AQUIDNECK ISLAND

WEST SIDE MASTER PLAN

Prepared for:

Aquidneck Island Planning Commission,
West Side Task Force

Prepared by:

The Cecil Group
Pare Engineering Corporation
SMWM
Edwards and Kelcey
Bonz and Company
Ninigret Partners, LLC

November 2005

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The *West Side Master Plan* reflects the vision and goals of hundreds of Aquidneck Islanders. Although it was written over the past eighteen months, it evolved over a decade of collaborative efforts which included local community meetings, focus groups, brainstorming sessions, presentations and long hours of deliberation and planning. For the first time, individuals and groups have worked across municipal, regional, state and federal boundaries to provide a model for future planning efforts in Rhode Island. The *Master Plan* is now captured within some 350 pages, but only for a moment in time. Soon it will take shape and form within our communities and across our region.

Perhaps the best analogy to describe the *Master Plan* is that of a master key: unlocking the door to sustainable growth and positive change for our residents and communities. The plan brings us to the threshold, but now it is the free choice and work of residents, planning and zoning boards, institutions, businesses, and city and town councils to turn the key, walk through the door and create a better future.

There are hundreds of recommendations, strategies and concepts outlined in the *West Side Master Plan*. The ideas look far into the future, and include redevelopment strategies for West Side properties, including selected Navy lands which may be excessed or privatized at some point in the coming years. In this manner the plan anticipates a multitude of possible future configurations along the 5,000 acres of the West Side.

The future to be unlocked in the *Master Plan* includes a sweeping range of concepts from an alternate transportation route to help quiet West Main Road to a shoreline walking trail along Narragansett Bay from McAllister Point to Carr Point. Also among the hundreds of recommendations are tools for preserving agricultural lands, retaining open space and promoting high-quality redevelopment for commercial and mixed-use areas through performance standards.

The plan provides not only the tools, but the timelines for each community to reach both municipal and Island-wide goals. It is inspiring yet practical. Such a unique success must be credited first to our funders, the visionaries who provided the backing for the years of effort on this project. There are numerous individuals and agencies to thank for these donations, and these are listed below. Working side by side with the Aquidneck Island Planning Commission have been the members of the West Side Task Force, also listed herein, who have dedicated nearly a decade to create the groundwork for a successful planning process.

Because the *West Side Master Plan* has a long history, and is well-known as a collaborative effort, its expectations may well exceed reality. It is important to keep in mind, however, that the plan is just a starting point: the real measure of success will be in the implementation of the plan's ideas. For that phase, the communities of Aquidneck Island will play a key role together with the Aquidneck Island Planning Commission.

Aquidneck Island is a dynamic region with rich resources. The key to success will be long-term application of the tools outlined in the *West Side Master Plan*, coupled with continued commitment from our public officials, residents and other stakeholders, so that the future of our Island may well match our dreams.

Dr. Robert Quigley, *Chairman*

West Side Task Force

ACKNOWLEDGEMENTS

The Aquidneck Island Planning Commission wishes to thank the members of the West Side Master Plan Task Force for their valued effort, guidance and commitment to this plan, as well as all the government officials, Navy representatives, residents, business owners, and members of the community that generously participated in meetings, interviews and conversations during the planning process.

The West Side Master Plan would not have been possible without the generous contributions from the following funders:

Rhode Island Congressional Delegation
- U.S.Department of Commerce, NOAA

Rhode Island General Assembly

Rhode Island Statewide Planning Program

Rhode Island Foundation

University of Rhode Island Coastal Resources Center

Rhode Island Sea Grant

Bank Newport

Alletta Morris McBean Charitable Trust

Town of Middletown

City of Newport

Town of Portsmouth

Prince Charitable Trusts

Prospect Hill Foundation

van Beuren Charitable Foundation

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The Aquidneck Island Planning Commission is a joint municipal planning commission established by Rhode Island General Laws 45-22 and Resolutions of the Towns of Middletown and Portsmouth, and the City of Newport. The AIPC is committed to providing a forum for communication, coordination and consensus building among Middletown, Newport, Portsmouth, the State of Rhode Island, the U. S. Navy and other federal agencies.

Other West Side Master Plan Participants

Aquidneck Land Trust

Church Community Housing

Grow Smart Rhode Island

Newport Dinner Train

Old Colony and Newport Railway

The Preservation Society of Newport County

Restoration Advisory Board

Rhode Island Coastal Resources Management Council

Rhode Island Department of Environmental Management

Rhode Island General Assembly

Rhode Island Public Transit Authority

Save the Bay

The Foundation Newport

U. S. Environmental Protection Agency (Region I)

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1 PROLOGUE

The West Side Master Plan is a resource for every steward of Aquidneck Island. The Master Plan charts many paths that can be taken to fulfill community visions for the Island's future - by managing significant changes that are bound to occur within a coastal corridor that stretches along Narragansett Bay.

The *West Side Master Plan* is a resource for all of the stakeholders in the future of Aquidneck Island. The *Master Plan* has been specifically created to support important, common interests in shaping the future of the West Side of the Island. Prepared by a Task Force of the Aquidneck Island Planning Commission, the *Master Plan* contains strategies to advance a shared, community-based vision for the West Side. Linked to the vision are lists of actions that could manage change in order to fulfill this vision.

Aquidneck Island is a remarkable place. Defined by its distinctive geography and coastal environment, the Island has proved to be a highly desirable location for a rich mix of uses. Settled early in the colonial era, its growth and development have been consistently influenced by the maritime advantages of the deep, protected waters of Narragansett Bay and its relative proximity to the mainland cities and towns along the Northeast coast. The land, soil and climate formed a special environment readily adapted by agricultural uses that have persisted for centuries. The early communities on the Island evolved around farming and marine-related activities until the combination of a booming national economy and the spectacular coastline drew seasonal visitors. Tourism became a major new component in the mix. Over the past few decades, the Island has been subject to changing employment, shopping and lifestyle choices bringing new residents, changing income levels, pressure on housing prices, altered traffic patterns, and new kinds of development. Some of the land has been preserved in a natural state. However, large undeveloped tracts remain and are subject to considerable change.

The West Side of Aquidneck Island comprises the shore and land that line Narragansett Bay, forming a long band stretching from Newport Harbor to the Mt. Hope Bridge. The *West Side Master Plan* describes opportunities within this swath that could benefit the quality of life, the economy, and environmental health of the Island and the regions beyond. Portions of the West Side are poised for significant change; decisions must be made that will have implications extending well beyond the project area. The *West Side Master Plan* also provides information that will serve as a convenient reference to many other planning initiatives underway that will influence the West Side.

This document brings together the contributions and inspirations of hundreds of people who have been involved in its preparation over several years. While the ideas contained in this document frame long-term visions looking many decades ahead, these recommendations are focused on goals that could be reached through a combination of immediate actions and longer term programs largely undertaken over the next ten years.

The implementation of the *West Side Master Plan* depends entirely upon the cooperative participation, consensus and commitment among those who hold the keys to the West Side's future.

A User's Guide to the *West Side Master Plan*

This Master Plan *is not conceived as a regional blueprint that should direct local, state, and federal decisions about the West Side.*

Rather, it is conceived as though it were a cookbook of practical and complementary recipes for excellent planning. Composed of strategies that can contribute to the community-defined vision for the West Side, this Master Plan *is meant as a practical guide for action; it assembles tools that can be selected and employed to achieve the best results by each steward of the West Side's future.*

The *West Side Master Plan* has been organized as a resource to manage the future. This User's Guide will help you quickly navigate through this volume to reach those elements most useful for your purposes.

Structure of the *West Side Master Plan*

1. Prologue: Introduces the *West Side Master Plan*, explains why it has been prepared, and describes who prepared this *Master Plan*. The Prologue traces how the *Master Plan* was prepared through an extended participatory process. The Prologue also introduces the concept of "implementation" – the steps needed to convert recommendations into actions. The Prologue notes key roles and responsibilities for the governments, organizations, and citizens who will be the stewards of the West Side's future.

2. The Vision for the West Side: Briefly encapsulates the vision of a positive future for the West Side.

3. Overview: Highlights prominent aspects of the entire *West Side Master Plan*. After the definition of the West Side planning area, you will find the overall planning strategies that the *West Side Master Plan* seeks to fulfill. The discussion called "putting the pieces together" describes how the recommendations can be composed to strengthen the region. The next section provides a summary of major recommendations that are explored in more detail in *Section 5, Plan Strategies*. An implementation summary expresses prominent methods for accomplishing the *West Side Master Plan*, drawn from more detailed discussion in *Section 6, Implementation*.

4. Planning Context: Sets the context of the *West Side Master Plan* by referring to key conditions and trends that will shape future choices for Aquidneck Island's communities. The *Planning Context* assembles influential observations on demographics, economics, transportation, open space, natural resources, infrastructure and land use.

5. Planning Strategies: Collects all of the planning strategies that will fulfill the vision for the West Side. The strategies address land use (patterns of land use, natural resources, site planning and design principles, open space preservation); economic development (priorities, specific recommendations); transportation (roadways and streets, transit options, bicycle networks, trails, paths and sidewalks); and utilities.

6. Implementation: Details how the planning strategies in the *West Side Master Plan* can be accomplished. The section first conveys the overall implementation approach. The section then takes each strategy and assigns stewardship, recommends tools, describes the process, suggests standards for performance, and lists resources for implementation. Key implementation steps are displayed in a schedule of priorities for each of the public jurisdictions that will be stewards of the West Side.

Appendices: Provide specific, expanded descriptions of technical recommendations associated with sustainable planning and design standards.

Recreational boats at Melville

Linking the *Master Plan's* Strategies: Internal References

Many of the *West Side Master Plan* strategies and the methods for implementing them are closely related. This document uses internal section and page references to assist the reader in understanding links among different strategies. The reader will also find a system of page references that link strategies to the *Master Plan's* recommendations for their implementation.

The Need for a *West Side Master Plan*

Without coordinated planning, the West Side's assets can neither be preserved nor its future successfully managed for everyone's benefit.

The *West Side Master Plan* emerges from a recognition of common issues among the constituent jurisdictions and entities along the entire length of the West Side. Issues are best addressed through shared knowledge and, where appropriate, coordinated strategies.

The West Side spans three different municipalities. The southern portion is within the City of Newport, the center is within the Town of Middletown, while the northern segment is within the Town of Portsmouth. The federal government, through Naval Station Newport, has substantial land holdings of active and inactive facilities. These properties stretch along Narragansett Bay in an 8-mile chain of land and ports from Gateway Center near Newport Harbor to large, abandoned tank farms in Portsmouth, and the Mount Hope Bridge. The State is an important stakeholder by virtue of key roadway, highway, and rail corridors, and through the active role of its agencies and authorities in the West Side.

Among the compelling reasons to provide a planning focus to the West Side are:

Planning for a high quality of life – The high quality of life on Aquidneck Island is directly linked to the valued heritage of the distinctive balance of uses and coastal character. These could be degraded through inappropriate change along the West Side, profoundly affecting the economic and civic life within the communities that compose it.

Coordinating continued military use and needs – Naval Station Newport and the associated activities are critical components of the area's economy and communities. The role and requirements of the Navy's activities can be expected to change with evolving national priorities. Planning is required to provide successful coordination of land use and infrastructure in concert with the changing needs for these uses. This need ranges from protecting the capacity for the Navy-related research and development work to coordination with the Navy's housing privatization program that is now underway. This conversion of former Navy housing to private control and management is likely to affect infrastructure, services, and redevelopment of some former Navy facilities and land along the West Side.

Planning for the reuse of excess Navy land – Many portions of Naval Station Newport have been withdrawn from active use over the years, and large areas of excess land have become available for reuse, such as the waterside and landside marine facilities at Melville Harbor in Portsmouth. Additional dispositions of even larger parcels may be undertaken soon, including former tank farms along Narragansett Bay. Planning is needed to promote common interests in land use, open space preservation, and economic redevelopment among the communities and constituencies of the West Side.

Coordinating transportation strategies – Increasing congestion along the major corridors of Aquidneck Island requires coordinated strategies to increase safety, reduce congestion, and provide better options for transit, bicyclists, and pedestrians. A particular focus of planning is the limited north/south corridors along this long and narrow Island. In the West Side, these corridors include West Main

Road, a partially-used rail corridor, and the Defense Highway that flanks Narragansett Bay.

Ensuring the benefits of open space and natural resources – The West Side hosts large expanses of linked coastline and open spaces that can provide amenities and environmental value, these will benefit everyone on the Island if they are systematically enhanced. Agricultural uses persist along the West Side, but could incrementally disappear without concerted actions. Open space and view corridors cross private, public, and jurisdictional lines and will require coordinated action to retain.

West Main Road

Working Together to Create this *Master Plan*

The West Side Master Plan *is the culmination of years of careful preparation and extensive involvement of hundreds of participants in meetings, workshops, briefings and interviews – all supported by volumes of technical studies and thousands of hours of staff and professional assistance.*

The *West Side Master Plan* was prepared as an initiative of the Aquidneck Island Planning Commission to extend its mission and methods. It convenes the constituencies of Aquidneck Island to work together to define and achieve common goals through planning.

The Aquidneck Island Planning Commission (AIPC) is a joint municipal planning commission. It is dedicated to its role as a forum for understanding, communicating, and reaching consensus on shared issues within the Island. The AIPC was established by the legislature (Rhode Island General Laws 45-22) and by Resolutions of each of the municipalities of Aquidneck Island. The AIPC brings together the governmental entities responsible for the Island – Middletown, Newport, Portsmouth, the State of Rhode Island and its authorities, the U.S. Navy, and other federal agencies. The AIPC benefits from the active participation of citizens and organizations who contribute their efforts to its mission.

West Side Master Plan public meeting

The AIPC established a Task Force to coordinate the West Side Planning initiative. The Task Force guided the preparation of the *West Side Master Plan* through its membership. Among its membership have been representatives from Middletown, Newport, Portsmouth, the State of Rhode Island, Naval Station Newport, the Newport County Chamber of Commerce, the University of Rhode Island Coastal Resources Center/Rhode Island Sea Grant, and the Board of Directors of the AIPC.

The First Steps

Once established, the West Side Task Force took incremental steps to expand the understanding of the challenges and opportunities for the West Side and to shape a shared vision for its future. Together, these steps formed the foundation for the *West Side Master Plan*.

Aquidneck Island: Our Shared Vision **(1999)** – Through a citizen-based participatory process, the AIPC assembled a document that expresses common visions for the Island. Through workshops, interviews, and meetings, key messages emerged that were formally adopted by the West Side Task Force and incorporated as goals for the *Master Plan*. Among the salient sentiments were directions to provide a livable landscape that "links open space areas so that individuals may walk or ride their bikes from one end of the island to the other." The vision directs the *West Side Master Plan* to "preserve access to the coast, including harbors, coves, and beaches…." Social well-being is to be achieved, in part, by celebrating the history through enhanced cultural activities. Recognizing the need for a strong local economy

that balances preservation and development, the *Shared Vision* seeks development that complements the Island's character. Finally, the *Shared Vision* projects a future with multiple transportation modes to help relieve congestion.

West Side Planning Inventory **(2000)** – The Task Force completed an extensive inventory that charted many of the factors influencing the future of the West Side; the relevant information was reviewed and updated in 2004 and used as an essential reference in drafting the *West Side Master Plan*.

Transportation Guide Plan **(2000)** – The West Side is a focus of transportation issues on an Island that is subject to traffic congestion due to the limited roadway and transit options. After earlier proposals to build new highway corridors were rejected by the Island communities due to the undesirable changes that would occur, the Task Force provided a detailed technical study that documented existing problems and revealed options for roadway, transit, ferry, bicycle, and pedestrian connections along the entire West Side of the Island. The *West Side Master Plan* advances the most promising aspects of the *Transportation Guide Plan* in concert with land use, economic development, and open space preservation.

The West Side: The People, The Place, The Process **(2003)** – A broad-based community participation process was conducted by the AIPC to establish principal themes for the *West Side Master Plan*. Through workshops facilitated by a professional planning team, the Task Force established the criteria that have guided the preparation of this document.

Completing the *West Side Master Plan*

The Task Force advanced the *West Side Master Plan* through to completion with an intensive effort of its members, AIPC staff, and the applied planning expertise of a consulting team selected for its local, regional, and national experience with the issues facing the West Side. This nine-month enterprise included periodic public discussions and progress briefings, coordination meetings with the participating jurisdictions, and active involvement with emerging planning challenges. The final steps in the preparation of the *West Side Master Plan* included:

Confirming existing conditions and trends – Key issues and opportunities on the West Side were brought into sharp focus through a series of technical studies and evaluations. This included important economic and real estate market evaluations of trends that are affecting the region, Aquidneck Island, and the West Side. Additional technical reviews and observations established updated assumptions concerning demographics, affordable housing, traffic and transportation, natural resources, open space, and the utility infrastructure that serves the West Side. The Task Force also received information on state-of-the art planning practices for sustainable planning and development that are emerging in similar community settings both regionally and nationally. The reviews were gathered into documents that were reported to the Task Force: a *Summary of Findings* and a *Trends Report*.

Establishing baseline recommendations – The Task Force confirmed baseline planning recommendations that should be offered to the

constituent municipalities, state and federal agencies based on a well-developed consensus already established in the early stages of the West Side master planning process. These recommendations were then advanced with detailed ideas for their accomplishment and assembled in the *West Side Master Plan*.

Studying options and issues – Several complex topics required special study in the months leading up to the completion of the *West Side Master Plan*. In some cases, available options for the future had to be further understood before clear recommendations could be framed. In other cases, rapidly moving events required responsive consideration. Relevant results of these studies were then incorporated in the substance of the *West Side Master Plan*.

The planners sifted through the complicated choices for tackling traffic congestion and safety issues without compromising the quality of life and aesthetic value of the Island. They worked to clarify the most promising approaches to target the most meaningful travel alternatives to the automobile traffic that clogs West Side roadways and intersections.

Some of the special studies focused on significant proposals and prospective changes at the Naval Station Newport. Planning coordination and fiscal impact investigations were undertaken with the Navy's Housing Privatization initiative on Middletown, Newport, and Portsmouth. The privatization initiative surfaced in 2004 as a major consideration. The prospective transfer of hundreds of Navy housing units and large tracts of land to private sector control, management, and potential redevelopment of some Navy land and facilities became central issues.

Future land use choices were considered for property no longer being used by the Naval Station Newport, land and facilities which are widely expected to be released for reuse in the near term. The planning effort provided perspectives of economists, land use, environmental, and land preservation professionals to help construct options for reuse that would be aligned with the community visions for the West Side. These options were framed in the

West Main Road in Middletown

context of various disposition processes available to the federal government and the related implications for the West Side. Special efforts helped equip Aquidneck Island's communities with information regarding the procedures for reuse likely to be unlocked either as a result of the 2005 federal Base Realignment and Closure (BRAC) process or through other disposition methods.

Assembling the *Master Plan* – The baseline recommendations and results of the special studies were compiled, considered, and advanced in this consolidated document which was reviewed, refined, and finally approved by the Aquidneck Island Task Force.

Supporting implementation – The *West Side Master Plan* has been dedicated to supporting active management of the West Side's future. It offers strategies, ideas, and specific tools that can be employed by the stewards of that future. These have been incorporated into *Implementation Guidebooks* that have been tailored for use by the council, boards, commissions, agencies, and leadership of Middletown, Newport, Portsmouth, Rhode Island, and the Naval Station Newport.

The AIPC has already used the planning effort to help advance common interests and advocate for the value of the regional perspective provided in the *West Side Master Plan*. In February, 2005 the AIPC contributed a list of potential transportation projects for State consideration as it forms the Rhode Island Transportation Improvement Program (TIP). This list of projects was coordinated with the Island's communities to insure compatibility with local goals. These projects would fulfill the safety, congestion relief, and alternative transportation purposes contained in the *West Side Master Plan*.

The AIPC will sponsor public presentations and discussions of the *West Side Master Plan* with the public entities that are stewards of the West Side's future, seeking endorsements and incorporation of its recommendations in future decision making.

The AIPC will organize special initiatives to advance the implementation of the *Master Plan*. A prominent part of this effort will be the Intergovernmental Working Group, which will coordinate strategies and intergovernmental agreements associated with large redevelopment areas, including excess Navy land.

Responsibility for the Future

The stewardship of the West Side will never be the responsibility of any single group, agency or entity – it can only be accomplished by everyone working together.

The West Side is a shared asset; responsibility for its future must also be shared through coordinated efforts of the many constituents that are its stewards. It is important to recall the principal roles performed by each of the actors on the public policy stage:

Citizens of Aquidneck Island – The fundamental constituency for the West Side's future is the citizenry of the entire Island. Stewardship is accomplished when an informed citizenry is consistently involved in public issues along the West Side. There are many resources available, open doors to learn about the West Side, and other avenues to express preferences through volunteer activities, advocacy, and the ballot box.

Aquidneck Island Planning Commission – The AIPC is the only entity entirely focused on regional coordination for this Island. It will continue its leadership role in providing information, convening stakeholders, and providing technical planning support to the other governmental entities where regional benefits can be attained. At the request of those entities and consistent with its mission, the AIPC can also take an active role in project coordination, management, promotion, or project review for initiatives along the West Side. The AIPC will participate in the Intergovernmental Working Group that will help implement this *Master Plan*. The AIPC will also be a participant in the future disposition of excess Naval Station Newport land through a special collaborative process that the *Master Plan* describes.

Municipalities – Middletown, Newport, and Portsmouth are empowered to exercise wide-reaching land use and development controls through their zoning and subdivision regulations that are critical to shaping the future. These powers extend to lands owned by the state or federal governments when that land is used for purposes other than for public facilities. Each community controls its own public facilities and public open spaces, including the ability to shape the local transportation and utility networks that are linked to the vision for the West Side.

In order for the *West Side Master Plan* to achieve full implementation, key strategies that are relevant or specific to each municipality should become incorporated into its respective Comprehensive Plan. Comprehensive Plans may be amended from time to time to account for growth and change, and must be updated at least once every five years. Land use controls and regulations will also need to be amended as needed to reflect the adopted plan strategies and recommendations.

The municipalities will participate in the Intergovernmental Working Group that will enhance coordination, and be participants in the future disposition of excess Naval Station Newport land through a special collaborative process that the *Master Plan* describes.

The municipalities can also empower special entities to undertake targeted tasks along the West Side, through enabling legislation approved by the state legislature. In addition to the municipal utilities and authorities already in existence, each municipality could create or designate a Local Redevelopment Authority (LRA) to serve as a public intermediary for private redevelopment of former Navy land, for example.

State Government – Rhode Island will play multiple roles in the future of the West Side. The State has a regulatory

role, principally applied to the West Side in the form of environmental, public health, and public interest standards in the water and coastal resources. The Rhode Island Department of Transportation (RIDOT) is responsible for large portions of the roadway and rail infrastructure serving the West Side; The Rhode Island Public Transit Authority (RIPTA) can play a major role in bus or water transportation. The State is also a sponsor of economic initiatives and the Rhode Island Economic Development Corporation (RIEDC) can serve to promote, manage, or undertake economic development projects within its mission to support prosperity and jobs. The State will also be a source of funds, programs, and incentives to meet the *West Side Master Plan* objectives, such as the pivotal role that has already been played by the University of Rhode Island Coastal Resources Center/ Rhode Island Sea Grant. The state government will participate in the Intergovernmental Working Group that will enhance coordination, and be participants in the future disposition of excess Naval Station Newport land through a special collaborative process that the *Master Plan* describes.

Newport Secondary rail corridor

Federal Government – The stewardship of the Rhode Island congressional delegation will be critical to the future of the West Side. The federal role along the West Side is partly vested in Naval Station Newport that has occupied most of the coastal edge and continues to be an important component of Aquidneck Island's economy. The federal government controls the disposition process for unused Navy land and the privatization process for some of its facilities. The federal role in funding will be significant in the future, as it has been in the past. Federal funding has underwritten planning and research efforts, including this *West Side Master Plan*. Major transportation improvements are dependent upon federal funding and must consequently meet national standards. Environmental mitigation may be funded by the federal government, among other projects that serve to protect resources, administered through the U.S. Fish and Wildlife Service, the Environmental Protection Agency, or others. Regulations at the federal level will guide changes, including special attention to the coastal conditions and navigation-related projects. Naval Station Newport should be a participant in the Intergovernmental Working Group that will enhance coordination along the West Side.

