

NORTH KINGSTOWN POST ROAD CORRIDOR PLAN



Submitted to:
TOWN OF NORTH KINGSTOWN

Submitted by:
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This report provides information and recommendations for the enhancement of the northern segments of Post Road as it passes through North Kingstown. The report summarizes the results of a planning study that specifically considered how the Town could best shape the future of a corridor of land that is the primary commercial area in the Town. The study focused on the roadway and land flanking Post Road from the State Police facility (just north of the Route 1/Route 1A intersection and historic Wickford Village) to the Town's border with East Greenwich. This planning effort has been undertaken to implement a portion of the Town's Comprehensive Plan that was adopted in 2001, which recognized the need for a Post Road Corridor plan to help guide both public and private investment.

The planning effort focused on land use, design and transportation improvements along a corridor that has been subject to inconsistent development patterns and significant circulation issues. The economic vitality, value and quality of life within the Town can be improved substantially through concerted actions along the Post Road Corridor, and the Town has meaningful choices to shape the future. The recommendations that are included in this report have several common themes:

- Because of the close relationship of circulation, land use and the overall appearance of the area, a **coordinated approach must be established between public and private investment in order to accomplish significant improvements.**
- The **Town's regulatory framework could be adjusted to address the special needs and particular vision for the area.**
- **Other potential private and public actions are identified** for that could improve the overall quality and value of the area.
- The **Town should establish clear preferences and an overall rationale for roadway and infrastructure improvements** and other enhancements **so that the Town is well positioned to seek and secure state and federal funds to assist in positive changes.**
- **To the extent appropriate with the Town's plans and vision, long term planning for portions of the Post Road Corridor should be aimed at generating village centers,** consistent with sustainable growth recommendations established by the Governor's Growth Planning Council in 2002. This would allow the Town to benefit from a helpful state planning initiative that can bring advantages in funding and programs.

This report is organized to convey each of the steps that were taken during the course of the study. It contains:

- **Introduction and Summary** – This is an overview of the study and a guide to the principal recommendations
- **Assessment of Existing Conditions** – The report includes a summary of the conditions along the Post Road Corridor, some of which provide opportunities

for the future, and others which are significant constraints that could block positive changes.

- **Visioning, Goals and Objectives** – This section includes a vision statement for the Corridor accompanied by a list of general goals and objectives that were formed as a basis for the recommendations. These goals and objectives build upon the Comprehensive Plan and take into account the public input received through a participatory process.
- **Plan Recommendations** – The recommendations of the study are assembled according to key categories, and include conceptual engineering plans, analysis of village center options, and land use planning concepts. Further recommendations focus on townscape and open space, streetscape concepts, and infrastructure needs.
- **Implementation** – The final section of the report provides a guide to accomplishing those recommendations that the Town may choose to pursue.

Planning Background

The Post Road Corridor north of Wickford village served historically as a vital connector among the villages that constituted the original commercial and population centers. Like many other “Post Roads” throughout New England, the corridor represented a recognized route for the spread of information and regional travel- the Post Roads were literally the routes for posted mail. The evolution of transportation in this country required a systematic network of roadways as routes for motor vehicles in the early twentieth century, and U.S. Route 1 in New England frequently occupied the original Post Road segments, and became the designated north-south corridor for the entire East Coast. Like many communities, the Route 1 corridor required a related connector road to facilitate parallel movements, and the “Route 1A” designation appeared.

The Post Road segments largely passed through rural or undeveloped land and connected densely developed centers where business, residences and industry could be efficiently concentrated, as transportation was difficult and expensive. This pattern of development resulted in the valued historic districts like Wickford village, which are increasingly recognized as appropriate models for some future districts.

The advent of cars and trucks dramatically increased mobility and allowed for entirely new patterns of residential and commercial development. The land along the Post Road became very desirable because of its low cost, adaptability to different uses, and accessibility to other areas. This trend was reinforced by the explosive growth of activity associated with the military installation at Quonset/Davisville during the Second World War that was followed by a trend towards suburban lifestyles and preferences for a booming economy and dramatically increasing population. The Post Road land became increasingly desirable in an era when controls over the quality and character of development were not strong.

In many communities through which Route 1 passed, the expansion of “strip” commercial uses and haphazard residential or industrial development continued

unabated. In part, this was due to increasing suburban populations. In part, this was due to a shift in how people shopped and the organization of the retail business in this country. But the trend stalled in North Kingstown. In part, the population growth in the region has never approached the levels experienced in suburban areas closer to large cities like Providence, so the demand for goods and services never required as much land to be developed. The closure of the military facilities significantly altered the local economy and population characteristics. Importantly, the expansion of a high-speed regional highway network with improved connectors diminished the role of the Post Road as a regional connector.

The result has been a corridor that is “neither here nor there”. It did not become – nor is it likely to become – a regional shopping and business corridor with a concentration of “big box” or chain establishments and larger scale commercial enterprises. There is not enough population density or traffic volumes (existing or projected) to support this type of use. However, even with significant undeveloped land and nearby residential areas, it is not readily reconverted to residential or low scale uses. Instead, it has become a diverse collection with pockets of uses that find advantages associated with the relatively affordable land, large lots, or location within the community.

The conversion of Quonset/Davisville will provide future opportunities for North Kingstown associated with the jobs, uses, activities and infrastructure located there. However, the provision of a new connector to the regional highway system will divert much of the traffic from the Post Road corridor, and it is not clear whether there will be any significant induced growth, travel and land use demand outside of the former base, as it has an enormous capacity for internal growth and development.

The State, through the Rhode Island Department of Transportation, has undertaken significant roadway and circulation improvements in the vicinity of Quonset/Davisville and Post Road to the north, and other improvements to correct particular intersection problems have occurred. However, future repairs and improvements between the Route 1A intersection and Quonset/Davisville area are anticipated, but are not clearly defined. The Town is in a position to anticipate future needs, help guide future design decisions, and advocate for timely and appropriate funding.

The need for coordinated planning for economic development, land use and transportation were recognized during the preparation and adoption of the 5-Year Update of the Town’s Comprehensive Plan, which included a Post Road Element. This element called for several strategies, and included a focus on “formulating of a Post Road Corridor Plan to guide public and private investment” (page 96). This study has been prepared to help accomplish this purpose.

The Planning Commission, through its staff, directed the preparation of this study. The Town engaged the services of a professional planning and engineering team to provide technical assistance. This team was led by The Cecil Group, Inc. and included Edwards & Kelcey, which provided expertise in transportation planning and design. The planning process included public meetings and workshops at key intervals. Briefings and discussions also included the Planning Commission and Town Council. The work effort was coordinated with other plans and projects within the Town, including the ongoing bikeway initiatives.

Summary of Recommendations

The following is a list of the principal recommendations of the Post Road Corridor planning study. The recommendations have been coordinated so that they consistently reinforce the overall vision for the area.

Transportation Improvements

- Retain four-lane configuration, two lanes in each direction.
- Alternate intermittent landscaped median with left turn lanes on central segment (from School Street to Newcomb Road).
- Introduce left turn lanes at key intersections along the corridor's central segment (from School Street to Newcomb Road).
- Introduce 5-foot bike lanes and 5-foot sidewalks along each side of the road (between School Street and Dana Road).
- Introduce a 10-foot shared use path for bicycles and pedestrians along the east side of the road (between Dana Road and Richard Smith Drive).
- Introduce traffic calming and safety measures (changes in pavement texture prior to intersections, pedestrian-activated traffic signals, crosswalks at all signalized intersections, and speed limit enforcement).
- Review and coordinate signal timing and operations.
- Encourage the creation of an access management plan and service connections between parking lots that may contribute to improved traffic safety along segments of the corridor.
- Reconfigure "fork" intersections to a "T" shape, in order to improve safety, turns and visibility (e.g., Namcook Road, Chadsey Road).
- Seek alternative solutions to Quonset emergency access that will limit access through Camp Avenue.

Streetscape Concepts

- Introduce an intermittent landscaped median along the central segment of the corridor.
- Provide sidewalks on both sides of the corridor and crosswalks at all intersections.
- Replace the sidewalk on the east side of the corridor between Dana Road and Richard Smith Drive with a shared use path for pedestrians and bicycles.
- Introduce a five-foot planted strip and utility corridor for poles, hydrants and signage between the proposed shared use path and vehicular traffic lanes.
- Adopt traffic calming measures that may include a combination of differential pavement treatments, crosswalks and signage.
- Select plantings from a pool of resilient, salt tolerant specimens, and locally adapted tree species and perennial grasses.
- Create distinctive clusters of flowering trees and bushes to mark key landmarks and gateways (e.g., access to Smith Castle, Quonset Gate Road intersection, access to Saw Mill Pond natural recreation area, etc.)
- Seek underground relocation of utilities.
- Implement design guidelines to create landscaped edges along front property lines and sidewalks, and coordinate placement of trees, signage and lighting.



Existing Section – Central Corridor



Proposed Section – Central Corridor



Existing Section – South Corridor



Proposed Section – South Corridor

Village Center Options

- Plan for the long term generation of two village center areas along the Post Road:
 - A Quonset/Davisville Village Center oriented towards the creation of economic development opportunities at the Quonset Gateway parcel, and infill redevelopment of aging properties along the Post Road.
 - A Reynolds Farm/Oakdale Road Village Center oriented towards long term controlled development of vacant and underutilized properties, and updating of aging public infrastructure and utilities.
- Create pedestrian and bicycle connections between both village center areas along the Post Road corridor.
- Consider applying for designation of two growth centers as defined by the Governor’s Growth Planning Council report, in order to support the generation of village centers and benefit from growth center priorities in State funding and programs.
- Plan for wastewater demands in both village center areas.

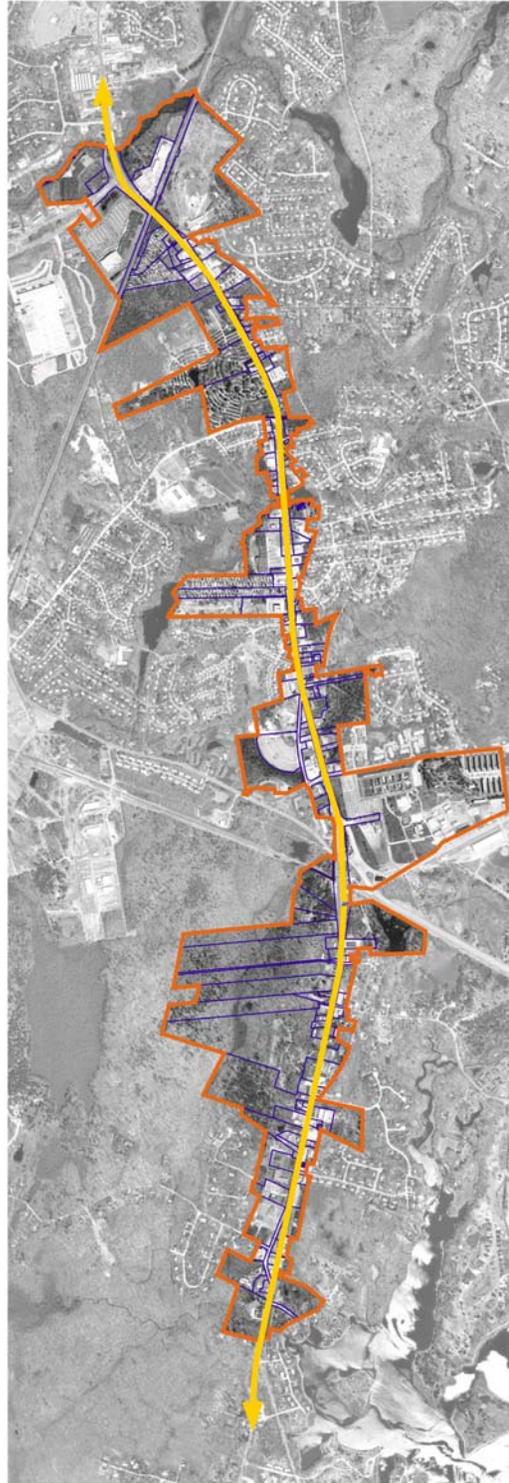
Land Use Planning Concepts

- Promote a smart-growth planning approach to concentrate future development in areas served by infrastructure (village centers) and preserve areas that are underserved or inaccessible.
- Review zoning and subdivision regulations to support concentrated development (potential to reduce setbacks, lot building coverage, minimum lot size, parking requirements, etc.)
- Introduce mixed-use concepts and building types that will support the creation of village-scale densities (for example, multi-family residential development with neighborhood retail components; commercial development with upper floor residential components).
- Keep overall limits to new development as set per current regulations (maximum building area or number of units allowed per acre); encourage building concentration in appropriate locations and open space preservation in other areas seeking to establish an overall density balance.
- Encourage proximity between buildings and amenities that will support walking and bicycling as the preferred modes of travel.
- Encourage redevelopment concepts that congregate new buildings around a village green or neighborhood park, in order to provide opportunities for recreation and create a focal point for the community.
- Encourage retail redevelopment that will bring buildings and storefronts closer to the street and relocate some parking to the back of the buildings (e.g., employee parking).
- Promote parking solutions that break down large expanses of pavement into smaller areas buffered and enhanced by landscaping.

Implementation

- Initiate contact/steps with RIDOT for incorporation of recommended improvements into the Transportation Improvement Program.
- Identify growth center areas (village centers); either through a comprehensive plan amendment or a regularly scheduled five-year update.
- Apply to the Statewide Planning Program for designation of the growth centers.
- Review and update zoning to support plan recommendations such as the creation of village centers, zoning overlay districts, and design guidelines to support the desired character and image.
- Consider the development of a district to address wastewater issues for the Post Road Corridor.
- Involve the business and resident communities into planning and development processes at multiple levels.
- Explore the potential to create public/private partnerships that will mutually support capital investment and maintenance.
- Amend the Post Road Corridor element of the Comprehensive Plan to reflect completion of the corridor plan and support the proposed changes and recommendations.
- Amend the Comprehensive Plan to identify and promote the creation of village centers.

