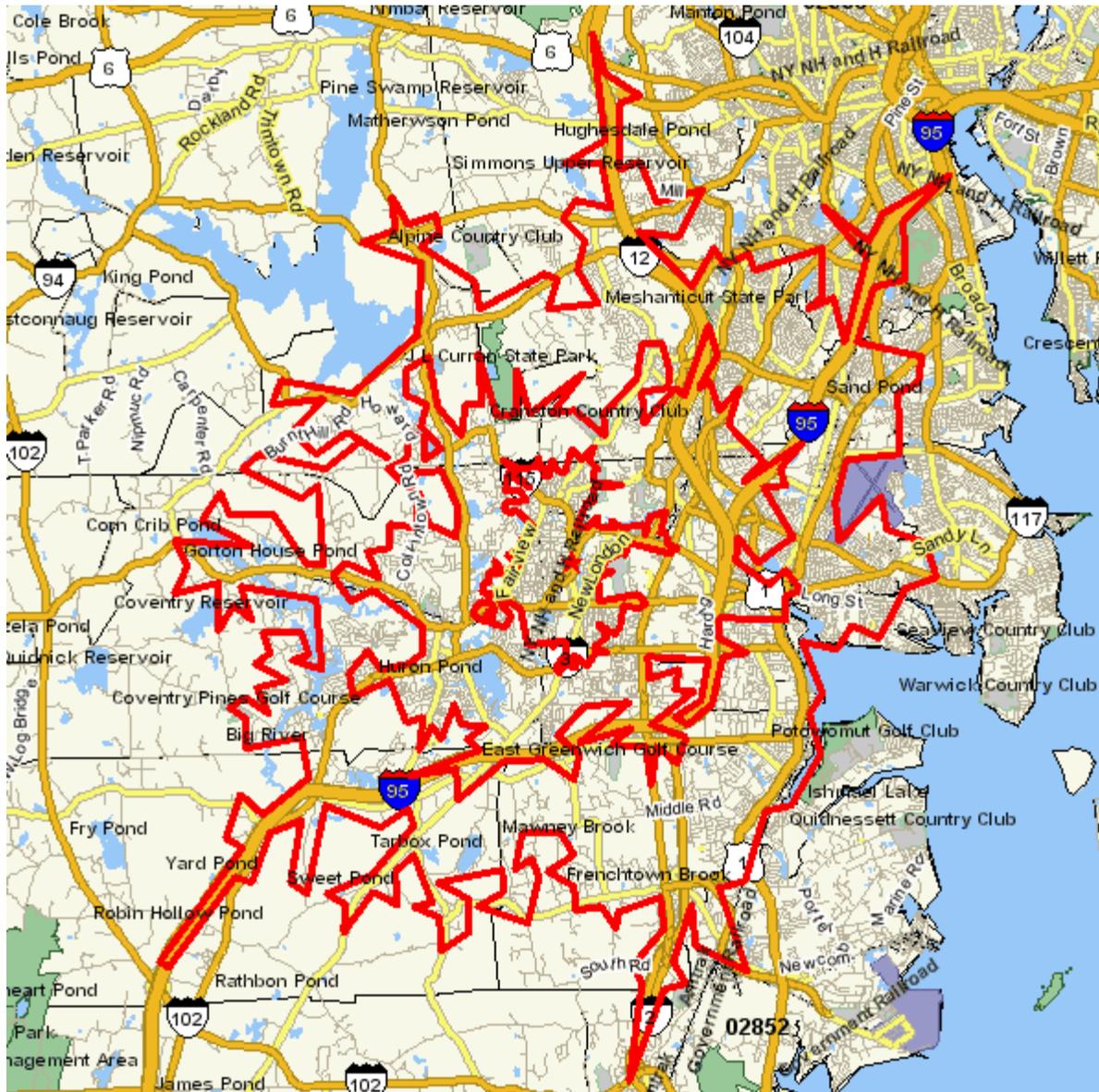
A Retail Opportunity/Gap analysis is a tool used by virtually all major retailers and chain restaurants to gauge market demand and competition within a specified geographic area. It represents a snapshot of the current expenditures of consumers within a geographic area and actual retail store sales matching those expenditures within the same geographic area. Smaller establishments do not typically have the resources to prepare a retail gap analysis on their own. Local officials, property owners, and real estate brokers, therefore, may find the results of a retail opportunity/gap analysis useful in efforts to recruit successful small retailers and restaurants outside their community to open another establishment in their community. The retail opportunity/gap analysis also may help prospective investors in a new establishment better understand market opportunities.

The retail opportunity, or gap, analysis shows the potential demand for various types of retail development within a defined market area by comparing estimated household expenditures in a range of retail store categories with actual store sales in those categories. Where expenditures by households in the market area exceed sales, a gap or opportunity exists for stores within the market area to “capture” more of those household expenditures. Conversely, where market area household expenditures are less than actual sales in particular retail categories, stores in the market area already attract consumer dollars from outside the market area and opportunities for additional retail development would be more limited. The retail gap analysis identifies current opportunities for retailers to locate new or expand facilities, and is based on established empirical evidence that people will typically purchase comparable goods and services within the shortest available walking or drive-time from where they live.

Retailers define market areas in terms of drive-time distances, with a 15-minute drive-time considered the maximum market area definition for all but the largest stores and store types. Market support within a 5-minute drive-time is considered the drive-time reach of convenience stores; and, market support within a 10-minute drive-time is considered essential for most medium sized stores and restaurants (the types found in community center or strip malls, plus many destination retail shops and restaurants that are stand alone or in downtown or village centers). If a specific category of retail sales opportunity were shown for a 5-minute drive-time market area and also held up at the 10 and 15-minute market area, then most retailers would consider market conditions favorable – from a demand standpoint –for locating a store within that market area.

Figure A shows the geographic area covered by 5, 10, and 15-minute drive times of Arctic Village.

Figure A
5-10-15 Minute Drive Times of Arctic Village Center



Source: A.C. Nielsen Site Reports, 2011 data, and FXM Associates

Overall, each of these trade areas (from the center of the project area) shows a significant influx of retail sales for most of the detailed store types examined by FXM in the opportunity/gap analysis. In other words, persons living outside the 5-10-15- minute trade areas are shopping locally. There are, however, specific potential market opportunities within the Arctic Village project area, as shown in the table below:

Table 1
Retail Opportunity/Gap for Selected Store Types

Store Type & NAICS Code	5 Minute Drive Time	10 Minute Drive Time	15 Minute Drive Time
Total Retail Sales Incl Eating and Drinking Places	(\$20,846,237)	(\$1,138,725,766)	(\$1,559,924,086)
Hardware Stores-44413	\$2,259,327	\$7,081,384	\$7,108,645
Nursery and Garden Centers-44422	\$1,471,486	\$5,968,092	\$13,937,654
Office Supplies and Stationery Stores-45321	\$1,747,226	\$746,689	\$2,614,214
Limited-Service Eating Places-7222	\$6,609,138	\$369,820	(\$14,219,189)

Source: A.C. Nielsen *Site Reports*, 2011 data, and FXM Associates

The findings from a retail opportunity gap analysis can be useful in a revitalization planning study by identifying possible commercial uses with likely market support to help formulate redevelopment programs for vacant storefronts and other under-utilized property. The results often are used by local economic development agencies to implement successful business recruitment efforts while supporting growth of existing retailers.

The next table shows potentially supportable square footage (SF) in Arctic Village – based on the retail opportunities identified above, median sales per SF, and median store sizes for the selected store types.

Table 2
Estimated Number of Stores and Square Footage by Store Type Based on Retail Opportunity/Gap for Arctic Village

Store Type & NAICS Code	Sales Volume Opportunity	Median Sales per SF	Supportable SF	Median Store Size	Hypothetical Number of Stores	Stores capturable in ArcticVillage	SF Potential
Hardware Stores-44413	\$7,108,645	\$130	54,682	13,200	4	1	13,200
Nursery and Garden Centers-44422*	\$13,937,654	\$185	75,339	1,600*	1*	1*	1,600*
Office Supplies and Stationery Stores-45321	\$2,614,214	\$175	14,938	4,000	4	1	15,000
Limited-Service Eating Places-7222	\$6,609,138	\$280	23,604	1,750	13	4	7,000
TOTALS						7	35,200

*Facility sizes vary greatly. Shown is that for a Nursery & Garden Center typical in a suburban Shopping Mall.
A much larger facility could be supported by the apparent opportunity/gap that suggests a much higher supportable sales and square footage.

Source: A.C. Nielsen *Site Reports*, 2011 data; Urban Land Institute, *Dollars and Cents of Shopping Centers*; and FXM Associates

Caution must be taken in interpreting the results of a retail gap assessment. While demand is apparent for certain store types, some retailers rely on the level of pedestrian traffic generated in a shopping mall to garner a significant portion of their sales – Arctic Village cannot compete with malls for pedestrian traffic. Convenient parking is also essential, as are competitive rents and an attractive environment for daytime and evening shopping. However, the data shown in **Tables 1 and 2** can be useful to property owners, brokers, and economic development professionals as part of a strategy to attract successful retailers within the region but outside the immediate market to locate an additional store in Arctic Village. Small business owners without *Arctic Village Retail Market Analysis*

the resources for a retail gap analysis may find these data – and the apparent competitive market advantage they indicate -- an inducement, especially when these data are part of a package of incentives, including favorable lease rates during initial years of operation, joint promotion and advertising options, and a supportive political and private sector business climate.