Institutions, Organizations, and Companies – Applied assistance from a network of institutions, organizations, and companies will play prominent roles in the future of the West Side. Among those that can be expected to take leadership roles in recommendations of this *Master Plan* are the following:

- Aquidneck Land Trust – The Land Trust preserves open space by acquiring land and development rights. Through its leadership role, it will support continued open space acquisition, preservation of agriculture, protection of the Island's water supply, and contributions to public access with trails.

- Companies – Private sector companies are major stakeholders in the future of the West Side; their participation in achieving the *West Side Master Plan* vision will be determined by their circumstances. Some may shape their land and facilities in line with the recommendations contained within these pages, while others may be contributors to programs that will advance the public purposes that the *Master Plan* expresses.

- Foundations, Trusts and Grants – Contributions from charitable foundations, trusts, and grant sources have been essential in advancing planning for the West Side; targeted assistance will be needed to translate planning concepts into reality as well.

- Newport County Chamber of Commerce – This organization will continue to play a leadership role, bring consistent focus to issues of quality of life and quality of employment that are linked to the West Side's contribution to a healthy economy of Aquidneck Island.

- Community College of Rhode Island, Newport County Campus (CCRI) – This new campus within the West Side provides a key educational and training asset that can be an active component in advancing many of the recommendations of this *Master Plan*. CCRI can provide a forum for exchange of information, education and training in fields linked to the competitive advantages of the West Side. This may include special programs for marine-related businesses concentrated in Melville (currently being discussed). Additional academic support could be explored for other dimensions of the *West Side Master Plan* as well, such as for military-related research and development activities in the area, specialized environmental issues and technologies, or a host of other topical concentrations.

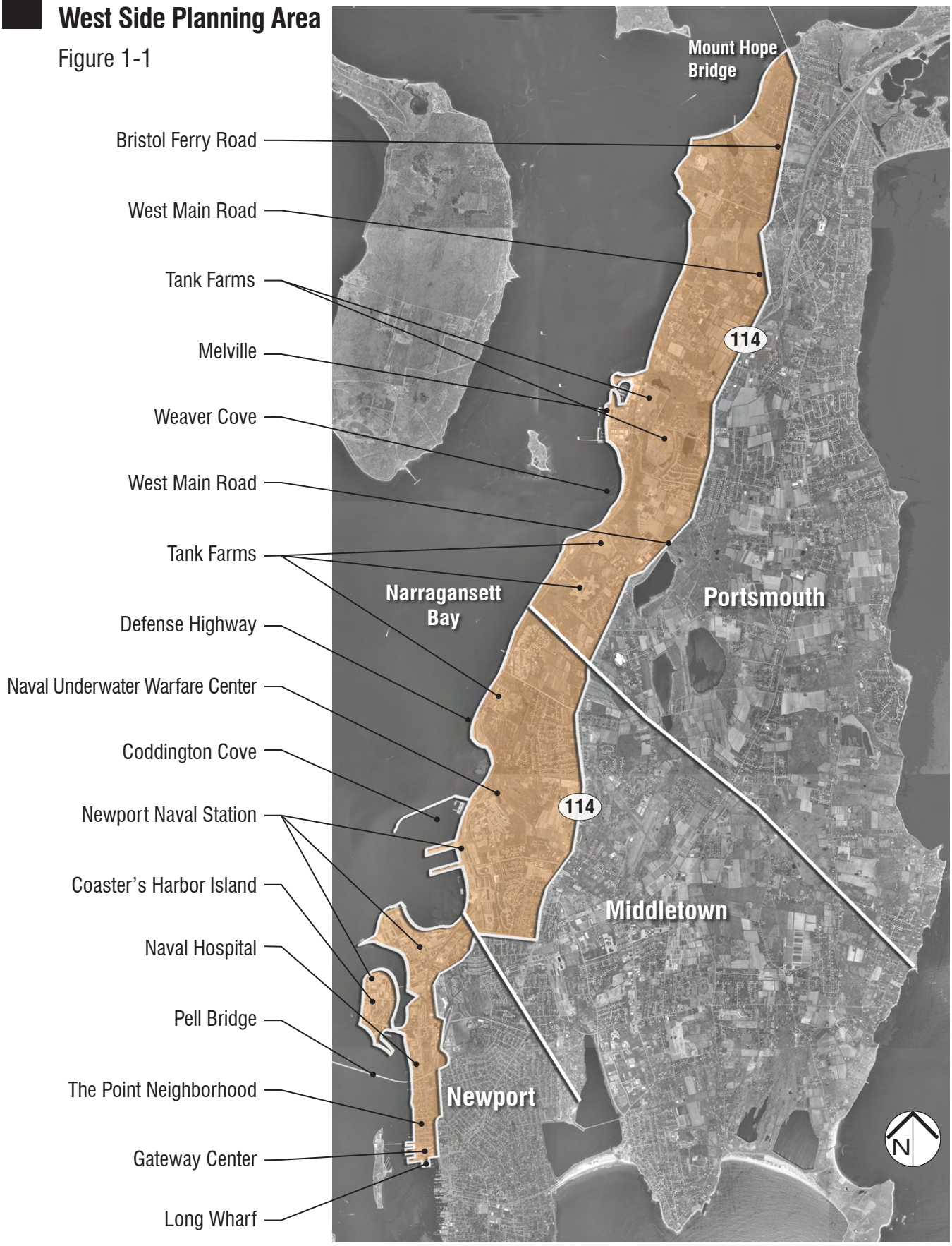
- Rhode Island Marine Trades Association – RIMTA's role will be to advance the interests of both the marine trades that are an important industry along the West Side and to promote the interests of the boating public of Rhode Island.

- Save the Bay – In keeping with its advocacy for the environmental quality of Narragansett Bay, Save the Bay can bring a helpful focus to promoting sustainable landside and waterside practices along the West Side's coastal edge.

- Other Advocacy and Interest Groups – The *West Side Master Plan* invites the involvement of advocacy and interest groups that will help advance recommendations that further their own missions. The continued engagement of groups like the Preservation Society of Newport County, Grow Smart Rhode Island, the Foundation for Newport, and many others will be needed.

West Side Planning Area

Figure 1-1



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2 THE VISION FOR THE WEST SIDE

The West Side will become recognized by the citizens of Aquidneck Island as an exceptionally well-managed corridor. The associated land and water will attain a sustainable balance among complementary uses and natural resources, each contributing to the high quality of life that distinguishes the unique cultural and natural environment of Aquidneck Island. This will be steadily accomplished over the next two decades.

The land will reach a stable balance among uses. Nearly all of the West Side land use patterns will be established within twenty years, with ongoing changes concentrated within targeted, predictable areas. The established land use pattern will consist of tracts of preserved open space and continued agriculture, large well-designed and planned developments, a more efficient and consolidated Naval Station Newport, concentrated mixed use areas along the West Side's major roadways, and diverse, smaller-scale clusters of uses whose design and development pre-date the *West Side Master Plan*.

Weaver Cove Photo: Elizabeth Matthews

The West Side will support valuable job centers. Naval Station Newport will continue to be a leading-edge center for education and training, as well as for its research and development activities. The civilian research and development work will be clustered in close vicinity to the military facilities, taking advantage of attractively developed nearby sites and the reuse of historic former military facilities, like the former Naval Hospital complex. Through combined federal, state, and local efforts, the West Side will become recognized as an "Innovation Factory" linked to the military's activities and attracting small and large companies. Commercial success will be associated with the competitive advantages related to the high quality of life on Aquidneck Island and the valued employees that will migrate to be here. Melville will increasingly be recognized as one of the most important national concentrations of recreational boat building, boat technology, and high-end boat services. This will be linked to a well-planned marina complex at Weaver Cove that continues the tradition of Narragansett Bay as a boating haven.

Large areas of land will remain undeveloped, preserved in linked patterns that encompass non-profit ownership, public land, and portions of private property. The shared stewardship of permanently preserved open space will expand because of the mutual benefits that will be gained. The steep, wooded slopes within the former Navy tank farms will be set aside for public preservation, adding to the network of parks and recreation areas already in place. Strategic new acquisitions and park investments will be advanced by the state and the towns, such as the new Greene Lane park and recreation area along

Narragansett Bay. Additional undeveloped land will be preserved where environmental values are high through the actions of the Aquidneck Land Trust and through new tools available to the towns. Well-planned development will respond to site planning guidelines and incentives to preserve land for views, public access, habitats, and environmental resources. The combination of public, private, and non-profit actions will ensure that places like Lawton Valley still extend an unbroken corridor of open space from West Main Road to the shores of Narragansett Bay.

New developments will be designed to preserve the character of the landscape, conceal many of the new buildings from prominent vantage points, and use emerging techniques to dramatically diminish impacts relative to previous practices. The public and private sector will have achieved a common goal: promoting valuable development that respects and protects the image, assets, and character of Aquidneck Island. Much of the new development will be channelled towards "Growth Centers" rather than being distributed evenly across the landscape (or across other parts of the Island); this long-term approach benefits everyone.

The municipalities and development entities will employ state-of-the art site planning techniques that are mutually understood and predictably applied, so that responsible development consistent with community goals can advance. When the impacts of a major project appear significant on a regional scale, the municipalities can rely on the expert advice and evaluation of the AIPC to help inform local policies and actions.

The West Side's agricultural land will be maintained in the future as long and as much as possible. If some of the agricultural land is converted to other uses, however, site planning standards will be applied that help preserve the rural aspect and natural character from prominent public views.

New residential development will be limited to types of housing that clearly contribute to the Island's needs, economic circumstances, and townscape. New housing will include affordable units that are critically required to maintain the advantages of diverse incomes on the Island. Some of these will take advantage of the Navy housing privatization process to provide excellent choices for sites and units, in conjunction with the municipal

Residential development in Portsmouth

goals of each community. High value "resort home" units will be clustered in well-planned areas, attracting residents because they complement, rather than dominate, the generous views and landscapes retained. Other residences will be clustered along Weaver Cove. These will directly complement the activities and vitality found there and serve as important components in unlocking the coordinated, high-quality investment in a multi-use marina with public waterfront access and amenities. Multi-family housing will be invited to join the mix of uses. It will help create profitable and more attractive development patterns along areas currently dominated by strip-type development, providing units and a rising tax base.

Retail development will be constrained to re-development and improvements to previously developed areas. Large-scale strip commercial development on the West Side will be discouraged. Instead, the somewhat limited commercial and retail opportunities will be directed to promote improvements to existing commercial and retail centers. Both existing and future commercial development will be enhanced through site planning, architectural quality, and generous landscape improvements. These will promote higher values and diminish the negative visual impacts of large parking areas and circulation devoted to automobiles. A wider range of uses, including housing, will be invited to help convert commercial strips into more interesting and productive areas. As a regional model, this "smart growth" approach can be extended to other sensitive parts of the Island.

The Pell Bridge ramps and the area around them will be transformed into an attractive mixed use district. This district will be served by convenient boulevards and roadways flanked by deep borders of trees and landscaping. The reorganization of the bridge ramps will open land that can be assembled to provide for a coherently planned redevelopment. The blend of retail, residential, entertainment, and commercial uses will continue the traditional small-city composition of streets, buildings, and spaces that marks Newport's character. The development will appeal to the quality of life sought by Aquidneck Islanders. Superbly located relative to the regional and local transportation network, it will trigger profitable reinvestment in adjacent private land along J.T. Connell Highway.

The West Side will host several sites along the "Heritage Corridor" – using a system of signage and interpretive enhancements that links the past to the present. This creative approach to the West Side's historic resources will help direct visitors along desirable routes and broaden the appreciation of the region.

Moving along the West Main Road network will be safer and more pleasant – although it will not be much faster. The West Main Road network will benefit from "intelligent transportation systems" that use technology to manage the flow of vehicles between traffic signals during peak times. Special signage will better distribute seasonal traffic; the signage will be linked to remote parking lots, shuttles, and the increasingly effective transit systems. Incremental improvements will make intersections more functional, set aside areas for bus stops, and extend sidewalks and safe pedestrian crossings in key locations. Curb

cuts will be reduced, in part, through progressive improvements to private parcels. Like other West Side scenic roads, rural portions of West Main Road will remain attractive, through a program of regulations. Dramatically improved landscaping along less attractive roadsides will enhance the visual qualities of the West Main Road network. The landscape will extend a coordinated palette of stone walls and indigenous plantings to offer pleasant reminders of the terrain and traditions of rural Aquidneck Island. There will be no practical, higher speed alternative, however, for most north-south automobile travel along the West Side; no new parkway will be built and West Main Road will not undergo any significant expansion.

The Defense Highway will be converted into Shoreline Drive - a pleasant and useful alternative route for some of the Island's employees, visitors, and residents. The "Burma Road" will continue to connect Melville to the north and Naval Station Newport to the south and have a much improved connection to Stringham Road. If Naval Station Newport and security standards allow, portions of this route will continue to pass through the active portions of the Naval Station and provide a direct connection to Coddington Highway. For military personnel, civilian employees, and the cluster of uses growing along Weaver Cove and Melville, the Shoreline Drive will be a great way to avoid traffic on the West Main Road network.

Getting to, from, and along Narragansett Bay will be easy. Improved public access points (including parking in some locations) will be arranged where land and facilities can be created. Pathways and walkways will extend along the edge of some privately developed areas, including much of Weaver Cove. This is a consequence of development incentives built into the local zoning and approval processes. Accessible docks will allow a growing fleet of water taxis, ferries, and excursion boats to move along the West Side's shore. Stops near the Gateway Center, the Pell Bridge, Weaver Cove, Melville, and the resort/residential communities along the north shore of the Island will increase bay access.

Pedestrian trails and bicycle paths will extend along the entire West Side, linking amenities and crossing through natural areas. The trail and bikeway systems will become amenities that are accomplished incrementally as part of the open space and circulation initiatives along the West Side. Union Street will be a recreational corridor that people can use to get from West Side trails to the Aquidneck Land Trust's Sakonnet Greenway Trail on the East Side.

The utility infrastructure will efficiently and equitably provide services to any of the land uses that the communities deem appropriate for the West Side. The sewer, water, and storm drainage networks will be the focus of investment and operating changes after a period of study, negotiations and decisions among the municipalities, Naval Station Newport, and large users. Future systems and operations will be environmentally sensitive.

Natural and man-made hazards will be minimized, and to the extent possible, controlled. Environmental criteria and "best design and development practices" will help to reduce and eliminate impacts on the environment that may result in a detriment of natural conditions or people's safety along the coastal

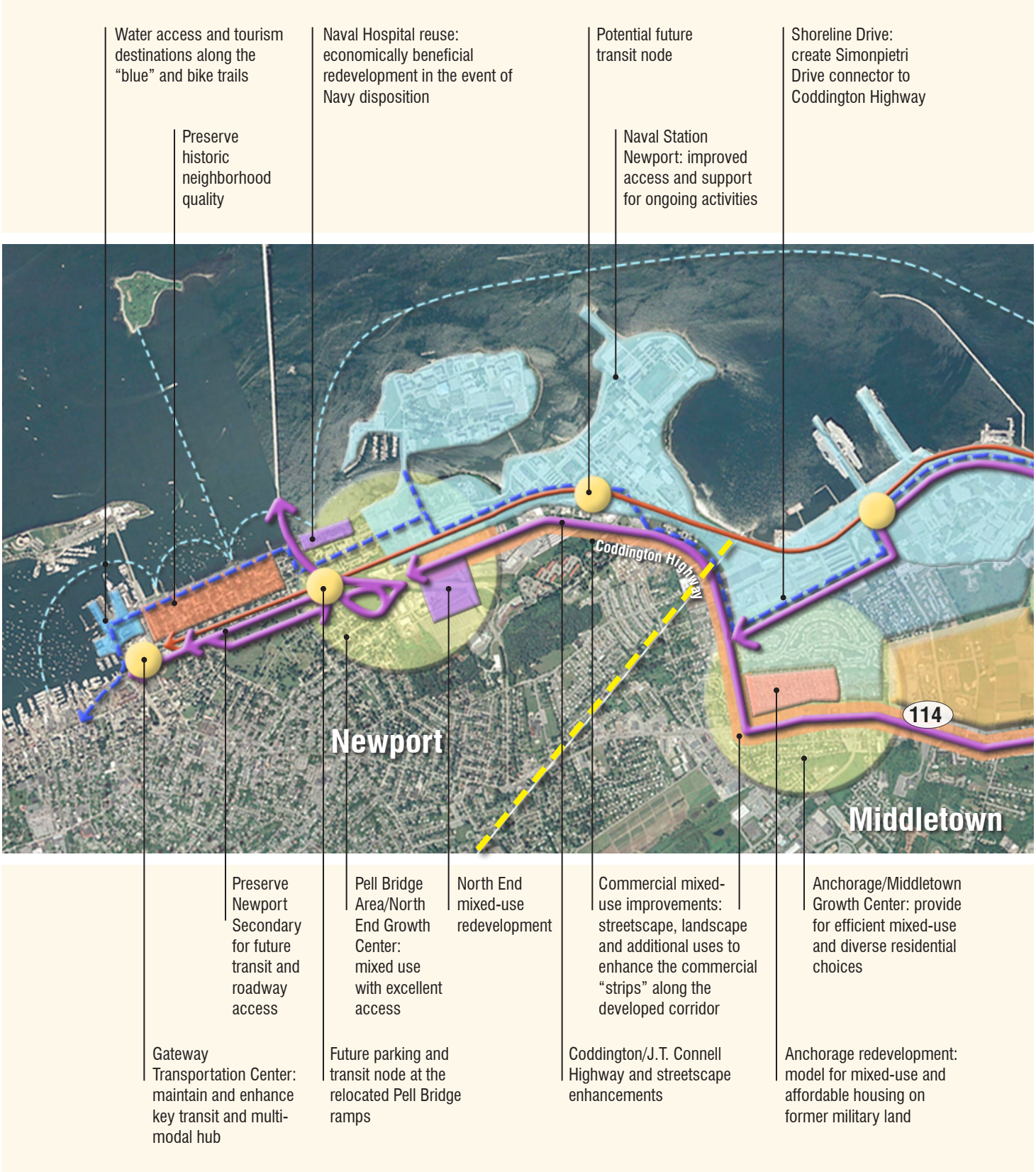
land that is subject to flood hazards and the challenges of steep terrain.

Enhanced stewardship of the West Side is integral to the vision for the future. It is impossible to predict all of the economic and technological changes that will influence Aquidneck Island's future over the very long term. It is neither possible nor wise to attempt to define a blueprint for the next twenty years for all of the compositional elements. However, it is very possible to equip the communities and stakeholders with an excellent forum for communication and tools for managing change. It is equally possible to create an implementation approach to use those tools to the best effect. The *Master Plan* document shows how planning tools, processes, standards, and resources will be focused to fulfill the vision that has emerged.

Farm land in Portsmouth

Planning Recommendations

Figure 2-1



Golf course as open space: preserve green assets on the long term

Maintain green corridors: preserve low density and open space

Tank Farm #5: continue specialized use

Greene Lane public access: recreational improvements

Shoreline bike trail along Newport Secondary

Blue Trail: destinations and access points for small boats

Shoreline Drive: create scenic route alternative to congested corridors with improvements and new connections to Burma Road

Tank Farm #3 reuse: marine mixed-use support and public infrastructure

Weaver Cove marina and marina village

Public access: waterfront access along Marina Village

Future transit node

Waterways management: establish use and environmental standards that limit negative impacts

Melville marine center: expand marine-related jobs and businesses

Tank Farm #1 reuse: redevelop with marine-related uses as a priority

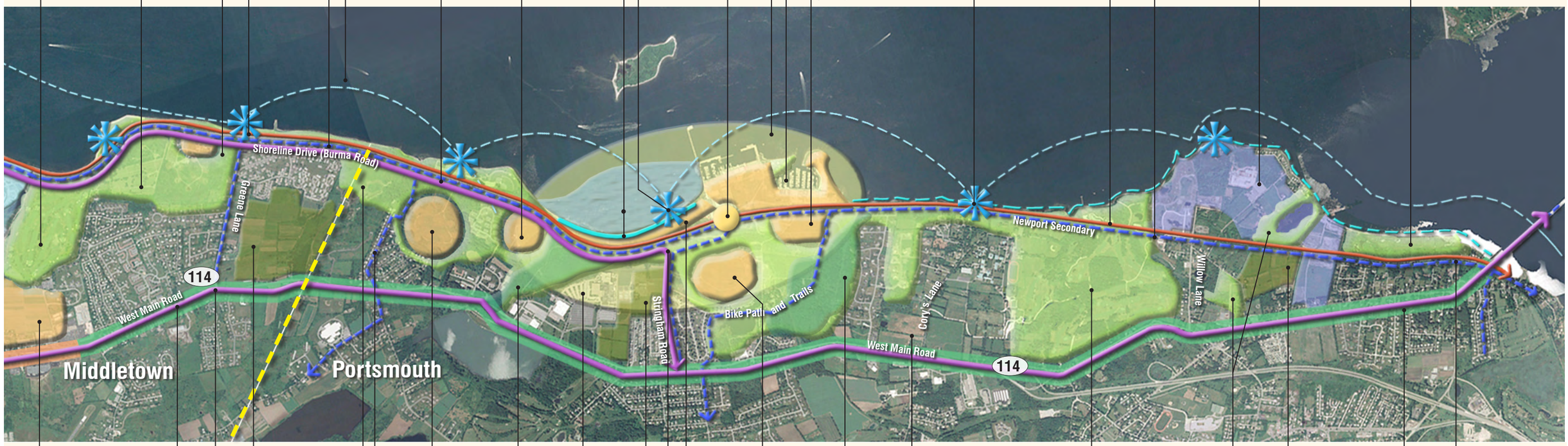
Potential "Blue Trail" access: periodic destinations/ stops. Additional public waterfront access provided through regulations and incentives

Rail corridor: preserve future transit options north of Melville

Bikeway: extend to Mt. Hope Bridge/ Sakonnet Bridge

Balanced development: resort and recreational development that preserves landscape quality

Protect open space: coastal feature protection through performance standards



Commercial/ mixed-use areas: Promote high quality redevelopment through performance standards and preserve valuable open space and views

Preserve Agriculture: Protect land and its use

Greene Lane: pedestrian and bike connectors

West Main Road: intersection and roadway management improvements including Intelligent Transportation Systems (ITS)

Tank Farm #4 reuse: municipal and low-density uses

Redwood Road: bike and trail connector to Center Island Greenway

Preserve open space within development

Lawton Valley: preserve and protect natural corridor

Preserve agricultural land

Raytheon: support access improvements and future business needs

Melville/ Weaver Cove Growth Center: multi-use development node

Burma Road/Stringham Road improvements: remove the "hairpin" and incorporate into Shoreline Drive

Tank Farm #2 reuse: mixed-use redevelopment

Melville Pond open space and trail system: connect natural features

Light industrial and commercial

Balanced development: resort and recreational development that preserves landscape quality

Open space and natural resources: protect existing vegetated open space corridors

Preserve agriculture and open space with cluster residential

Scenic roadway: protect scenic character of West Main Road from Oliphant Lane in Middletown to Mt. Hope Bridge

Bikeways and trails: extend connections to the Newport Secondary

3 OVERVIEW

The planning area limits were deliberately designed to encompass land and uses that have regional significance and that will benefit from managed change along the West Side.

West Side Planning Area

This section provides a panorama of the major ideas that are explored in more detail in later chapters. It demonstrates how and why the detailed recommendations need to be assembled together to accomplish the vision that has been articulated for the West Side. There is also a description of the major approaches that can be employed to implement the *Master Plan*.

The West Side Planning Area

The area addressed by the *Master Plan* consists of the land and waters along the west side of Aquidneck Island, stretching from Newport's Gateway Transportation Center to the south and the Mt. Hope Bridge to the north. The land area enclosed within the planning area contains approximately 5,000 acres. Its eastern edge is largely defined by the West Main Road network that serves as north/south corridor. The planning area is depicted in *Figure 1-1* (see p. 1-13).

The western boundary of the *West Side Master Plan* is defined by the shoreline and protected coves along the entire length of the planning area. The eastern limit begins at the edge of State Route 114 as it descends from the Mt. Hope Bridge and becomes the Bristol Ferry Road. The limit continues southwards along Route 114 as it becomes West Main Road, past its interchange with State Route 24. It then continues south along West Main Road/Route 114 to the intersection of Coddington Highway, turning west along Coddington Highway and J.T. Connell Highway until it reaches the Pell Bridge ramp complex. The planning area limit then continues southward along Farewell Street and America's Cup Avenue, until the boundary rejoins the water's edge at Long Wharf

Newport Secondary line

in Newport Harbor. For the purposes of the *Master Plan*, this linked network of roads is sometimes termed the "West Main Road network," unless the intended reference is to a specific segment of that network.