The Post Road Corridor Plan study area is illustrated below, and is comprised by all the parcels that have direct access from the Post Road along a stretch of the road that extends for approximately 4 ½ miles, and is located between Route 402/Frenchtown's Road to the north and the State Police Barracks to the south.



Three segments along the road have been identified as having particular conditions and characteristics:

- A northern segment, also referred to as the North Corridor in this report, located between Route 402/ Frenchtown Road and School Street.
- A central segment also referred to as the Central Corridor, between School Street and the Route 403 interchange currently under construction.
- A southern segment, or South Corridor, located between Route 403 and the State Police Barracks.

Roadway improvements for the North Corridor are currently underway, under design and supervision by the Rhode Island Department of Transportation (RIDOT). As a result, herein traffic and transportation recommendations are focused on the central and southern segments of the corridor. Land use considerations are applicable to the entire length of the study area, and include the North Corridor area as well.

The Central Corridor is characterized by the presence of a fifth middle lane dedicated to two-way left turns. This allows for great flexibility on left turns. However, this flexibility can some times be dangerous as two cars may be attempting to make left-turns in opposite directions too close to each other.

The South Corridor presents the most narrow and constrained section of the study area, with a right-of-way estimated at a minimum width of 64-foot, and four narrow lanes, two in each direction. Improvements to the corridor in this area will require of creative and well-thought solutions that will maximize the opportunities for pedestrian, bicycle, and streetscape enhancements while minimizing the impacts to the adjacent properties and avoiding to the extent possible the need for land takings.

An assessment of existing conditions has been made from the review of current plans and regulations, available traffic and transportation data, previous planning studies and initiatives, site visits, and findings from informational meetings and interviews.

The following is a summary of findings from this review.

Data Collected and Reviewed

The following information and related condition reports were reviewed and analyzed:

- North Kingstown Comprehensive Plan
- Zoning and Land Use Regulations
- Traffic and Transportation Data
- Plans and GIS Mapping for the Corridor
- Previous Plans and Studies
- Statewide Planning Initiatives

North Kingstown Comprehensive Plan

The North Kingstown Comprehensive Plan establishes goals, objectives, and proposed actions for the Post Road Corridor in its Chapter IX – Post Road Corridor Element.

The Comprehensive Plan recognizes and establishes the Post Road as the town’s primary commercial district, and the need for further coordinated planning for public and private investment to enhance the corridor’s character.

The Post Road Corridor Element also proposes a number of actions to carry on between 2001 and 2006, which include the preparation of a Post Road Corridor Plan (represented by this study) and the implementation of streetscape, signage, traffic and pedestrian improvements. The plan also calls for the provision of adequate infrastructure and community services.

The Comprehensive Plan’s Vision Statement for the Post Road Corridor calls for the enhancement and revitalization of the corridor, improving the commercial activity and visual qualities. It also promotes mixed uses, open space protection, and traffic and pedestrian safety. It envisions the future of the Post Road as a “tree-lined boulevard that is a source of community pride”.

A list of the specific planning goals of objectives set forth by the Comprehensive Plan is included in the section on Goals, Objectives and Visioning of this report.

Zoning and Land Use Regulations

The official Land Use Plan Map of the Town of North Kingstown illustrates the land use vision, goals and objectives established by the Town's Comprehensive Plan by identifying the desired future land uses at each location, for planning purposes.

According to the map, the majority of the land parcels that have access and frontage on the Post Road are dedicated to commercial uses. Parcels immediately adjacent to the east and west of the commercial areas are mainly residential, allowing for moderate and high density residential uses (moderate density residential areas are characterized by the presence of lots ranging in size from 40,000 to 80,000 square feet, high density residential areas include lots ranging from 20,000 to 40,000 square feet). Both moderate and high-density residential areas are mainly intended for single-family homes; the main difference between the two categories resides in the size of the lot.

In general, high-density residential areas comprise the majority of the existing neighborhoods along the north and central segments of the Post Road Corridor (Davisville, Essex and Quidnessett areas) and existing neighborhoods in the vicinity of the south corridor (Camp Avenue, Stony Lane, and Wickford). Farmlands and underdeveloped areas adjacent to the south portion of the corridor are mainly envisioned by the Land Use Plan as moderate density residential (Oakdale, Reynolds Farm). Areas located further to the west are envisioned as low density residential (lots ranging from 80,000 to 120,000 square feet).

Some special locations along the Post Road Corridor, such as Smith Castle, and Devil's Foot Road are designated as institutional/public uses.

Zoning regulations constitute the legal tool by which the Land Use Plan becomes implemented and, as such, current zoning is consistent with the Land Use Plan designations. Parcels assigned to commercial use in the Land Use Plan are zoned for business uses, mainly under two categories – General Business (GB) and Neighborhood Business (NB).

Areas designated in the Land Use Plan as high density residential are zoned as part of the Village Residential District (VR20), with a few parcels zoned as Multifamily Residential (MF). Areas planned for moderate density residential uses are zoned as Neighborhood Residential District (NR40), and areas planned for low density residential uses are zoned as part of the Rural Residential District (RR80).

Quonset Davisville Port and Commerce Park

Encompassing roughly 3,000 acres, Quonset Davisville is the largest industrial park in Rhode Island and one of the state's largest economic development projects. One of its key parcels and development areas, Executive Park, is located at the intersection of the Post Corridor and Route 403, a new freeway under construction linking Quonset and industrial areas to Route 4.

Two of these key Executive Park parcels have direct frontage on the Post Road, and are envisioned by the Quonset Davisville Port and Commerce Park Master Plan as mixed use development, which may include offices, hotel, restaurants, small retail, and business services. A new Gate Road has been constructed to provide access to new development in the Executive Park area, with direct connections from the Post Road and Route 403. The Quonset Master Plan anticipates that Executive Park will become a major activity node due to its location and planned commercial character. The implications for the future of the Post Road Corridor in terms of land use and development, future growth, and transportation cannot be ignored.

In Executive Park area (Plat 182) ten (10) acres adjacent to Post Road were re-zoned to General Business (GB) several years ago in anticipation of the parcel being developed for a hotel. The remainder of Executive Park is currently zoned Institutional/Office (IO).

Traffic and Transportation Data

This report section describes an assessment of existing traffic conditions along the Post Road Corridor based on the analysis of current levels of service. The analysis focused on the Post Road between School Street in the north and the State Police Barracks in the south, excluding the northern portion of the corridor for which roadway improvements are currently underway.

Arterial Roadway Level of Service (LOS)

Average daily traffic varies from 20,200 vehicles per day (vpd) in the Central segment of the corridor (School Street to Newcomb Road) to approximately 24,100 vpd south of Route 403. These values have been progressed from a 1998 base reading at a 1.5% growth rate per year as established by the Rhode Island Department of Transportation, Traffic Planning Division.

In order to better understand how the Quonset development functions in relation to the Post Road Corridor, additional traffic counts were performed as part of this analysis at School Street and Newcomb and Devils Foot Road, in order to balance the traffic flow analysis and fill in information gaps of the latest available traffic data, which dates back to 1998. Findings are the following:

- During PM peak traffic it has been quantified that northbound traffic, north of Devil's Foot/Newcomb Road intersection and southbound traffic south of this intersection, experience heightened traffic volumes with respect to the opposing direction. This is primarily a result of egressing traffic from the Quonset area during PM peak time.
- AM traffic peaks are not as pronounced as the PM peak times. However this event happens in reverse indicating increased traffic flow entering the Quonset area via Post Road.

- During AM and PM peak hour Post Road northbound between Camp Avenue and Newcomb Road presents a drop in LOS from the downstream segment from LOS C to D. This is possibly a result of traffic approaching and entering the Quonset area since LOS improves to LOS B upstream of this location.
- There is also a drop in Arterial LOS south of School Street to the North Kingstown Plaza intersection under PM conditions. This could be the result of converging traffic within this segment heading to the points south while being delayed by high traffic volumes exiting the shopping center. The central corridor would benefit from signal coordination in this area especially at PM peak times.
- The entire corridor functions at an average of LOS C (stable traffic flow with few delays, 50% of free flow speed) during AM conditions and LOS D (moderate delay some speed reduction, 40% of free flow speed) during PM conditions between School Street and Stony Lane.
- Based upon the new traffic count information obtained on field observations, the total corridor within the study area operates with LOS C during both AM and PM peak hours. The information recorded at School Street and Newcomb Road, and egressing and entering traffic at Quonset has contributed to this assessment. This additional information resulted in a more exact interpretation of the overall delay associated with the corridor as a whole.
- The Central Corridor presents LOS B (mostly unimpeded traffic flow 70% of the free flow speed) from School Street to Namcook Road during AM conditions, and LOS B during PM conditions.

Level of Service at Key Intersections

- *Namcook Road* – This intersection is currently unsignalized and operates at an LOS of C during AM peak hour and LOS D/E during PM peak hour with all delay focused on the minor movement (Delays are 21 seconds and 30 seconds respectively).
- *Post Road at Camp Avenue* – This intersection is currently signalized and operates at an LOS of D during AM peak hour and LOS D during PM peak hour with most of the delay focused on the Camp Avenue approach. This intersection could be improved with the addition of a left turn lane on the southbound approach during PM peak hour. New traffic counts also serve to determine that at the Camp Avenue and Oakdale Road intersections, existing signalization and associated queuing at each intersection actually effects the other intersection. It can be determined from the analysis that both intersections can function more efficiently through coordination of these signals.

- *Post Road at Newcomb/Devils Foot Road* – Based on new traffic counts for the Newcomb/Devils Foot intersection, effects on downstream (and upstream) intersections can be better assessed. This is most noticed on the Camp Avenue intersection. Queuing limits for the PM southbound, Post Road traffic indicate that queuing is actually more exacerbated than indicated by the previous existing data, and that this occurs during a greater portion of the peak hour period.
- *Post Road at School Street* - At School Street, effects of the left turning traffic can be seen on the overall LOS of the intersections. Long queuing is realized on the southbound approach during PM peak times. This is due to lane geometry and intersection signalization inadequacies and/or excessive left turning traffic demands on the northbound approach. Through traffic on Post Road experiences an LOS of A/B along with the eastbound left while the exclusive northbound left actually fails under PM peak conditions. This is due to inefficient use of signal phasing and duration of southbound queue release. These movements bring the overall LOS of the intersection to D during PM peak times. However, during AM peak times with the northbound left demands are reduced as compared to the PM peak, the overall intersection efficiency is improved allowing for more freedom of movement. Thus resulting in an LOS A for the overall intersection.

Conclusions

It can be seen from the preliminary traffic analysis that the corridor functions as a primary arterial with most traffic passing through the study area for points north or south. Traffic flow on the main arterial is paramount in any future design.

South Corridor - Within the southern portion of the project (south of Route 403 to Stony Lane), which presents the most restrictive right-of-way, the current roadway section includes four 10-foot travel lanes and no center turn lane to facilitate a boulevard type median. As part of the preliminary analysis of options, a lane drop was considered in each direction allowing for a landscaped median with left turn lanes and increased shoulder width consistent with preliminary assumptions for a reduced number of lanes along this segment.

A preliminary analysis of the lane drop was performed. It was found that a median would add left turn lanes to all the intersections within this portion of the corridor but it would reduce capacity at the through approaches. As a result drops in Level of Service would happen (LOS D would become a high LOS E during PM peak and LOS D would remain LOS D during AM peak). Queue lengths and delays at the Camp Street intersection would double over existing conditions (delay at the intersection would increase from 30 seconds to 60 seconds during PM peak hour). An important conclusion from this analysis is that four travel lanes need to be retained along the South Corridor, and additional measures, such as traffic signal coordination implemented to ensure adequate traffic flow.

Further analysis of upstream and downstream conditions indicates that the corridor will greatly benefit from signal coordination. This is particularly true in the southern

portion. With the implementation of signal coordination, queues on Post Road approaches will be reduced and the overall intersection LOS will be improved over existing signal conditions. However, LOS on the minor approaches, particularly on Camp Avenue, will suffer drops and increases in queue length.

Central Corridor – The central segment of the corridor will also benefit from signal coordination. This will mitigate LOS drop within the School Street/North Kingstown Plaza roadway segment by allowing better control of sporadic egressing traffic from the shopping center and more steady egress traffic flow during peak PM traffic.

Along this segment, the substitution of the center turn lane by an alternating median and left turn lanes, and the combination of traffic signals with sufficient approach capacity (two lane thru) may sufficiently process traffic without significant overall delay.

It was observed that Namcook Road would benefit from improved geometric alignment with the intersection of Post Road. A traffic signal would be beneficial at this intersection if a raised boulevard type median were to be constructed. This would permit left turns onto Namcook Road and impacts to the Post Road traffic flow would likely be minimal. Addition of a boulevard median would not impact the right-of-way north of Newcomb Road to School Street since a center turn lane is in place. Additional signals would be needed to facilitate left turns and blocked major intersections. Some gaps could be allowed at lesser-unsignalized intersections as traffic volumes warrant.