The retail opportunity/gap analysis is not meant to define the only opportunities for expanding retail uses in Arctic Village. A well-managed business with a successful retailing concept/product/service can succeed -- even where current store sales suggest that demand is already satisfied -- by out-competing its rivals. For example, excellent restaurants – those with quality food and service, diverse offerings, and responsive market pricing – may find the attributes of Arctic Village – which are distinctive compared to a regional or strip mall -- and favorable lease terms attractive and could be successful by attracting customers from a broader geographic area as well as those now frequenting other existing restaurants.

Summary of Retail Opportunity/Gap Analysis

- The retail gap analysis can be a useful tool in recruiting small retailers. It is an established method of evaluating market potential often used by chain stores and other retailers with internal expertise or technical resources that smaller retailers may lack.
- The most effective strategy for recruitment is to find a successful retailer/restaurant in the larger region that fits the “image” you are trying to foster or create, and ‘pitch’ them on the advantages of your location.
- In the case of Arctic Village, each of the store types that emerged from the retail opportunity/gap analysis has the potential for being a “destination” that does not depend on a large amount of foot traffic or a concentration of other retailers – neither of which conditions now prevail in Arctic Village.

The retail gap analysis revealed potential business development opportunities that could support Arctic Village revitalization goals to increase retail and restaurant destinations, expand the diversity of commercial activity, and attract more families, students, young and older adults. Preliminary market investigation for this planning study identified retail categories, store types and store sizes for possible re-occupancy of vacant property or new construction. Following discussion at Steering Committee and public meetings, three concepts with identified potential market support (demand) were examined to consider key factors influencing business location, target segments, and nearby competition.

- **Nursery and Garden Center** businesses include lawn and garden equipment, outdoor power equipment, nursery, garden center, and supply stores. Rhode Island has more than 24 of these establishments (year-round and seasonal), including at least three in Warwick. The entire retail industry is in transition, and independent garden centers competing successfully with mass merchandisers (chains, big-box), have found critical factors are: excellent selection, larger plants, personnel service, and niche marketing with a trend catering to

different age segments of the population.¹ Garden centers and nurseries purchase plants and produce from regional distributors, farm and co-operative associations, or harvest their own fields. Garden center facilities are permanent wood frame or steel buildings with retail sale space, office, work area, cooler, storage (outdoor and indoor), and restrooms. Most garden centers incorporate a greenhouse, some have display gardens and picnic area, many sell allied or ‘add-on’ items (tools, seeds, fertilizer, mulch), and others include bird feeders, patio bricks and stones, specialty clothing as well as giftware.²

General site selection guidelines for garden centers and greenhouses recommend locations near a population center on a road with high traffic volume (good visibility, reduce advertising budget), good vehicular access (patrons and deliveries), and good exterior lighting to improve visibility, safety, and sense of security.³ Industry experts suggest sites of 4-5 acres with expansion area for a garden center/greenhouse facility, excluding crop production; however, successful garden centers often operate on smaller sites in dense, urban areas using off-site storage, regional wholesale growers, Market Growers and Grow Local-Buy Local food supply networks. The availability and cost of utilities was identified as a very important factor in locating a garden centers – water supply suitable for irrigation, electricity, gas, telecommunication system for internet sales, sewer/stormwater drainage.

Garden centers and greenhouses require sizable amounts of electricity and gas, therefore, a location with power and gas available on site should be considered more valuable as described in industry reference sources, and advertisements of regional garden center facilities for sale. The Arctic Village geothermal project may be able to provide a more competitive price for this power-intensive use at a suitable site and promote development of a garden center/greenhouse facility, in concert with other Town initiatives for sustainable economic development, youth entrepreneurship, and environmental education.

- **Limited Service Eating Places** usually are fast-food restaurants, cafeterias, and commonly franchise operations. Features characterizing these restaurants include, a limited menu prepared with minimal food-handling and culinary skills, disposable and take-out containers, and many have drive-through or walk-up service; full Service restaurants have several menu categories prepared to order by chefs, and waitrons offer table service.⁴

A brewpub featuring Rhode Island micro-brewery products was selected as an example of a distinctive, themed limited service restaurant that could be independently developed, and begin promote Arctic Village as a regional dining destination. Brewpubs are restaurants --

¹ “Independents can compete successfully with mass merchandisers,” Garden Center Nursery marketing, Washington State University at www.gardencenternursery.wsu.edu/marketing

² *Garden Center Design Guidelines*, UMass Extension Greenhouse Crops & Horticulture Program, University of Massachusetts Amherst at www.umass.edu/floriculture/fact>

³ *Starting A Greenhouse Business: A Commercial Growers Guide*, Alan B. Stevens, Extension Specialist et al, Cooperative Extension Service, Kansas State University

⁴ *The Restaurant Industry Today: Food Services Statistics* (November 2011) at www.healthygrillusa.com

first and foremost -- and have a higher success rate nationally than restaurants as a whole.⁵ Initial research revealed more than a dozen Rhode Island micro-breweries, and only a few have attached/affiliated pubs (restaurants). However, Arctic Village ranks average or below in terms of brewing industry guidelines for site characteristics compiled from studies of successful brewpubs. An ideal brewpub location has geographic area with at least 150,000 residents within 15-mile radius; demographic area with middle-income, 30 to 50 year old professionals; exposure (easy for clientele to find), access (near well-traveled roads), and ample, well-lit parking. Of course, investing large amounts of business profits in advertising could compensate for some apparently less than advantageous conditions.

- **Hardware Store** operations in neighborhoods and small shopping centers are often franchise members of a national cooperative (co-op), a retailer-owned buying group that provides services and technical support services. Neighborhood hardware store owners struggle to retain market share and compete with pharmacies and convenience stores, big-box home improvement centers, and super-store retailers selling traditional hardware store inventory. Hardware stores require a large investment for a facility and inventory – described as capital-intensive with small profit (ROI) requiring cash flow to keep sufficient inventory and adequate space to display inventory.⁶ However, retailer reports indicate an increasing number of new small hardware stores opening nationwide, and successful stores are in locations that are less than 15-30 minute drive-time to a big-box retailer or even another competing small hardware store.⁷

Typically, small hardware stores have operated in 5,000-8,000 SF spaces, and cannot install enough inventory due to limited display and storage space. Current industry standards recommend 10,000-12,000 SF facility space plus parking as a model that also works for new neighborhood hardware stores.⁸ Business development reference sources also characterize successful small hardware stores as offering stellar customer service, focused on community-based customers, and oriented to special market segments, especially females and renters. The Arctic Village transient residential community, limited size of storefront commercial space, and lack of suitable developable land will present challenges to capturing potential market demand for a new hardware store.

⁵ *From Dreams to Reality : A Brewpub Feasibility Study is the First Step to Liquid Gold*, by Mark A. Diebolt, at www.brewingtechniques.com/library

⁶ *The Best Ways to Start a Hardware Store* by Jane Doyle, Demand Media at www.smallbusiness-chron.com

⁷ Anecdotal information gathered during this research suggests that *Rocky's Ace Hardware* recently opened new stores in Massachusetts and Rhode Island, and has future expansion plans/

⁸ "Opening A Hardware Store FQs , "The True Value Company at www.truevaluecompany.com/open-hardware-store

Technical Memorandum

Arctic Village Revitalization Study

Prepared by FXM Associates
May 2012

Residential Market Analysis

For the purposes of this analysis of potential demand for housing within the Arctic Village Study Area the geographic market area is defined as a 20-minute drive time radius of the center of Arctic Village. This is consistent with the generally accepted view of the primary geographic area where communities offer similar economic development attributes, and constitute the competitive region for attracting jobs and households. **Figure A** shows the 20-minute drive-time map. For this geographic area, FXM used Nielsen-Claritas *SiteReports* subscription data for estimating the number of households by age of householder and income ranges in 2011 and projected to 2016. Claritas uses US Census and other data to estimate geospatially current year demographic characteristics – including number and type of households, age of householder, and income by age cohort – and projects these characteristics for a five year period. Claritas is the most frequently used source of local demographic and business data by professional real estate and economic development analysts.

Next, FXM applied its proprietary *Housing Demand Model* which incorporates data on mobility rates by age of householder, propensities to own or rent by age of householder, local market data on current and historical rental and sales prices, current and projected number of households by age and income, and the qualifying income standards of leasing agents and commercial lenders (which are based on a 30% of income standard for gross rent and homeownership costs – homeownership affordability includes estimated interest rates, local property taxes, and a 20% down payment requirement).

In this instance, neither single family nor condominium sales are considered for rehabilitation of existing space or new construction within the Arctic Village study area, based on current market conditions, client and public participant visions for the project area. Therefore, the target housing product is rental units.