The planning area limits were deliberately designed to encompass land and uses that have regional significance and that will benefit from managed change along the West Side.

At the southern tip of the planning area, the water-dependent facilities along Long Wharf and the Gateway Transportation Center provide important links to the entire region. The Point neighborhood is an intact enclave of historic homes, some dating from colonial times; it stretches between the bridges to Goat Island and the Pell Bridge and may be affected by changes along its perimeter.

Changes are planned along the Pell Bridge ramps and the connected segments of J.T. Connell Highway and Coddington Highway that offer opportunities from many perspectives.

Naval Station Newport occupies considerable land and waterside areas

north of the Pell Bridge. The Navy War College and the Naval Underwater Warfare Center (NUWC) are prominent among the many active functions of Naval Station Newport that generally stretch from the Pell Bridge northwards, including Coaster Harbor Island and land around Coddington Cove. Naval Station Newport and NUWC play a key regional economic role, including the associated research and development activities at nearby West Side sites like the Raytheon Corporation that has been included in the planning area.

Large segments of the coastal land between Coddington Cove and the Mt. Hope Bridge are candidates for substantial change. The specific boundaries of the planning area were conceived to include the former Navy tank farms that are likely slated for disposition and reuse. It encompasses the land and waterside assets for which redevelopment proposals are active, from Weaver Cove through Melville and northwards to the former Weyerhauser land.

The West Main Road was chosen as the eastern boundary of the planning area because of its importance as a transportation corridor and because of the land use planning challenges along its edges.

The land area enclosed within these limits contains a rich mix of natural resources, undeveloped land vulnerable to change, utility networks needed to serve the future, and roadway and rail corridors that may hold keys to reduced traffic congestion.

East Passage of Narragansett Bay

Overall Planning Principles

The recommended strategies and implementation approach contained within the *Master Plan* are the extension of planning principles that emerged through a vigorous participatory process that extended over several years. The principles were expressed as criteria that will define success for the West Side. They are an extension of the shared vision for the entire Island, created through a process sponsored by the Aquidneck Island Planning Commission (AIPC).

Objectives of the *West Side Master Plan*

The objectives for the *West Side Master Plan* reflect the conviction that many of the West Side problems and opportunities are shared. The articulated objectives include a key link to the broader vision for the entire Island:

Incorporate the four elements of Aquidneck Island: Our Shared Vision into the *West Side Master Plan* – The foundations of the shared vision include ensuring a Livable Landscape, providing Social Well-being, securing a Strong Local Economy, and supporting Multiple Modes of Transportation. This objective was expanded to express more detailed planning criteria, which are listed below.

The objectives also responded to specific West Side challenges:

Enhance Naval Station Newport by planning surrounding land uses that are compatible with the base's mission and by planning for the reuse of public and private property - This objective supports the continuation of the important missions at Naval Station and recognizes that off-base planning is key to its future. It also recognizes that changes have occurred that will unlock reuse potential that meets multiple purposes, if coordinated planning takes place.

Plan for economic development that complements surrounding land features and contributes to the local economy - The West Side simultaneously offers clear opportunities for economic development that can provide employment and tax base; this future potential could be lost through precipitous short-term actions. At the same time, the land features and environmental quality are linked to the quality of life and long term value of the entire community. Planning is required to find compatible paths among the many options ahead.

Provide more active and passive recreation for community members – Despite its 5,000-acre scale and abundant open land, the West Side has relatively few active and passive recreation opportunities for the public; this can be remedied best through planning.

Increase vistas and access on public properties along Narragansett Bay – The long coastline has few access points; this long-held priority should be advanced through the *West Side Master Plan*.

Criteria for Success

Particular criteria have been established as a measure of success, organized with the lines established by the Island-wide vision:

A Livable Landscape

Maximize open space – Policies and actions should consistently seek land uses that support the preservation of natural ecosystems and farmland,

enhance active and passive recreation, and both establish and link greenways.

Provide public access to the shore – Achieving at least two new public access points and extending new trails to the waterfront will be the measure of successful development plans and land use strategies.

Minimize adverse aesthetic impacts – Planning and design techniques will protect and enhance the views and visual qualities while limiting undesirable impacts in order to maintain the high quality of life and community identity that are valued.

Minimize sprawl – Compact and land-efficient development in previously developed areas should be consistently supported with the accompanying effect of preservation of open space within the West Side.

Social Well-being

Provide educational and professional development opportunities – Stewardship of the economy and stewardship of the land are both linked to a well-educated citizenry with training and skills that are linked to excellent jobs.

Provide adequate housing - A diverse community with a range of incomes is an economic and civic asset. This should be achieved, in part, by land use decisions that provide adequate housing with affordable choices for a range of residents.

Provide a strong sense of community – Aquidneck Island's identity is linked to its cultural and natural heritage; this identity should be reinforced through future land use and design decisions along the West Side.

A Strong Local Economy

Provide a diversified economic base – Success will be measured by the ability of the West Side to support the sectors that are foundations of the existing economy and which expand the opportunities already found here.

Promote environmentally sensitive development – Future development should include strategies that protect or enhance the valued environmental features of the West Side and accomplish efficient use of resources.

Provide for a diversity of land use – Planning should lead to more multiple-use development patterns that combine compatible uses.

Address demand on municipal services – The West Side should contribute to the provision of needed services through planned strategies that address issues of municipal demand and resources.

Multiple Modes of Transportation

Provide flexible, safe, efficient Island transportation – Good choices among multiple transportation modes should be provided for the benefit of the entire Island through planned strategies and actions.

Ensure consistency with the regional transportation network – The West Side transportation solutions should be seamlessly integrated into the regional transportation framework as it evolves.

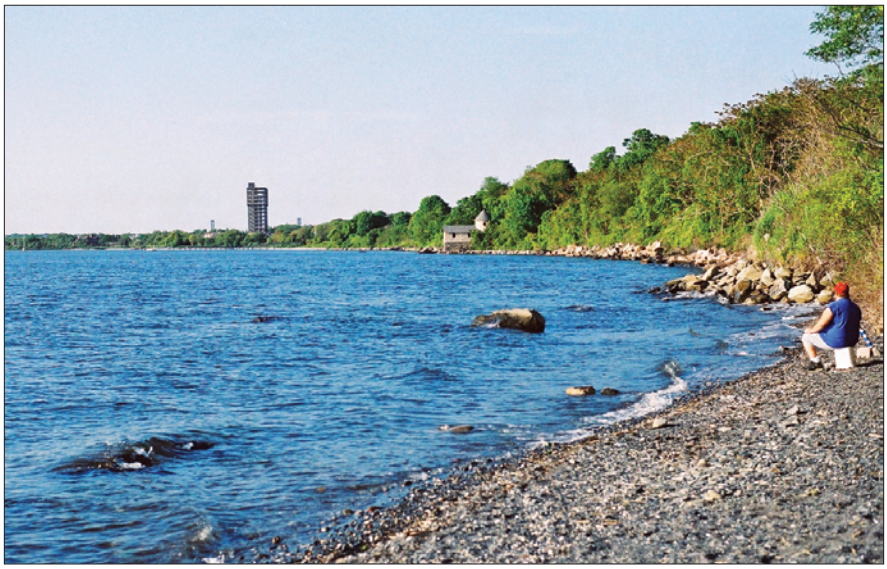
Putting the Pieces Together

A great region is more than the sum of its parts and the *Master Plan* has been designed to reward separate initiatives with the added benefit of enhancing the West Side and the Island as a whole. The regional perspective that is contained within the *West Side Master Plan* is intended to ensure that the stewards of the future are well-equipped to put the pieces together – land use, the local economy, natural resources, transportation and the utility infrastructure.

This regional benefit will be accomplished through the continued attention of the many participants in the *West Side Master Plan* to the impacts and opportunities associated with working together on common ground. Among the common themes that can serve this purpose:

Consistent focus on the corridors – When priorities are set, investments, improvements, and open space protections should consistently be focused along the north/south corridors of the West Side. The economic success of the uses connected to these corridors is linked to the viability and character of the uses that neighbor these critical paths. The region is most often perceived from the ground level. A collective, shared experience will be shaped by travel along the distinctive corridors that channel movement. This experience is influenced by the sequence of views and aesthetic qualities flanking the corridors. A personal experience also emerges through a sense of safety and vehicular convenience that depend in part on an individual's mode of travel.

Consistent focus on the shorefront – One of the most dramatic changes along the West Side will be the redevelopment of large land areas along the edges of Narragansett Bay. This is likely to be accompanied by marinas and increased boat traffic extending into the harbors and coves. Because so much of this stretch of coastline was inaccessible and undevelopable until now, there is a remarkable opportunity to coordinate the quality of uses and extend public amenities along miles of waterfront. Consistent attention to the regional impacts and benefits of managed change offer unique opportunities.



Waterfront access at Cory's Lane

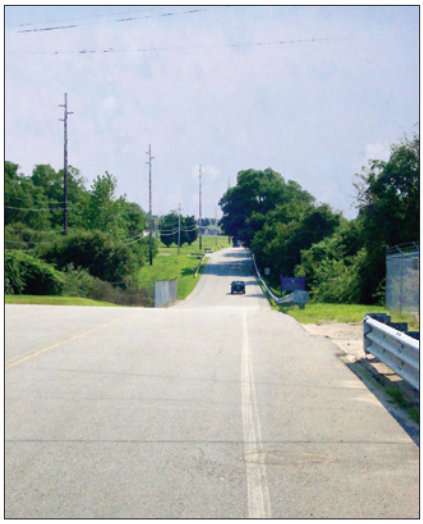
Linking transportation decisions to land use opportunities – Future planning and design of transportation improvements should be linked explicitly to land use opportunities. This will require simultaneous planning and impact evaluation regarding the land use recommendations contained in the *Master Plan* when significant changes are contemplated.

Aesthetics drawn from local character - The design of buildings, the landscape and even the visible infrastructure should draw inspiration from the rich traditions associated with Aquidneck Island's cultural past and natural setting. The local topography and geology are highly unusual, even within the varied coastline of New England. The architectural heritage grew from an appreciation of the value of this setting in the choice of siting and materials. Consistent attention to these connections will yield regionally important results.

Communication among the stewards – The continued communication among the stewards of the West Side is vital to success. This should range from informal opportunities to exchange insights to formalized processes and agendas that ensure that the jurisdictions, organizations and institutions regularly encounter one another's concerns and ideas.

Use of agreements – As the implementation program for the *West Side Master Plan* recommends, the use of intergovernmental agreements to advance shared agendas can provide greater predictability and assured outcomes that promote mutual interests.

Maintaining a strong and effective professional resource in the Aquidneck Island Planning Commission – The



Burma Road (Defense Highway)

AIPC is uniquely positioned to maintain the regional perspective needed to bridge apparent differences. To accomplish the common purposes of its constituent members, the AIPC must have the capacity to provide excellent planning resources on a responsive basis for the rapidly changing circumstances along the West Side.

Summary of Planning Strategies

The following summary is a list of major recommendations that previews the detailed recommendations of *Section 5: Planning Strategies*. The strategies are organized according to Land Use, Economic Development, Transportation and Utilities. This organizational approach is an effective and traditional planning practice; the organization generally matches the manner in which government and institutional responsibilities are distributed.

In some cases, recommendations on a given topic will appear in nuanced forms in multiple different strategies. This is deliberate, although it may seem repetitive to the reader that consumes the entire *Master Plan*. It is not the result of an editing mistake; many of the recommendations were crafted to meet multiple purposes and must be understood from the different perspectives of those who will implement them. The former military land is an apt example. The recommendations for the reuse of former Navy land entail an economic strategy <u>and</u> a land use strategy <u>and</u> include transportation opportunities <u>and</u> will be linked to utility improvements and management recommendations.

By approaching opportunities from multiple vantage points, the *Master Plan* aligns these recommendations for ready reference by the governmental entities and institutions responsible for their implementation on the West Side.

Land Use Strategies

The land use strategies for the West Side recommend targeted, mixed-use redevelopment that supports existing uses and provides public economic benefit, within an attractive and accessible open space system. These strategies seek long-term improvement, instead of short-term fixes. The adaptable approach to land use decisions involves coordinated development, high quality design, public use opportunities, environmental awareness, and reasonable demands on the community support network.

The open space preservation and recreation strategy promotes the preservation, enhancement, and acquisition of open spaces on the West Side to advance an extensive and varied open space system. The system would incorporate parks, wildlife parcels, greenways, scenic roads and vistas, waterfront property, and agricultural land. Depending on ownership and access, these united elements would support uses ranging from active recreation through natural resource protection and essential visual character. The master plan targets areas such as the Lawton Valley Brook corridor, the Island's brook systems, Greene Lane Park, a chain of waterfront access points, and multiple farms with tailored strategies for their involvement in the open space system.

The reuse and redevelopment of former military land occupies a prominent position in the land use strategy for the West Side. For large parcels, the Master Plan recommends a planning approach that mimics the time-tested BRAC Reuse Plan strategy in an alternative disposition process. Mixed use redevelopments are most appropriate for the Island, combining uses such as commercial, light industrial, marine-related, affordable housing, or needed public utilities. The *Master Plan* also recommends uses that support the continued military presence on the West Side, especially to ensure the compatibility of uses on adjacent

parcels. Of particular importance are the military housing and tank farms which are in disposition or soon to be transferred.

The land use strategies also recommend marina and marine-related development, which would enhance the Island's strong, existing industry in this field. Marina expansion, marine-industrial, and resort/tourism accommodations are recommended developments, especially for Melville and adjacent properties. Public waterfront access could be stipulated as part of these projects, which would promote the open space strategy.

The *Master Plan* supports limited commercial and residential development as part of mixed-use redevelopment projects. Instead of dedicating undeveloped land to new offices, retail, and homes, the strategy for the West Side is to reuse parcels with prior development, thus preserving valuable open space and natural resources and limiting adverse transportation and environmental impacts. Existing commercial areas can be enhanced through landscape projects and design guidelines that improve pedestrian access.

An important, overarching concept for the land use strategy is for the towns to consider the uses and facilities on the West Side with a regional perspective. It is this standpoint that will foster limited, effective development that supports extant industries, while simultaneously knitting the Island's built and natural environment into a cohesive physical network with high visual quality.

Land Use Strategies

1. **Expand the inventory of systematically preserved open space and natural resources** that are beneficial to cultural, civic, and environmental values. Among the preserved resources should be priority areas such as land in agricultural use, the Lawton Valley Brook Corridor, entire system of brooks (Gomes, Normans, and Barker), greenways (Sakonnet, the Center Island, and the Newport Neck), wetlands, and coastal features that are identified in the *West Side Master Plan*.

2. **Provide a series of new public places and facilities to enjoy Narragansett Bay**, including a scenic overlook and fishing pier at the Midway Pier area near Greene Lane with access to the shoreline for walking, wading and swimming, and a shoreline path and walking trails to McAllister Point.

3. **Link preserved land and complement the roles and activities of the Aquidneck Land Trust** by advancing parallel preservation initiatives through public sector actions and regulations, especially when the valued resources extend across property and jurisdictional lines.

4. **Protect and enhance scenic roads and vistas within the West Side.** The rural and picturesque qualities enjoyed by everyone who moves along key segments of the West Side's roadway network are an enormous contributor to the quality of life and value of the Island.

5. **Manage change of agricultural land when preservation is not possible,** through site design and land use distribution that preserves aspects of the low density, rural character, and viewsheds that distinguish these areas.

Melville Illustrative Concept Plan

6. **Support the continued military use of those land areas that are needed for Naval Station Newport and the evolving national priorities.**

7. **Ensure that the reuse of excess Navy Land is consistent with the economic, civic and environmental goals** of the *West Side Master Plan* through planning that empowers the local communities to ensure continuity with their priorities.

8. **Reuse the former tank farms near Melville to support marine and marina-related businesses and economic development** while preserving adequate land in an appropriate location to provide an excellent option for a potential sewage treatment plant for Portsmouth. The wooded slopes and natural resources should be preserved at these sites.

9. **Reuse other former tank farms as sites for economic development** including military-related research and development or other uses that will provide jobs and tax benefits, while preserving natural resources on these sites.

10. **Manage privatization of Navy housing to create mutual benefits among all participants.** Change within Navy housing areas that are leased through the Navy Public Private Venture (PPV) program should be monitored, reviewed and guided, in order to help provide locations for affordable housing, provide for civic uses that are a shared benefit, and mitigate costs and impacts on the local communities.

11. **Reuse the former Navy Hospital for high value uses** that contribute to the local economy and afford access to and use of the waterfront by the public, if it is no longer needed for federal purposes.

12. **Protect the supply of adequate land areas for future military-related research and development** and other military-compatible uses in locations that are proximate to existing facilities.

13. **Expand marine-related businesses as a priority land use at Melville to enhance waterfront development**. This recommendation recognizes the potential importance of former Tank Farms #1 and #2 to help support, directly and indirectly, the redevelopment of nearby marine and marina uses.

14. **Promote the creation of a "marina village" development at Weaver Cove and within the**

adjacent land. Marina uses should be complemented by a mix of housing, restaurant, retail, and other uses at a moderate density and amount to create a more viable and attractive opportunity for reinvestment that will expand public access and enjoyment.

15. **Consider the reuse of Tank Farm #3 as a location for a wastewater treatment plant** to support Portsmouth and any development advanced for the Melville area.

16. **Expand the range of uses permitted in commercial corridors to promote reinvestment and the advantages of concentrated, higher quality development.** The "strip commercial" qualities of many of the areas along the West Main Road corridor may be gradually transformed through the introduction of housing and promotion of mixed use that can more efficiently use the land.

17. **Promote the location of commercial and appropriate industrial uses within the West Side.** Although expansion of these uses is expected to be very limited on Aquidneck Island, the opportunity to enhance the transportation network and manage impacts makes the West Side an excellent candidate for these uses that are essential components of the Island's tax and employment base.

18. **Limit expansion of land devoted to retail use** by requiring that significant future retail redevelopment be contained within areas or on parcels already devoted to this type of use. There is adequate land to support the expected limited expansion of retail uses, and there are many advantages to encouraging reinvestment rather than continuing the spread of retail into vacant and undeveloped portions of the West Side.

19. **Promote coordinated planned development of large land parcels that result in site-tailored patterns of use** that protect natural resources and views, compose development densities to reduce overall impacts and respond to the traditional character of the landscape and architecture that distinguish Aquidneck Island.

20. **Provide for coordinated master planning of largely undeveloped public and private land tracts** that occupy substantial bayside areas in Portsmouth so that both the local and regional importance and impacts of redevelopment are reflected in the quality of use, economic con-

Pell Bridge North End Area Land Use Concept

tributions, public access, transportation infrastructure and preservation of natural resources and views.

21. **Support the Pell Bridge ramp relocations to unlock the potential for comprehensively-planned mixed use redevelopment.** These initiatives open the potential for centrally located, high quality development as an excellent alternative to sprawl and include the opportunity to provide a parking and transit facility with regional benefits.

22. **Support high quality resort-type residential and recreational development** that are master planned as large land parcels, have low traffic and environmental impacts and contribute substantially to the economy of the Island through related employment and enhancement in value.

23. **Minimize the construction of new single family market-rate residences along the West Side.** This recommendation notes the exception of affordable housing, housing associated with recommended mixed use areas and resort-type second homes.

Economic Development Strategies

The central economic strategy of the *West Side Master Plan* is to increase high income jobs and a solid return on investments for the long-term, by capitalizing on existing uses, industries and unique redevelopment opportunities. The recommendations are site-specific, tailored for the Island context and considered alongside the land use and transportation strategies, so that the village image and the value of small-city life can be retained and appreciated.

The Navy is a substantial asset for the Island that can continue to be supported—both in its continuing military activities and its land disposition process. Promoting defense-related research and development will reinforce a mutually-beneficial fiscal relationship between the military and Island communities. A "technology transfer" is an essential component of this strategy and could be accomplished through the promotion of an "Innovation Factory" concept at the former Naval Hospital. Industries should be compatible with the continuing military activities. The housing and infrastructure privatization initiatives must establish equitable compensation and provision of municipal services for all involved. Within these processes of military land reuse, the Island communities receive the right of first refusal. The formation of an LRA will ensure the speed of the transfer process and promote reuses that focus on public benefits and job creation.

A second locus for viable economic growth is the marina and shipbuilding industry on the West Side, in the Melville District. The recommended strategy seeks to highlight and support these waterfront uses over the long-term, bolstering the Island to a prominent regional and national yachting destination and shipbuilding center. Unlike quick-fix, waterfront housing developments, the marina and marine-related industry approach will boost job growth in the long-term. In addition, an upland resort or additional marine-related industries in adjacent parcels would strengthen any marina expansion. The *West Side Master Plan's* overall approach to tourism is measured: a resort, second-home development, and a heritage corridor are envisioned to spread the benefits of

tourism to diversified, yet highly controlled, areas on the West Side.

Affordable housing, "life-style centers," commercial offices and health care industry are additional viable initiatives that are appropriate for the West Side. Any economic development project should be accompanied by home-based business zoning, airport improvements, and job-training programs to provide the regulatory context, transportation and access improvements, and quality employment pool necessary for a viable market.

Economic Priorities

The highest return on the investment of time and resources will be achieved as the following economic priorities are used to focus public actions and appropriate development:

1. **Consistently support all actions that improve the quality of life for residents of Aquidneck Island as an economic strategy**, recognizing that the desirability of living and working on the Island is a key to the retention and expansion of quality employment opportunities.

2. **Actively support the existing cluster of military activities and associated research and development businesses.**

3. **Actively support the specialized cluster of marine-related and marina uses** to the greatest extent practical and necessary to take advantage of the unique physical assets and concentration of activities found along the West Side.

4. **Preserve land assets that are potentially prime development opportunities for job-generating businesses** rather than maximizing short-term benefits associated with current market conditions and the high demand for housing.

5. **Ensure that the reuse and redevelopment of excess Navy property accomplishes both local and regional economic goals** as the highest priority.

6. **Promote affordable housing development within the West Side as an economic strategy**, recognizing the critical importance of diverse housing opportunities for the employers, employees and families of Aquidneck Island.

7. **Promote mixed-use development that appeals to the citizens of Aquidneck Island and the quality of life they seek**, rather than new large scale or isolated commercial and retail concentration.

8. **Promote high value, high quality tourism, resort and second home development.**

Economic Development Strategies

1. **Promote effective privatization of military facilities that will benefit the military presence at Naval Station Newport** (including both housing and infrastructure) through efforts that achieve compatibility with the other goals of the *West Side Master Plan*.

2. **Support the potential infrastructure Public Private Partnership (PPV)** dedicated to combining privatization of the Navy's utilities with expanded service to serve desirable future development associated with Navy land disposition, large-area developments near Weaver Cove and Melville and other Portsmouth-area needs.

3. **Discourage land uses adjacent to active military functions** that will tend to be incompatible.

4. **Create a technology transfer center to leverage the clustered human and technical resources** already associated with military-research and development.

5. **Target the reuse of the former Naval Hospital as a technology transfer center using the emerging "Innovation Factory" concept being advanced by RIEDC.**

6. **Advance the reuse of military land in the event of disposition by focusing on economically beneficial uses.** Use the *West Side Master Plan* as an economic rationale and a basis for a reuse plan that accomplishes the necessary economic objectives and defines the process for transfer.

7. **Facilitate marina development at Weaver Cove** and promote marina-supporting upland resort development that enhances the investment opportunities through a mixed-use approach.

8. **Build upon the local marina sector** by supporting marine-related industry to enhance the Island's status as a premier yachting location.

9. **Develop portions of a heritage/ recreational trail along the West Side as an economic strategy**, in addition to its contributions to the cultural life of the Island.

10. **Investigate the potential for a multi-purpose/arts/entertainment facility and advance its development in a location that is well served by parking and transit**.

11. **Promote the development of affordable housing by leveraging the transfer and redevelopment of publicly owned land** and promoting regional coordination that helps implement the affordable housing strategies of the Island's constituent communities.