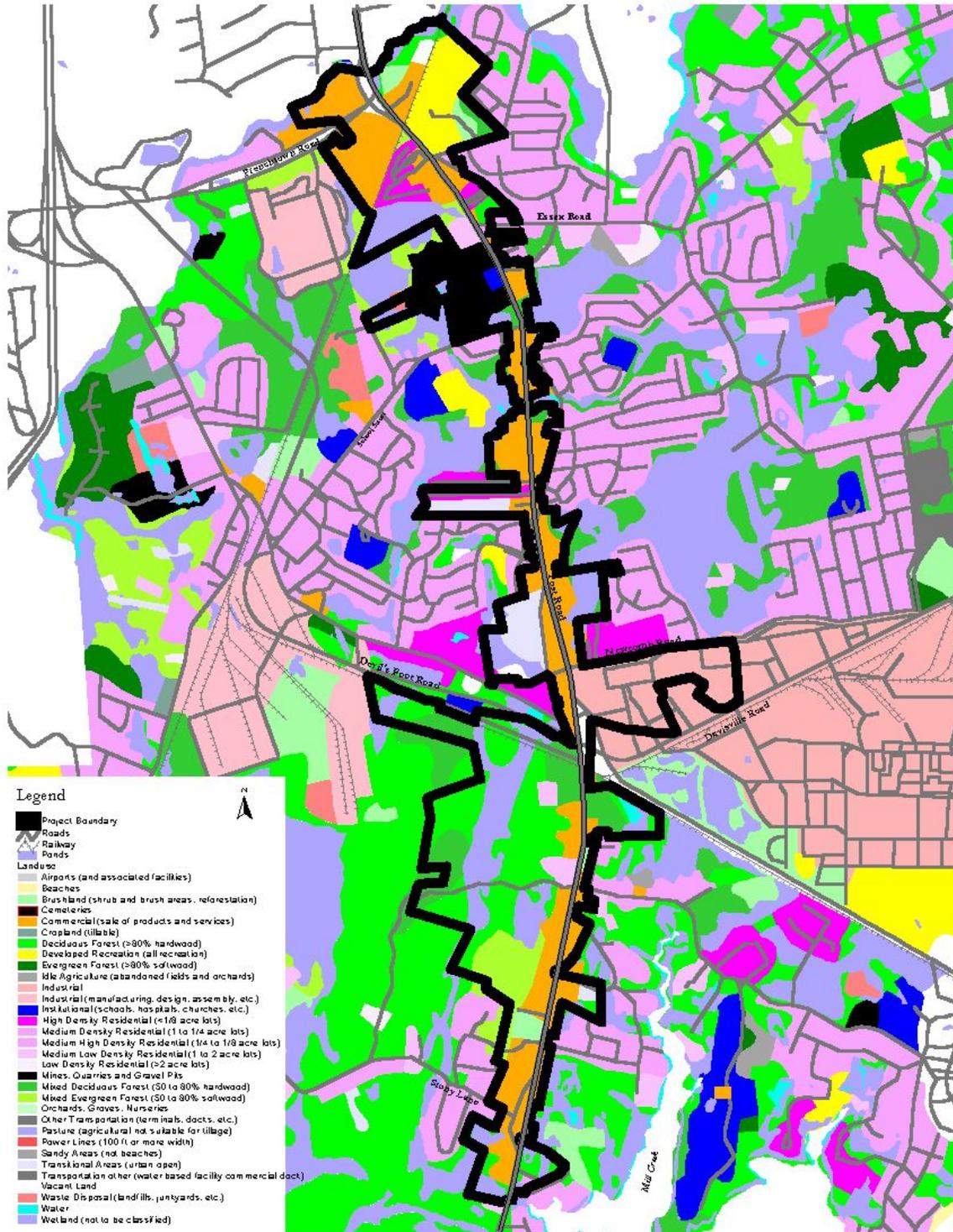
Signal coordination and the introduction of protected left turn lanes provide a significant increase in intersection efficiency and utilization, thus creating an inherent improvement in intersection LOS and average arterial speed.

It should be noted that coordination should be localized to provide the best overall LOS in the corridor. Meaning that signal coordination should be between similar intersections of no more than three. The central and southern portions of the corridor should be treated separately since traffic and right-of-way constraints in these areas vary.

Unsignalized intersections to provide access to varying proposed land uses could be introduced within the corridor provided they are separated from other unsignalized intersections by approximately 750 feet, and 1000 feet from a signalized intersection.

Plans and GIS Mapping for the Corridor

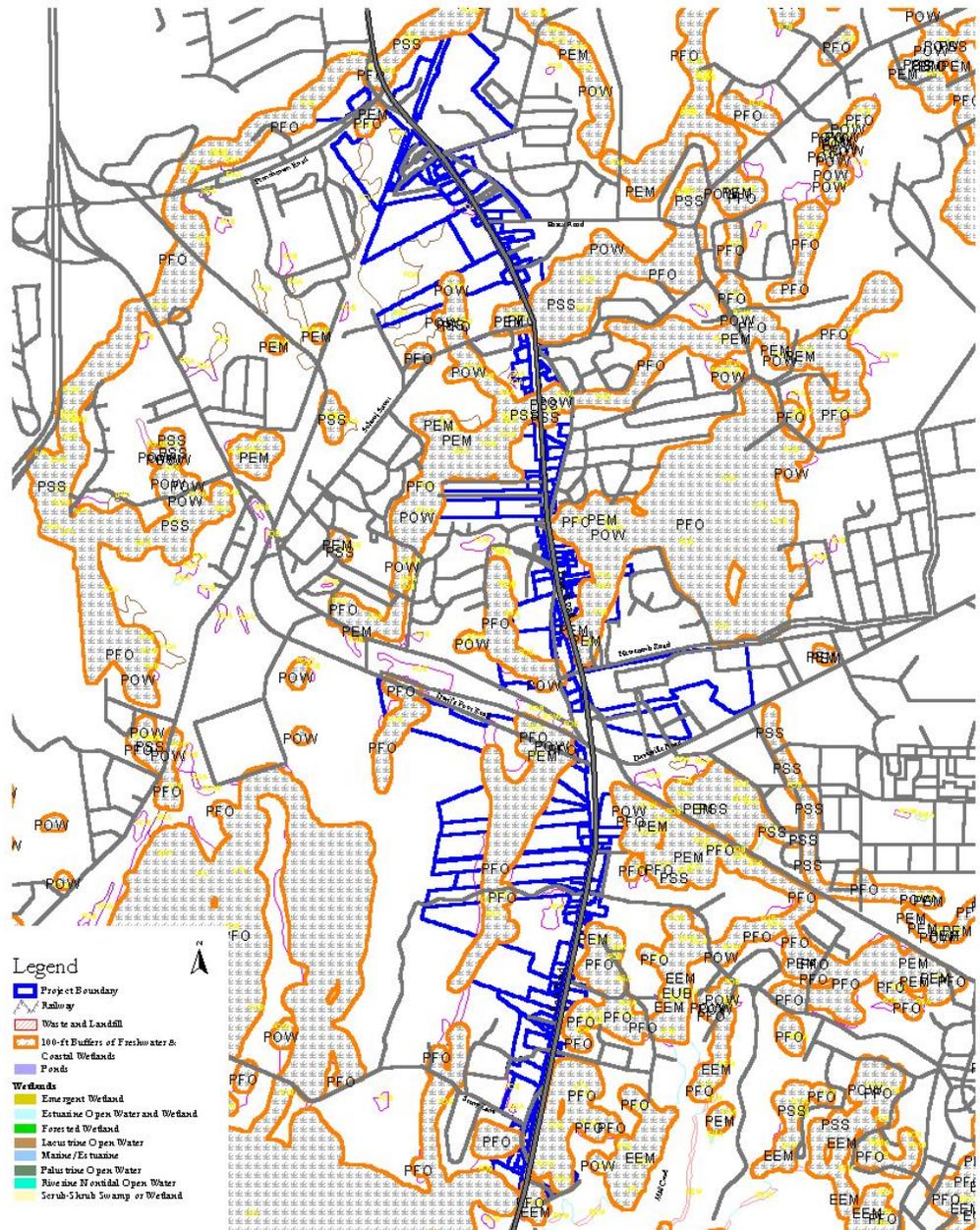
The review of available GIS mapping and information allows for an overall understanding of the existing land use and groundwater conditions along the corridor. GIS land use information (shown below) illustrates the commercial character of most of the parcels with frontage along the corridor (shown in orange) and the residential character of the areas immediately surrounding the corridor (shown in pink). The large parcels located on the west side of the South Corridor represent the former Reynolds Farm and constitute by far the largest undeveloped area along the corridor.



The Natural Resources map shown below indicates major wetland areas along the Post Road. All the properties that have direct access to the Post Road are outlined in blue. It is interesting to note how wetlands are major determinants of the shape and size of parcels along the corridor, particularly along the central and southern segments. Some parcels located on the west side of the South Corridor are deeper than average (in the Reynolds Farm area), but even those are bisected by wetlands, which may likely constrain their potential for redevelopment in a significant way.

Post Road Corridor Plan

Natural Resources



Previous Plans and Studies

Prior related plans and studies were also reviewed. The most relevant within the context of this planning effort are the following:

- Post Road Improvement Project – Conceptual Plan Review, by McDonough & Scully, Inc., 1994.
- Design Study Report – Wickford to Quonset Bike Path, by Pare Engineering Corporation, 2004.
- “Creating Connections” – A Davisville Neighborhood Improvement Plan, by The 445 Senior Landscape Architecture Design Studio at University of Rhode Island, 2003.
- Kingstown Mobile Home Park Revitalization Plan, by Barbara Sokoloff Associates, Inc., 2003
- 2003 Quonset Davisville Port and Commerce Park Master Plan Update, by the Rhode Island Economic Development Corporation, 2003

Post Road Improvement Project – Conceptual Plan Review

This study conducted a review of proposed plans by RIDOT to improve the southern segment of the Post Road Corridor north of West Main Street. RIDOT plans called for upgrading the road to a five-lane section, including two lanes in each direction and a center two-way left-turn lane, similar to the current configuration of the roadway along the Central Corridor segment. This concept became controversial, one of the reasons being the need for substantial land takings in order to accommodate the proposed section. The McDonough & Scully report served to point out that the proposed concepts did not really respond to the Town’s vision for a “boulevard”. It also advanced interesting planning ideas – including bicycle accommodations, coordinating traffic signals, introducing mid-block pedestrian crossings, and encouraging joint or shared parking access.

Design Study Report – Wickford to Quonset Bike Path

The bike path design study recently concluded investigated options for the development of a bike path following the right-of-way of the old Seaview Trolley. Given that parts of the old right-of-way have been developed, alternatives for alignment of the bike path had to be found. The preferred option recommends that the bike way follow a shared use pedestrian and bicycle path along great part of the southern segment of the Post Road Corridor. The proposed design elements are described below in the Plan Recommendations section of this report.

“Creating Connections” – A Davisville Neighborhood Improvement Plan

This study proposes pedestrian paths and connections throughout the Davisville area, with a focus on opportunities for the creation of paths and nature trails along the Saw Mill Pond area. These paths could extend underneath the Post Road and connect

neighborhoods on the east and west side of the corridor to the schools in Davisville and the shopping district along the Post Road Corridor.

Kingstown Mobile Home Park Revitalization Plan

This study advances strategies for the improvement and potential redevelopment of the existing mobile park community located at 6705 Post Road, in the central section of the corridor. The plan offers recommendations about the steps that the Town can take in order to improve living conditions in the park while preserving affordability, particularly in case of an eventual change of ownership.

2003 Quonset Davisville Port and Commerce Park Master Plan Update

Quonset Point was one of the largest navy bases and installations in the Northeast until it was closed in 1973, and the land was reverted to the State of Rhode Island. The Quonset Development Corporation (QDC) is transforming the old installations into a modern port, commercial and industrial park including 3000 acres of land.

The 2003 Master Plan update includes important land use and development recommendations for the parcels adjoining the Post Road between Newcomb Road and the Route 403 interchange, currently under construction.

Those parcels are part of the proposed Quonset Davisville Executive Park, conceived as a mixed use development area within the overall commercial and industrial park, which is clearly intended as the main gateway into Quonset from North Kingstown. Gateway Road, which intersects the Post Road approximately halfway along the Executive Park frontage, divides the Executive Park area into two sections, north and south, each one assigned to a large development parcel.

The proposed mixed use development would consist of offices, a hotel, restaurants, small retail and other locally-oriented services such as banking, copying and business support services. The parcels along the Post Road should be enhanced with signature buildings, where retail/commercial services would be located at the ground level, and offices or research& development uses on the upper floors. These types of uses would also take place at other locations within the park, but the Gateway parcels would have a denser concentration of employees, in order to create an activity node and support the use of public transit. High quality landscaping and pedestrian amenities would enhance the overall image and character of the place.

Market studies completed after the 2003 planning update have not been supportive of the development of a hotel at this location. However, the concept of a high-quality concentrated mixed-use development area, acting as a transition and buffer between the existing neighborhoods and the more industrial zones of the park is a positive recommendation, consistent with the overall vision and goals of the Town's Comprehensive Plan for the Post Road.

Statewide Planning Initiatives

The development of Quonset Davisville into the principal commercial and industrial park and port statewide is one of the key goals of RIEDC. North Kingstown is poised to reap benefits from this policy in terms of infrastructure improvements, economic development opportunities, and environmental cleanup. There will also be impacts of course, such as increases in traffic for example. However, the overall balance for the Post Road Corridor will likely be positive, particularly when opportunities for economic development and the creation of new businesses are taken into account.

Housing Policies and Programs

State housing policies and affordable housing goals also are to be considered in relation to the character of new development that may include residential uses along the Post Road Corridor. Smart growth concepts and principles advocate for the concentration of new development in areas where there is adequate infrastructure in place, including transportation. Potential development sites within the study area, and particularly along the South Corridor present many of the conditions that would make them suitable for residential and mixed use development including affordable housing components.

Growth Centers Initiative

The Governor's Growth Planning Council recommended in 2002 that processes be created to identify and approve special areas as growth centers that would be physically and programmatically equipped to accommodate future development (*"Growth Centers: Recommendations for Encouraging Growth and Investment in Economically and Environmentally Sound Locations in Rhode Island"*). One of the goals of this initiative is to use the growth center designation to provide incentives to communities to target future development to places where it makes more sense, either because there is a core of services and existing infrastructure that will support new development or because there is a recognized potential for growth in an area with defined landmarks and boundaries that convey a sense of place. One of the three types of growth centers recognized by the initiative is the "village center", exemplified by Wickford in the report.

As part of this program, cities and towns can apply to the State for designation of growth center areas. As a result, state resources and assistance could be targeted to growth centers, and regulatory changes could be made to support development and revitalization in these areas. Part of the idea behind this concept is to protect environmentally sensitive areas and significant historical resources from external development pressures that could instead be directed to growth centers where new development would be suitable.