Based on FXM's experience over the past several years in the rehabilitation and new construction of residential products within urban areas and downtowns in particular, the target markets are householders under age 35 and aged 55 to 74. These household types have been found to be those least likely to have school aged children – for whom a downtown location may not be suitable – and most likely to find the density, cultural/dining/shopping amenities and walk-ability of downtown areas most attractive. The under-35 households include younger professionals and newly formed households, who are highly mobile and show a high propensity to rent over home ownership. The over-55 households include “empty nesters” that in recent years have shown an increasing tendency to rent rather than purchase if and when they move

from a larger home to a smaller dwelling in this region. The 55-74 year age group also is projected to have a substantial increase in numbers compared to other age cohorts, as will be shown in subsequent graphs.

Figure A

20-minute Drive Time of Arctic Village

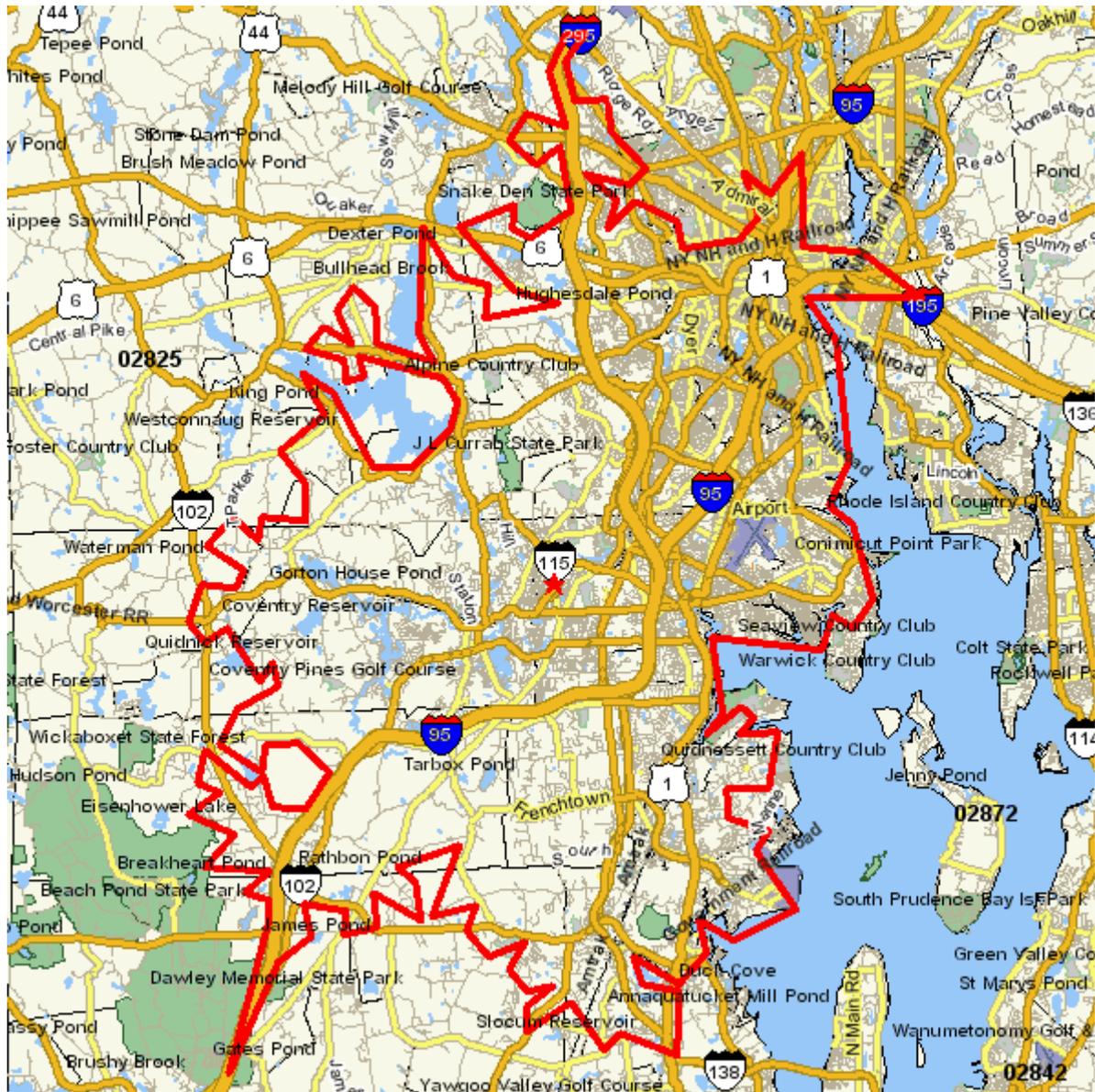


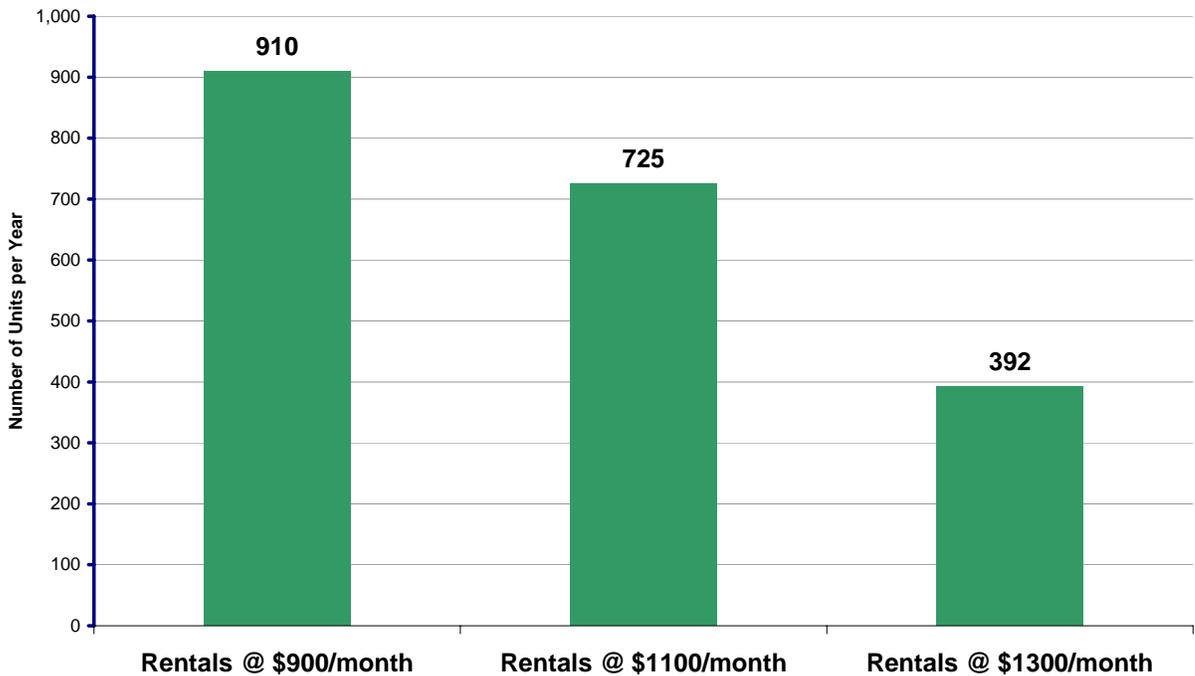
Figure B summarizes estimated average annual demand for rentals by all household types with sufficient incomes to afford the estimated market-rate rental and sales prices shown in the chart. More specific estimates by age of householder and income cohorts for rentals are shown in subsequent charts. Rental demand represents the income-qualified households with propensity to rent, and reflects mobility rates by age of householder applied to market area distribution of households by age. Average annual demand reflects the projected growth in number of households by income and age of householder between 2011 and 2016.

As shown by the data in **Figure B**, demand for rentals is expected to be about 900 units per year for rentals priced at \$900 per month. About 80% of these households (725 per year) could also afford units renting at \$1,100 per month, and 44% could afford to pay \$1,300 per month (392 per year between 2011 and 2016). These demand numbers do not imply a demand for new construction, as they mostly reflect turnover within the existing supply rather than net new population growth.

The Arctic Village Project Area’s ability to capture a significant share of this residential demand will depend on factors particular to specific development opportunities in the Project Area compared with potentially competitive projects elsewhere in the market area, as well as with the existing supply of both rental and sales units. For example, suitability of location, site features and unit amenities, competitive pricing, accessibility to jobs, permitting and approval requirements, will determine the success of individual projects.

Figure B

**Estimated Annual Demand for Rentals: West Warwick Market Area
2011- 2016**



Demand by Age of Householder and Price Category

Figure C shows average annual demand between 2011 and 2016 for rentals by price category and age of householder. By far, the greatest source of demand for rental units within the market area – and at each price category -- is expected to come from householders under age 35 because of their relatively high mobility and propensity to rent (see subsequent graphs).