12. **Promote coordinated re-use of land, transportation, and infrastructure improvements near the Pell Bridge** to provide an excellent location for mixed-use lifestyle center development.

13. **Promote locations and regulations** to attract commercial offices and health care facilities along the West Side to take advantage of the available land and the opportunities to provide future transit, transportation, and utility improvements.

14. **Actively engage business retention and assistance programs** in response to the understanding that the Island's economy is highly dependent upon a few concentrated economic sectors and that stability is linked to the health of those sectors and the businesses that are engaged within them.

15. **Support cost effective and environmentally responsible waste water solutions for the northern portions of the West Side.** Provision of municipal wastewater treatment will improve the attraction for the expansion of marine trades in Melville and future expansion of the Raytheon campus. Increased commercial and industrial property tax return will help counterbalance the Town's current dependence on residential property value.

Transportation Strategies

The transportation recommendations range from immediate actions to long-term strategies reaching thirty years into the future.

Many of the traffic strategies focus on enhancing north/south connections along the West Side of Aquidneck Island. The *Master Plan* also emphasizes the importance of alternative modes of travel. It contains recommendations for an extended network of bicycle trails, including the dedicated bikeway that should be created along much of the Newport Secondary. The recommendations detail approaches to expanded pedestrian networks and a program of improvements called "traffic calming" that will better balance auto and pedestrian needs. *The Master Plan* emphasizes strategies that will promote more use of transit. Specific concepts are also advanced to better manage the flows of traffic through emerging technologies and techniques.

The West Main Road network offers important opportunities for improved traffic flows and safety enhancements. The *Master Plan* recognizes the additional opportunities associated with two underutilized transportation corridors: Burma Road (Defense Highway) and the state-owned right-of-way along the Newport Secondary rail line. By more fully utilizing these assets, the need to undertake new roadway construction and acquisition of private property is significantly reduced.

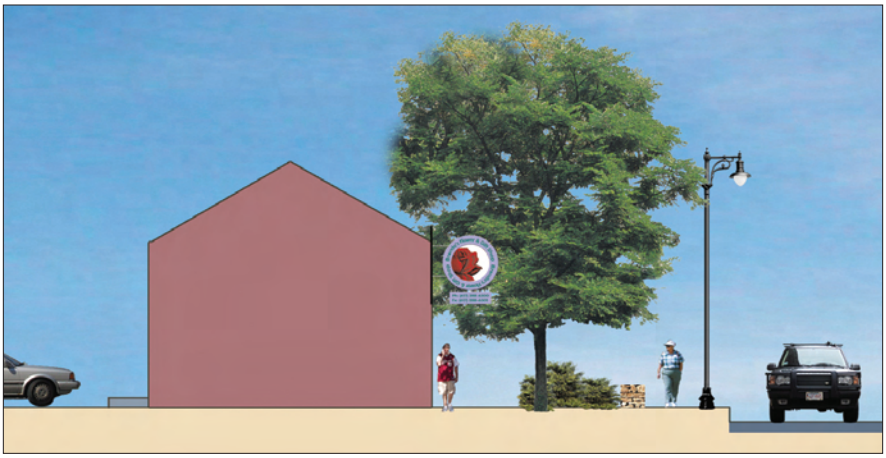
A phased strategy targets early and relatively affordable actions. West Main Road improvements can be accomplished in the short term and set the stage for multimodal improvements to meet future transportation needs. It is also a pragmatic strategy: a phased approach that recognizes fiscal constraints and the length of time required to conduct feasibility studies, alternatives analysis, environmental impact statements, permitting, and design may take 10 to 20 years for major projects.

Perhaps the most dramatic transportation change in the West Side planning area may be the transformation of Burma Road (Defense Highway) into Shoreline Drive, a two-lane roadway which would bypass West Main Road from Stringham Road in Portsmouth to Coddington Highway in Middletown. By diverting commuter and tourism traffic from congested roads to an underutilized corridor, traffic on the island will improve. This scenic route along the shoreline would utilize the current alignment of Stringham Road, Burma Road (Defense Highway), Gate 17 Access Road, and a continuation of Simonpietri Drive through Naval Station Newport. By removing the hairpin turn at the Stringham Road/Burma Road intersection and extending Simonpietri Drive, the existing route would be shortened by up to a mile. Geometric, site distance, and drainage improvements, sidewalk construction, and landscaping (including brush clearing) would improve speeds and create a scenic road second only to Ocean Drive in Newport.

This alignment would benefit the Navy by improving access for students, employees, and contractors at the Naval War College, Naval Station Newport, and NUWC. However, relocation of Naval Station Newport's secure perimeter, utility security, and emergency response routes must be addressed and approved. The alignment would also improve access to the new North Gate.

Approvals and support that transcend local decisions are paramount to implementing Shoreline Drive. Currently RIDOT is precluded from conducting improvements to this road because federal ownership and public use is limited. Extension of the Shoreline Drive along a new connection to Coddington Highway may require reorganization of some Navy facilities. As a result, federal-level approval of public use of Shoreline Drive or transfer of this corridor to RIDOT or local communities is necessary. The support of local communities will also be essential. The initiative must be fully coordinated with the commander of Naval Station Newport and gain support at appropriate federal and state levels.

The Newport Secondary rail line can continue to serve as a tourism destination and provide a route for rail shuttle service along portions of the Island. Over the long term (10 to 20 years), the entire public alignment may be capable of supporting significantly enhanced transit systems, such as a dedicated bus lane and a provision of Bus Rapid Transit systems if it is determined that there is a need on the Island to further relieve congestion. As with any major transportation improvement, feasibility studies, alternatives analysis, ridership studies, permitting, and design would require a decade or more of study and represent a significant commitment of Island residents and the State to provide an attractive alternative to the private automobile.



Proposed streetscape concept at J.T. Connell Highway

Strategies to Support Planned Street and Roadway Projects

The AIPC, its constituent communities and participating agencies should continue to actively support the following planned RIDOT ongoing improvement projects:

1. **Realign the Pell Bridge Ramp using the ideas contained in "Concept 4A2."** This concept represents the preferred alternative to simplify access to Island destinations including downtown Newport and the Navy property, improve safety, and open up land for private development.

2. **Improve and expand the capacity of Coddington Highway/J.T. Connell Highway**. The specific *Master Plan* recommendations for this area reinforce the opportunity to create an attractive "boulevard" appearance along the sides of a 4-lane roadway, restraining lane width to 11 feet and emphasizing the high quality landscaping, sidewalks and bikeways along the edges.

3. **Advance the Armstrong Bridge Replacement/Gate 4 Access improvements** with adequate pedestrian crosswalks, a connection from a "signed shared roadway" bikeway on J.T. Connell Highway and Coddington Highway, and land reserved for future construction of a rail shuttle, busway transit stop, and passenger drop off area when warranted.

4. **Advance RIDOT-sponsored improvements at West Main Road, Coddington Highway to East Main Road** with left turn lanes, pedestrian crossings and sidewalks included in the project design.

5. **Advance the West Main Road Resurfacing Project in Middletown** in accordance with enhanced sidewalk recommendations of the *West Side Master Plan* and recommendations of the Walkability Workshop held in May 2004 in Middletown.

Short Term Street and Roadway Improvement Projects

1. **Evaluate, design, and then construct left turn lanes in strategic locations along West Main Road.** The current state Transportation Improvement Plan (TIP) application includes left turn lanes and geometric improvements to increase capacity and improve safety from Raytheon in Portsmouth to Forest Avenue in Middletown.

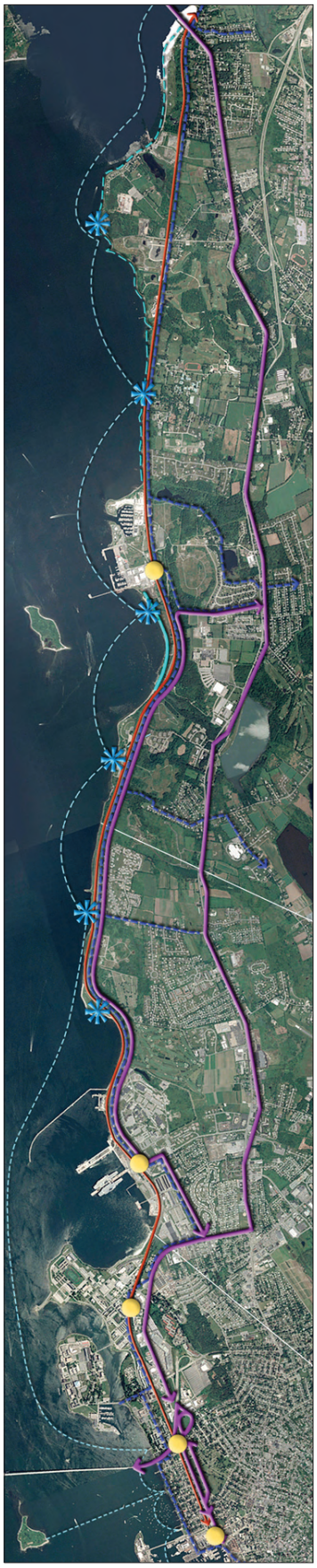
2. **Realign West Main Road intersections of Hedly Street and Cory's Lane as one signalized intersection.** This will remove a signalized intersection, improve access to local destinations, and provide a site for a gateway welcome center at the north end of the island, immediately after Route 24.

3. **Remove the awkward switchback at the north end of Burma Road (Defense Highway) at Stringham Road**. Roadway realignment and intersection improvements will reduce travel distance by almost one-half mile and make it a more attractive alternative north-south route on Aquidneck Island while improving access to the Navy base, Weaver Cove, and Melville.

4. **Upgrade segments of Stringham Road and Burma Road (Defense Highway) to achieve attractive travel times and to draw traffic from West Main Road.** Upgrades will retain the current two-lane roadway configuration while retaining sufficient right-of-way for long term roadway widening, if and when warranted. Improvements should include enhanced site distance (clearing brush), drainage, access restrictions, and minor grade and geometric improvements. Through truck traffic would be limited due to steep grades. Signage directing tourists to this scenic roadway should also be accomplished.

Major Street and Roadway Initiatives

1. **Create the Shoreline Drive, connecting Coddington Highway and the Gate 17 Access Road via an extension of Simonpietri Drive through Naval Station Newport.** This roadway would provide the missing link on the Shoreline Drive, extending from West Main Road at Stringham Road in Portsmouth south to Burma Road (Defense Highway) and the Gate 17 Access Road at the Navy base in Middletown. The Shoreline Drive would provide a scenic bypass for commuters and tourists and divert traffic from West Main Road. Implementation of this connection would be the single most important action item for the improvement of traffic flow on the West Side. This will require approval and coordination with Naval Station Newport to establish a corridor connecting the Gate 17 Access Road with Coddington Highway; its feasibility



Transportation Concept Plan

will be dependent on security and operational considerations that are within their jurisdiction.

2. **Institute a comprehensive Intelligent Transportation System (ITS)** and related technologies to manage traffic flows by providing motorists and traffic managers with information that will allow them to actively adjust travel patterns and reduce congestion.

3. **Implement Transportation Management Associations (TMAs) for Naval Station Newport** and possibly for other major employers and/or employment locations. This approach will provide scheduling alternatives, information and advocacy for strategic roadway and management improvements, and attractive high occupancy vehicle (HOV) alternatives to the single occupant vehicle (SOV or passenger car).

4. **Adopt special principles of design to enhance safety and create a systematic, access management approach to traffic calming** along the entire West Side. Among the standards advocated are traffic calming devices, roundabouts, signed shared bike lanes, access management, and landscaping.

Transit and Alternative Transportation Modes

1. **Plan, design, and create remote parking at stations and stops in conjunction with the West Side transit strategy**. Candidate sites include downtown Newport with parking at the Gateway Center garage and surface lot, land available through the reconfiguration of the Pell Bridge ramps, Navy Gate 4/CCRI on J.T. Connell Highway in Newport, Melville, and Mt. Hope Marine Terminal.

2. **Support on-island rail service enhancements** by protecting the long-term capacity and entire alignment of the existing rail corridor from Newport's Gateway Center to the Sakonnet River Bridge. Support for rail service enhancements should be extended to both rail shuttle service and tourism-based service options. The *Master Plan* supports continuation of the Old Colony and Dinner Trains as a diversified tourism attraction in Newport.

3. **Support expansion of ferry and water shuttle service** along the West Side. This recommendation acknowledges that this service will likely be tourist-oriented and largely focused on the summer season. Possible service points in addition to Perrotti Park in Newport could include the stone pier off the Naval Hospital, the former Navy Midway pier at Greene Lane in Middletown, and docks at Melville and Mt. Hope Marine Terminal in Portsmouth. The Mount Hope Marine Terminal was dropped in 2001, based on extremely low commuter ridership from this site. However, ferry service may be appropriate in the future as land use changes, with development of second home communities in this area.

4. **Provide a bicycle way** along the Newport Secondary north of the Pell Bridge ramps to the Sakonnet Bridge. In the longer term, construction of the Newport Secondary bike path will be successful in diverting bike traffic from local

roads and neighborhoods to a dedicated off-road path. To avoid security issues at the Navy base, the bikeway should be diverted to Simonpietri Drive and Coddington Highway between Gate 4 and Gate 17 Access Road. Further analysis will be required to determine the feasibility of including various modes of transportation within the Newport Secondary corridor, but a preference for multiple modes and the use or preservation of capacity for transit options should be a priority.

5. **Evaluate and designate qualifying segments of streets and roads for "Share the Road" bikeways**, including Long Wharf, Washington Street, Sycamore Street, Third Street and Admiral Kalbfus Road in Newport; local roads adjacent to the Navy base and Greene Lane in Middletown and Redwood Road and Willow Lane in Portsmouth.

6. **Extend new bike lanes** as part of roadway improvements where adequate width is available, such as along Coddington Highway. Where on-street parking is permitted and striped, the Bike Lane should be placed between the parking area and the travel lane and have a minimum width of 5 feet.

7. **Extend off-road "shared use paths"** connecting Redwood Road with the Defense Highway Commuter Bike Lane (or the Newport Secondary bike path) through a Town of Portsmouth playground to create an important connection to the Center Island Greenway and the shoreline of Narragansett Bay.

8. **Require construction of sidewalks** for any roadway construction or reconstruction. A similar requirement should be included within local zoning ordinances and land development regulations for projects on local roadways. Sidewalks should be constructed to the next logical destination or intersection to facilitate safe off-street pedestrian access.

9. **Create and market a Blue Trail** of kayak and small boat put-in locations, shoreline destinations, and facilities along the West Side.

10. **Plan for the potential upgrade of Shoreline Drive** to a four-lane parkway as an option for the long term. Not a currently attractive option, this parkway is only recommended when other upgrades and transit alternatives are ineffective. The expanded Shoreline Drive would extend from West Main Road at Stringham Road south to Burma Road (Defense Highway).

11. **Investigate the feasibility of a dedicated busway** along the rail alignment if ridership warrants it. A reversible, one-way express bus network would meet future traffic needs on the West Side by more fully utilizing the state-owned right of way of the Newport Secondary rail line. The busway would carry Bus Rapid Transit Service as well as special event and seasonal scheduled and chartered bus services for tourism. Peak hour flow would be on the busway with the off-peak return trip via existing roads including J.T. Connell Highway, Coddington Highway, and West Main Road. In the section between the Pell

Bridge ramps and the Gateway Center, the busway would share the southbound one-way roadway proposed by RIDOT along the rail right-of-way.

Utilities Strategies

The *West Side Master Plan* proposes strategies for water supply, wastewater treatment, and sustainable energy on the Island. While there is adequate water supply for the projected needs of the municipalities, issues regarding water supply purification and distribution must be addressed. The *Master Plan* bases its recommendations on the continued discussions and negotiations among the Island municipalities, the Navy, the Portsmouth Water and Fire District (PWFD) and the Rhode Island Economic Development Corporation (RIEDC). Multiple options for remedying the water supply issues are possible within this forum, including regionalization alternatives, treatment facility upgrades, and ensuring compatibility among water demand and system size. While the water supply is sufficient to meet current projections, the likelihood of development, especially in the Melville area of Portsmouth, would require consideration of an additional water supply source. The Melville area could be serviced via Navy negotiations to secure a low pressure line. Alternatively, and among other options, PWFD or City of Newport Service could be extended to Melville. The recommendations discuss the various options and encourage further analysis of their respective strengths.

Portsmouth and a proposed development in Melville present wastewater issues as well. Unlike Newport, Middletown, and Naval Station Newport, Portsmouth has no municipal sewage treatment system and is accommodated by Individual Sewage Disposal Systems, package treatment plants, or hauling septage to the Newport facility. The *Master Plan* proposes multiple options for wastewater treatment in Portsmouth, some of which are contingent upon the land transfer process of former Navy property. Also associated with these alternatives is the possible installation of wind turbines on former Navy tank farms to generate sustainable energy for the wastewater treatment plant.

1. **Support the establishment of a regular forum, ongoing discussions, and collaboration among the City of Newport, Towns of Middletown and Portsmouth, the Navy, PWFD, and RIEDC regarding water treatment and distribution issues**. It is recognized that adequate water is available to meet projected needs along the West Side but that several issues must be resolved to assure delivery to all Island residents, businesses and institutions. This forum is expected to resolve the organizational approach for water treatment and distribution.

2. **Resolve issues related to the Safe Drinking Water Act, especially the Disinfectants By-products Rule.** PWFD and Navy customers at the ends of the distribution system have experienced water quality which does not meet these requirements. Treatment facility upgrades are required for compliance.

3. **Resolve the best approach to provide all necessary water distribution for future development in the Melville area of Portsmouth that is consistent with the *Master Plan*.** This section is currently

underserved by Navy lines that have water quality issues; the City of Newport's delivery of water to private businesses in Melville is "wheeled through" the Navy distribution system. The PWFD 36-inch line on West Main Road is currently not accessible for use in Melville.

4. **Negotiate and execute a contract between the City of Newport and PWFD that assures adequate quantity and quality of water supply** will be available at an equitable fee for future needs in Portsmouth.

5. **Provide for the transfer, purchase or privatization of Navy utilities and regionally-important utility corridors to the extent that it is mutually beneficial.** Privatization of the Navy utility system may provide benefits if it can be linked to solutions for private and public sector sewer and water needs, for example. In addition, extension of Burma Road connections and/or transfer should identify and preserve potential utility corridors.

6. **Preserve a location, land, and adequate setbacks to allow future construction of a Municipal Wastewater Treatment Facility (WWTF) for Portsmouth and the Melville redevelopment areas**. Former Tank Farm 3 may be suitable for construction of a municipal WWTF. Approximately 10 acres should be reserved for current and projected use. Although this location is not convenient to areas of Town where failed septic systems must be addressed per RIDEM, the Town of Portsmouth may realize several cost savings with a plant in the vicinity of Melville.

7. **Support the provision of wastewater treatment systems and solutions that are needed to fulfill the economic development goals and land use vision contained in the *West Side Master Plan*.** This recommendation recognizes that there are many alternative methods to provide for wastewater treatment today, and that there are capital, operational, and maintenance trade-offs that must be explored by the entities most directly affected by the outcome. However, delay in the resolution of these issues should not be used to thwart desirable development.

8. **Promote the location of wind turbines to supplement electric generation and distribution** by sustainable means in locations and numbers that do not dominate the visual qualities of the land from prominent public vantage points.

Implementation Summary

The *West Side Master Plan* lays the groundwork for its own implementation. Through specific approaches and tools, the *Master Plan* provides detailed directions that might be used to accomplish the vision for the West Side. This summary briefly previews the content of the *Master Plans' Section 6: Implementation*, which has three sections: Overall Coordination Approach, Implementation Approach, and Roles and Timelines.

This summary does not represent all of the implementation methods in *Section 6: Implementation*, but highlights some of the most significant tools, processes, standards, and resources available to the West Side.

Overall Coordination Approach Summary

The Overall Coordination Approach for the *Master Plan* is termed "consistent organized stewardship." A steady, managed staff, agencies with coherent and defined roles and responsibilities, and a broad stakeholder representation are the foundation of coordination. This summary of the overall coordination approach briefly describes the roles and responsibilities of the AIPC, the Island municipalities, and all associated agencies.

The AIPC has a central role as a coordinator and facilitator for the West Side's regional perspective. The organization will provide a structure for managing change through implementation committees. The **Intergovernmental Working Group** (IWG) will be a consistent forum, facilitated by the AIPC, for promoting projects, shaping intergovernmental agreements, and fostering communication to limit misinformation. IWG participants would include representatives from the three Island communities, local and regional entities, State offices and legislature, the Navy or DOD, and the Congressional delegation.

The AIPC will conduct special studies, *Master Plan* progress reviews, and present annual updates on the *Master Plan* implementation. Standards for coordination will be established and revised through regional consistency statements and the implementation matrix. Through its interaction with other agencies, the AIPC could serve as a source for model regulations and standards. It will also contribute to the awareness of the *Master Plan* through a website and an awards program for outstanding West Side projects. Coordination Resources available to the AIPC and other entities include fees for service and grants.

These Coordination tools, processes, standards, and resources are fully explained in *Section 6: Implementation.*

Implementation Approach Summary

The Implementation Approach follows the coordination approach. The implementation section is also divided into land use, economic development, transportation, and utilities categories. For each of these topical divisions, the implementation approach lists and explains the tools, processes, standards, and resources that could be used to accomplish the planning strategies. A **tool** is a technique or method that can be employed to fulfill a strategy. A **process** is an organized series of procedures or events. A **standard** is a limit that sets the level of performance to be achieved. A **resource** enables a strategy to be pursued. Synopses of

those implementation tools, processes, standards, and resources, for all four categories, are provided in this summary.

Roles and Timelines is a section that follows the Implementation Approach. The summary briefly discusses the priorities from the perspective of key public vantage points which are enumerated in depth in *Section 6: Implementation*.

Land Use Implementation

Transfer of development rights (TDR) is a tool that promotes intensified, urban development in some areas, while preserving rural character in others, protecting open space and natural resources. Landowners relinquish a portion of their development rights and transfer them to a parcel slated for higher-density development.

Interim Planning Overlay Districts (IPODs) improve local regulations without inhibiting development opportunities. The overlay coexists with the extant zoning and adds new regulations or standards to that zoning. They are especially applicable for improved environmental standards, design guidelines, or density stipulations. IPODs are temporary and are not considered to infringe on property rights.

Growth centers, or "priority investment areas," are local Smart Growth projects. They promote compact, mixed-use development; open space, natural and historic resource preservation; regionally-appropriate development; and community and employment goals.

Intergovernmental agreements are tools that assess impact fees, provide services, manage redevelopment, apply performance standards, and design guidelines that are in keeping with the *Master Plan*. The agreements are employed through the Intergovernmental Working Group (IWG).

A Local Redevelopment Authority (LRAs) is established or designated by the IWG to facilitate local management and control of a land disposition process. An LRA acts as a single, community-based entity with the full responsibility for facilitating the planning and implementation of large, military or non-military redevelopments. It is modeled after the LRA of the BRAC process. An LRA would be appropriate for the reuse of the Tank Farms or other Special Area Reuse Plans.

Special Area Reuse Plans (SARPs) propose large-scale, mixed-use redevelopment projects and consider the relationships among infrastructure, open space, and land use patterns. Imitating the BRAC Reuse Plan process, SARPs are consensus-driven projects implemented through an LRA which coalesce principles from environmental sustainability, Smart Growth, and public benefit. Performance criteria and approval procedures are incorporated at the local, regional, state, and federal levels.

Special Area Management Planning (SAMP) is a comprehensive planning tool for natural resource protection and reasonable economic growth in coastal areas. These processes recognize incompatibilities among the uses and users of coastal resources. SAMPs form strategies to protect and manage resources which cross political boundaries and call upon multiple conflicting groups. Special Area Management Planning could be used along the West Side waterfront, Weaver Cove, and Melville, and can boost economic development.

The Aquidneck Land Trust (ALT) acquires, preserves, and enhances open space and natural resources using tools such as perpetual conservation easements and restrictions, deed restrictions, conservation intent, and land evaluation forms. The AIPC and the municipalities should support and parallel such endeavors.