This initiative has a particular relevance for the Post Road Corridor given the presence of vacant sites that could positively contribute to the economic revitalization of the corridor should they be redeveloped in conjunction with village center planning efforts,

and the need for substantial public investment in infrastructure improvements and services.

Photographic Inventory

The following pages include a photographic selection of views of the corridor that are representative of the existing conditions, land use and character. Images are organized by corridor segments into North Corridor, Central Corridor and South Corridor views.

North Corridor



Retail complex at Frenchtown's Road



Restaurant use along Post Road



Austin Road intersection



Retail building with parking in front



Residential neighborhood off Post Road



Quidnessett Memorial Cemetery



Typical 4-lane section (North Corridor)



Tunnel crossing below the road

Central Corridor



Vicinity of School Street intersection



Post Road crossing Sand Hill Brook area



Typical 5-lane section (Central Corridor)



North Kingstown Plaza parking lot



North Kingstown Plaza entrance



Chadsey Road intersection



Typical 5-lane section (Central Corridor)



Namcook Road intersection

South Corridor



Typical 4-lane section (South Corridor)



Oakdale Road Intersection



Typical business site configuration



Site of future Stony Lane intersection



Typical commercial signage



Undeveloped lots along the road



Landscaped edge along public right-of-way



Narrowest point along the corridor

Issues and Opportunities

A public meeting held on April 2004 served to identify specific issues of concern, goals and objectives for the corridor plan, and ideas from community members to prepare a vision statement for the Post Road Corridor Plan. Group discussions also identified key opportunities that need to be taken into consideration in planning for the future of the corridor. The following is an edited summary of key issues and opportunities recorded at the meeting. Goals, objectives, and a vision statement are presented in the next section of the report.

Issues

- There is a significant amount of elderly population in the surrounding neighborhoods that shop on the Post Road, often walking to destinations. There is a need for improvements in pedestrian safety and pedestrian amenities, particularly oriented towards this segment of the population.
- There is no place to make left turns between intersections along the northern and southern segments of the corridor. The only area where left turns are possible is the central corridor, where a fifth lane is available in the middle of the road for this purpose.
- The danger of collisions in the middle lane when two vehicles are approaching each other in opposite directions, looking for a place to make a left turn, is high and is real.
- Traffic speeds are often above the posted speed limit, and the need for police enforcement cannot be overemphasized.
- Businesses along the road need free and unrestricted access to the extent possible. This is a necessity that may be at times in conflict with traffic safety and traffic calming requirements. Proposals for the creation of a median along segments of the corridor should recognize this, and minimize potential restrictions to business access.
- Issues of maintenance and repair along the corridor are critical to the future success of any proposed improvements. Curbs and separations between pedestrian and vehicular zones should be designed with consideration of winter needs for snow removal. Plantings on medians and landscaped strips need to be of resilient and salt tolerant species.
- The State-owned right-of-way varies in width along different sections of the corridor. This poses constraints to the potential dimensions and level of amenities of future corridor improvements. The south corridor in particular has a minimum width of approximately 64 feet, which precludes the possibilities of having a traffic median and generous sidewalks on both sides of the road.
- A significant challenge will be to convince the State Department of Transportation (DOT) to buy into visions for an improved and landscaped Post Road corridor, which may promote pedestrian safety and amenities over traffic flow and level of service priorities.
- The Quonset Davisville Port and Commercial Park has prime undeveloped parcels with direct frontage on the Post Road. These parcels constitute a major gateway into the complex, and an opportunity for a signature-type of development. Market

development potential and existing plans/guidelines for these parcels will have a significant impact on the image and character of the Post Road Corridor and need to be taken into consideration by the plan.

- There are places along the road where sidewalks are absent and multiple curb cuts make it very difficult to walk from business to business. Notwithstanding the need for direct and convenient vehicular access to businesses, the number and frequency of curb cuts need to be simplified in order to increase traffic and pedestrian safety.
- There are no safe ways to cross the road, except by a pedestrian-activated signal in the vicinity of the North Kingstown Plaza, and a recently installed crosswalk at the intersection of Newcomb Road. Provision of crosswalks and pedestrian signals at major intersections is a necessity.
- Road hazards and obstructions, such as former utility telephone poles in the middle of Juniper Lane or commercial signs placed at the eye level of motorists attempting to merge into oncoming traffic, endanger both driving and walking along parts of the corridor.
- There is a lack of consensus among the business community and property owners about the best planning options for the future of the corridor. Community meetings and discussions of proposals for the provision of sewers along the southern segment of the corridor served to deepen divisions and polarize opinions on the need for sewers and their potential benefits. The lack of consensus contributed to the rejection of plans for the construction of sewers in the south corridor area.
- One of the elements that contribute to the visual clutter and the commercial strip image is the presence of utility poles and electric lines running along both sides of the road. Relocating utilities underground or to the rear of the existing businesses would highly improve the overall image and aesthetics along the corridor.

Opportunities

- A bicycle path has been planned following the old trolley right-of-way between Wickford Village and Quonset, and a pedestrian trail has been proposed along the Sand Hill Brook connecting the East Davisville and Quidnessett neighborhoods to the Middle School complex in Davisville. These represent opportunities to increase and expand pedestrian and bicycle connections across the area.
- The existence of the fifth lane between Newcomb Road and School Street represents an opportunity to provide a median along parts of the central corridor segment. A median utilizing the fifth lane right-of-way would likely need to be intermittent in order to alternate landscaped areas with left turn lanes at key locations.
- People often schedule shopping trips to the corridor on a weekend or in such a way that coordinates errands so that they travel from business to business on one side of the road, and then turn left to the other direction and continue the sequence of shopping visits on the opposite direction (e.g., they go the hardware store, and then continue to Ryan's, Wilson's, over to the Post Office, veterinarian, the liquor store, etc.)
- The corridor is generally busy all through the day, every day of the week. Activities are more business oriented during working days, shopping oriented during the weekends.

- The opportunity exists along the southern segment of the corridor to investigate the potential for sharing driveways in order to reduce the number of consecutive curb cuts along the road and increase interconnectivity between business parking areas (an interesting precedent is set for MacDonald's on the central corridor where there is an access driveway connecting their business to the adjacent North Kingstown Plaza therefore increasing business opportunities and appeal for both).
- Opportunities also exist at some locations for a reconfiguration of parking lots and building entrances so that businesses could have direct frontage and storefronts on the Post Road and parking on the back of the buildings.
- The Post Road Corridor Plan offers an opportunity to improve storm water handling and drainage utilities, as well as consider planning for the location of a sewer utility corridor in the future.
- The proposed improvements will offer an opportunity to plan for the relocation of existing utilities to the back of the existing business properties or underground.
- There is a potential for considering relocation of some parking spaces to the back of the (Home Goods) North Kingstown Plaza buildings and provide an alternate entrance on the back of the buildings
- There are opportunities for the redevelopment of some aging properties and businesses that don't carry today the same appeal than in the past. This may lead to infill redevelopment and modest, but steady opportunities for growth and economic development along the corridor.

Planning goals and objectives for the Post Road Corridor have already been established by the Town's Comprehensive Plan, which is updated every five years. The last update took place in 2001, and one of the key objectives at that time was to formulate a Post Road Corridor Plan, which led to the preparation of this plan as a result.

One of the tasks of this study is to review the Comprehensive Plan and propose amendments that will be necessary as part of the implementation of the recommendations proposed as a result of this planning process.

Comprehensive Plan Goals

The following is a list of the specific goals and objectives included in the Post Road Corridor Element of the Comprehensive Plan. Most of these goals are current and consistent with the vision, goals and objectives expressed by the community at public meetings. Others may need to be updated as a result of the recommendations proposed in this document. Recommendations for potential amendments are discussed in the Implementation section of this report.

Goal 1: Enhance and Revitalize Post Road as the Town's Major Commercial District

Objectives:

- Formulate a Post Road Corridor Plan
- Encourage redevelopment of selected sites
- Set public investment priorities
- Promote residential uses along the Post Road
- Create a more "human scale" of development
- Improve streetscape, landscaping and public open spaces
- Improve signage and minimize visual clutter
- Work with businesses and property owners

Goal 2: Protect and Preserve Unique Resources

Objectives:

- Preserve historic landmarks, open space and natural resources
- Foster the creation of pocket parks in commercial areas

Goal 3: Develop a Circulation Plan that Accommodates Local Travel, Coordinates Through Traffic and Encourages Alternative Transportation

Objectives:

- Increase pedestrian and traffic safety
- Encourage the development of shared parking areas
- Plan roadway improvements
- Encourage the provision of public transportation

Goal 4: Provide Adequate Infrastructure and Community Services

Objectives:

- Seek the installation of underground utilities
- Recognize opportunities associated with using sanitary sewers
- Require stormwater systems to meet best management practices
- Protect groundwater resources
- Upgrade the water distribution system

Planning Goals and Objectives

The first public meeting that took place as part of this planning process served to identify community goals and objectives for the future of the corridor, through group discussions. The following is an edited summary of those goals.

Goal: Pursue the boulevard concept

Objectives:

- Provide landscaped median, including the south section
- Keep the road narrow

Goal: Allow for continuous traffic flow through

Objectives:

- Better coordinate traffic signals
- Have curbs to better control traffic

Goal: Control traffic speed

Objectives:

- Slow traffic through roadway narrowing
- Allow for pedestrian crosswalks and activated signals
- Keep speed limit down

Goal: Improve roadway design and layout

Objectives:

- Improve intersection at Stony Lane, but allow people to turn around (jug handle)
- Improve intersection at Namcook Road (T- shape)
- Reconfigure North Kingstown Plaza entrance
- Provide vehicle connections between stores/properties (CVS Del's, PO/Plaza)
- Reconfigure parking, building frontage on Post Road and parking on back

Goal: Increase pedestrian safety

Objectives:

- Provide crosswalks and pedestrian activated signals
- Provide pedestrian connections among parcels
- Create pedestrian paths serving the Middle school
- Provide pedestrian scale lighting

Goal: Make the corridor pleasant to the neighborhood

Objectives:

- Build good quality sidewalks
- Create pedestrian crossings where people want to walk
- Create a more “human” scale of development
- Improve streetscape, landscaping, and open spaces
- Relocate utilities underground

Goal: Reduce light pollution, create environmentally responsive lighting

Objectives:

- Consider using the model lighting ordinance

Goal: Encourage redevelopment

Objectives:

- Promote mixed use development connected to the Post Road
- Encourage quality business development, not strip uses
- Make entry into Quonset a major image improvement, appropriate business generator

Goal: Preserve historic landmarks

Goal: Promote sustainable development practices

Objectives:

- Preserve existing vegetation and trees
- Provide sewer service

Goal: Improve storm water handling and drainage

Objectives:

- Require storm water systems to meet best management practices

Goal: Improve business environment

Objectives:

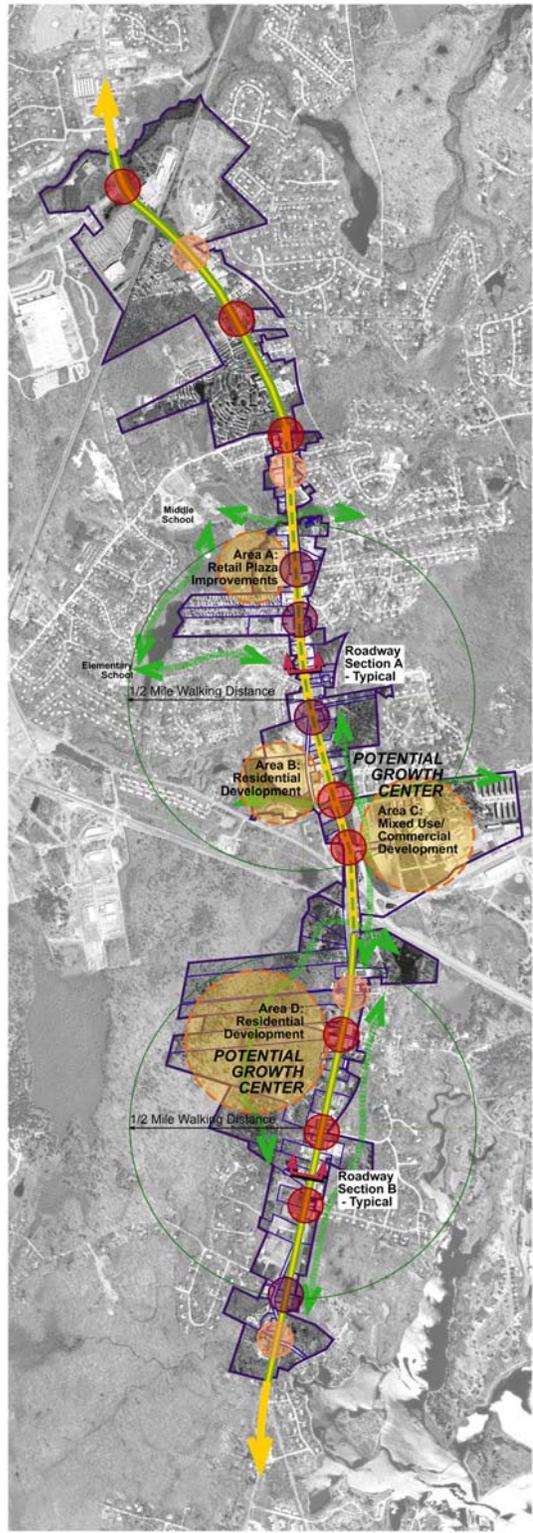
- Work with businesses and property owners to achieve consensus
- Maintain local flavor in terms of uniqueness and architecture

Vision Statement

The following vision statement has been crafted from ideas and suggestions provided by members of the community:

The Post Road should be a vibrant, safe, and attractive commercial corridor defined by distinctive businesses that reflect its character as the shopping and business center of North Kingstown. The corridor should reflect and emphasize its diversity and the particular character of each one of its segments, rather than attempting to convey a uniform image. The corridor should be community oriented and linked to the surrounding neighborhoods, lined with sidewalks and trees, and friendly to pedestrians and bicycles. Controlled traffic speed, pedestrian crossings, and left turn opportunities will provide safe and easy access to both sides of the road. Underground utilities, pedestrian lighting, and minimal but effective signage will enhance the streetscape. Design guidelines for new development will foster a village scale wherever possible, and promote the development of smaller shops and residential areas that will enhance community livability and character.