Figure C

Estimated Annual Demand for Rental Units by Price and Age of Householder: West Warwick Market Area 2011-2016

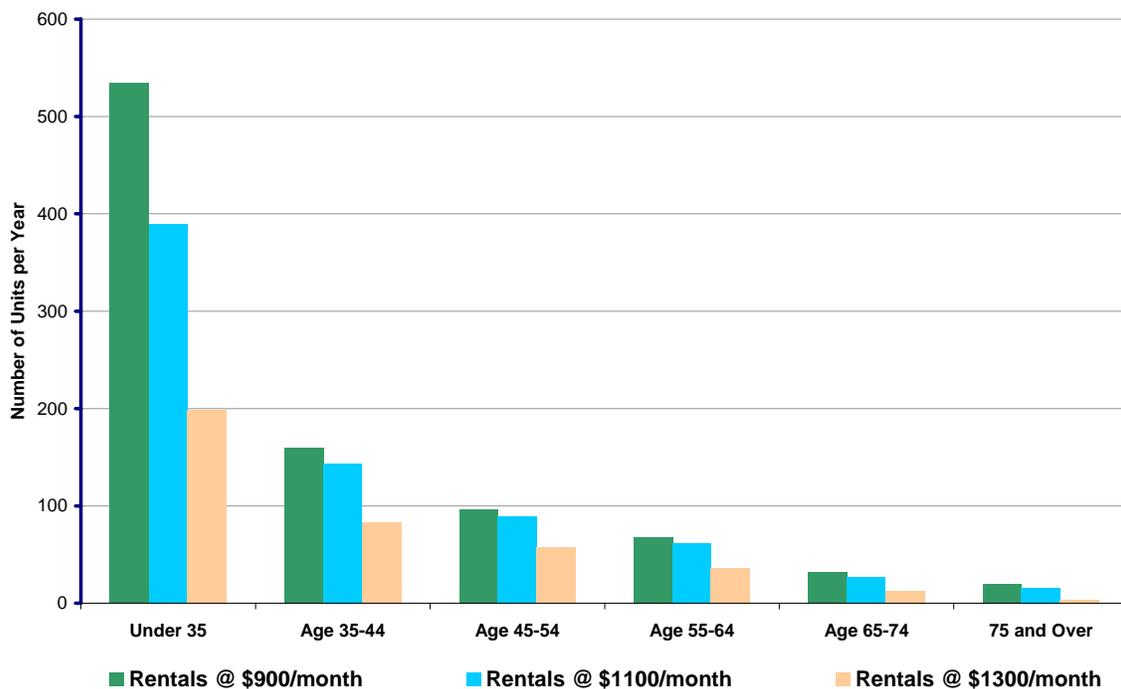
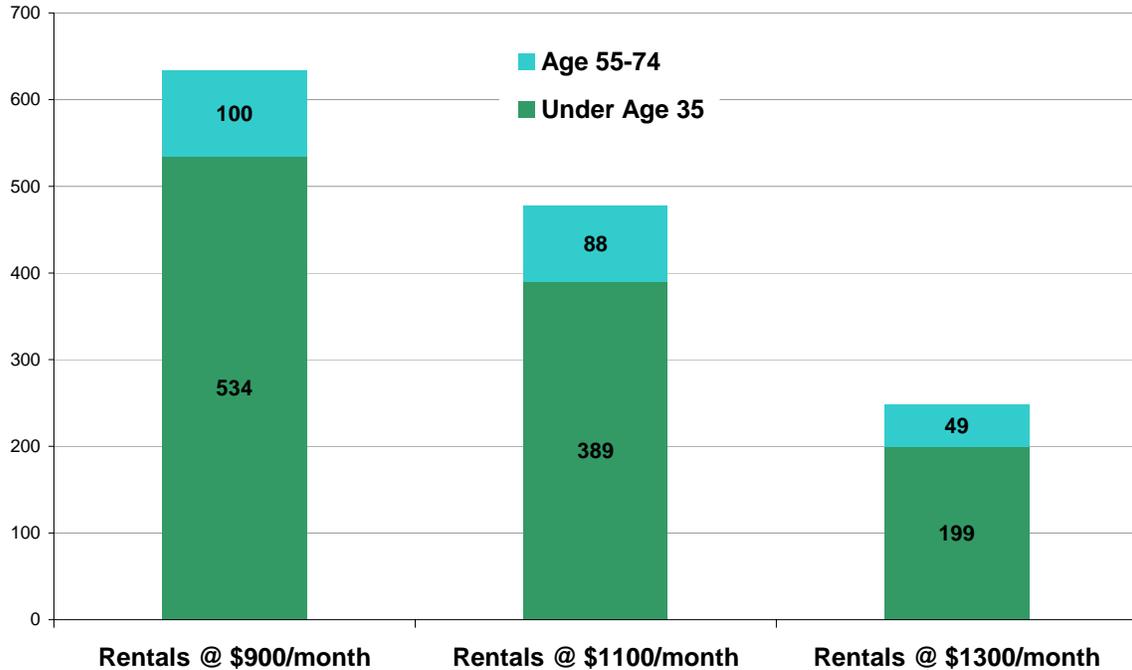


Figure D shows average annual demand for the target market segments – householders under age 35 and aged 55-74. Householders within these age groups account for 70% of the average annual demand by all householder types for rentals priced at \$900 per month (see Figure B); 66% of the average annual demand by all householder types for rentals priced at \$1,100 per month; and 63% of the average annual demand by all householder types for rentals priced at \$1,300 per month.