Land Use Performance Standards and Design Guidelines are tailored land use management tools beyond land use regulations. Assembled at the local level, they shape future development and land use. **Baseline performance standards** are applicable to the overall development of land and the management and improvement of roadways. **Land Use Specific performance standards** are tailored for large development projects, commercial and mixed use developments, military land reuse, marina/marine-related uses, agricultural land, open space, and scenic roadways/vistas. **Sustainable Site Planning and Design Performance Standards** address stormwater management, waste water treatment, energy conservation, erosion control, and site selection through the latest Low Impact Development (LID) and U.S. Green Building Design (USGBC) LEED standards.

Land Use Resources are available for open space and natural resource preservation, trail networks, land acquisition, development and construction projects. Examples include: **The U.S. FHWA Recreational Trails Program (RTP), RIDEM's Open Space, Recreation, Bay and Watershed Protection Bond, the Department of Interior Land and Water Conservation Fund, RIDEM's Open Space Grants, off-site and local impact fees, and combined construction.**

These Land Use Implementation tools, processes, standards, and resources are fully explained in *Section 6: Implementation.*

Economic Development Implementation Summary

A Project of Critical Economic Concern is a project status that functions as a tool to enhance commerce, stimulate jobs, and relieve unemployment. Certificates of Critical Economic Concern (CCECs) award a project a priority status in all permit review processes as an incentive to prospective businesses and industries. CCECs may be especially applicable for Melville, to accelerate marine-related industries, marina and marina-village, tourism and resorts and other desirable developments.

As in the Land Use implementation, **intergovernmental agreements** are tools for economic development that are formed among constituent and associated agencies and facilitated by an Intergovernmental Working Group (IWG.) They create enforceable contracts, advance development, and meet public purposes without burdensome regulations. The IWG also activates the Special Area Reuse Plan (SARP) process or other developments which have economic development value. In the SARP process, the IWG would designate an LRA to coordinate and execute the reuse plan.

Special Area Reuse Plans (SARPs) advance economic development aims in addition to land use strategies. SARPs manage the development of former military property, or non-military property, into large-scale, mixed-use redevelopment projects. They are geared to support projects that provide long-term fiscal benefits and fulfill the aims of the *West Side Master Plan*.

Transfer of Development Rights (TDR) is primarily a land use tool. However, the TDR also provides financial incentives to developers that render it an attractive method for economic development. Density bonuses and downzoning compensation are associated with TDRs as incentives for development that fulfills the fiscal strategies of the West Side.

Additional economic development tools for implementing the *West Side Master Plan* focus reinvestment, apply supplemental zoning, and offer incentives. Such tools include t**he State's "Innovation Factory" concept**, s**pecial economic redevelopment overlay districts**, **inclusionary zoning or impact fees for affordable housing, tax abatement, and special loan guarantee/ credit enhancement programs.**

Special Area Management Plans (SAMPs) are effective economic development processes for coastal properties. These plans reconcile conflicts between coastal resource protection and reasonable economic growth in coastal zones. They create and promote compatible goals and agreements for issues which cross political boundaries and impact conflicting groups. Special Area Management Planning could be used along the West Side waterfront, Weaver Cove and Melville, and can boost economic development.

A Technology Transfer Center, affordable housing, heritage trail and tourism programs, and business retention and assistance programs are economic development processes that will focus and support strategic reinvestment on the West Side over the long term.

Economic Development Resources include a range of financing, tax credit, insurance, and funding options. For example, Tax Increment Financing promotes private sector development through funding infrastructure development. New Markets Tax Credits are awarded to local certified entities for improvements in lower-income areas. IRBA/Bond Mortgage Insurance reduces the risk and cost of desirable private sector development. CDBG Funding supports qualifying economic development projects through loans accessible to the West Side under Section 108.

These Economic Development Implementation tools, processes, standards, and resources are fully explained in *Section 6: Implementation.*

Transportation Implementation

Existing Intelligent Transportation System (ITS) technology tools can be updated to mitigate congestion and incident management through traffic surveillance and information systems. ITS tools include Highway Advisory Radio (HAR) transmitters, Dynamic Message Signs (DMS) Camera Surveillance, 511 Traveler Telephone Information System, and Closed Loop Traffic Signal Systems. The ITS tools disseminate traveler information to motorists entering Aquidneck Island on multiple transportation modes.

New Intelligent Transportation System (ITS) tools promote an integrated transit system geared to decrease automobile dependence. The integrated transit system includes fleet management systems, Passenger Information Display Systems (PIDS), parking facility management, traffic signal prioritization, transit security, and an Incident and Planned Event Management Response Team. The RIDOT Transportation Management Center (TMC) can coordinate new and existing ITS technologies.

A Transportation Management Association (TMA) is a tool that helps reduce congestion by decreasing dependence on the single occupant vehicle (SOV) for commuting through transit or (HOV) options. Example TMA tactics are carpool matching, designating busway and vanpool providers, promoting flex time or telecommuting, and HOV strategies. There are three steps to create a TMA. Investigation consists of a Transit Needs Assessment. Implementation resolves regulatory issues, establishes legal and organizational structure, and sets a funding source. Operation maintains service structures, membership, and funding.

Transit Ridership Enhancements can consistently be implemented through coordination with RIPTA and area employers. All Aquidneck Island businesses should participate in RIPTA programs such as Express Traveler Programs, AlterNet Ridership Programs, and Commuter Check Programs to provide alternatives to the SOV. Bus Rapid Transit (BRT) creates express bus service. It is a flexible, economical alternative to the SOV and may be appropriate for the West Side over the long term.

Creating a Shoreline Drive is a process that can improve transportation on the Island by diverting traffic from congested roads to underutilized corridors. The process would involve the disposition, improvement, and marketing of Stringham Road and Burma Road (Defense Highway).

Transportation standards specify techniques and aesthetic character for transit corridors on Aquidneck Island. There are standards for bike lanes, access management, public rights-of-way, retaining walls, landscaping, and signage. AASHTO designations offer detailed categories and principles for on- and off-road bike ways and lanes.

The statewide Transportation Improvement Program (TIP) is a primary resource for the implementation of the *Master Plan* transportation improvements**.** TIP organizes and prioritizes a list of transportation projects eligible for state and federal funding, including bicycle and pedestrian projects. Developed by the Transportation Advisory Committee (TAC) and adopted by the State Planning Council, these projects are implemented by RIDOT and RIPTA and managed by the Office of Statewide Planning. The AIPC should continue to submit TIP applications to fund improvements of West Main Road, Stringham Road, the Burma Road (Defense Highway), and the bicycle path.

The Congestion Mitigation and Air Quality (CMAQ) Program directs funds toward transportation projects in areas that have been classified under the Clean Air Act as being in non-attainment of the ozone and carbon monoxide standards. CMAQ funding is flexible and spans projects related to highways, transit, and non-traditional areas. The CMAQ Program is suitable for the transportation improvements recommended by the *Master Plan*.

AIPC Staff time, FHWA Ferry Boat Discretionary Funds, combined TIPs and CMAQs, and charitable funds and grants are additional sources of funding for transportation implementation on the West Side.

Informational resources for the *West Side Master Plan* include AASHTO and project specific Environmental Impact Studies.

These Transportation Implementation tools, processes, standards, and resources are fully explained in *Section 6: Implementation.*

Utilities Implementation

Intergovernmental agreements are effective tools used to assess impact fees, provide services, manage redevelopment, and apply performance standards and design guidelines as an alternative to regulatory processes. The agreements can determine the best means to allocate roles and responsibilities regarding water supply distribution and treatment, and wastewater collection and treatment on the island.

The Intergovernmental Working Group (IWG) and their coordinated utility agendas are processes that will lead to the best solutions to existing issues regarding utility distribution on the West Side. The IWG proposed in the *Master Plan* can serve as an appropriate forum to advance discussions toward resolution on an organized and scheduled basis. Principle solutions for future issues are in the *Utilities Strategies* of *Section 5: Planning Strategies.* However, high priority IWG agenda items include securing water supply for the Melville area, and acquiring sewage treatment in Portsmouth. RIDEM's State Revolving Loan Fund is a viable state funding source for many of Aquidneck Island's utility issues and projects. Improvements for the Melville area water supply and the sewage treatment issues in Portsmouth could be funded through this loan.

Sustainable utilities standards will advance the *Master Plan* strategy to conserve energy on Aquidneck Island. The sustainable and renewable energy recommendations will largely be accomplished through the performance criteria for development that are suggested.

These Utilities Implementation tools, processes, standards, and resources are fully explained in *Section 6: Implementation.*

Roles and Timelines

Summary of Implementation for Stewards

The AIPC will be the regional entity responsible for the implementation of the *West Side Master Plan*. In order to achieve this role, the AIPC will sponsor and coordinate several processes, such as periodic progress reviews, annual community updates, annual transportation "summits", input to the regional Transportation Improvement Plan, and special studies. However, while the AIPC will maintain a central role in the implementation of the *Master Plan*, most of the actions will be taken by the constituent municipalities, participating public agencies, local organizations and the private sector.

The federal congressional delegation links federal legislation, actions, programs, agencies, and funding that will be part of the West Side's future. The federal stewards of the West Side should adopt aspects of the *Master Plan* that are consistent with the federal purposes and continue to be participants in the key coordination required. This includes particular emphases on collaborating with other jurisdictions through the Intergovernmental Working Group (IWG), supporting the Navy land disposition processes and Special Area Reuse Plans, and determining grant funding sources for implementation.

Naval Station Newport and the Department of Defense are integral to the West Side's future. These entities should participate in the IWG and the Transportation Management Association (TMA), coordinate roadway uses, security, and access procedures, and incorporate the *West Side Master Plan* recommendations in their future military planning. Other federal agencies should consider the eligibility of recommended relevant projects for funding or support as model or demonstration programs for environmental sustainability, multi-modal and alternative transportation, and natural resource preservation.

The State of Rhode Island's stewards of the West Side are asked to incorporate the recommendations of the *Master Plan* into the public policies, legislation, regulations, and funded programs at the state level. This includes special emphases on supporting the land transfer processes used for Navy land disposition, advancing the transportation initiatives listed in the *Master Plan*, and working with the other authorities through the Intergovernmental Working Group.

The Rhode Island Department of Transportation (RIDOT), the Rhode Island Public Transit Administration (RIPTA), the Rhode Island Economic Development Corporation (RIEDC), and the Rhode Island Department of Environmental Management (RIDEM) are essential to the accomplishment of many of the recommendations of the *West Side Master Plan*. Successful initiatives will depend on their active assistance. These state agencies should endorse and apply the *Plan's* principles, participate in the implementation committees, and work collaboratively to advance transportation, economic development and open space preservation strategies.

Middletown, Newport, and Portsmouth are asked to endorse the *Master Plan* and then tailor and absorb those elements most appropriate to their circumstances and comprehensive planning. All communities are asked to approve the Island-wide transportation strategies described herein. The municipalities should devote appropriate staff time to implementing those aspects of the *Master Plan* consistent with their needs and actively participate in the AIPC's implementation committees, including the Intergovernmental Working Group.

All associated municipalities, agencies, institutions, and organizations at the local, regional, and state level should formally endorse the *Master Plan*, contribute to its implementation, devote staff and resources to applicable projects, and actively participate on AIPC-facilitated implementation committees. The Aquidneck Land Trust (ALT) and the Newport County Chamber of Commerce are key institutional stewards for the West Side.

4 PLANNING CONTEXT

The number of people living on Aquidneck Island is growing, but at a very low rate. In fact, the population peaked over 30 years ago, when military activities were far greater than they are today. However, the character of the population has been changing dramatically. There are more households than in the past, incomes are higher, there are more retirees, and people are traveling farther to and from work.

The *Master Plan* has been based on a disciplined and multi-disciplinary review of existing conditions and trends that form the context for planning the West Side. This section brings to light some of the important insights gained through the research and analyses that have been accomplished over several years. This review is purposefully brief, so that the bulk of this report can focus on strategies and implementation.

Demographics: The Changing Community

The population characteristics of Aquidneck Island have been changing significantly for decades, with important implications for the way of life for all Islanders. Looking into the future, changes are likely to be less dramatic, but are nevertheless important to understand.

A study of population statistics begins with the total number of residents on Aquidneck Island. The population levels were measured in the past with census statistics and are projected into the future using the statistical models of Rhode Island's Office of Statewide Planning. Aquidneck Island's population peaked over 30 years ago, when the Navy's active presence was far more extensive than it is today. The census recorded over 76,000 Island residents in 1970, while the most recent census in 2000 counted just under 61,000 residents – a decline of 20 percent.

The sudden decline in population coincided with a major realignment of military bases in New England in 1973. Some of the Navy's waterside and landside facilities along the West Side have been underutilized or abandoned since that time, leading to the disposition process that is a focus of the *West Side Master Plan*. This can lead to a false conclusion that the military presence is no longer very important; this is not the case. The number of personnel living at Naval Station Newport was listed as 7,384 in 2003 – over ten percent of the Island's total population and the majority of those who live within the West Side planning area.

A Stable Population Count – Since that sudden drop in population in the 1970's, the total population on Aquidneck Island has not significantly changed – nor is it expected to in the future. The most recent projections suggest that the Island population in the year 2030 will gain only a few hundred residents above current levels. This can be very difficult to understand in the context of the apparent "growth" on the Island – there are obviously more homes, newcomers moving onto the Island, higher housing prices, more cars, and a lot more congestion than people remember in the past. Looking further into the population patterns reveals some interesting facts that help explain this apparent anomaly.

The following table and graphic summarize population growth for Aquidneck Island and the State from 1950 to 2000 based on U.S. Census historic data, and projected growth for the next twenty-five years based on projections from the Rhode Island Statewide Planning Program. **The graphic illustrates changes in population recorded by each Census beginning in 1950, on a percent basis.**

The Seasonal Balloon – The seasonal population shifts on Aquidneck Island are dramatic. Accurate estimates are not available, but studies suggest that the peak summer population may increase temporarily by as much as

Table 4-1: Population Growth

City/Town	1950	1960	**1970**	**1980**	1990	**2000**	2005	2010	2015	2020	2025	**2030**
Middletown	7,382	12,675	29,290	17,216	19,460	17,334	17,350	17,364	17,385	17,408	17,427	17,442
Newport	37,564	47,049	34,562	29,259	28,227	26,475	26,086	25,763	25,278	24,737	24,275	23,937
Portsmouth	6,578	8,251	12,521	14,257	16,857	17,149	17,553	17,889	18,392	18,954	19,434	19,785
Aquidneck Island	51,524	67,975	**76,373**	**60,732**	64,544	**60,958**	60,989	61,016	61,055	61,099	61,136	**61,164**
State Total	791,896	859,488	949,723	947,154	1,003,464	1,048,319	1,062,441	1,074,199	1,091,813	1,111,464	1,128,260	1,140,543

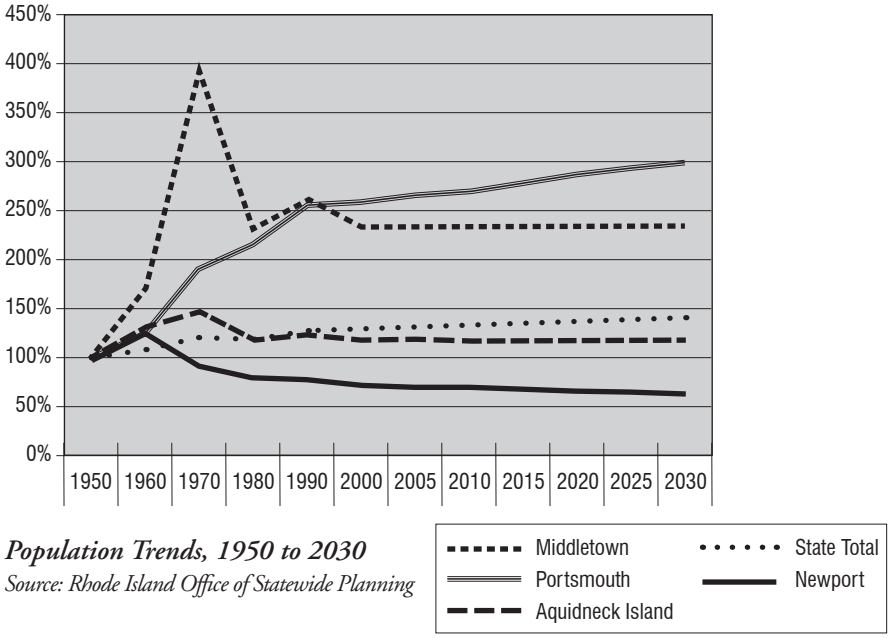
Source: Rhode Island Office of Statewide Planning

100,000 visitors, with the greatest concentration in Newport. The seasonal traffic severely stresses the area's roadways, including the West Main Road network that feeds north/south travel.

More Households – The year-round Aquidneck Island population has become dispersed among more and smaller "households." Like most of America, there has been a marked trend in independent living for singles, seniors and single-head households relative to the past, when large families were more typical. Simply put, while the population has not been growing in numbers, it is occupying more homes, apartments, and condominiums than ever before. This has placed significant pressure on the housing stock, raising prices, and providing incentives for more construction, leading to thousands of new homes being built on Aquidneck Island over the past two decades. The cost of housing has triggered a housing affordability crisis on Aquidneck Island that can be enormously damaging to its diverse culture and economic success.

The trend toward household formation is not expected to continue at the same rate as in the past, which should ease pressure for new housing in general. But it is important to remember that this increasingly dispersed population tends to create significantly more traffic than the same population in the past, as residents move about the Island running errands as well as commuting to and from work.

The graph to the right illustrates the population trends for Aquidneck Island and for its constituent communities. Using the census year of 1950 as the base year (100%), the chart tracks the population counts every ten years relative to this base. It helps show that population peaked around 1970, and has receded to a lower level that is now rising slowly over time.



Population Trends, 1950 to 2030
Source: Rhode Island Office of Statewide Planning

Uneven Distribution of Change – The expansion of housing into previously undeveloped areas has not been evenly distributed. Portsmouth and Middletown have experienced consistently higher levels of new development relative to Newport, which is also reflected in the population statistics, with Middletown and Portsmouth growing while Newport has been slightly declining in population – a general trend that is expected to continue.

Rising Incomes and Older Population – Aquidneck Island has fared well in terms of average household income over time. This trend may continue. In part, this reflects the increasing desirability of the Island as a residence because of its environment and lifestyle opportunities for retirees, and individuals who work elsewhere. In particular, the older segments of the population are growing faster than other age groups and are associated with some of the higher incomes. According to projections, during a time when overall household growth is expected to grow at less than one percent per year, the 55-to-64 and 65-to-74 cohorts are expected to grow at annualized rates of 2.6 and 1.4 percent, respectively. Within these age groups, the highest-income (above $100,000 annual income) groups are expected to increase at rates ranging from approximately 6.0 to 7.0 percent.

Departures and New Faces – Aquidneck Island has a notable turnover pattern: while many people are migrating away, there is also a high percentage of new arrivals – individuals that are choosing to live here because of the quality of life. This trend affects the character of the population and demand for amenities, goods and services, even if the total population count changes little. For example, the senior citizen population moving to the Island is expected to be generated mostly by seasonal residents that will primarily come to the Island from the Providence, Boston and New York metropolitan areas, most of them fitting "empty nester" profiles.

Walking trail
Photo: Monica Allard Cox

Economic Factors: Jobs, Business, Real Estate and Housing

The West Side is linked to several of the fundamental components of the Island's employment and economic base. The Navy is highly specialized and directly contributes to the economy both through on-base activities and associated private sector research and development activities nearby. The West Side contains both existing facilities and potential expansion areas for a major concentration of marine businesses and recreational boating activities. The West Side also participates in the tourism industry that forms part of Aquidneck Island's economic life. Demand for some types of housing is high, raising costs and contributing to an affordable housing problem.

Aquidneck Island is highly dependent on a few narrowly-focused and predominant economic activities that provide the base of jobs and income. Each of these predominant sectors is prominently linked to the future of the West Side.

Military and Military-related Uses

The activities of Naval Station Newport (including the Naval War College and the Naval Undersea Warfare Center (NUWC) and the associated research and development (at the Raytheon Corporation's facility and others) are an essential contributor of employment in general, and of high-end jobs in particular. Naval Station Newport remains the single largest employer on the Island and in the West Side, with approximately 7,200 permanent employees, or 21 percent of the Aquidneck Island's employment base (including civilian employees). The educational and training orientation is substantial; there are about 2,200 military students or trainees stationed here. This cumulative contribution to the economy is profound, linked to an annual payroll of about $500 million, and $200 million in payments to contractors.

While major changes could occur due to the constantly shifting national priorities, these activities appear likely to continue. Rhode Island Economic Development Corporation (RIEDC) suggests good possibilities for the replacement of defense department jobs that may be relocated outside the Island with associated local defense contractor jobs. A review of this sector suggests a likely need for modest expansion – perhaps 175,000 square feet of additional office/research and development space within the foreseeable future. This type of use will almost certainly gravitate towards locations that are convenient to the cluster of similar activities already in place. As a result, the West Side is the clear candidate for locating these uses. While important economically, this expansion can readily be accommodated within the West Side; the projected additional building area can be imagined as three or four typical four-story office buildings. Such uses may have additional site requirements and security standards that also need to be taken into account.

Boat building and repair at Melville

Marine-related Business and Recreational Boating

The Melville area and northern portions of the West Side host an internationally important concentration of recreational boat building and associated activities. Narragansett Bay and Aquidneck Island have a long and distinguished heritage in the specialized trades of boat building and boat repair, which have become technologically advanced. The West Side's marine companies have developed a specialization in large yacht building, services, repair, and brokerage. This industrial use occupies significant land and water areas as part of typical operations. In New England, this includes large land areas used for winter boat storage; the off-season is a focus for repair and servicing.

The companies along the West Side provide a significant number of highly skilled jobs and there is a demand for expansion of these activities. While the recreational boat industry is highly

sensitive to the broader economic climate (such as interest rates), the local companies have fared well. It is reasonable to project the need for expansion of existing businesses and the attraction of new companies to the West Side over time. In the short-term, approximately 30 acres of additional land in the Melville area may be consumed by the combination of buildings, open storage and operational requirements. Over the long term, it is wise to set aside a similar amount of land to accommodate additional needs.


Marina at Melville

The West Side is also well positioned to serve recreational boating. The cumulative attractions of Narragansett Bay and the amenities in the region have long distinguished Aquidneck Island as a boating center. Rhode Island has a strong market for slips and moorings. From 1996 to 2002, Rhode Island's boat registrations grew 23 percent faster than New England or the nation. The last analysis of slip and mooring demand conducted in 2002 by Rhode Island Marine Trades Association found a 3,000-slip waiting list in Rhode Island; a significant portion of this could be absorbed along the West Side.

The LNG Tanker Transit Impact Study, conducted by the AIPC in the summer of 2005, documented recreational and marine-related business uses on the East Passage of Narragansett Bay.

Tourism and Hospitality

Tourism is a major component of Aquidneck Island's economy that is integrally tied to its cultural heritage, environment, and way of life. The potential for future growth is not evenly distributed among the businesses and activities associated with tourism, however. The tourism market is narrowly focused due to the seasonality of the climate and the character of amenities and attractions that draw visitors. The pattern and intensity of peak season tourism is also facing a practical capacity limit – the capacity of the infrastructure and attractions to comfortably absorb the intense level of use. As a result, Aquidneck Island trails the national trends in tourism growth.

Future opportunities will occur where existing assets can be more effectively used, where off-season activities can be promoted, and where a different patronage with higher spending proclivities can be attracted. The expansion of hotels and hospitality development is expected to be limited, except for specialized segments of the market that may be underserved, including business travelers. Resort-style developments that provide multiple amenities and high quality settings are emerging along the West Side. Marina and marina-related uses can expand the options and amenities for boating enthusiasts.

Commercial Office Space

The prospect for expansion of commercial office space is limited on Aquidneck Island. In part, this is because of the Island's relatively remote location in relation to the major regional commercial centers. The Island has a highly specialized local economy that does not generate this type of use and the population is not growing significantly. Peering into the future, the projected absorption of office space for all of Aquidneck Island is only about

20,000 square feet per year – or the equivalent of one typical floor of a contemporary office building. So there will likely be only limited pressure for this use on the West Side.

Retail, Entertainment and Services

The economic projections generally do not foresee a significant increase in the amount of retail or services required for Aquidneck Island over time. Within this broad economic category, however, certain "niche" opportunities will be found to expand the range of choices available today.