Principal Plan Elements



Planning recommendations for the Post Road Corridor include a series of actions aimed at achieving the vision and goals identified in the previous section. The proposed recommendations have been structured around several plan elements further described in this section:

- Transportation improvements
- Conceptual engineering plans
- Streetscape concepts
- Village center options
- Land use planning concepts
- Townscape and open space
- Infrastructure and utilities

Transportation Improvements

The following is a series of recommendations covering improvement aspects for the central and southern segments of the corridor:

- Travel lanes
- Proposed typical sections
- Intersection geometric improvements/traffic signal modifications
- Traffic signal coordination
- Pedestrian accommodations
- Traffic calming and safety measures
- Bicycle accommodations
- Bus service
- Potential for on-street parking

Travel Lanes

It is recommended that each corridor section consist of four travel lanes, with two lanes in each direction based on existing and projected daily traffic volumes.

Proposed Typical Sections

Proposed typical sections for the Post Road corridor have been created based on field measurements and procurement of RIDOT Right-of-Way Plans for Post Road. A typical section has been derived for each section – one for the central portion and one for the southern portion that are representative of the characteristics of each section.

Within the central section, the corridor right-of-way is such as to accommodate an 11-foot boulevard median and 5-foot bike lanes on each side of the road. All four-travel lanes (two in each direction) will be 11 feet in width with a 1 foot striped offset from the median. This configuration will not require any right-of-way takings; all proposed modifications would take place within the 80 foot right-of-way and be located on State property. Sidewalks will be concrete and narrowed to 5 feet. Utility poles are to be relocated to the rear of the sidewalks to allow for continuous freedom of movement for pedestrians and to have the sidewalk uniformly conform to ADA requirements. Utility poles are currently located along the back of curb or in the middle of the sidewalks. In areas where alterations or tapers in the curb line may be required the corridor right-of-way may need to be expanded to accommodate the increase in pavement width. Provisions should be made to accommodate turning trucks. On the west side of the highway provisions can be made within the parking area of North Kingstown Plaza to allow for turning trucks to utilize the existing traffic signal.

Within the southern portion of the project, the corridor right-of-way width is much narrower than that in the central section consisting of a total minimum width of approximately 64 feet. The existing typical section consists of four 10 ½-foot travel lanes with a 6 inch offset at the curb line. The proposed roadway section will increase the offset to one foot and create four 11-foot travel lanes. No additional right-of-way

will be required to accomplish this. However, this southern segment of the corridor will need to accommodate sidewalks, 5-foot bike lanes on both sides of the road between Quonset and Camp Avenue, and the proposed Wickford to Quonset Bike Path between Camp Avenue and Richard Smith Drive. The new section of Post Road constructed under the Route 403 project would accommodate the bike lanes and required offsets with 12-foot travel lanes. South of Camp Avenue, the following roadway section is proposed in a coordinated effort with the recently concluded Wickford to Quonset Bike Path Design Study:

- A three-foot pedestrian sidewalk (along the west side of the road)
- A one-foot paved shoulder
- Four 11-foot wide vehicle travel lanes
- A one-foot paved shoulder
- A five-foot planted strip including a utility corridor for poles, hydrants and signage
- A 10-foot shared use path for bicycles and pedestrians (along the east side of the road)

Further survey and right-of-way investigation will be needed prior to actual design, in order to confirm existing and proposed minimum dimensions for the proposed road section configuration. Access management to parking lots and existing businesses will need to be studied, in order to reduce curb cuts along the eastern side of the Post Road.

Intersection Geometric Improvements/Traffic Signal Modifications

Route 1 at School Street

Existing equipment is old and in need of replacement. New signal equipment is proposed at this location under RI Contract 83113 for the Reconstruction of Post Road. In addition, the channelized southbound right-turn lane will be removed and the eastbound right-turn lane will be modified from a channelized lane to an exclusive right-turn lane. There is an existing left-turn lane on Route 1 northbound that will remain.

Route 1 at Kingstown Plaza

Existing equipment is old but in fair condition. Under proposed conditions (RI Contract 83113), a new three-phase signal will be implemented and will include an exclusive left turn phase for the northbound and southbound approaches. The signal will also provide concurrent pedestrian phasing. Geometric improvements are proposed at the plaza driveway to consolidate lane movements. The existing left-turn lanes on Route 1 northbound and southbound will remain.

Route 1 Pedestrian Signal at Kingstown Plaza

A pedestrian signal exists just south of the entrance to the Kingstown Plaza. This existing pedestrian signal will be removed once the new signal with concurrent pedestrian phasing is installed at the Kingstown Plaza entrance.

New Pedestrian/Bicycle Crossing at Yorktown Road

A new pedestrian crossing is proposed at the Yorktown Road intersection in order to facilitate pedestrian and bicycle connections between the Davisville neighborhood and the Post Road. This crossing should be equipped with a pedestrian-activated traffic signal.

Route 1 at Newcomb Road

This location is currently under construction and new traffic signal equipment has been installed under RI Contract 2001-CH-015, Relocated Route 403. The signal operates as a three-phase signal with exclusive left turn phasing for the northbound and southbound approaches. Devil's Foot Road has been relocated opposite Newcomb Road to create a four-legged intersection at Route 1. New lane configuration improvements have been implemented at this location and include left-turn lanes on the Route 1 northbound and southbound approaches.

Route 1 at Gate Road/QPD

This location is currently under construction and new traffic signal equipment has been installed under RI Contract 2001-CH-015. The signal operates as a three-phase signal with an advance left turn phase for the southbound approach. New lane configuration improvements have been implemented at this location. A left-turn lane is provided on Route 1 southbound.

Route 1 at Camp Avenue

Existing equipment is old but in fair condition. The pole mounted controller cabinet is rusting out. All heads lack LED lenses. Currently the signal operates with three phases including an advance green phase for the southbound approach. There are no improvements currently planned for this location.

It is recommended that new lane configurations be considered at this location including the addition of a left-turn lane to the southbound approach on Route 1 and the westbound approach of Camp Avenue. Provisions for accommodation of bike lanes and pedestrian crossings also need to be made in coordination with the final design of the Wickford to Quonset Bike Path. This will ensure that future capacity demands are met at this location. It is recommended that new signal equipment be installed at this location.

New Pedestrian/Bicycle Crossing at Camp Avenue

A new pedestrian crossing is proposed at Camp Avenue in order to facilitate the transition from the shared use path for pedestrians and bicycles to two 5-foot bicycle lanes on each side of the Post Road. Ideally, this crossing should be equipped with a pedestrian-activated traffic signal.

Route 1 at Oakdale Road/Wickford Commons

Presently, the signal operates well and is in good physical condition. The signal operates with three phases including an advance green phase for the northbound approach. Left-turn lanes are not needed. An assessment should be made relative to the need for a phase that would facilitate southbound left turns on to Oakdale Road.

Route 1 at Huling Road

Presently, the signal operates well and is in good physical condition. However, with the proposed extension and signalization of Stony Lane just to the south of this location, this signal will be removed.

Route 1 at Stony Lane

The extension of Stony Lane to Route 1 is being designed under RI Contract 87116. Once Stony Lane is extended to intersect with Route 1, a traffic signal will be installed and the existing signal at Post Road/Huling Road will be removed. A three-phase signal with an advance left phase for the northbound approach is recommended for this future intersection. A left-turn lane is recommended for the Route 1 northbound approach.

Traffic Signal Coordination

The following traffic signal locations are recommended to be included as coordinated systems:

Signal System A

Two intersections are recommended as part of coordinated signal system A:

- Route 1 at Stony Lane
- Route 1 at Oakdale Road/Wickford Commons

Signal System B

Two intersections are recommended as part of coordinated signal system B:

- Route 1 at Newcomb Road
- Route 1 at Gate Road/QPD

The remaining intersections will operate as isolated intersection locations.

Pedestrian Accommodations

Pedestrian crosswalks and crossings are recommended at the following locations:

- Route 1 at School Street
- Route 1 at Kingstown Plaza
- Route 1 at Yorktown Road (new pedestrian/bicycle crossing)
- Route 1 at Newcomb Road
- Route 1 at Gate Road/QPD
- Route 1 at Camp Avenue (new pedestrian/bicycle crossing)
- Route 1 at Oakdale Road/Wickford Commons
- Route 1 at Stony Lane

Traffic Calming and Safety Measures

Within the central portion of the project limits along the Post Road corridor between Devils Foot Road and School Street, implementation of traffic calming measures would be marginal. With the placement of the 11-foot boulevard median and 5-foot bicycle lanes, number of travel lanes and reduction in overall roadway width would not be possible for the implementation of geometric constraints. The boulevard median however would serve as an added “distraction” for the motorist, lending to an indirect calming effect for opposing traffic and pedestrians.

Within the southern portion of the corridor south of Quonset and the Route 1 improvements at Route 403 to Stony Lane, a boulevard median will not be present. Proximity of opposing traffic and increased density reflects a more Urban Arterial character. Traffic calming measures in this area would be restricted to speed reduction and implementation of pedestrian control devices and improved pedestrian access. The key and central focus of traffic calming within the southern portion of this project is to make the roadway less threatening to the other uses (i.e., bikes, pedestrians and land use fronting the roadway) in this area; implementation of an on-street parking plan would also be impractical within the southern portion of the corridor. However, implementation of an access management plan would allow various businesses to combine driveways and in some cases a “frontage roadway” where several business can tie in and provide roadway access at a designated controlled point. This would remove a significant portion of the “cross-traffic” and improve pedestrian friendliness and safety along this segment of the corridor.

For corridors or primary traffic routes where network capacity is an issue and land use varies throughout the roadway, Level II traffic calming measures would be required. These measures, as defined by the Institute of Transportation Engineers, would generally be limited to the following items:

- Speed reduction zones (with increased enforcement)
- Rearrangement of land uses on traffic routes
- Slow speed mixed traffic areas in town centers
- Pedestrian signals at retail areas
- Bike lanes
- Parking policies

This type of traffic calming precludes any use of vertical deflection such as raised crosswalks, speed bumps, etc. and in many instances horizontal deflection is limited. Particularly within the project limits horizontal deflections are difficult given the characteristics of the right-of-way and alignment of the Post Road (US Route 1).

Within the central portion of the corridor on-street bike lanes and traffic advisory signs would provide additional traffic calming. Reduced speed through the retail district may add additional calming provided that enforcement is consistent. A speed profile must be performed to determine the areas where speed reduction is warranted and where increased enforcement is required in the future. The current straight alignment of the corridor would require this enforcement to create a pattern with the motorist to reduce speed within the specified area. Although no formal speed studies were performed it was qualitatively observed that the median speed is significantly in excess of the posted speed limit. Introduction of on-street parking would not be practical within the project limits due to high peak volumes, right-of-way limitations and roadway alignment. Although the roadway is classified as an Urban Arterial, the local characteristics are such that many of the uses are mixed with low-density segments scattered throughout the corridor.

Planning for the long term generation of village centers, as discussed in this study, will allow for a more consistent placement of retail, office and residential uses concentrating pedestrian intensive areas together. This will allow for improved and more consistent placement advisory signs, vehicular and pedestrian devices and access ways as well as restricted speed zoning through denser, more pedestrian utilized areas. Bus refuge and “pull-off” areas, if feasible, would also lend itself to a better separation of the various roadway uses. This would be of particular importance within the central section of the project where the bus would not be obtrusive to the bike lane users. Bus stops would need to be located in areas of highest density and areas of high concentrations of pedestrians.

Bicycle Accommodations

As mentioned under the previous sections accommodations will be made for bikes within the existing right-of-way. Additional land may be required at limited locations along the southern corridor in order to accommodate the proposed shared use path. One of those locations may be a constrained stretch of right-of-way where a restaurant building is very close to the Post Road edge of pavement.

Bus Service

The current RIPTA bus route through the Post Road corridor within the project limits consists of the following stops:

- Inbound - Quonset at Newcomb Road -Weekdays - 6:55AM, 7:21AM, 7:46AM, 8:12AM, 10:02AM, 1:07PM, 2:17PM, 3:28PM, 4:12PM, 5:12PM, 6:07PM
- Inbound - Heritage Village at Namcook - Weekdays - 10:05AM
- Inbound - Essex Village - 10:12AM
- Outbound - Quonset at Newcomb Road - Weekdays - 8:15AM, 8:45AM, 11:48AM, 12:49PM, 2:57PM, 3:45PM, 4:55PM, 5:20 PM, 5:50PM, 6:50PM
- Outbound - Heritage Village at Namcook - Weekdays - 2:54PM
- Outbound - Essex Village - Weekdays - 2:50PM

Three busses run on weekends at Quonset with one stop at the other locations. Limited stops are available along the southern portion of the project. However there are frequent stops south of the southern project limit within the Wickford village at Brown Street. With the location of the proposed village centers, additional stops can be added within the southern section. This could occur in the vicinity of Camp Avenue and at Stony Lane. Stops at these locations could be designated for weekend and peak times with less frequency than the Quonset stop, which could remain the hub stop with the surrounding others providing support.

A RIPTA kiosk may be added at the Quonset stop where a local transport system can route people to the hub stop for Inter-city transport. Bus shelters should be added to the other stops along the corridor, in particular to the northbound stops where there would likely be more people waiting for the bus to commute out of Town. Bus stops should, when possible, be located where parking is available.

Planning for the provision of bus pull over lanes in the long term is recommended, in order to increase overall traffic and pedestrian safety.