Figure D

**Average Annual Demand for Rentals:
West Warwick Market Area 2011-2016
Householders under Age 35 and Ages 55 to 74**

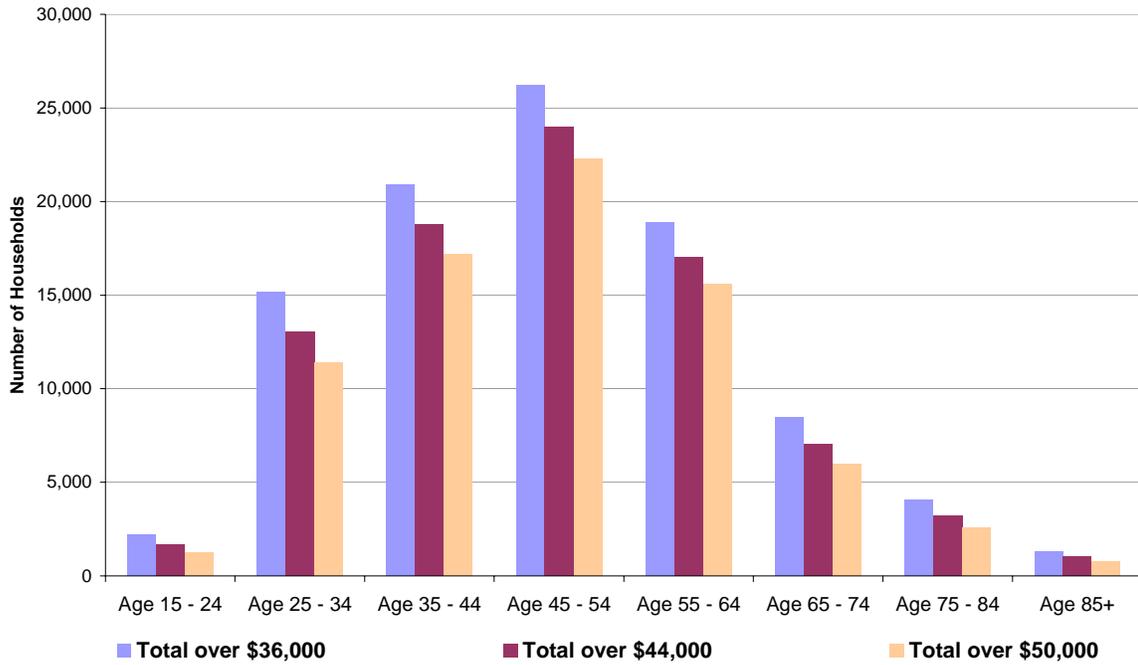


Projected Growth by Market Segment

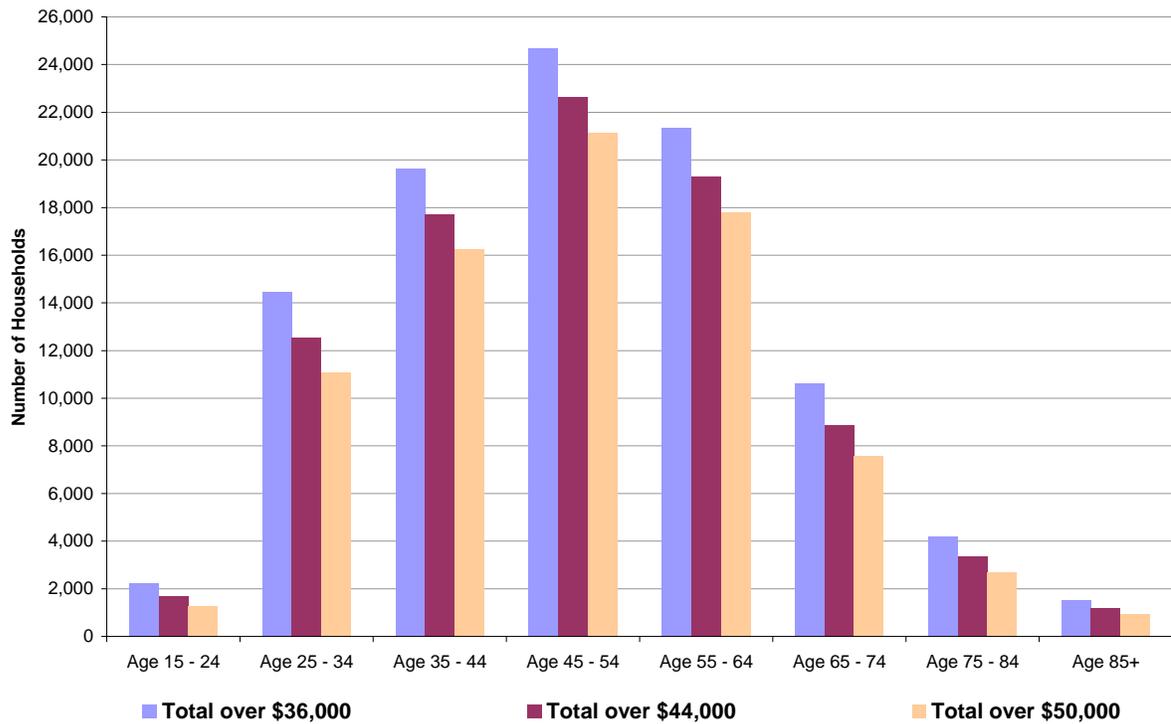
This analysis also determined that an annual household income of \$36,000 is the minimum needed to afford a \$900 per month the market-rate rental price shown in previous charts. An annual household income of \$50,000 would be sufficient to afford the \$1,300 per month market rate rental price presented in this analysis

The subsequent graphs display findings of the analyses inherent to the FXM *Housing Demand Model*. Of particular note is the last graph, “Change in Number of Households by Age and Income Cohort,” which shows an absolute decline in the number of householders aged 35 to 54 between 2011 and 2016, and a substantial increase in the number of householders aged 55 and 74 during that same period. This trend largely reflects the maturation of the “boomer” generation and the relatively lower number of younger households maturing into the former “boomer” age groups.

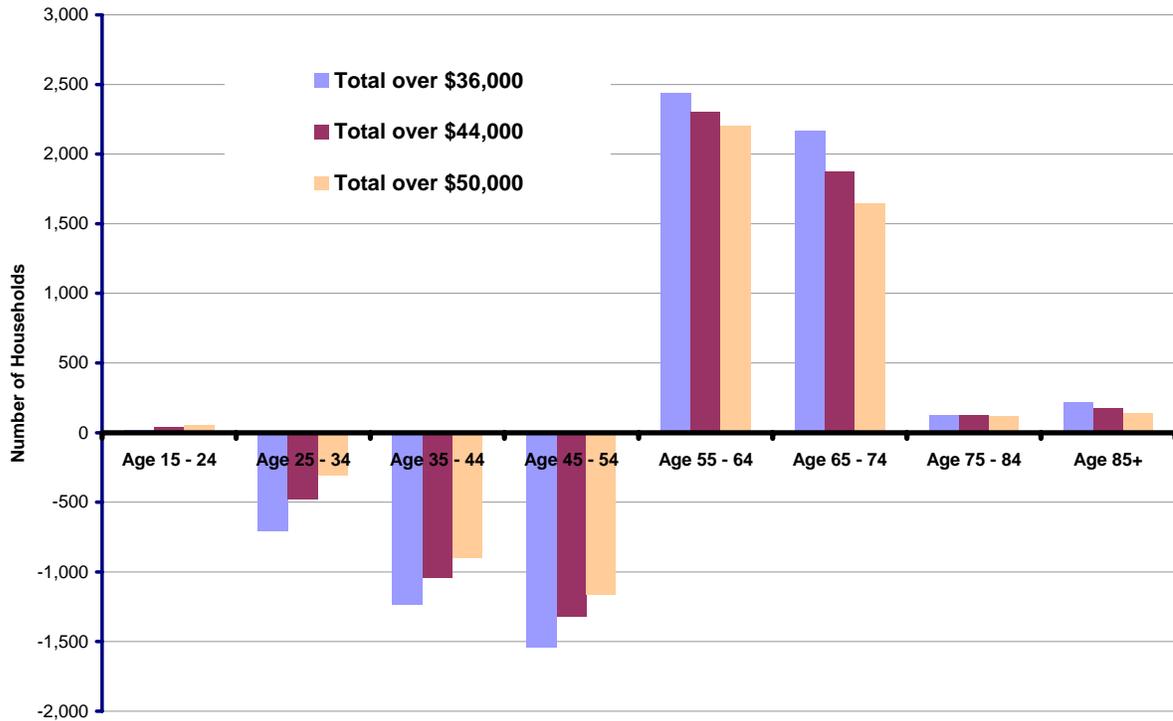
2011 Income by Age of Householder: West Warwick Market Area



2016 Income by Age of Householder: West Warwick Market Area



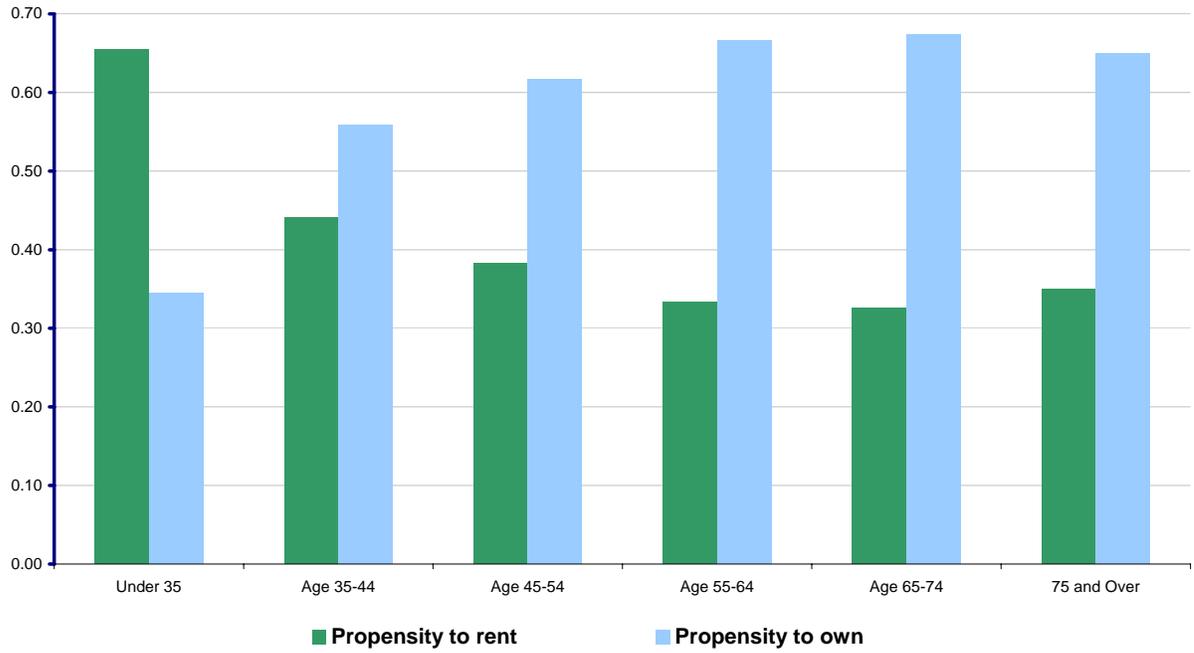
**Change in Number of Households by Age and Income Cohorts:
West Warwick Market Area 2011-2016**



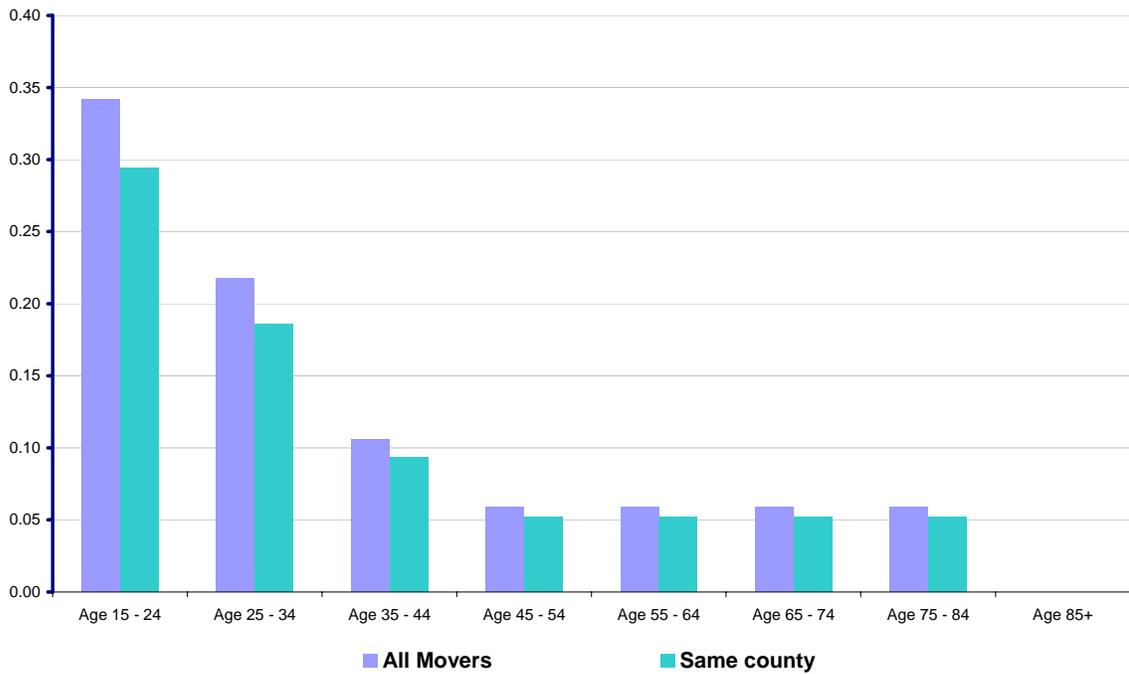
The final two graphs show propensities to own or rent by age of householder and mobility by age of householder. It should be noted that the most recent data on renting compared to homeownership by age of householder shows an increase from historical rent/own propensities in favor of rentals.