Over the past decades, there has been a realignment in the retail and service industries that has altered the types of facilities and companies and effected location decisions. A national phenomenon arrived on the Island: larger format retail establishments and a shift to many more national "chains" along heavily traveled roads. This pattern dominates portions of West Main Road. There is no expectation, however, that there will be any significant new demand or general growth in retail, service, and entertainment. Rather than growth in these sectors, Islanders can anticipate continuing shifts towards different goods and services; there will be new and different establishments replacing existing merchants, mirroring the lifestyle choices and changing population characteristics on Aquidneck Island.

Among the potential trends are "lifestyle"-based developments that provide a mixed-use, high quality environment through planned and coordinated design and amenities. Such developments are frequently using significant amounts of housing to provide a critical mass of activity and investment to complement restaurant, small office, retail, and entertainment uses. This approach provides desirable choices for those who prefer to live in more dense, village-scale, or urban environments.

Housing

The attractiveness of Aquidneck Island as a place to live has driven up housing prices and is leading to significant development opportunities because of the positive market -- particularly for high-end products. The rental market is tight and apartments are expensive. These and other factors have lead to a persistent housing affordability problem that will require dedicated efforts to overcome. A new trend is rapidly becoming a major planning challenge (and opportunity) – the Navy is privatizing much of its housing stock, shifting the way that their housing needs will be fulfilled.

High-Cost, High-End Housing – Housing demand is expected to remain strong, particularly within the upper-income/high-cost housing category on Aquidneck Island. The strongest demand for new housing on Aquidneck Island is for second homes and luxury residences. This type of development has occurred primarily in waterfront areas, with high premiums being paid for water access and other vacation amenities. The largest recent residential development project in the planning area is illustrative of this demand. The Carnegie Abbey development in Portsmouth is a 450-acre development. It will be limited to 400 private memberships and include a 79-slip marina and high-end golf course. The development has approval for 43 single-family home lots and up to 59 condominium units, mostly located

New home in Portsmouth

in the 14-story Carnegie Tower. The attractiveness of this type of development is expected to lead to similar market opportunities on similarly located large parcels of land along the West Side coastline. Prices have averaged approximately $1,000,000 per lot and condominium units have averaged approximately $1.4 million. Buyers are reported to be almost exclusively second home and vacation home purchasers. The successful absorption of these units, few of which are used as primary residences, underlines the strength of the resort and second home market.

Tight Rental Markets – Rental housing is also in high demand. No new multi-family rental apartment projects have been constructed in the planning area in the past fifteen years. The six largest apartment properties in the study area include the Bay View Tower, Harbor Village, Eastbay, Northgate Apartment, Bayside Village, and Rolling Green Apartments. Collectively, these complexes total over 1,000 units of 1 and 2-bedroom housing. Operators report healthy occupancies, ranging from 93 percent to 98 percent. Rental rates range from $785 to $995 for 1-bedroom units and $930 to $1,100 for 2-bedroom units.

Privatizing Military Housing – Military housing has long been a major component of the housing stock along the West Side. Recent actions have changed the characteristics of this housing, with significant implications for the Island's communities. The Navy is participating in a housing privatization program that is transferring control and management responsibilities for a series of housing complexes, some the size of small neighborhoods. The business relationship is called a Public-Private Venture (PPV) between the Navy and a private company, GMH Military Housing. The Navy is expected to lease back many of the units. Other housing units (or land, or other facilities) can become available through the PPV for sale or lease for non-military uses.

The Navy housing privatization initiative raises many economic considerations, including the fiscal impacts on the Island's municipalities. The AIPC has assisted the privatization process by preparing economic impact analyses as part of the ongoing negotiating and approvals process for the changes underway. The prospect of reuse of former Navy housing, land, or other facilities released through the privatization process is likely to provide economic development opportunities in the near future, including prospects for providing much needed affordable housing.

An Affordability Crisis – The attractiveness of available housing to increasingly affluent residential buyers and the high demand for rental housing relative to the supply is contributing to an island-wide affordable housing shortage. The lack of affordable housing is a fundamental economic issue as well as a social and cultural concern. Aquidneck Island cannot attract or retain a high quality work force nor support existing businesses if there are not good housing choices for a wide range of income levels. The lack of affordable housing will also exacerbate traffic and commuting patterns. Statistics suggest a growing pattern of cross-commuting, where individuals living in high cost Island communities are commuting to high-paying jobs off-island, while workers with lower paying jobs must find other places to live, and are commuting to the Island to go to work.

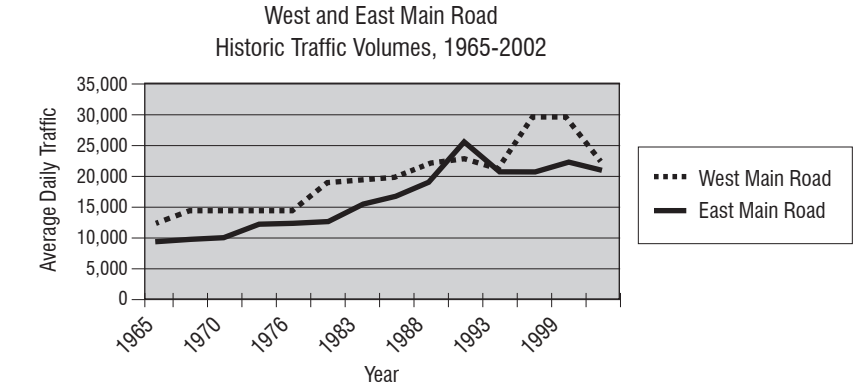
Transportation: Moving to, from and through the West Side

The West Side provides several north south circulation corridors. These have become congested due to increased traffic associated with the changing Island population (more households, more cars, new destinations) and the commuter and tourism trips. There are opportunities for improvements that would make the corridors more safe and effective. The West Side also provides unique opportunities to enhance transit options, bike trails, and pedestrian connections.

The West Side hosts several of the major transportation corridors that serve Aquidneck Island and which must be relied on in the future (see *Figure 4-1, Transportation Context,* page 4-10). Traffic along these corridors and at key intersections exhibit the congestion problems that were once common in the tourist season, but which have now become prevalent all year. While other modes of travel are components of the West Side transportation network, they are currently insufficient to offset the predominant use of the automobile to move to, from and through the West Side.

The roadway network on Aquidneck Island is largely defined by its island location, the three bridges that connect it to the region, and the north-south traffic flows that connect the bridges and island communities on both Route 114 (West Main Road network) and Route 138 (East Main Road). A partial north-south connection is provided by the Defense Highway, the so-called "Burma Road" that once linked the Navy's facility stretched along Narragansett Bay. Civilian use of the Defense Highway is permitted over some portions of the road today, but is subject to security closures in portions that pass through the active areas of Naval Station Newport.

Historic Trends and Commuting Patterns



Source: RIDOT Traffic Flow Maps, 1964 to 2004

The surface transportation modes are linked together at the Newport Gateway Center at the southern end of the planning area. The Gateway Center serves as a hub for all transportation modes, providing bus service sponsored by the Rhode Island Public Transit Authority (RIPTA), interstate, and tourism-based buses, parking, ferry service to Providence, water taxi service to harbor destinations and Jamestown, and access to the Old Colony and Newport Railway and Newport Dinner Train service on the Newport Secondary rail corridor.

This rail corridor extends along the entire West Side; it once extended northwards into Massachusetts, where it joined the regional rail network. Rail connection over the Sakonnet River is no longer available.

Historic Trends and Commuting Patterns

Traffic volumes on Island bridges and roadways have increased dramatically over the past forty years (1965 to 2004) in contrast to the population trends, which declined after the 1973 Navy base realignment and which has been effectively stable since. This increase in traffic is due to the accumulation of many factors. There are more households moving among different destinations on the Island, commuting patterns have changed, and tourism trips have increased along with the revitalization of Newport and Aquidneck Island's attractive features.

In the past, some of the routes along the Island provided relief from the more congested corridors, but these advantages have been disappearing. For example, although traffic volumes have historically been lower on

East Main Road than on West Main Road, the volumes are now equal. The more easterly route is increasingly used to avoid West Main Road congestion. Similarly, although the Sakonnet Bridge historically served as the primary access to the Island for off-island commuters and visitors, the Pell Bridge now rivals the more northerly bridge in popularity, despite the cost of its tolls. From the year when the Pell Bridge opened in 1970, the combined traffic volumes of the Island's three bridges had doubled by the year 2000.

Commuting longer distances to work is a regional trend and has influenced Aquidneck Island's traffic patterns. The Island is a net importer of jobs. Local businesses employ 36,500 workers. Approximately 31,000 Island residents (or 8 of 10) work on the Island. Of those working on the Island, 70 percent live in Portsmouth, Middletown, or Newport while 30 percent commute from off-island. Approximately 12 percent of Portsmouth employees and 7.0 percent of Newport and Middletown employees live in Massachusetts.


Traffic on West Main Road

Travel patterns in Middletown and Portsmouth are more "suburban" than in Newport; 85 percent of residents in these towns drive alone to work. In Newport, 69 percent drive alone to work while 17 percent either walk or work at home. Newport residents are more transit-dependent than other island communities. Among Newport residents, 15 percent do not have access to a vehicle and 46 percent have access to one vehicle. In contrast, among Middletown residents only 6.0 percent do not have a vehicle and 54 percent have access to one vehicle. In Portsmouth, fully 67 percent of the population has access to two or more vehicles.

Ongoing Projects and Prospects

Several Rhode Island Department of Transportation (RIDOT) projects which are underway or recently completed have the potential to improve traffic flows in the West Side planning area.

Reconfiguration of the Pell Bridge ramp system – This major reorganization initiative in Newport has the potential to improve access to the downtown, provide opportunities for remote parking within the interchange, and open up land for development, which had nearly approached build-out.

Improving connections along J.T. Connell Highway and Coddington Highway – Planned upgrades of J.T. Connell Highway and Coddington Highway in Newport and Middletown will provide four travel lanes, landscaping, sidewalks and drainage improvements.

Keeping the connection open to Naval Station Newport at Gate 4 – The Armstrong Bridge replacement over the Newport Secondary rail corridor at the Gate 4 entrance to Naval Station Newport will improve safety through the reconfiguration and signalization of the J.T. Connell Highway intersection.

Redesigning the complex intersection of the Main Roads and the Coddington Highway – The West Main Road intersection reconfiguration at Coddington Highway and East Main Road

Transportation Context

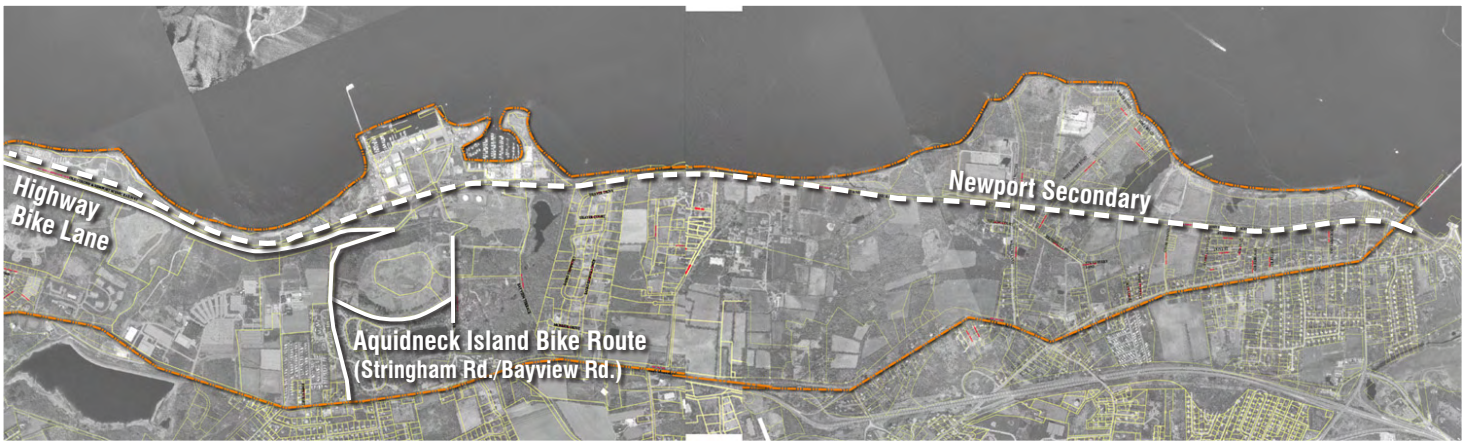
Figure 4-1

MAJOR ROADWAYS

◇ = Signal

RAIL AND BIKE CORRIDORS


Mount
Hope
Bridge,
Route 114
Melville
Road
Stringham
Road
Cory's
Lane
Willow Lane
Bristol Ferry Road
Route 24


Highway
Bike Lane
Newport Secondary
Aquidneck Island Bike Route
(Stringham Rd./Bayview Rd.)

will improve traffic flow in a section where heavy turning movements reduce the capacity and adversely affect safety.

Sidewalks in Middletown – Repaving and resurfacing or construction of new sidewalks will be underway along West Main Road in Middletown in 2006. This will improve pedestrian access along the more commercially-developed southern section of this road and provide safer connections between adjacent neighborhoods and local destinations.

Expanding Use of the Rail Corridor - RIDOT's Aquidneck Island Passenger Rail study concluded that passenger rail service can be restored within the existing Newport Secondary right-of-way. A single set of rail infrastructure improvements can satisfy the requirements for simultaneous operation of existing Dinner/Tourist service trains, an on-island visitor shuttle, and a commuter shuttle to Fall River, Massachusetts (with reconstruction of the Sakonnet River rail bridge). However, there is no proposal to extend the line and reconnect it to the regional rail network within the foreseeable future. A bicycle path can be built within or adjacent to the right-of-way on public land. The bicycle path and rail service can be added incrementally.

Planning for Future Connections – Corridor studies undertaken by the Rhode Island Statewide Planning Program in 2003 have identified a vision of the Aquidneck Island corridor in the year 2020. This vision includes developing transportation linkages connecting Aquidneck Island with tourist and cultural destinations through a variety of transportation alternatives including expanded ferry service, increased bus schedules, and improved bicycle and pedestrian friendly pathways. Rhode Island Public Transit Authority (RIPTA) express routes will accommodate both year-round residents and seasonal commuters. More Park 'n Ride lots and bus service will provide safe linkages to other transportation modes. Access management to reduce curb cuts, and increased left turn storage lanes will improve traffic flow. West Main Road will be designated for freight and tour buses allowing East Main Road to maintain its more rural character.

Traffic Considerations

In the West Side planning area, the West Main Road network (Route 114) is the primary means of north–south travel, providing access to Naval Station Newport and its Naval Undersea Warfare Center (NUWC), the Raytheon Corporation campus, marinas and other marine industries in Melville, commercial development in Middletown, downtown Newport and destinations at the south end of the Island. Studies and evaluations of the West Main Road network have raised the following considerations:

Serious Safety Issues along West Main Road – In 2001 and 2002, 854 accidents were reported on West Main Road in Portsmouth and Middletown. Three RIPTA passengers were killed in one year when trying to cross the road.

Traffic Flows and the Frequency of Intersections and Turns – Although traffic volumes on both West and East Main Road are comparable, the number of signalized intersections and turning movements to adjacent commercial development reduces the operating efficiency and capacity of West Main Road. Signalized intersection locations disrupt the mainline by competing

demands for green time. Although two coordinated signal systems are in operation along West Main Road, the efficiency of one eight-signal system is reduced by movements from side streets and adjacent development.

Left Turns and Reduced Capacity – Left turns from West Main Road cause significant disruption to the corridor by blocking a travel lane and forcing vehicles to utilize one travel lane. This occurs at ten signalized intersections where left-turn lanes are not currently provided. Access into the many retail and commercial driveways causes further disruption of traffic flow.

Buses Stopping in Traffic – RIPTA buses traveling along West Main Road stop in the right travel lane to pick-up and drop-off passengers, forcing vehicles to either stop and gather in lines behind them (what traffic engineers call "queues"), or to merge left to try and move around them. School bus stops disrupt flow by halting all traffic north and south during the morning peak traffic periods and during the afternoon periods when traffic volumes increase.

Operations at Capacity – Sections of West Main Road are currently operating near capacity and are experiencing congestion. This is most acute during the peak tourist season when traffic volumes are 49 percent higher than during winter off-peak months.

Right-of-way Constraints – Limited public right-of-way is available along West Main Road to construct safety and capacity improvements. Roadway improvements adjacent to high-density retail and commercial development in the south, where congestion is heaviest, are constrained by minimal setbacks to buildings and parking areas.

Other Modes of Travel: Alternatives to the Car

RIPTA Bus Service – RIPTA provides scheduled bus service along the West Side. Route 60 provides local service between Newport and Portsmouth on West Main Road with approximately 29 riders per trip. Additional routes such as the Route 63 provide local service within Newport. This bus averages 16 passenger per trip. RIPTA operates a bus garage within the area that is located on J.T. Connell Highway.

Ferry Service – Ferry service is limited along the West Side today. Newport to Providence ferry service is seasonal and tourism based. Ridership on a year-round commuter ferry with service to Newport, Mt. Hope Marine Terminal in Portsmouth and Providence did not warrant continuation of service after the first year of operation in 2002.

Bicycle Routes – The Defense Highway Commuter Bike Lane along Burma Road is the only designated bike route in the West Side planning area. Few roadways provide suitable connection between neighborhoods on the east side of the Island with the shoreline of Narragansett Bay. Stringham Road in Portsmouth is designated as "more suitable" and Washington Street and Third Avenue in Newport are designated as "suitable" for cycling by RIDOT. A Bicyclists' Guide to Aquidneck Island identifies further options as suitable for cycling: Long Wharf and Admiral Kalbfus Road to Coasters' Harbor Island in Newport, and Bay View Terrace and the road to the campground in Melville (see *Figure 4-1, Transportation Context,* page 4-10).

Infrastructure: Serving the West Side (and More)

The infrastructure conditions along the West Side provide opportunities and choices for the communities and facilities along the entire corridor. These include opportunities to regionalize the water supply systems to support desired uses and the possible provision of a location for a future wastewater treatment plant for Portsmouth, should it decide to advance this option.

The utility infrastructure for the West Side must be planned in concert with the land uses that will be retained or changed over time. But infrastructure planning along the West Side can play an even larger role in terms of Aquidneck Island's communities. The water and sewer systems for its communities and Naval Station Newport are interdependent in many ways, and a regional perspective is helpful.

Water Service

An adequate water supply is available for Aquidneck Island's present and future needs through a series of surface water reservoirs on Aquidneck Island and on the mainland east of the Sakonnet River. The Newport Water Division's Water Supply Management Plan indicates that sufficient water quantity is available to meet water demand through 2025. Infrastructure upgrades will be required in the future to meet pumping and treatment demand and to extend lines for new development. The Newport Water Division (NWD) reports that conservation measures and reduced processing by Newport Creamery have led to a decrease in water consumption. NWD provides municipal water service to Newport and Middletown and sells water wholesale to Naval Station Newport and Portsmouth Water and Fire District (PWFD). Several island-wide water initiatives may address water quality and quantity issues that affect the entire Island:

Actions to Protect Water Quality – The Public Utility Commission mandated in June 2004 that the City of Newport, Town of Portsmouth, and Naval Station Newport work cooperatively to address compliance with the Safe Drinking Water Act Disinfectants Byproducts Rule.

Opportunities for Better Coordination – In 2004-2005 the AIPC facilitated informal discussions with representatives from the City of Newport, Newport Water Division, Portsmouth Water and Fire District, Middletown and the Navy regarding the possibility of forming an Aquidneck Island Water Resources Board. Such an entity would reduce dependence on the City of Newport and more equitably address water quality and quantity issues for residents, businesses and institutions on the island. No consensus was reached on a water resources board, and instead the group focused on forming an Aquidneck Island Advisory Committee. The Advisory Committee, although not regulatory, would continue to bring all the constituent groups together, provide a forum for communications, and allow for joint consideration of the island's quality and quantity of drinking water resources.

Water Supply for Melville – The Melville area water supply is provided through the Navy distribution system. Service to private businesses is provided through an agreement with the Navy. This water is being "wheeled through the Navy" but billed by the City of Newport. Neither the Navy nor the City of Newport would like to expand this arrangement to new water users in Melville. Melville is not within the PFWD service area. PWFD does not have a contract with the City of Newport to assure future water quantity; it cannot provide service outside its limits, and its pumps are not sized to expand service to Melville. This places private development at some risk and without a guaranteed capacity for expanding in the future.

Water Quality and Investment Issues with The Navy Water System – Naval Station Newport water system was

sized to meet the requirements of the fleet when it was in port in the 1970's. With decreased demand on the system, water quality issues have increased, especially in areas remote from water treatment plants. The Navy has not fully addressed this issue to date, in part because of the potential privatization of both their water and sewer systems in the future, through which such reinvestment may occur. However, the costs and benefits of acquiring, repairing and operating these systems has not been an attractive investment for the private sector to date.

Sewer Service

Wastewater treatment for the City of Newport, Town of Middletown, and Naval Station Newport is provided by the privately operated Newport Wastewater Treatment Plant. With the exception of Naval Station Newport property, no municipal sewage treatment is offered in Portsmouth.

Sufficient capacity is available at the privately-operated Newport Wastewater Treatment Plant for projected development in the service area. However, according to the established sewer allocation agreements, Newport's use of the system is close to its allocation, Middletown's use exceeds its allocation, and the Navy has excess capacity within its allocation as demonstrated by wastewater flows at the Newport plant in February 2004 (see Table 4-2 below).

Middletown is currently undertaking a study to address inflow and infiltration issues in its distribution system. The system would appear to have capacity for the changes that might be anticipated in the West Side, although the allocation agreements and payment procedures may need to be modified.

Although the portions of Naval Station Newport within Portsmouth are connected to the municipal sewer network, wastewater treatment in other areas is provided either by Individual Sewage Disposal Systems (ISDS), package treatment plants (such as the Carnegie Abbey development) or by hauling of septage to the Newport Wastewater Treatment Plant (such as at the Raytheon Corporation site). The lack of sewage treatment has constrained some land use decisions in Portsmouth because of the cost of and permitting restrictions on developing on-site treatment with unsuitable local soil conditions.

Additional considerations include the following:

Sewer Systems and Portsmouth – Portsmouth is currently dependent on septic systems, but is considering the potential costs and benefits of converting to a treatment plant system for the north end of town. One of the questions associated with this option concerns the potential location of a treatment plant that could serve the Town. It appears that a candidate location would include some of the area within the tank farm complex that may be released for reuse by the Navy in the future.

Limits to sewerage use at Melville – Melville Marine Industries (MMI) has an agreement with the US Navy to provide wastewater treatment for 40,000 gallons per day. MMI can store an additional 60,000 gallons per day to be pumped back through the Navy system during off-peak hours. This service was negotiated to accommodate future marina/condo development in the Weaver Cove area. East Passage Yacht Center has a 12,000-gallon per day capacity for wastewater treatment with the Navy.

The Navy has indicated that it is not willing to provide sewage treatment for new uses that may occur in the Melville area.

Renewable Energy

The West Side of Aquidneck Island has been identified as having potential for wind generation based on exposure to southwest winds. This assessment was made through a private sector effort, following analysis of a year of data received from a measurement station installed on the Navy cable tower at Melville. Melville was not pursued for consideration of wind turbine installation because of uncertainties of future land ownership and site remediation of Navy tank farms. Planning may discover useful and acceptable opportunities to use this or other technologies in concert with traditional energy sources serving Aquidneck Island.

Table 4-2: Newport Wastewater Treatment Plant

	MGD at the Plant – February 2004			
	Newport	Middletown	Navy	TOTAL
Average Daily Flow	6.897	2.399	1.066	10.362
Average Daily Dry Weather Flow	6.192	2.037	0.988	9.217
Average Daily Wet Weather Flow	7.700	2.799	1.123	11.622
Daily Allocation, MGD	5.7	2.1	2.9	

Natural Resources: A West Side Heritage

The West Side preserves a heritage of natural resources due to its extended shoreline and substantial undeveloped open space. Its corridors and open space provide a rich environment that is highly valued.

The West Side hosts distinctive and valuable natural resources in its coastal waters, shoreline, and substantial undeveloped open space. Its corridors and open space provide a rich environment that is valued for many reasons. This context is pictured in *Figure 4-2, Natural Resources, Water Classifications and Types, Historic Resources* (page 4-18).