Potential for On-Street Parking

Due to right-of-way constraints, on-street parking during off-peak hours is not applicable since it would require the use of the right travel lane and is not recommended.

Conceptual Engineering Plans

Diagrams on the next pages show proposed engineering concepts for intersections and alignment along the central and southern segments of the corridor. The following changes to the existing roadway configuration are proposed:

Post Road at Chadsey Road (North)/CVS

A median break is provided and left-turn lanes are added to Post Road northbound and southbound.

Post Road at Chadsey Road (South)

The alignment of Chadsey Road is squared-off without impacting the building on the northeast corner as requested. A median break is provided and a left-turn lane is added to Post Road southbound.

Post Road at Yorktown Road

A new pedestrian and bicycle crossing is proposed at the Yorktown Road intersection, equipped with a pedestrian-actuated signal crossing.

Post Road at Namcook Road

The alignment of Namcook Road is squared-off without impacting the building on the southwest corner as requested. A median break is provided and a left-turn lane is added to Post Road northbound.

Post Road at Route 403

The proposed alignment for the relocation of 403 is shown, following a drawing provided by RIDOT, and including the current Post Road alignment and proposed connections to Route 403.

Wickford to Quonset Bike Path

Concept plans show the preferred alignment option as provided by Pare Engineering Corporation. The following items related to the bike path are shown in the diagrams:

- South of Camp Avenue the bike path is shown as a shared use path for pedestrians and bicycles along the east side of the Post Road, as described earlier.
- North of Camp Avenue, bicycle accommodations include two 5-foot lanes on both sides of the Post Road.
- A mid-block pedestrian and bicycle crossing is shown at Camp Avenue, which will include a pedestrian-actuated signal crossing.
- A shoulder line is shown along each side of Camp Avenue, representing the proposed bike path.

Huling Road/Stony Lane Improvements

The concept plans show the proposed (RIDOT) improvements to Stony Lane. Additional improvements are suggested:

- Huling Road (north) will not have a connection to the Post Road at the Post Office; access to the Post office will be via Huling Road at Stony Lane.
- Huling Road (south) will have a connection to the Post Road; alignment will be squared off (anticipated use is limited).

The Post Road Corridor study area south boundaries stop at the State Police Barracks, approximately 700 feet south of Stony Lane. However, the enclosed engineering concept layouts include portions of the Post Road located outside of the study area in order to represent the preferred bike path alignment recommended for the Wickford Quonset Bike Path from Stony Lane to Richard Smith Drive (shown below).

School Street to North Kingstown Plaza



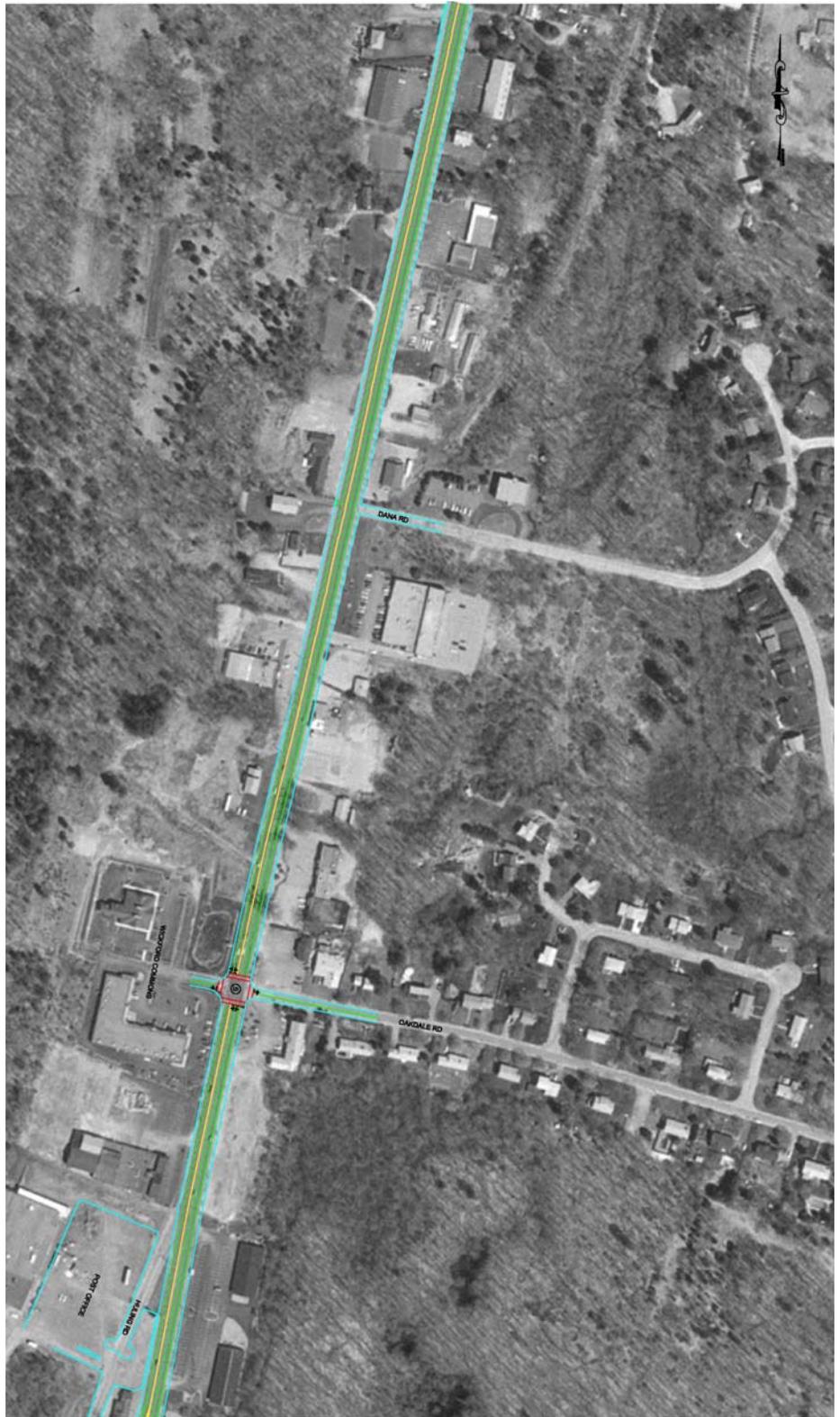
Chadsey Road to Newcomb Road



Gate Road to Camp Avenue



Camp Avenue to Huling Road



Stony Lane to Richard Smith Drive



Streetscape Concepts

The proposed streetscape concepts are aimed at complementing the recommended traffic improvements. Given the particular characteristics of right-of-way, roadway section, and lane configuration that are proposed for each segment, two different streetscape concepts are proposed for the Central and South Corridor segments (illustrated on the next pages). Both concepts are aimed at responding to the goals and objectives set forth by the community and the North Kingstown Comprehensive Plan by creating a “tree-lined boulevard”.

Both concepts are intended to complement each other by using similar types of materials and design elements, although planting selections don’t necessarily have to be the same. In fact, the use of different types and species of trees at different locations may allow for the creation of distinctive images to identify particular segments along the corridor. For example, the Central Corridor rendering shown below illustrates the potential use of trees with a rounded crown along a landscaped median occupying the space currently used by the central turn lane, while the South Corridor rendering illustrates the potential use of columnar-shaped trees that would be more appropriate on the proposed landscaped strip and utility corridor. Similarly, clusters of evergreens or flowering trees may be used to introduce variety at different locations.

Additional recommendations include:

- Introduce an intermittent landscaped median along the central segment of the corridor
- Provide sidewalks on both sides of the corridor and crosswalks at all intersections
- Replace the sidewalk on the east side of the corridor between Camp Avenue and Richard Smith Drive with a shared use path for pedestrians and bicycles
- Introduce a five-foot planted strip and utility corridor for poles, hydrants and signage between the proposed shared use path and vehicular traffic lanes
- Adopt traffic calming measures that may include a combination of differential pavement treatments, crosswalks and signage
- Select plantings from a pool of resilient, salt tolerant specimens, and locally adapted tree species and perennial grasses
- Create distinctive clusters of flowering trees and bushes to mark key landmarks and gateways (e.g., access to Smith Castle, Quonset Gate Road intersection, access to Saw Mill Pond natural recreation area, etc.)
- Seek underground relocation of utilities
- Implement design guidelines to create landscaped edges along front property lines and sidewalks
- Implement design guidelines to coordinate placement of trees, signage and lighting

Village Center Options

One of the planning tasks included in the scope of work for the corridor plan was to investigate the potential to generate a growth center along the Post Road, based on policies and parameters outlined by the 2002 Growth Centers Report of the Governor's Growth Planning Council. The following is a summary of the conclusions derived from this analysis.

The 2002 Growth Centers Report is aimed at recommending "ways of encouraging growth in economically and environmentally sound locations". The report defines growth centers as "dynamic and efficient centers for development that have a core of commercial and community services, residential development, and natural and built landmarks and boundaries that provide a sense of place." Three types of growth centers are recognized by the Growth Centers Report: urban centers, town centers, and village centers. Centers could be already developed, or they could be planned for development. The report also sets criteria for identification and approval of growth centers. Once an area is identified and becomes approved as a growth center, state departments and agencies will identify programs and resources that could be targeted to supporting appropriate development according to a defined set of priorities.

A town or municipality could have more than one growth center when appropriate.

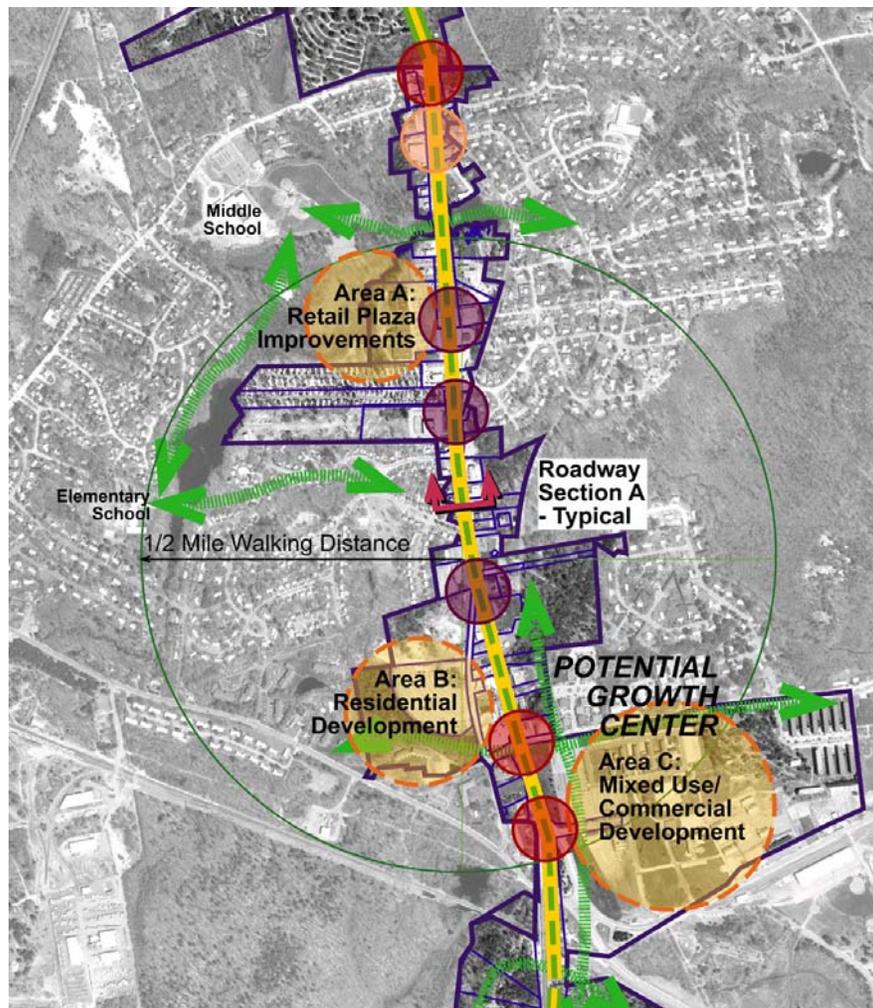
Summary and Conclusions

Based on the review of criteria described in the report, and their application to the Post Road Corridor Plan study area, it may be possible to identify two areas that could be planned as potential village centers. The Town could apply to the Statewide Planning Program for growth center designation for these areas (referred to as Village Center Options 1 and 2 below). Areas considered included the segment of the Post Road extending between School Street and Gateway/Executive Park parcel at Quonset Industrial Park, and the segment extending between Maxwell Road and Stony Lane.

These areas comply with many of the criteria defined in the Governor's report. However, none of the areas fulfills all the requirements. Consequently, the actual process of identification and approval may be contingent on state policies and priorities, and the willingness of state officials to be somehow flexible in the application of some of the criteria. It may also depend on the capacity of the Town to undertake certain actions in order to meet all the requirements.