- Most analysts are predicting that the trend toward a higher proportion of renters, is likely to continue, at least over the next five years, and may further apply to older age groups which have traditionally been more inclined to own rather than rent housing.
- Mobility rates have declined slightly in the past few years because of fewer job opportunities since the recession, but moves based on job changes comprise only a small proportion (less than 15%) of the reason households overall cite for changing housing.

Propensity to Own or Rent by Age of Householder



Annual Mobility Rates by Age of Householder



Implications for the Arctic Village Study Area

In the absence of a more detailed analysis of a specific new construction or rehabilitation program, development project amenities, pricing, unit size and features, and potential sources of below-market financing, tax credits, and so forth, as well as planned and proposed projects within the 20-minute drive-time market area, it is extremely difficult to estimate how much of overall market area demand could be served by new development or rehabilitation projects within Arctic Village. For planning purposes at this time, a range of 40 to 60 units (4% to 7% of market area demand) might be assumed for potential annual absorption over the next five years.

While the following is *not* a recommended development program for any specific site, the market analysis suggests that \$900 is the low end potential gross rent that could be supported by a \$120 per square foot cost for rehabilitation of existing buildings or new construction without tax and other subsidies. Of the estimated 50 units per year average annual demand, 75% of target under age 35 and over age 55 households could afford rentals at \$1,100 per month and 40% could afford rentals of \$1,300 per month.

Appendix 3.2



As part of the process of creating the Redevelopment Strategy, The Cecil Group Team looked at two separate prototype studies. The first study was for the “hinge parcel” bounded by Main Street, St. Mary Street, Legion Way and Grove Street. The second prototype was a typical infill development, using 95 Washington Street as the example.

Hinge Parcel

The hinge parcel is an empty lot, currently owned by CVS, at the center of Arctic Village. The prototype study examined what type and scale of development might be possible on that lot in addition to the proposed CVS.

The typical CVS has the following requirements:¹

- Drive-through capability
- Parking for 75-85 vehicles
- Dimensions of 96'x137'
- 12,900 Square feet



The parcel owned by CVS is large enough to allow the prototype to meet all of these requirements with additional square footage available for some residential units. However, by adding the adjacent parcel containing an empty school to the study, it is possible to add a combination of retail and housing – specifically a 5,000 square foot garden center and ten townhouse units – and still retain enough square footage for the required parking, landscape buffers between the possible development and adjacent residential uses, and a public space that relates to both the Arctic Gazebo and the vacant lot on the other side of St. Mary Street.



Top: Hinge Parcel along Main Street

Middle: Hinge Parcel from Main Street looking toward Legion Way

Bottom: Hinge Parcel looking toward houses on Grove Street

All photos courtesy of The Cecil Group, Inc.

The Retail Gap Analysis identified a garden center as a retail use that could be attractive for Arctic Village. A garden center would draw customers from beyond the immediate area and would benefit from the proposed geothermal energy plant. The on-site parking is sufficient for both the garden center and the CVS use – it is likely that some customers would go to both. Whether or not a garden center is paired with the CVS is not relevant, however, the idea of compatible retail uses is important for an expanded development.

The ten townhouse units allow the possible development to relate to the surrounding residential uses. They also provide needed housing in Arctic Village. Main Street is served by buses, providing public transportation for new residents. Parking is located on the ground floor of each unit.

¹ From www.cvscaremarkrealty.com, downloaded 04/09/2012



Figure 1: Hinge Parcel Prototype

Use	SF	Parking Required	Parking Provided
CVS	12,900	75-85	81
Garden Center	5,000	5	5
Townhouses (10)	1,400	10	10 (underneath units)

Appendix 3.3

APPENDIX 3.3: CURRENT ZONING CHARACTERISTICS

Contents

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Key

Zoning District Abbreviations

Arctic Design Control District – ACDC

Commercial/Industrial – CI Minimum 40,000 square feet

Mill Reuse - MRU

Business – B; minimum lot size 10,000 square feet

Commercial/Industrial – CI

Village Commercial – VC

Residential – R-6; minimum lot size 6,000 square feet

Residential – R-7.5; minimum lot size 7,500 square feet

Table of Uses

Y = Permitted

X = Prohibited

S = Special Use Permit

Table of Uses

	ADCD	MRU	B	CI	VC	R-6	R-7.5
Section 5. Use regulations							
5.3 Table of use regulations.							
A. Residential Uses							
1. Dwelling, single-family						Y	Y
2. Dwelling, two-family			X	X	S	Y	Y
3. Dwelling, multiple-family	Y		X	X	S	S	S
4. Dwelling lawfully existing prior to adoption of this ordinance	Y		Y	Y	Y	Y	Y
5. Mobile homes						X	S
6. Residential mobile home parks						S	S
7. Rooming house						S	S
B. Residential community facilities							
1. Church, or similar place of worship or religious instructions	Y		Y	Y	Y	Y	Y
2. School, public or private elementary, junior/middle, or high	Y		Y	Y	Y	Y	Y
3. College, university or similar higher educational institution	?		Y	Y	Y	S	S
4. Community residence						Y	Y
5. Family day care home						Y	Y
6. Nursing home						S	S
C. General community facilities							
1. Public park or playground	Y		Y	Y	Y	Y	Y
2. Library or museum	Y		Y	Y	Y	Y	Y
3. Public or private golf course, course, or country club			Y	Y	X	Y	Y
4. Public utility structure or right-of-way, sewage treatment plant, water treatment plant but not including an electric generating plant	Y		Y	Y	X	S	S
5. Government building not including a public utility structure or right-of-way	Y		Y	Y	Y	Y	Y
6. Watershed or wellhead supply or protection			Y	Y	X	Y	Y
7. Transit passenger shelter						Y	Y
8. Cemetery			Y	Y	X	S	S
9. Clinic			Y	Y	Y	S	S
10. Hospital, sanitarium, auxiliary and accessory uses			S	S	S	S	S

	ADCD	MRU	B	CI	VC	R-6	R-7.5
11. Philanthropic, fraternal, social or educational office, club or meeting room			Y	Y	Y	S	S
D. Agricultural uses						Y	Y
1. Agriculture			Y	Y	Y	Y	Y
2. Plant nursery			Y	Y	Y	Y	Y
3. Wood lot			Y	Y	Y	Y	Y
4. Conservation area, wildlife refuge			Y	Y	Y	Y	Y
5. Animal shelter, kennel, aviary			Y	Y	X		
6. Veterinarian, veterinary hospital			Y	Y	Y		
7. Landscape and horticultural services			Y	Y	X		
8. Commercial greenhouse			Y	Y	S		
9. Garden center, lawn supplies			Y	Y	Y		
E. Residential accessory uses							
1. Accessory family dwelling unit						S	S
2. Accessory use						Y	Y
3. Home occupation						Y	Y
4. Private garage						Y	Y
5. Storage of campers, travel trailers, boats and other recreational vehicles						Y	Y
6. Swimming pool						Y	Y
7. Sign: one face or ground describing one of the following messages: Real estate Jobsite improvement Bulletin board Professional Nameplate Instructional or directional						Y	Y
8. Temporary structure						Y	Y
F. Telecommunications facilities							
1. Underground facilities						S	S
2. Overhead facilities						S	S
3. Monopoles/towers						X	X