The West Side of Aquidneck Island hosts a diversity of natural habitats ranging from estuarine mudflats and cobble beach, to salt marsh and freshwater wetlands along the network of named and unnamed streams. Upland woods and meadows provide additional habitat. The edge between these resource areas provides valuable habitat for estuarine, freshwater, and upland species of plants, animals and shorebirds. The West Side planning area, especially the section north of the heavily developed Navy base and south of the Mount Hope Bridge, is representative of habitats that have reverted from intensive agriculture through the 1800's to woodland succession.

Although the Newport Secondary rail line has created a man-made border between these shoreline and upland habitat areas, it has also restricted access and development. The West Side of Aquidneck Island represents one of the largest expanses of undeveloped shoreline in Rhode Island. In a state where many shorefront lots have been privatized for residential or marine-related commercial development, nearly six miles of shoreline remains undeveloped north and south of Melville. The view, especially from the water, is of a relatively undisturbed cobble beach and scrub growth along the railroad embankment, backed by woodland.

Several organizations and agencies have been involved in documenting natural resources along the West Side of Aquidneck Island. Naval Station Newport and the Naval Undersea Warfare Center (NUWC) have undertaken Integrated Natural Resource Management Plans and have delineated all wetlands in accordance with the Rhode Island Freshwater Wetlands Act. The Raytheon Employees Wildlife Habitat Committee (REWHC), a corporate initiative begun in 1999 and certified by the Wildlife Habitat Council (WHC) in 2001, has prepared a wildlife management plan that focuses on increasing biodiversity, increasing environmental and historical awareness, and protecting the environment for future generations.

The 175-acre Raytheon property on West Main Road extends to Lawton Brook on the south, Burma Road (Defense Highway) on the west, and abuts Chases Farm on the north. The site property line runs through part of Lawton Valley, an inaccessible rocky gorge with waterfalls and old-growth trees. Because of its isolation, it has remained mostly untouched and unmanaged. The REHWC has documented the history of the valley. Thomas Lawton, one of the first settlers of Portsmouth, farmed Lawton Valley until 1800 when a town poorhouse or asylum was established on the property. During the Civil War era Julia Ward Howe, best known as the author of the *Battle Hymn of the Republic*, built a house on an old mill site by Lawton Falls. Lawton Valley was dammed for construction of the Lawton Reservoir in 1945.

Melville Park, a 152-acre tract of land given to the Town of Portsmouth "exclusively for public park or public recreational purposes" by the US government on 16 March 1978, has

been developed as the Melville Campground, with the remainder retained as open space. This property, located east of Tank Farm #1 and #2, extends from West Main Road to the Newport Secondary rail line with access to the shoreline across the rail. The upper and lower ponds are significant freshwater fishing sites. A series of trails (blue, orange, green and red) provide access to sections of this property.

Conservation and Preservation Trends and Issues

The Aquidneck Island Partnership has identified land conservation strategies for preservation of the quality of life of island residents: linked open spaces, alternate modes of transportation, safe sustainable drinking water, and protecting natural habitat and farmland. The Aquidneck Land Trust (ALT) has been instrumental in protecting land from development. Extension of the Center Island Greenway to Lawton Brook and the shoreline of Narragansett Bay is one of many initiatives of ALT. ALT, Raytheon Corporation and the REWHC, the Town of Portsmouth and the City of Newport have begun preliminary discussions about conserving Lawton Valley.

Carnegie Abbey in Portsmouth

Looking forward, key conservation and preservation efforts are focused on areas where change could threaten valued resources. Among the issues that planning may help resolve are the following:

Agricultural and Undeveloped Land – The West Side includes significantly large tracts of undeveloped land and land actively employed for agriculture. These lands provide visual amenity and environmental value, and are linked to the cultural heritage of the communities of Aquidneck Island.

Valued Freshwater Brooks and Streams – Several freshwater brooks and streams flow through Navy property in the areas north of NUWC. Gomes, Normans and Lawton Brooks all flow adjacent to or within the drainage area of former Navy tank farms. Although the quality of these brooks may have been degraded through past practices at the tank farms, these brooks flow through areas otherwise undeveloped and inaccessible. These brooks are not generally subject to degradation by adjacent residential or highway development that would increase the potential for discharge of point and non-point sources of pollution.

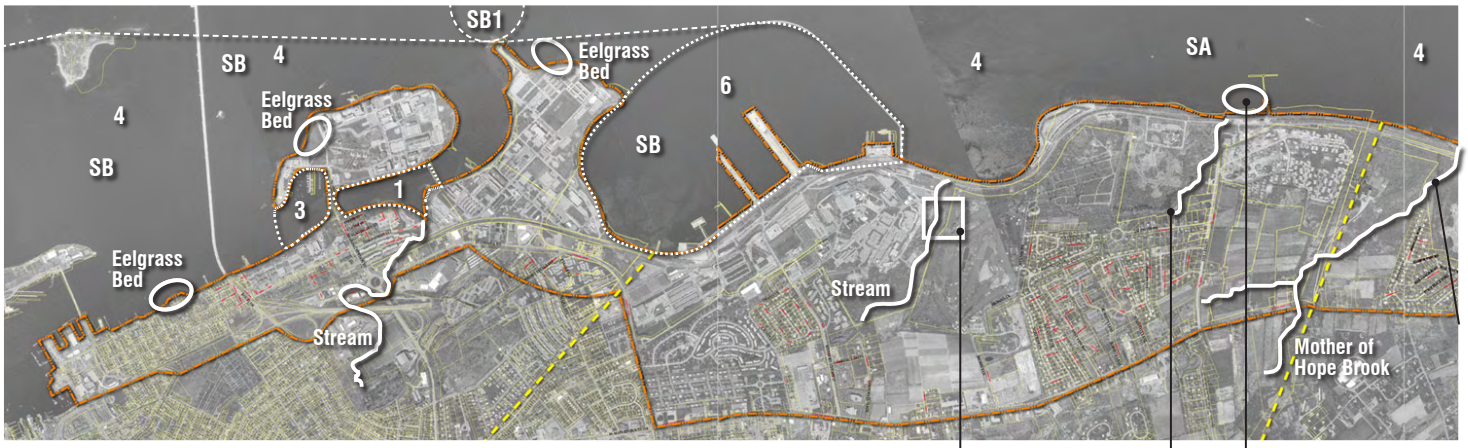
Private Land and Natural Resources – Several resource areas north of Melville are located on privately owned land not subject to protection from development. The Barker Brook complex, located on the Carnegie Golf Course, the former Weyerhauser fire pond on the Mt. Hope Marine Terminal property, and the tidal inlet near Porter Lane are all in areas of changing land use.

Coastal Ecology – Several eelgrass beds have been identified immediately off the western shoreline of Aquidneck Island. Beds are located off the Navy Hospital, Coasters Harbor Island, and Coddington Point in Newport, and Greene Lane in Middletown. Eelgrass beds are considered special aquatic sites under the Clean Water Act. Stormwater discharge from construction sites and impervious areas must be carefully managed to avoid sediment discharge that could adversely affect the health of these resource areas.

Natural Resources, Water Classifications and Types, Historic Resources

Figure 4-2

NATURAL RESOURCES, WATER CLASSIFICATIONS AND TYPES



Legend

RIDEM Class Waters

SA - Salt waters designated for shellfish harvesting, primary and secondary contact recreation, and fish and wildlife habitat.

SB - Salt waters designated for primary and secondary contact recreation, and fish and wildlife habitat.

SB1- SB waters which may be impacted for primary contact recreation due to approved wastewater discharges.

CRMC Type Waters

1 - Conservation Harbors

3 - High-intensity Boating Waterfronts

4 - Multipurpose Waters

5 - Commercial

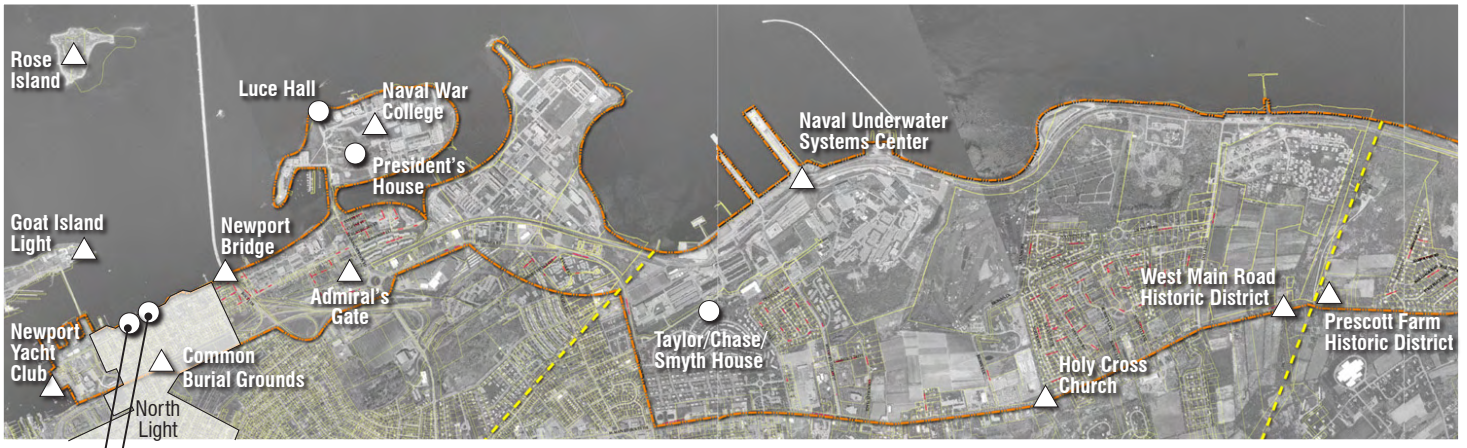
6 - Industrial

Deerfield Wetlands — *Freshwater wetland, bird nesting area*

Gomes Brook — *Interface between freshwater wetlands and estuarine resources*

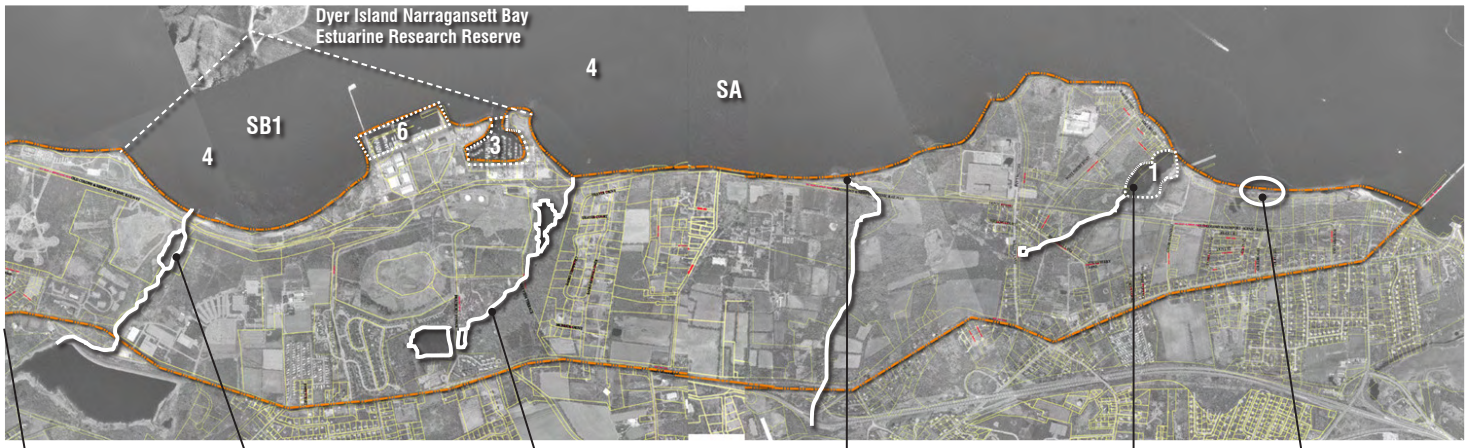
Eelgrass Beds — *Habitat for fish and shellfish*

HISTORIC RESOURCES



Legend

- Historic Sites
- Historic Districts
- Candidate for National Register of Historic Places



Norman's Brook

Interface between freshwater wetlands and estuarine resources

Lawton Brook

Interface between freshwater wetlands and estuarine resources

Melville Park, Chain of Ponds

Stocked trout ponds

Barker Brook

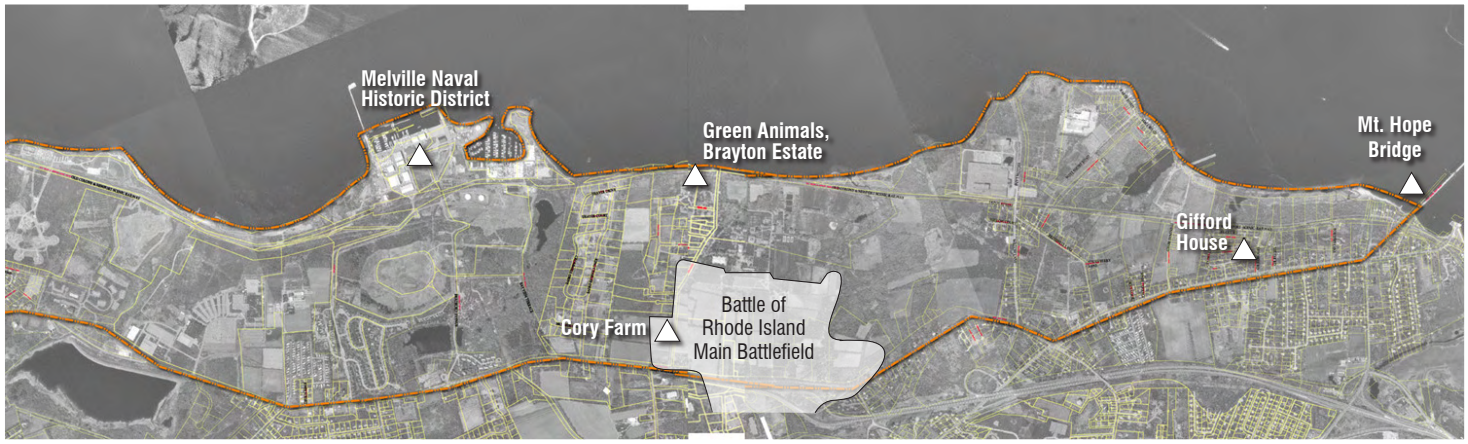
Interface between freshwater wetlands and estuarine resources

Fire Pond

CRMC Type 1

Tidal Inlets

Estuarine habitat, salt mashes



Land Use: Open Space and the Built Environment

Land use along the West Side is characterized by a diverse collection of large contiguous areas, each devoted to different uses. Naval Station Newport occupies an extensive amount of land along the shoreline. Agricultural land, open space and undeveloped land occupy other substantial areas. Large institutions, housing developments, and commercial uses dominate areas of the West Side, while recreational and resort-type use is a growing proportion of the overall pattern. Retail and service development is strung along the main roadway network, creating a "strip commercial" character for sustained segments.

The planning process has used many resources to comprehend the land use conditions within the 5,000-acre planning area that extends nearly 10 miles along Narragansett Bay. Computer mapping that categorizes uses in conventional planning terms has been compiled by the AIPC, the communities, and other sources; a recent composite map is a helpful reference. Land use patterns are changing, however, and the mapped information has been supplemented through interviews and other sources so that the *West Side Master Plan* reflects the most current information available.

The evaluations also took into account projections of current trends, called a "susceptibility to change analysis." This process is very useful to convey an important planning insight: much of the land along the West Side has already been committed to uses and development patterns that can be expected to remain into the distant future. Most of the planning effort, recommendations and subsequent actions can most beneficially be focused within those area where change is imminent or likely within a foreseeable time frame. The following discussion reveals some of the key observations about land use that have influenced the *West Side Master Plan.*

Aerial view of Melville

Land Use Patterns

The land use patterns along the West Side have been clearly influenced by its geography, topography and historical development. The Navy long occupied the largest proportion of the coastal land and harbors that have been created, taking advantage of the available low-lying land at the base of the hillsides that climb steeply eastwards towards the center of Aquidneck Island. The connected access provided by West Main Road network has served as a trunk from which uses have branched, reaching into the relatively flat land along either side. The interior parcels have been developed in large "chunks," as farms and large holdings were converted into other uses. The land in between the developed and actively used areas has remained as large parcels for various reasons, including the difficulties of building on steep slopes, or the persistence of farms with fields in the prominent gridwork pattern that preceded contemporary development. Large parcels remain abandoned from previous industrial or military use, while other areas are minimally occupied by tax exempt institutions. Relatively little of the "empty" land has been set aside from development as public open space or preserved through other means.

Open Space and Recreation – Prominent among the lands set aside is the Melville Recreation Area with its 150 acres of passive and active uses. Multiple golf courses occupy hundreds of acres of the land that slope toward the Bay, opening views from some vantage


Farm land in Portsmouth

points. Prominently lacking along the West Side, however, has been adequate public waterfront access.

Agricultural Uses – There are four large farms in operation along the West Side. The scale and spacing of these uses extends the rural character through Portsmouth and Middletown. They all have noteworthy impacts on the landscape; they are visible from West Main Road and frame picturesque views to the west.

Military and Military-Related Land – Newport Naval Station occupies both land and water-edge areas of the West Side. The majority of the active uses are located at the southern portions of their holdings, and include the U.S. Naval War College, part of a former hospital complex, and the NUWC research and development facilities. Civilian companies participate in key activities, including research and development. The Raytheon Corporation maintains a 175-acre site and facility in Portsmouth near Stringham Road.

Base Reuse and Excess Land – The Navy and the federal government dispose of land at military bases when it is no longer needed for military purposes. There are various processes that are employed to accomplish this. Commonly used today is the Base Reuse and Closure (BRAC) process, and other parallel disposition initiatives. Naval Station Newport is currently under consideration as part of a land disposition process. It is reasonable to assume that portions of the base may be nominated for transfer for reuse in the near future. These areas are likely to consist of some of the large and abandoned tank farms within the West Side planning area.

Marine-Related Uses – Marine-related uses occur in clusters along the entire length of the planning area. Notable are the clusters of recreational, excursion and fishing vessels that use the harbor's edge in Newport, near the Gateway Transportation Center. At the opposite end of the planning area, the Mt. Hope marine terminal has provided opportunities for boat building and other marine industrial activities. Coddington Cove, once used for Navy fleet operations as a deep water port, is now minimally used for docking and ship layover. The largest concentration of marine-related activities is now Melville, where recreational boat building, storage, and repairs occupy much of the available acreage along the water's edge. Immediately adjacent to Melville is Weaver Cove, long planned as a major marina facility; despite the long gestation of marina investment, the prospects remain strong that significant marina development will eventually occur there.

Undeveloped and Underdeveloped Land – The land use patterns reveal a series of large parcels that have been owned by private entities or institutions that appear underdeveloped relative to the land's locations and surroundings. These parcels are being acquired and repositioned through new entitlements and investments to follow strong market demand for redevelopment along the West Side. The Carnegie Abbey Development on land associated with a Benedictine Monastery is representative of this trend.

Business and Commercial Strips – The concentrated volumes of traffic and relative accessibility along the

West Main Road at Middletown

West Main Road network have generated a band of business and commercial uses. Because the great majority of these businesses serve Islanders as well as tourists, the concentration of these uses has understandably emerged near the central portions of the Island – in well-named Middletown. Several factors have stalled the evolution of the commercial strip that provide both opportunities and constraints. Many of the lots are relatively small and shallow because of the proximity to residential neighborhoods, public property, or environmental limits. These small lots have become fully occupied by the buildings and parking. In a market that is relatively "flat" for retail, service and office uses, there are few market forces to unlock reinvestment. The strategically-located large lots along these strips have predictably developed large-format retail establishments with expanses of convenient parking that serve contemporary shopping patterns. New market opportunities or changed parcel limitations will be required in order to significantly alter the overall land use patterns in these areas.

Established – and New – Neighborhoods – Neighborhood-scale housing developments are scattered along the West Side. Much of this housing was developed for Navy housing or on land once owned by Naval Station Newport. Significant portions of the existing Navy housing are proceeding through the military's privatization process, which is likely to allow a reorganization of land use patterns to allow incorporation of new uses and better integration with the community fabric, as is currently being explored for the Anchorage Housing Development at the junction of West Main Road and Coddington Highway.

Susceptibility to Change

A useful tool of planning is a "susceptibility to change" analysis. This analysis considers economic, transportation, regulatory, and other factors to project the likelihood that any parcel of land will change in use or be subject to substantial redevelopment in the future. Each parcel within the West Side was reviewed, and a preliminary map created to understand the patterns of possible change. The results of this analysis are illustrated on the following pages. As a predictive tool, this analysis is not precise, but as a means to reveal key patterns and land parcels it is illuminating. Among the useful observations derived from this exercise are the following:

Large Tracts with Stable Use – Most of the West Side is not expected to significantly change within the horizon envisioned by the *West Side Master Plan*. Many planning efforts can be most beneficially focused within areas that are far more likely to change.

Importance of Navy Land Disposition – The evaluation highlights the pivotal significance of disposition of unused Navy land holdings. A separate map more clearly illustrates the relationship of active and unused portions of Naval Station Newport (see *Figure 4-4, Navy Land and Potential Dispositions*, page 4-24). This map is based on reasonable assumptions and past patterns of disposition rather than any approved plan or program. The disposition planning process is dependent upon Navy, military, and federal priorities that is underway and is not highly predictable.

Cluster of probable changes at Melville – There are a clusters of properties in the vicinity of Melville that are poised for change. Existing and potential marina and marine-related uses are linked to this land and water edge.

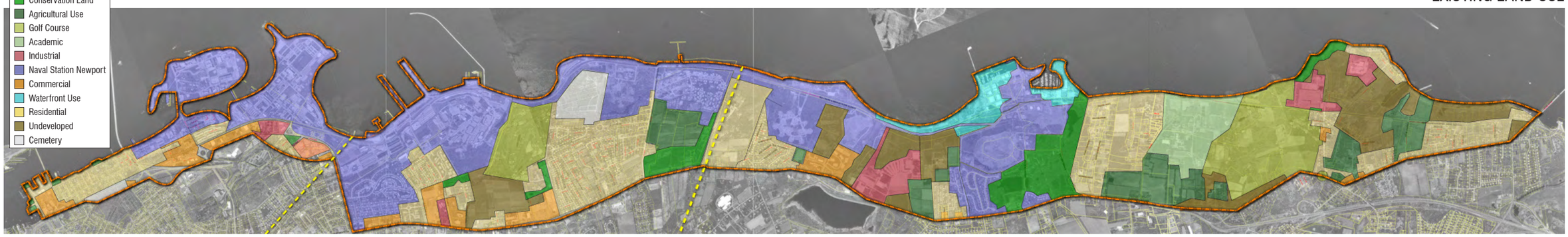
Large redevelopment parcels – Scattered along the entire corridor are large land areas where redevelopment may be triggered through coordinated projects or proposals because of their advantageous locations relative to access, amenities, or existing uses. Among these are large parcels of land around the Pell Bridge ramps, near NUWC, along the northwestern shore, and farm land near the interchange of Route 24 and Route 114.