Potential Village Center Option 1

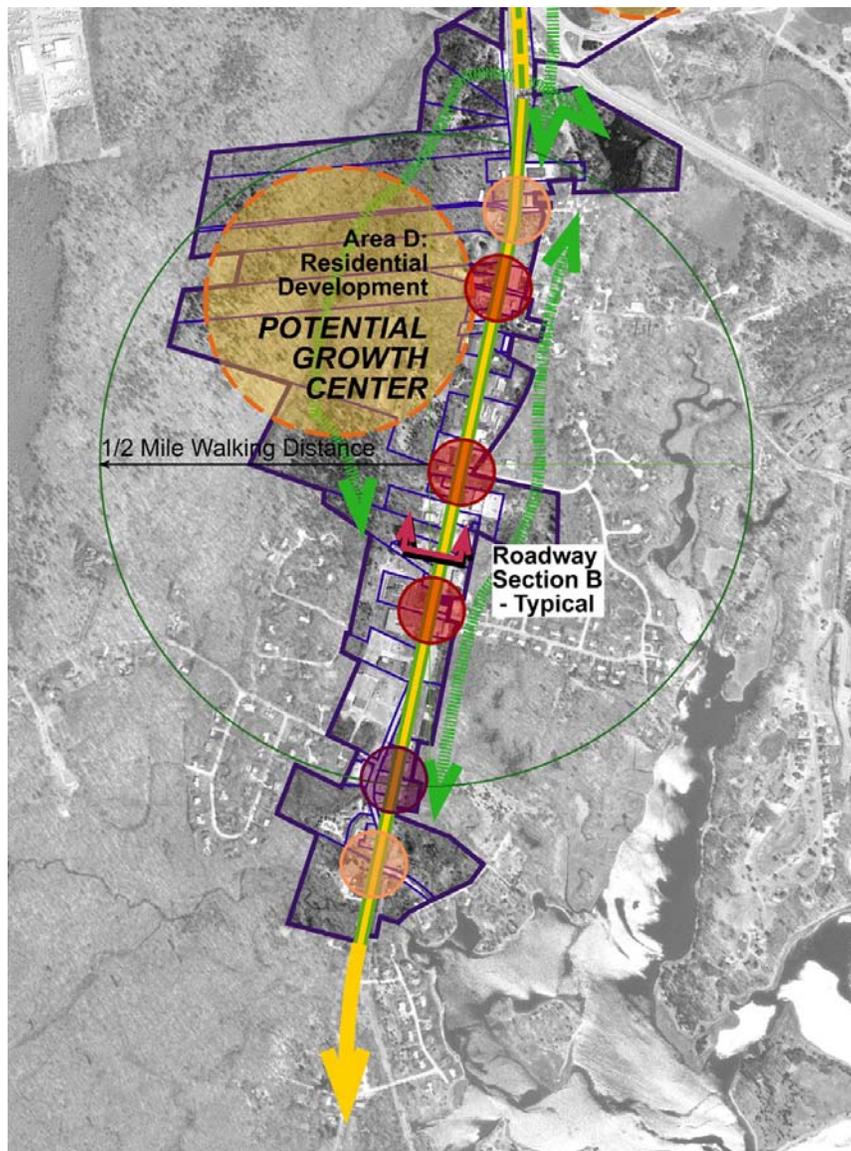
Two of the key criteria for approval require that growth centers include a mix of housing, employment opportunities, schools, commercial and industrial uses, and civic/public spaces *within an area no larger than a ½ mile radius circle*. From this point of view neither of the areas identified above include a school within a ½ mile distance. However, if we consider the segment of the Post Road comprised between School Street and Quonset Industrial Park (to which we may refer as the “central corridor”), and a ½ mile radius circle centered near the North Kingstown Plaza retail complex, the Gateway Parcel and the existing Davisville elementary and middle schools would be connected by the circle, as indicated in the Central Corridor concept diagram shown below. If this area could be identified as a village center, it would include schools and a wide range of diverse uses within a ½ mile walking distance. Potential growth could include improvements to existing commercial properties (exemplified by potential improvements to Area A as indicated in the diagram) and new development in areas labeled as B and C.



Central Corridor – Potential Village Center Option 1

Potential Village Center Option 2

The following South Corridor concept diagram illustrates a potential village center focused on the southern portion of the corridor and the adjacent properties. Potential redevelopment areas are shown (indicated as Areas D and E). This village center would include a variety of uses ranging from commercial to residential, and it would be adjacent to a historic landmark (Smith Castle). However, there would be no schools included within the ½ mile radius unless the municipality undertakes special actions to provide school services. Otherwise, eligibility to growth center designation may depend on special consideration of school requirements.



South Corridor – Potential Village Center Option 2

Growth Center Criteria

The following table summarizes the key criteria established in the Governor's report for identifying and approving growth centers, and it includes a qualitative evaluation of the performance of each of the proposed options based on **Yes** (complies with the criteria) or **No** (does not comply or requires municipal intervention).

Growth Center Criteria	Option 1	Option 2
Preferred locations are areas with existing infrastructure and public services (including water, sewer or wastewater management district, and transportation)	Yes	No
Infill projects, reuse of brownfields, and conversion of underutilized structures have priority over greenfield sites	Yes	Yes
Planned infrastructure is sized to support designated compact growth, not sprawl	Yes	Yes
Adequate infrastructure should be either in place or planned for a time-frame to coincide with development of the new center, as documented in the local Comprehensive Plan	Yes	No
Compact design should minimize the amount of land consumed, on a per capita, per dwelling, and per job basis	Yes	Yes
Centers should include a mix of housing, significant employment, schools, commercial and industrial uses, and civic/public spaces and buildings	Yes	No
A single-use development may be considered if it is linked to, compliments and completes a nearby mix of compatible, existing or planned land uses	Yes	Yes
Community comprehensive plan and zoning allow a mix of land uses to coexist with a center	Yes	Yes
Housing should include a range of opportunities in building type, tenancy, price, and income levels	Yes	Yes
Community comprehensive plan and zoning allow and encourage a mix of housing types in centers	Yes	Yes
Avoids converting working lands, such as prime farmland and forestland, to development	Yes	Yes
Avoids fragmenting existing greenspace, especially natural habitats; community green spaces should contribute to create community/statewide interconnected networks	Yes	Yes

Growth Center Criteria	Option 1	Option 2
Center protects the local watershed, and does not negatively impact critical and unique resource areas	Yes	Yes
Center does not negatively impact unique cultural resource areas (including scenic vistas)	Yes	Yes
Convenient access to mass transit (existing or planned); centers encouraged to include public transit hubs/stations	Yes	Yes
Layout, density and design should encourage public transit, walking and biking over automobile use	No	No
Traffic should be accommodated by interconnected street patterns providing multiple routes to minimize congestion	Yes	No
Community design should be used to encourage interactions among people	Yes	Yes
Streets have been designed with sidewalks, appropriate lighting and connectedness, to promote easy and safe walking	Yes	No
Commitment to using older and historic buildings	Yes	Yes
Exhibit several or all of the characteristics of walkable communities: physical indicators, sidewalks, buildings close to the street and accessible, on-street parking, trees, traffic calming devices, and streetscape amenities	No	No
Municipally identified growth centers should not be larger than an area with an approximately ¼ to ½ mile radius from its center in all directions	Yes	Yes

The proposed Village Center Option 2 does not comply with state eligibility criteria because there are no sewer infrastructure and no school facilities available within the potential village center area. However, and in spite of these conditions, the Town should consider applying for designation of two village centers as an important opportunity to leverage state assistance and promote economic development along the Post Road.

Land Use Planning Concepts

The Post Road Element of the North Kingstown Comprehensive Plan sets goals, objectives and actions to implement the vision of the Post Road as the Town's major commercial district, while allowing for the introduction of mixed uses and the protection of open space and historic resources. These goals and vision are in general consistent with the existing land use patterns along the Post Road. The most significant change proposed for the future is the support of mixed use development. This section reviews the perceived opportunities for new development including mixed use concepts, and related land use and planning recommendations.

The existing land use patterns are characterized by the presence of commercial uses lining both sides of the Post Road, and residential neighborhoods surrounding commercial areas. These neighborhoods generally consist of groups of single-family homes interspersed with open space and wetlands. These patterns are supported by the current Land Use Plan and Zoning Ordinance.



Most of the existing commercial properties along the Post Road as well as the adjacent residential neighborhoods are practically built-out today, with little or no room available for new development. Future development opportunities will likely be a result of the revitalization of aging commercial properties, and the redevelopment of a few available large parcels currently vacant or underutilized.

The majority of the existing commercial properties along the corridor are relatively small, comprising one acre or less. Improvement and revitalization of older businesses through the years will certainly enhance the overall economic and physical environment along the corridor, resulting in a general improvement of the quality of living. However, the revitalization of small commercial parcels on a one-by-one basis will not necessarily result in significant growth. Growth will likely be generated by a few large parcels that are or have recently been subject to redevelopment proposals. These parcels are located in potential improvement and redevelopment areas that have been identified through the planning process, and are shown in yellow in the enclosed Corridor Concept Plan.

Preliminary estimates of potential development volumes for these areas, based on the analysis of current zoning requirements and prior development proposals for some of the parcels indicate that redevelopment of these areas could result in a combined build-out of 300,000 square feet of business/office space and 600 residential units in the long term.

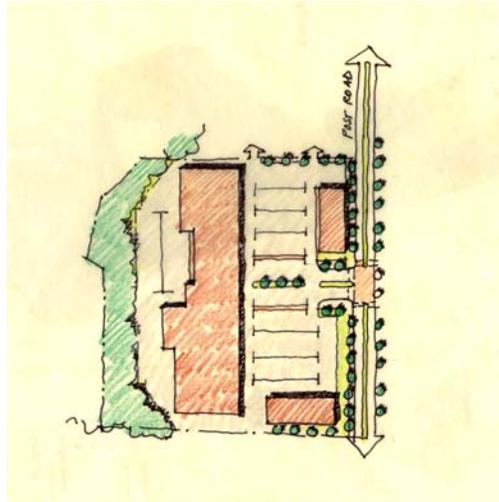
Proposals for the former drive-in theater site and the Reynolds Farm (shown in the map as areas B and D) were made last year that included mixed use components, proposing business uses facing the Post Road and multifamily/cluster residential uses on the interior of the parcel.

No proposals have been recently submitted to the Town for improvements to retail plazas or development of the Quonset Gateway parcels (areas A and C). However, these parcels are designated for mixed use commercial and office use as part of the master plan for Executive Park at Quonset.

Land use planning concepts and recommendations are herein proposed to guide the future redevelopment of those parcels towards the achievement of the stated goals and vision. If approved by the Town and Post Road constituencies, these concepts would need to be incorporated into zoning and plan documents in order to become effective. New zoning and design guidelines will likely need to be produced in order to support the creation of village centers, if these are designated along the Post Road as discussed in the previous section. Proposed recommendations are the following:

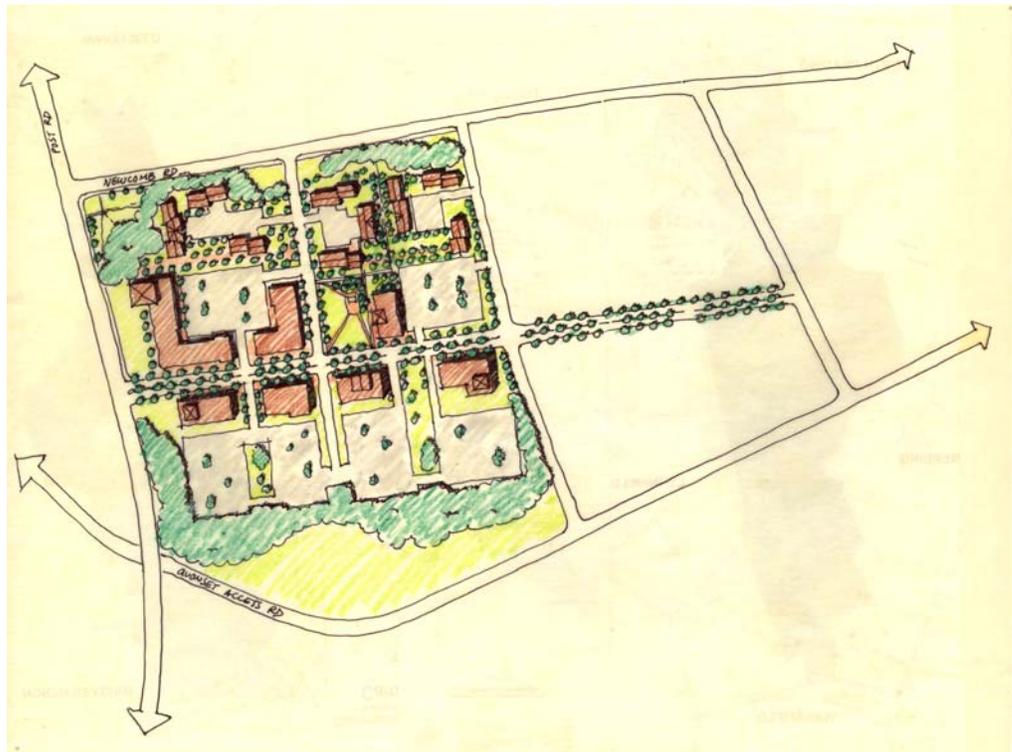
- Promote a smart-growth approach in planning for the concentration of future development in areas already served by infrastructure, and the preservation of areas that are underserved or inaccessible
- Review zoning and subdivision regulations to support concentrated development (potentially reducing setbacks, lot building coverage, minimum lot size, parking requirements, etc.)
- Introduce mixed-use concepts and building types that will support the creation of village-scale densities (for example, multi-family residential development with neighborhood retail components; commercial development with upper floor residential components)
- Keep overall limits to new development as set per current regulations (maximum building area or number of units allowed per acre); encourage building concentration in appropriate locations and open space preservation in other areas seeking to establish an overall density balance
- Encourage proximity between buildings and amenities that will support walking and bicycling as the preferred modes of travel
- Encourage redevelopment concepts that congregate new buildings around a village green or neighborhood park, in order to provide opportunities for recreation and create a focal point for the community
- Encourage retail redevelopment that will bring buildings and storefronts closer to the street and relocate some parking to the back of the buildings (e.g., employee parking)
- Promote parking solutions that break down large expanses of pavement into smaller areas buffered and enhanced by landscaping

Illustrative land use concept plans have been prepared to convey the potential results of the application of the above recommendations to some of the existing parcels. These are only intended as illustrations of potential results, they do not represent current or proposed plans for any existing parcel.



Potential Retail Plaza Improvements

This concept illustrates the possibility that some of the parking located in front of existing retail businesses could be relocated to the back of the buildings, allowing for the construction of additional retail along the front of the parcel. This would have a positive effect on commercial visibility and pedestrian amenities along the Post Road by bringing retail storefronts and access closer to the sidewalk.