	ADCD	MRU	B	CI	VC	R-6	R-7.5
E. Retail business							
1. Lumber and building materials dealers			Y	Y	Y/S		
2. Paint, glass and wallpaper stores			Y	X	Y		
3. Hardware stores			Y	X	Y		
4. Mobile home dealers	Y		Y	X	X		
5. Department and variety stores			Y	X	Y/S		
6. General merchandise stores			Y	X	Y		
7. Food and grocery stores			Y	X	Y		
8. Meat and fish stores			Y	X	Y		
9. Fruit and vegetable markets			Y	X	Y		
10. Candy, nut and confectionery stores			Y	X	Y		
11. Dairy products stores			Y	X	Y		
12. Retail bakery, baking and selling			Y	X	Y		
13. Motor vehicle dealers (new and used)	X		Y	X	X		
14. Auto and home supply stores			Y	X	S		
15. Gas stations and service stations	X		Y	X	X		
16. Boat dealers	?		Y	X	X		
17. Recreational vehicle dealers	?		Y	X	X		
18. Motorcycle dealers	?		Y	X	Y/S		
19. Clothing, personal furnishings and accessories			Y	X	Y		
20. Shoe stores			Y	X	Y		
21. Furniture and home furnishings			Y	X	Y		
22. Household appliance store			Y	X	Y		
23. Radio, television and related stores			Y	X	Y		
24. Music stores			Y	X	Y		
25. Restaurant, standard	Y		Y	X	Y		
26. Restaurant, fast-food	?		Y	X	Y		
27. Bar, tavern or nightclub			Y	X	Y		
28. Drugstores			Y	X	Y		
29. Liquor stores			Y	X	Y		
30. Antique and used merchandise stores			Y	X	Y		

	ADCD	MRU	B	CI	VC	R-6	R-7.5
31. Sporting goods and bicycle shops			Y	X	Y		
32. Bookstores			Y	X	Y		
33. Stationery stores			Y	X	Y		
34. Jewelry stores			Y	X	Y		
35. Hobby, game and toy stores			Y	X	Y		
36. Camera and photographic supply stores			Y	X	Y		
37. Gift, novelty and souvenir shops			Y	X	Y		
38. Luggage and leather goods			Y	X	Y		
39. Sewing, needlework and piece goods stores			Y	X	Y		
40. Mail-order houses and other non-store retail			Y	X	Y		
41. Fuel and ice dealers (except gasoline)	X		X	Y	X		
42. Fuel oil dealers (fuel storage in tanks)	X		X	Y	X		
43. Liquefied gas dealers (fuel storage in tanks)	X		X	Y	X		
44. Florists			Y	X	Y		
45. Cigar stores and tobacconists			Y	X	Y		
46. News dealers and newsstands			Y	X	Y		
47. Optical goods			Y	X	Y		
48. Other retail, not elsewhere classified			Y	X	Y/S		
F. Office Business category							
1. Banks and credit agencies			Y	X	Y		
2. security and commodity brokers			Y	X	Y		
3. Exchanges and services			Y	X	Y		
4. Insurance offices			Y	X	Y		
5. Real estate offices			Y	X	Y		
6. Other investment offices			Y	X	Y		
7. Advertising services			Y	X	Y		
8. Advertising			Y	X	Y		
9. Credit/mercantile reporting and collection agencies			Y	X	Y		
10. Mailing, reproduction, commercial art and steno services			Y	X	Y		
11. Services to buildings			Y	X	Y/S		
12. Miscellaneous equipment rental			Y	X	Y/S		
13. Personnel supply agencies			Y	X	Y		

	ADCD	MRU	B	CI	VC	R-6	R-7.5
14. Computer and data processing services			Y	X	Y		
15. Management, consulting and public relations services			Y	X	Y		
16. Miscellaneous business services			Y	X	Y		
17. Offices of physicians, dentists and other health practitioners and medical arts buildings			Y	X	Y		
18. Medical and dental laboratories			Y	X	Y		
19. Outpatient care facilities			Y	X	Y		
20. Other health services			Y	X	Y		
21. Legal services			Y	X	Y		
22. Correspondence, vocational and job training schools			Y	Y	Y		
23. Other schools and educational services			Y	X	Y		
24. Business, professional and labor organizations			Y	X	Y		
25. Civic, social and fraternal associations			Y	X	Y		
26. Political organizations			Y	X	Y		
27. Other membership organizations			Y	X	Y		
28. Engineering, architectural and surveying services			Y	X	Y		
29. Noncommercial educational, scientific and research organizations			Y	X	Y		
30. Accounting, auditing and booking services			Y	X	Y		
31. Other services			Y	X	Y		
G. Personal and Other Service Categories							
1. Building construction, general and special trade contractors			Y	Y	Y/S		
2. Laundry, dry-cleaning plants and garment services				Y	S		
3. Laundry, dry-cleaning plants and garment services (self-service only)			Y	X	Y		
4. Photographic studios			Y	X	Y		
5. Beauty or barber shops			Y	X	Y		
6. Shoe repair			Y	X	Y		
7. Funeral services, crematory			Y	X	Y/S		
8. Other personal services			Y	X	Y/S		
9. Appliance, furniture and equipment rental and leasing			Y	X	Y		
10. Auto, truck and trailer rental and leasing	X		Y	Y	X		
11. Automotive and auto body repair and service	X		X	Y	X		
12. Automobile parking lots or garages			Y	Y	S		

	ADCD	MRU	B	CI	VC	R-6	R-7.5
13. Auto cleaning and car washes	X		Y	Y	X		
14. General electrical repair shops			Y	Y	Y		
15. Watch, clock and jewelry repair			Y	X	Y		
16. Re-upholstery and furniture repair			Y	Y	Y		
17. Other repair services, welding			X	Y	S		
H. Wholesale Business Category							
1. Wholesale business office or showroom: display of wares and sales transactions only			Y	Y	Y		
2. Wholesale trade or transfer of durable goods, not elsewhere classified			X	Y	S		
3. Wholesale trade or transfer of nondurable goods, not elsewhere classified			X	Y	S		
I. Amusement and Recreational Business Category							
1. Motion-picture, film, tape and disk distribution			Y	Y	Y		
2. Motion-picture theaters			Y	Y	Y		
3. Dance halls, studios or schools			Y	Y	Y		
4. Bowling alleys or billiards			Y	Y	Y		
5. Other indoor recreation			Y	Y	Y/S		
6. Amusement park or outdoor recreation			Y	Y	Y/S		
7. Art galleries			Y	Y	Y		
J. Other Business Uses							
1. Hotels and motels, transient	Y		Y	X	S		
K. Transportation, Telecommunications Facilities							
1. Local and intercity bus transportation			Y	Y	Y/S		
2. Bus charter service			Y	Y	Y/S		
3. Taxicab establishment			Y	Y	Y		
4. Trucking service and/or terminal			X	Y	X		
5. Courier service			X	Y	Y/S		
6. Warehousing: general and/or refrigerated			X	Y	X		
6a. Warehousing: public			X	Y	X		
7. Communications: services and broadcasting offices			Y	Y	Y		
8a. Underground facilities			S	S	S		

	ADCD	MRU	B	CI	VC	R-6	R-7.5
8b. Overhead facilities			S	S	S		
8c. Monopoles/towers			S	S	S		
9. sanitary services (not including waste storage, treatment or disposal)			X	Y	X		
L. Manufacturing							
1. Food and kindred manufacturing processing or packaging			Y	S	X		
2. Textile mill products and production			X	Y	X		
3. Apparel and finished products			X	Y	X		
4. Lumber and wood products			X	Y	X		
5. Furniture and fixtures			X	Y	X		
6. Paper and allied products			X	S	X		
7. Printing, publishing and allied industries			X	Y	X		
8. Chemical and allied products			X	S	X		
9. Petroleum refining and related industries			X	X	X		
10. Rubber and miscellaneous plastics products			X	S	X		
11. Leather and leather products			X	S	X		
12. Stone, clay, glass and concrete products			X	S	X		
13. Primary metals industries (except blast furnaces, steel works, foundries and primary smelting)			X	S	X		
14. Fabricated metal products (except machinery and transportation equipment)			X	S	X		
15. Industrial and commercial machinery and computer equipment			X	Y	X		
16. Electronic and other electrical equipment, except computers			X	Y	X		
17. Transportation equipment			X	Y	X		
18. Instruments: photographic, medical and optical goods, chronographs			X	Y	X		
19. Miscellaneous manufacturing			X	S	X		
M. Mining							
1. Nonmetallic mineral extraction or quarrying			X	S	X		
2. Crushing, processing grading, washing of material			X	S	X		
N. Accessory Uses							
1. Residential accessory uses for dwellings lawfully existing prior to the adoption of this ordinance; accessory uses 1 through 8 inclusive as			-	-	-		

	ADCD	MRU	B	CI	VC	R-6	R-7.5
permitted in, prohibited, or regulated by special use permit in residential districts							
2. Signs			Y	Y	Y		
3. Incidental temporary structures			Y	Y	Y		
3a. Other temporary structure			Y	Y	Y		
4. Private garage			Y	Y	Y		
5.3.1 Wind energy conversion systems (WECS)							
	S		S	S	X	S	S
5.3.2 Adult entertainment uses							
			X	S	X	X	X

5.4 Table of Dimensional Requirements

	ADCD	MRU	B	CI	VC	R-6	R-7.5
Minimum							
Lot area in sq. ft.							
1-family	Waived, at P/B discretion		40,000	40,000		6,000	7,500
2-family						8,000	10,000
Lot width (feet)			100	150		60	75
Lot depth (feet)			100	200		100	100
Lot frontage (feet)						55	70
Yards (feet)							
Principal building							
Front	Waived, at P/B discretion		5	50	5	20	20
Interior side			15	20		6	7
Corner side			15	50		20	20
Rear			30	50		20	20
Accessory use							
Front	Waived, at P/B discretion		5	50		20	20
Interior Side			10	20		6	7
Corner side			20	50		20	20
Rear			10	50		6	7
Maximum							
Stories						3	3
Height (feet)			90	90	90	35	35
Building lot coverage (%)			50	30	80	30	25