Potential Mixed Use/Commercial Development

The enclosed diagram illustrates a potential application of the proposed recommendations to large parcels along the Post Road, such as the Quonset Executive Park area.

The diagram shows a layout that congregates mixed use commercial buildings along Gate Road and a central “village green” focal point. Retail uses have frontage along Post Road and Gate Road, and parking on the back of the buildings. These may also be designed to house additional mixed use office or residential components on upper floors. A small tower or a landmark architectural feature, and a green “common” space mark the corner of Newcomb and Post Road. Mixed use residential units are also proposed along Newcomb Road, in order to create an edge consistent with existing residential uses across the street.

Potential Mixed Use/Residential Development



The enclosed concept plan illustrates an example of mixed use development that concentrates higher density and commercial uses along the Post Road. Smaller residential buildings are located inside the block, creating clusters of multi-family buildings and townhouses that decrease in size and density as we move from the street towards the back of the parcel. Open space areas are preserved along wetlands and streams.

Zoning Observations

Current zoning requirements were used to estimate the amount of potential development that could be accommodated on the sample parcels selected to illustrate land use and planning concepts. It was generally found that the maximum densities allowed by zoning do not allow for a concentration of buildings close to each other and are, therefore, too low to accommodate development of village-type environments.

One obvious reason is given by the lack of sewer infrastructure in the area, which requires low development densities in order to protect groundwater quality and the capacity to treat wastewater through the provision of septic systems. However, even with sewers, the resulting layouts were still too spread out to convey a village character

even when the highest residential densities currently allowed were applied (4 residential units per acre and 17,000 square feet of commercial use per acre for Planned Development Units, with sewers).

The existing densities currently allowed are one of the regulatory aspects that may need to be reviewed by the Planning Commission and Town Council, and possibly changed if village center concepts become implemented.

Townscape and Open Space

As many other towns in New England, North Kingstown has inherited a cultural and building tradition that goes back to colonial times, and is characterized by human scale and the use of natural construction materials. This tradition is best represented by existing historic town centers, such as Wickford Village, which have evolved through the years adapting to changing circumstances without losing their inherent charm and value.

Circumstances along the Post Road Corridor are different as a result of its origins and development. The Post Road grew from a need to connect and transport goods and people between early settlements. The physical character of the areas served by the road, and the road itself, changed with the advent of the car, and land use and building patterns have adapted to the needs of the automobile rather than the pedestrian.

In recent years, revitalization initiatives in places comparable to the Post Road have been oriented towards a recapture of public spaces for pedestrians and a reinvention of the village character. Even while people are still highly dependent on the automobile for long-distance travel, planners strive to create places where people can arrive by car, park, and then walk to jobs, shops and services within a comfortable distance. This type of environment is created through the proximity of buildings and activities, which also supports the provision of attractive streetscapes and adequate infrastructure within reasonable cost. The greatest challenge is to achieve the necessary continuity of key connections from one place to another, while maintaining an overall balance between public spaces and parking.

All factors analyzed indicate that the Post Road will continue to be a car-oriented environment. However, efforts can be made to enhance the human scale and pedestrian qualities along the road on a segment-by-segment and a project-by-project basis. These can be accomplished through the creation and implementation of design guidelines, which should take into consideration the particular design character of each section of the road, and site planning standards that support pedestrian scale and attractive landscaping along the corridor. Design guidelines can be incorporated into zoning as part of district overlays or special development standards, and they can be used as a basis for project design review prior to issuing permit approvals.

Design guidelines and site planning standards could also be implemented as a means to protect natural resources and preserve open space within private development sites. This could be achieved by allowing the development of (village-scale) moderate densities in areas closer to the Post Road, while requiring the provision of parks, greens

and natural conservation areas in portions of the same parcels located far from the road or adjacent to existing natural resources.

Interesting examples of commercial and residential development that create pedestrian environments in village-type settings are found in concepts that support smart-growth principles. An interesting commercial precedent is found at Mashpee Commons, a large mixed use/commercial redevelopment in Cape Cod that contains a variety of regional retail and commercial uses within a pedestrian-oriented environment. Long-term plans also include residential uses and open space. Although the Post Road is clearly not a shopping center, some of the design concepts conveyed by Mashpee's architecture, site planning, building scale, and pedestrian environment could be referenced as examples for guidelines.

The following images illustrate townscape, streetscape and open space concepts that could be used to initiate the review and discussion of potential zoning amendments and design guidelines for the corridor.

Commercial Design Concepts





Commercial Design Concepts



Mashpee Commons



Mixed Use and Residential Design Concepts

Mashpee Commons



Open Space and Landscape Design Concepts



Infrastructure and Utilities

In addition to the transportation improvements recommended earlier, the Town, with State assistance, needs to reconsider the potential for upgrading wastewater treatment infrastructure. Treatment is currently provided by means of private individual septic systems. Plans have been studied in the past to supply the Post Road Corridor with a public sewer system connected to an existing treatment facility at Quonset. However, they never became implemented due to a lack of consensus on the resolution of important financial and procedural issues. This process may need to be revisited again in order to arrive to sound wastewater treatment solutions that will be able to support long term sustainable growth, and the preservation of environmental qualities along the corridor.

Another important recommendation is the relocation of power and telephone lines underground. This is one of the elements that most strongly contributes to visual clutter along the Post Road. Similarly, the oversized poles and utility lines reflect a strip-mall character that detracts from the envisioned image of a pedestrian friendly, quality-shopping district that the proposed streetscape improvements aim to create.

Recommendations for implementing the proposed plan elements are based on two principal strategies – the formulation of transportation priorities for the financing and construction of the recommended improvements, and the review and update of existing land use regulations to support sustainable growth at appropriate locations.

The following section also includes a summary of proposed draft amendments to the Town’s Comprehensive Plan that may be needed as a result of this plan, as well as a summary list of actions that the Town will need to initiate in order to implement the proposed recommendations.

Transportation Priorities

Most of the recommended geometric and traffic signal modifications are underway through current RIDOT contracts. These RIDOT projects are at various stages, from design to construction. The exception is the intersection of Route 1 at Camp Avenue. There are no improvements currently planned for this location. It is recommended that new lane configurations be considered at this location including the addition of a left-turn lane to the southbound approach on Route 1 and the westbound approach of Camp Avenue. In addition, it is recommended that new signal equipment be installed at this location.

Changes to Zoning and Land Use

The analysis of potential development sites and estimates of potential development along the Post Road, carried out as part of this study, indicate that redevelopment along the corridor may likely occur at a moderate pace during the next 10 to 15 years, on an infill basis, except by two particular areas where new development may take place in the near term. These are the Reynolds Farm parcels and the Quonset Executive Park parcels.

As many other historic New England towns, which are already relatively densely developed, it is difficult for North Kingstown to control the amount of new development that may occur in the long term. However, it is possible to define the physical and environmental qualities of the resulting neighborhoods and communities through land use policies and zoning regulations.

The Rhode Island Governor’s Growth Planning Council has established policies and parameters to guide new development towards areas defined as growth centers, where the proximity of commercial and community services, transportation, residential uses and natural boundaries converge to create a sense of place. Under these policies growth centers are identified by local communities and, once approved by the State, may qualify for priority in the allocation of funding, programs and resources.

Analysis and consideration of potential growth centers along the Post Road Corridor has been an important part of this study. One of the key recommendations that has emerged as a result is to apply for the designation of two village centers along the Post Road – one in the central section of the corridor including areas comprised between

School Street and Route 403, Saw Mill Pond and Quonset Executive Park; the other village center focuses on the south section of the corridor between Route 403 and Smith Castle, and includes the Reynolds Farm area and the Oakdale neighborhood.

Zoning Recommendations

In order to support the generation of village centers along the Post Road, zoning needs to be reviewed and amended to allow for mixed use development and the introduction of residential uses in areas currently zoned as General Business (which does not support residential uses). Growth center policies call for the provision of a variety of housing types that may include multifamily and affordable units, and layouts and densities that encourage walking, biking and the use of public transportation over automobiles. To this effect, dimensional requirements that apply to underdeveloped parcels along the south segment of the corridor follow those under current Neighborhood/NR40 and Rural/RR80 zoning districts. These will also need to be reviewed and likely modified in order to allow for a more compact scale of development.

A review of the existing zoning indicates that there may be more than one way in which these changes could be accomplished. One possible option would be to rezone designated village center areas to zoning districts that allow for a higher flexibility in use mix or dimensional requirements; some of these options are already included in various sections of the Town's zoning ordinance (e.g., rezoning Neighborhood Residential or Village Residential areas to Multifamily Residential or Planned Village Development Districts; rezoning General Business or Institutional/Office areas to Planned Business District). Another option would be to create a zoning overlay district for each village center, which would supersede the underlying zoning and modify specific use and dimensional requirements in ways that are consistent with the desired land use and townscape character.

If the Town decides to identify and apply to the State for the designation of two growth centers along the Post Road Corridor, an internal process of planning and zoning review for the target areas should follow suit in order to better define the character of the future village centers. Density, in particular, is a key parameter that needs to be reviewed and evaluated. Earlier design explorations of land use planning concepts indicate that the densities established by the current zoning are generally not conducive to the design of village-type settings, with the only exceptions found of the Multifamily District (a 1-bedroom unit is allowed by right per 2,500 square feet of land, with sewers; a special use permit is required for more than one bedroom per unit per 2,500 square feet, with sewers), and the Planned Unit Development District (if density bonuses are granted). Even the highest densities considered for the Planned Unit Development District, (4 units per acre outside Groundwater Overlay District, with sewers) which is intended to support the development of village centers, are too low without density bonuses to allow for site layouts similar to those of traditional villages.

In summary, the following zoning recommendations are proposed:

- Retain the existing land use character and zoning requirements for the majority of parcels with direct frontage along the Post Road Corridor – General Business District and Neighborhood Business District – except for underdeveloped areas that may be identified as part of potential village centers.
- Amend as necessary zoning for underdeveloped areas located within the proposed two village centers upon designation, in order to introduce mixed use residential components and design standards conducive to the creation of village-type layouts.
- Consider the creation of overlay zoning districts that would set specific requirements and design guidelines for each of the designated village center areas.
- Review zoning requirements for the Quonset Executive Park parcels that have direct frontage on the Post Road, in order to introduce design guidelines and standards supportive of village-type layouts.
- Review land use and zoning requirements for underdeveloped properties west of the Post Road Corridor southern segment, which are now zoned for moderate and low densities, in order to allow for the creation of village-type concentration and layouts.

Groundwater and Wastewater Considerations

Current zoning requirements are driven to a great extent by existing soil and groundwater conditions, and the need to preserve the quality and equilibrium of the natural environment. This is particularly true for the current Neighborhood Residential/NR40 and Rural Residential/RR80 districts, which regulate some of the areas that may be considered as part of a future village center. The development of village-type settings in these areas may require the provision of public infrastructure for the collection and treatment of wastewater. In the long term this may be a desirable option in order to preserve environmental qualities. It may also be an economically feasible option as well, especially if public funding programs and priorities are earmarked as a result of growth center designation.

In the short term, the creation of village-type settings as a result of new development may be achievable by establishing design guidelines that will support the concentration of uses *without increasing the overall development density*. This could be achieved by means of design guidelines and standards that would allow moderately higher densities in portions of the parcel located closer to the Post Road Corridor, while requiring the provision of natural conservation areas, parks and vegetation in portions of the same parcels located further away. Net densities in the localized areas where construction would occur would be allowed to foster proximity between buildings and access within walking distances. The gross density for the overall parcel could be capped to the maximum currently allowed. Such design guidelines and standards would help set the basis for the public review process, and facilitate the work of the Planning Commission in reviewing and approving large development projects.

Amendments to Comprehensive Plan

One of the tasks included as part of the scope of work for the Post Road Corridor Plan was to draft proposed amendments to the Post Road Corridor Element of the North Kingstown Comprehensive Plan that reflect the findings and recommendations of this planning process. Draft amendments were submitted for review in a separate document as recommended changes to the wording of the Vision, Goals and Objectives as stated in the current 5-Year Update adopted by the Town Council on July 9, 2001.

Most of the Goals and Objectives set forth by the Comprehensive Plan are consistent with the goals and recommendations of the Post Road Corridor Plan. However, some actions should be revised once the corridor plan is adopted in order to maintain consistency between the two planning documents.

Some of the proposed changes are minor and represent the necessary updating to convey that the Post Road Corridor Plan will already have been completed and adopted by the time that the Comprehensive Plan is amended. Other proposed changes are more significant, including the following:

- Amend Action P.1.1.2 (page 97) to exclude industrial uses from the range of uses along the Post Road; they do not necessarily contribute to the type of character and scale portrayed by the vision for the future of the Post Road, and there are other advantageous locations available for the development of industrial uses such as Quonset.
- Amend Objective P.1.3 (page 98) to include mention of mixed use options.
- Amend Action P.3.1.2 (page 101) to plan for the creation of an Access Management Plan to control and coordinate curb openings along the Post Road.
- Amend Action P.3.3.2 (page 101) to retain Post Road designation as a primary arterial.
- Amend Action P.3.3.3 (page 101) to incorporate the Post Road Corridor Plan elements and recommendations into the RIDOT reconstruction plans for Post Road.

Action Plan and Timeline

Six basic actions are recommended as key to unlocking the implementation process within the next three to five years:

- Initiate contacts with RIDOT to secure planning, design and funding of the recommended Post Road improvements – 2005
- Initiate the process of identifying village center areas and amending the Comprehensive Plan and Land Use regulations accordingly – 2005
- Work together with RIEDC to coordinate land use plans, vision and goals for Quonset Gateway parcels – 2005/2006

- Review and update zoning and land use regulations to promote mixed use development, incorporate design guidelines and site planning standards, and reflect other plan recommendations – 2005/2006
- Work closely with the community to plan for the detailed design of the proposed corridor improvements and the creation of an access management plan – 2006/2008
- Advance the planning process for provision of long term wastewater treatment solutions – 2008/2009