5.9.10.7 Table of Parking Requirements

Use	Minimum Requirement Parking Space per Unit or Gross Floor Area (GFA)
Residential	
Single-family	2/dwelling unit (DU)
Two-family	2/DU
Multiple-family	2/DU
Elderly housing	1/DU
Rooming house	1/room
Home occupation	1/100 square feet of home occupation
Accessory Family dwelling unit	1/DU
Mobile home	1/DU
Office	
Banks and other financial institutions	1/200 square feet GFA
Medical office and clinic	1/150 square feet
Business and other educational service	1/instructor plus 1/employee or staff peak shift plus 1/4 students
Service	
Business and commercial service	1/200 square feet (GFA)
Hotel/motel	1/bedroom plus 1/employee peak shift
Funeral home	1/3 seats plus 1/employee peak shift plus 1/hearse
Theater and auditorium	1/3 seats
Indoor commercial recreation and coin-operated amusement establishments	1/200 square feet (GFA)
Gold course	3/hole plus 1/employee peak shift
Driving range	1/tee
Outdoor commercial	1/1000 square feet of lot area
Gas or service station	1/employee plus 4/bay
Retail	
Restaurant	1/90 square feet GFA plus 1/employee peak shift
Fast food restaurant	1/50 square feet GFA plus 1/employee peak shift plus 10 car queuing line
New and used vehicle and boat sales	1/200 square feet (GFA)

Furniture, appliance or carpet sales	1/400 square feet GFA
Other retail uses	1/200 square feet GFA
Transportation and utility	
Passenger terminal	1/200 square feet (GFA) plus 1/employee peak shift
Public and private utilities	1/300 square feet GFA
Commercial vehicle terminal	1/400 square feet GFA
Community facilities	
Place of worship	1/5 seats
Preschool	1/500 square feet GFA
Primary or junior high school	5/classroom plus 1/staff member and employee peak shift
High school	1/5 students plus 1/staff member and employee peak shift
Junior college, college, university, vocational or business school	1/3 students
Resident dormitory, fraternity or sorority	1/bed
Nursing, convalescent home	1/2 beds plus 1/employee peak shift
Library, museum	1/400 square feet GFA
Hospital, sanitarium	1/2 beds plus 1/2 employees and staff peak shift
Clinics	4/doctor plus 1/employee peak shift
Clubs, civic, social and fraternal	1/5 members or 1/5 seats whichever is greater plus 1/2 employees peak shift
Clubs, country, swimming and similar uses	1/3 members plus 1/employee peak shift
Other uses	Space in accordance with the parking needs as may be reasonably determined by the town engineer, subject to the approval of the building inspector
Parking in the ADCD district	Waived, at P/B discretion

Sign Table

Type	ADCD	MRU	B	CI	VC	R-6	R-7.5
Addresses			Y	Y	Y	Y	Y
Animated signs							
Balloons/Inflated objects							
Banners: street					Y		
Storefront					Y		
Billboards							
Bulletin board			Y	Y	Y	Y	Y
Canopy signs			Y	Y	Y	Y	Y
Construction signs			Y	Y	Y	Y	Y
Directional signs			Y	Y	Y	Y	Y
Electronic Message Display Device			S	S	S		
Directory signs			Y	Y	Y	Y	Y
Flags			Y	Y	Y	Y	Y
Freestanding signs			Y/S	Y/S	Y/S		
Government signs			Y	Y	Y	Y	Y
Marquee signs			Y	Y	Y		
Memorial sign/tablet			Y	Y	Y	Y	Y
Monument signs			Y	Y	Y	Y	Y
Murals			Y	Y	Y	Y	Y
Nameplates							
Professional			Y	Y	Y	Y	Y
Residential			Y	Y	Y	Y	Y
Off-premise: Private							
Nonprofit			Y	Y			
Pennants			Y		Y		
Political signs			Y	Y	Y	Y	Y
Portable signs					Y		
Private parking lot sign			Y	Y	Y	Y	Y
Real estate							
Residential			Y	Y	Y	Y	Y

Commercial			Y	Y	Y	Y	Y
Industrial			Y	Y	Y	Y	Y
Roof signs							
Sandwich board signs					Y		
Wall sign			Y/S	Y/S	Y/S		

Appendix 3.4

There are many towns and small cities that provide examples for the type of revitalization that this report covers. The following three documents provide short descriptions of successful initiatives and projects.

- *Small Towns/BIG IDEAS: Case Studies in Small Town Community Economic Development*, UNC School of Government and N.C. Rural Economic Development Center, December 2008 – this study examines success stories in small towns throughout the south, but principally in North Carolina. While the specific context of these cases studies differs from Arctic Village, the examples are useful in considering different possibilities. The report can be found here:
http://www.sog.unc.edu/programs/cednc/stbi/pdfs/stbi_final.pdf
- *Economic Development Case Studies*, National Association of REALTORS® Government Affairs, February 2005 – this document looks at individual projects that have acted as catalysts for further development. One of the projects, the Alice Building, is in Providence. This report is useful because it notes the financing sources used to complete the project. The report can be found here:
<http://www.envirottools.msu.edu/redevelopment/NARcasesstudies.pdf>
- *Revitalizing America's Mills: A Report on Brownfields Mill Projects*, SRA International, Inc. for the U.S. Environmental Protection Agency, undated – the largest amount of building square footage by use in Arctic Village belongs to the mills. This report looks at successful uses for underutilized mills. The report can be found here:
http://epa.gov/brownfields/policy/Mill_Report_110306.pdf

Most of the future projects in Arctic Village will be based on the repair and rehabilitation of existing buildings, including the adaptive reuse of some buildings and infill development on the empty lots. The following case studies provide inspiration for some of those projects.

- *Adaptive reuse of a U.S. Post Office* – there are many examples of adaptive reuse of an older post office building, and growing interest in exploring new uses given the financial difficulties of the U.S. Postal Service. Here are links to a few of those examples:
 - *Natchez, Mississippi* – the post office became a museum:
<http://www.mississippiheritage.com/curriculum/MHT%20Curriculum%20%2022%20Exercise%209.pdf>
<http://visitnapac.net/>
 - *St. Louis, Missouri* – the redevelopment of the post office acted as a catalyst for the rest of the area. This study is helpful because it gives the strategy and action plan behind the project.
<http://oldpostofficestl.com/redevelopment.php>

- Devil's Lake, North Dakota – their post office became a regional history and culture center
<http://www.lrhcmuseum.com/>
- Infill development – the Municipal research and Services Center of Washington has an excellent site devoted to infill development, including toolkits, programs in several states, example ordinances and funding resources.
<http://www.mrsc.org/subjects/planning/infilldev.aspx>
- The importance of the river – the Pawtuxet River is an underutilized resource for Arctic Village, especially when joined with the bike path. Here is an example of how Olneyville, in Providence, incorporated both assets:
<http://www.instituteccd.org/news/1359>
- Beautification projects – cleaning up the streets can make a big difference. Here is an example from the Fulton Village area of Richmond, VA. <http://www.instituteccd.org/news/3878>
- Community involvement – the success of a redevelopment plan is dependent upon getting the entire community involved. Here is how Lawrence, Massachusetts was able to develop a successful process:
<http://www.nhi.org/online/issues/140/LCW.html>
- Urban/community agriculture - there are several examples of successful projects in Rhode Island, including the South Side Community Land Trust : <http://www.southsideclt.org/>

It is also helpful to see the planning documents from other towns and cities to see the strategies they used to achieve a successful revitalization effort. The following communities, all of whom have experienced revitalized downtowns as a result of the efforts, have documents online that may be useful.

- New Bedford, Massachusetts – these documents relate to New Bedford's Downtown District, which has been extremely successful after an initial market study done in 2000 by FXM Associates.
 - *Economic Development Strategy for Downtown New Bedford Part II: Measuring Success*, FXM Associates, 2007
<http://www.newbedford-ma.gov/Planning/FXM%20Economic%20Dev%20Strategy.pdf>
 - *2008 Downtown Action Plan*, author not identified
<http://www.newbedford-ma.gov/Planning/2008%20Downtown%20Action%20Plan.pdf>
 - *2009 Downtown Revitalization Strategy*, Utile, Inc. and FXM Associates

http://www.newbedford-ma.gov/Planning/downtown_2009_study.html

- *A Market for Downtown New Bedford*, New Bedford Economic Development Council
<http://www.nbedc.org/pdf/market-marketing.pdf>
- East Greenwich, Rhode Island – this community was mentioned by several people during the study process as an example of what they were looking for in a redevelopment scenario. Although East Greenwich does not have a specific downtown plan on their website, the Planning Department has listed the grants which they received over the years and this may be useful as a guide to identifying possible funding sources;
<http://www.eastgreenwichri.com/matriarch/MultiPiecePage.asp?PageID=83&PageName=TownDeptPlanningZoning>