Parcelization, Land Use and Susceptibility to Change

Figure 4-3

PARCELIZATION

EXISTING LAND USE

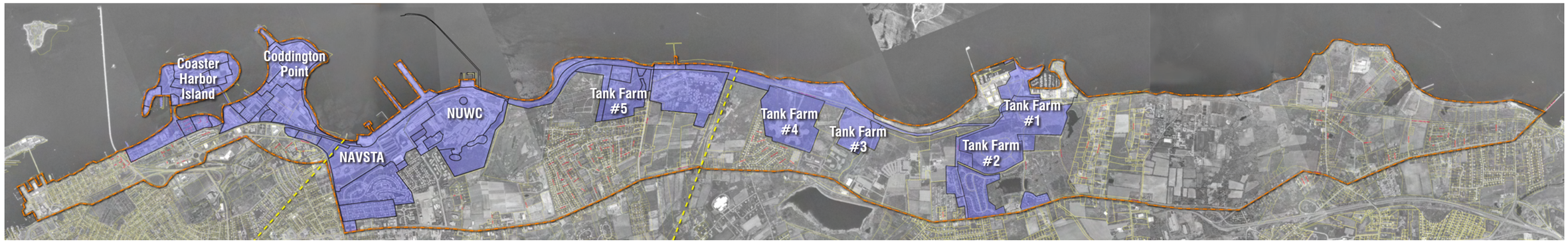


SUSCEPTIBILITY TO CHANGE

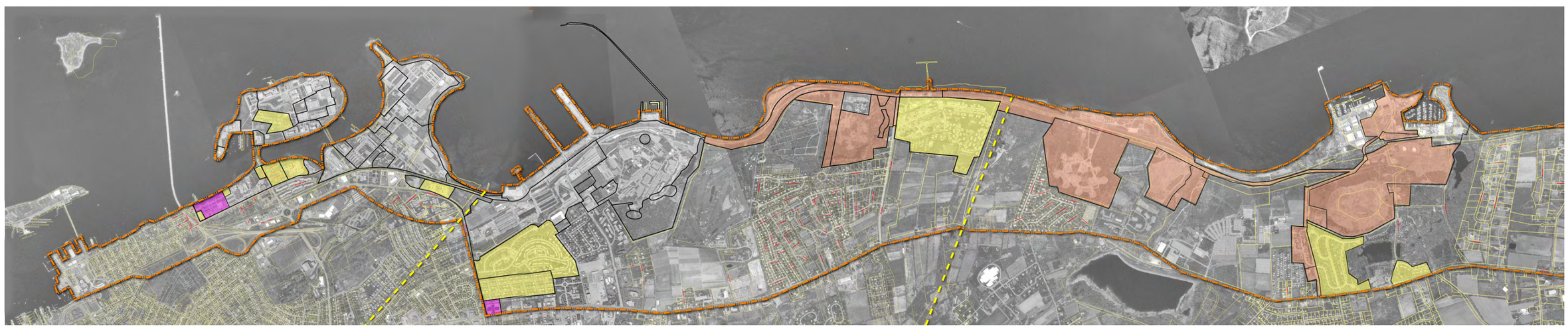
Navy Land and Potential Dispositions

Figure 4-4

MILITARY LAND AND FACILITIES



PROPOSED AND POTENTIAL DISPOSITIONS



LEGEND
- Navy Land Under Privatization
- Potential Department of Defense (DOD) Disposition via Sale or Transfer
- Potential Lease Disposition

5 PLANNING STRATEGIES

The planning recommendations of the *West Side Master Plan* are termed "strategies" for a good reason. They are more than a collection of separate ideas; they are intended to advance coordinated initiatives. The strategies have been organized into categories that correspond to traditional planning themes: land use, economic development, transportation, and utilities.

This section contains numerous references to the subsequent portions of the *West Side Master Plan*- major recommendations are linked to the tools, processes, resources or standards that may be associated with their accomplishment.

LAND USE

New Approaches to Land Use Decisions

The communities of Aquidneck Island have established comprehensive plans and land use regulations that manage development and land use according to their community preferences as allowed under State law. These rules allow the communities to set overall patterns of development, but they may not be capable of ensuring that the character and quality of new uses are tailored to the special conditions of the West Side. This Master Plan generally endorses a more flexible approach for land management that better ensures coordinated development, high quality design, public use opportunities, environmental sensitivity, and balanced demands on the community infrastructure. A map indicates how the land use strategy applies to different portions of the Island (Land Use Management Recommendations, Figure 5-1, p. 5-2).

The land use strategies for the West Side direct new development toward designated zones where it can best be absorbed and provide a public economic benefit, while preserving open space, environmental resources and aesthetic values. The open space, agricultural and recreational assets of the area will be preserved and expanded to the extent practical, with particular emphasis on corridors of land that are ecologically and aesthetically significant.

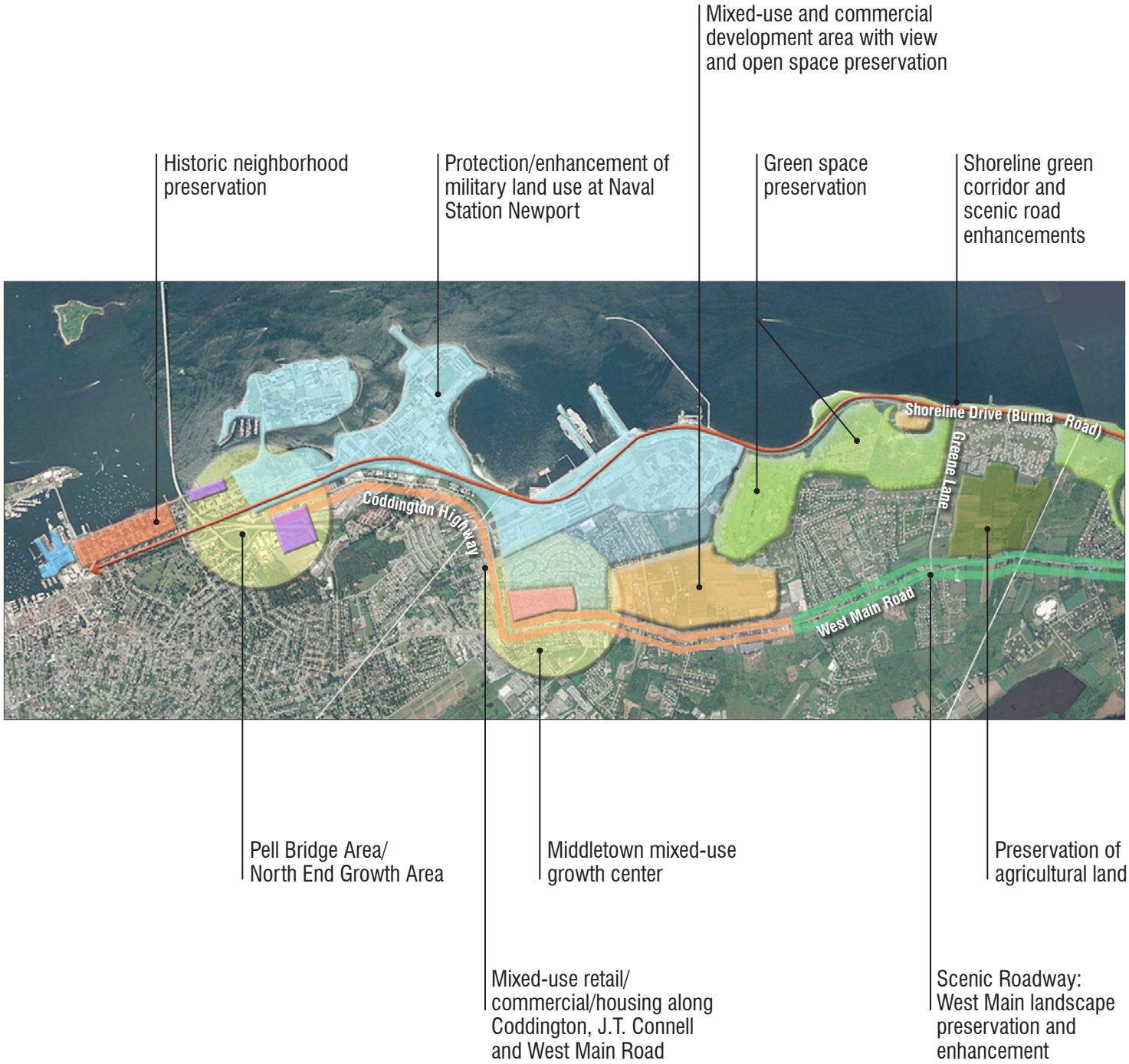
The land use strategies are linked to economic priorities that recognize the West Side as a long-term asset to the Island. This *Master Plan* thus stresses long-term benefits relative to short-term opportunities. Additional housing and retail uses are generally discouraged, except as part of redevelopment of areas that have already been developed. Some new development is directed toward areas that have been previously improved, including established commercial areas along West Main Road and more urbanized areas in Newport. Other new development is recommended for portions of former military land that were originally housing, fuel tanks or other facilities. Additional new development is encouraged that provides new marina-oriented and resort uses that build upon the unique coastal heritage as a high quality community for second homes and boating enthusiasts.

The strategies do not compose a comprehensive "land use plan" defining specific desirable uses for all of the parcels within the West Side; this remains the role of the constituent jurisdictions. The land use strategies of the *West Side Master Plan* are focused on those common regional interests that can be met by shaping land use in many locations. However, the "Smart Growth" strategies contained in this *Master Plan* concentrate public and private sector reinvestment in "Growth Centers" and preserve valued open land to benefit everyone in the long term.

The implementation mechanisms for the following recommendations are numerous and are collected in a subsection of the next chapter (*Land Use Implementation,* pp. 6-11- 6-32).

Land Use Management Recommendations

Figure 5-1



Weaver Cove/Melville village and marine business growth center

Tank Farm #4: reuse for public infrastructure and commercial or residential use

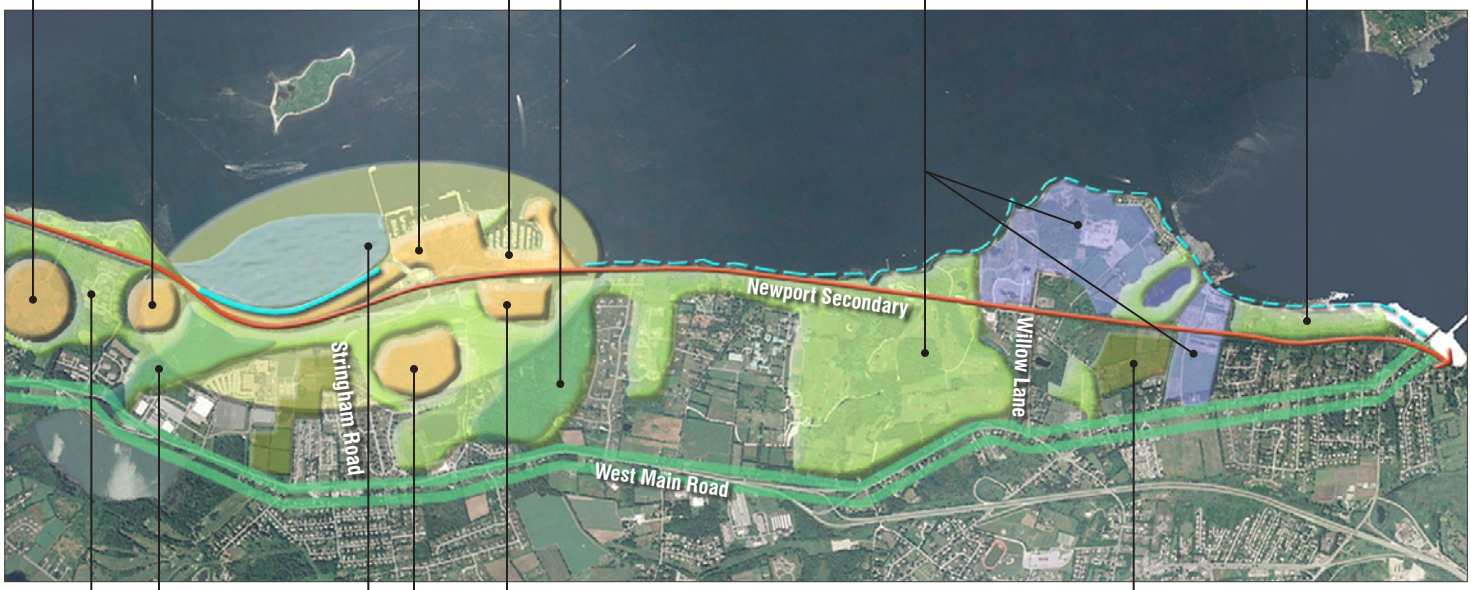
Melville marine-related business center

Tank Farm #3: reuse for marine-related and infrastructure use

Melville Ponds open space reservation

Resort planned development and recreational use

Coastal open space preservation



Lawton Valley open space preservation

Tank Farm #1: reuse for marine-related use

Preservation of agriculture and open space with cluster residential

Open space corridor preservation along steep slopes

Tank Farm #2: Reuse for commercial, marine-related and mixed-use

Weaver Cove marina village

Open Space, Recreation and Natural Resource Preservation

Open space preservation continues to be an issue in Aquidneck Island. The West Side has faced rapid development, loss of working farms and recreational space, and a growing threat to the Narragansett Bay watershed over the last few decades. The *West Side Master Plan* promotes a large, varied open space system. Open space parcels need to be secured, preserved or enhanced, and linked into a network of wildlife corridors, the waterfront, and residential and business districts.

Open space is an important component that cuts across several land use strategies and thus must be integrated in a coordinated way with other land use goals. Preservation of open space is typically approached via attempts to secure parcels of land or simply the development rights of those parcels, where the land can be held in public or private ownership. Open space is also preserved through development regulations which specify site planning restrictions, such as percent coverage and setbacks. However, the quality of open space can be greatly enhanced if each component is seen as linked to the regional ecology and to regional mobility. The former derives from a scientific understanding of the natural conditions of the land, such as wildlife corridors and habitat areas. The latter derives from understanding the movement of people to activity areas, such as playgrounds, the waterfront, and even businesses, reachable if these areas were linked by secure and pleasant open space corridors.

This *Master Plan* supports the open space efforts of the Aquidneck Land Trust (ALT) and seeks to both encourage and parallel these efforts. ALT was established in 1990 to preserve the Island's open spaces and natural character for the benefit of the resident community. While there are a number of agencies at federal, state and local levels which have a key role in the preservation of land on the Island, ALT has taken the lead and formed partnerships with other agencies to successfully conserve land all over the Island. ALT has been successful in its preservation efforts through the use of a land acquisition policy, which establishes the principles and procedures governing the Trust's acquisition of real estate interest. ALT can acquire real estate interests in land on Aquidneck Island or other islands that are legally a part of one of Aquidneck Island's municipalities, excluding Trade Lands (those lands offered to ALT with the understanding that the subject land can be traded, sold, or leased to generate revenue for ALT). Conservation easements, land evaluations, and deed restrictions are some of the methods used by ALT which should be continued and imitated at a municipal level. More information on these tools and processes is provided in *Implementation – Tools: Conservation Easements, Restrictions, and Evaluations,* p. 6-11 and *Processes to Preserve Open Space, Natural Resources and Agricultural Character,* p. 6-18. Open space preservation criteria are proposed in *Standards*: *Open Space Preservation Standards,* p. 6-25.

Other useful implementation mechanisms linked to these recommendations include Transfer of Development Rights (TDR) from undeveloped or agricultural land to other areas of the West Side, such as "growth centers" and land like the former tank farms or the Weaver Cove area (see *Tools: Transfer of Development Rights,* p. 6-10). Performance standards can be employed through regulatory processes and conditions on the redevelopment that

includes former public land (see *Performance Standards and Design Guidelines,* p. 6-27 and *Appendix A: Performance Standards*). Open space preservation can also be accomplished as part of the disposition process for former military land, including designation of qualifying open space as a "public benefit conveyance" (see *Processes for the Disposition of Military Land,* p. 6-20).

Greenways

In order to preserve larger-scale landscapes, ALT has been focusing on three greenways linking parcels of protected land. These include the Sakonnet Greenway, the Center Island Greenway and the Newport Neck Greenway. It is within these greenways that ALT has identified and prioritized key parcels that reflect the diversity of natural and cultural resources of the Island. These greenway initiatives should be supported and considered in subsequent open space preservation acquisitions and development.

The Sakonnet Greenway stretches from an area around the Glen in Portsmouth south to Sachuest Point in Middletown. It includes 882.13 acres of ALT-conserved land and features working vineyards, family farms, estates, and picturesque vistas. When complete, the six- to seven-mile Sakonnet Greenway Trail will extend from the Glen to Wyatt Road.

The Center Island Greenway extends from Hedly Street in Portsmouth south to First Beach in Newport. With 196.41 acres of ALT-conserved land, the Center Island Greenway focuses on the Island's drinking water supplies and some exceptional family farms and wildlife habitats. The ALT's Oakland Forest and Meadow Preserve (including a public trail), Escobar Farm in Middle Road, the Thurston Farm on Union Street in Portsmouth, and Kempenaar Valley in Middletown are all found within the ALT's Center Island Greenway. The Center Island Greenway also includes the Lawton Valley area.

The Newport Neck Greenway extends south and west of Narragansett Avenue in Newport. Protected parcels in this greenway can preserve sweeping coastal views near 10-mile Ocean Drive, buffer Narragansett Bay and its coastal ponds, protect Almy and Lily ponds and Gooseneck Cove from pollution, and safeguard the last working family farms in Newport. The ALT has conserved 42.75 acres in this greenway.

Identification of Key Areas for Open Space Preservation

Open space that is eligible for land acquisitions can include a range of parcel types that are primarily undeveloped and consist of open agricultural or shorefront property, fresh and saltwater marshes and adjoining uplands, wildlife habitats, land providing access to or views of the bay and ponds, land for paved and unpaved bicycle, bridle and hiking paths and for future passive recreational use, and land for agricultural use.

Open space protection and acquisition projects must be flexible in nature and must be adapted to suit specific conditions which may be unique to individual properties or terms of purchase and sale. Also, public access to open space parcels needs to be promoted and encouraged where such access will not threaten or jeopardize critical habitats or sensitive environmental values for which the land is being protected.

Conservation Recommendations

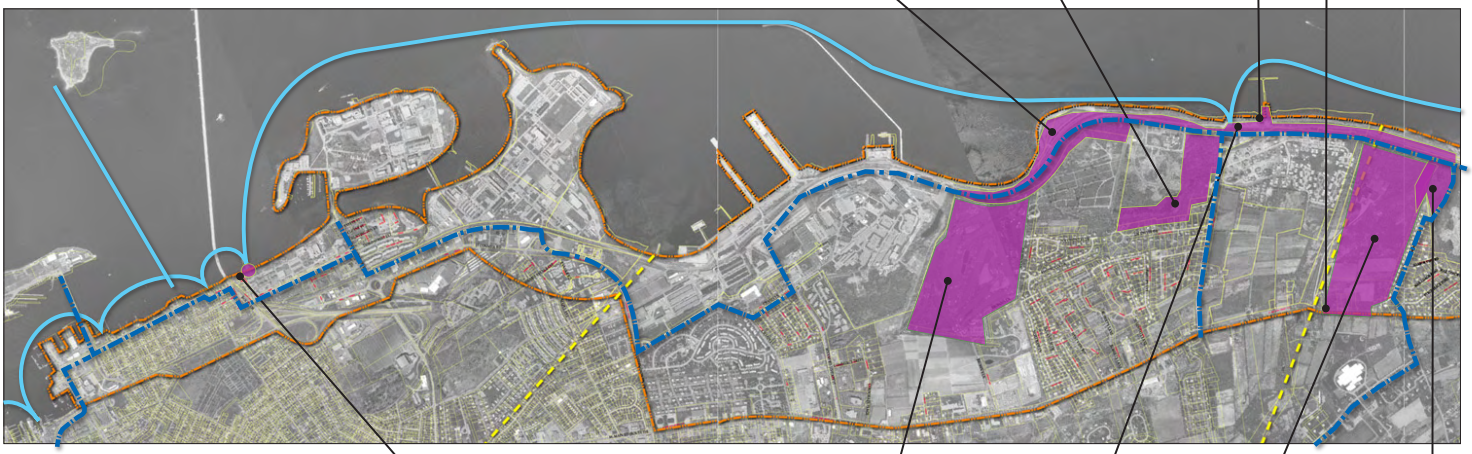
Figure 5-2

EXISTING CONSERVATION LAND

Legend

- Conservation Easements
- Deed Restrictions
- Conservation Intent

PROPOSED CONSERVED LAND

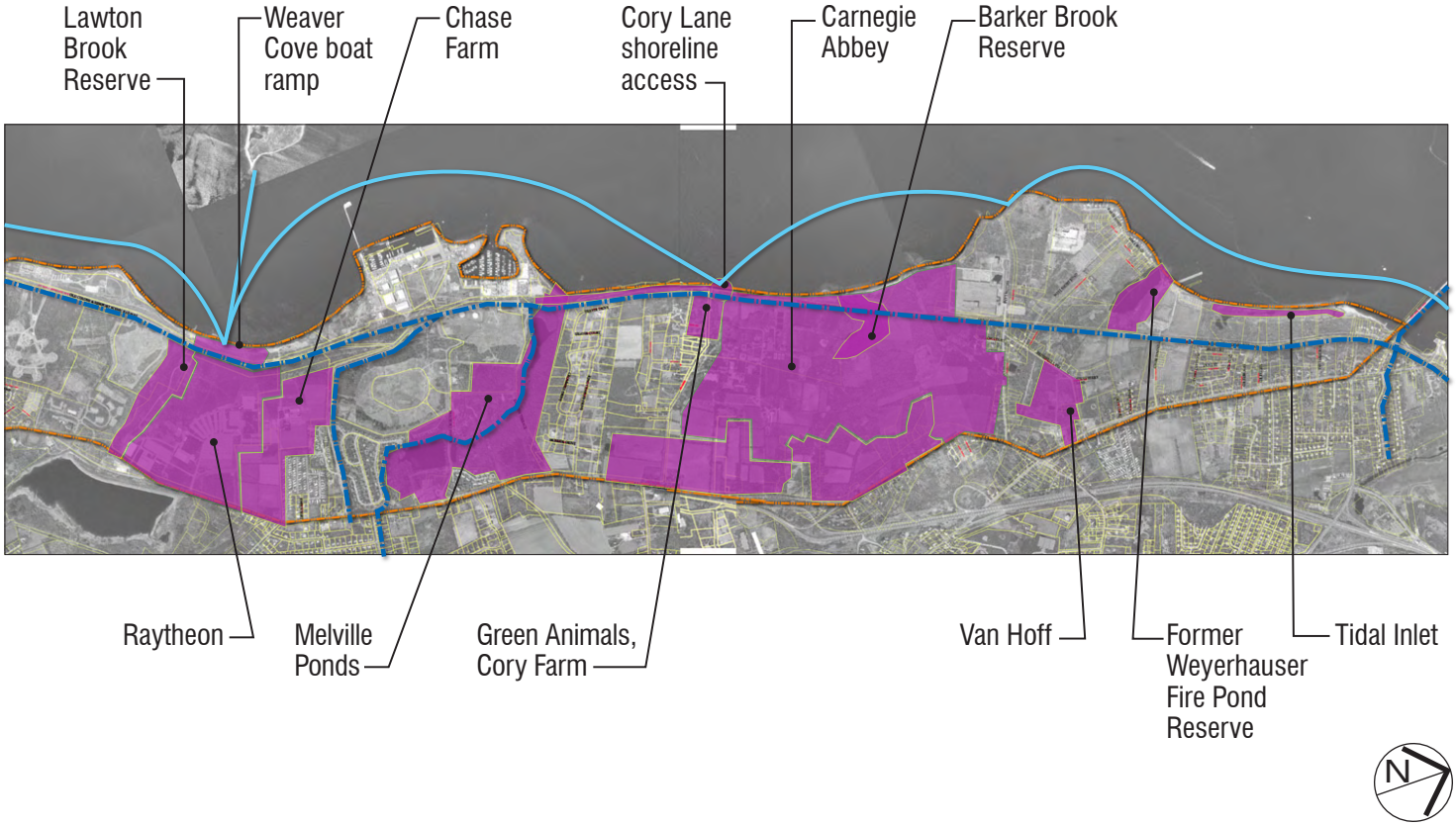


Legend

- Conservation Easements*
- Bike Path
- Blue Trail

* Aquidneck Land Trust recommendations (may not apply to entire parcel as shown)


Melville
Ponds


Lawton Brook Reserve
Weaver Cove boat ramp
Chase Farm
Cory Lane shoreline access
Carnegie Abbey
Barker Brook Reserve
Raytheon
Melville Ponds
Green Animals, Cory Farm
Van Hoff
Former Weyerhauser Fire Pond Reserve
Tidal Inlet
N

Key areas for open space preservation are indicated within *Figure 5-2, Conservation Recommendations* (p. 5-6). Although part of a parcel may be developed (Raytheon, golf courses) or under construction (Freedom Bay), the entire parcel has been identified in recognition that a portion may be conserved. The designation of parcels (or portions of parcels) for conservation easements, precludes future redevelopment.

Lawton Valley Brook Corridor

Lawton Valley Brook is a steeply defined "canyon" with waterfalls and old growth trees. The Lawton Valley Brook corridor should be preserved as open space. This would not only connect West Main Road to the Narragansett Bay waterfront in the immediate project area, but would also provide connections to the Lawton Reservoir and ALT parcels in the central and eastern portions of the Island. Union Street may be a future corridor that people could use to get from West Side trails on the east side of the Island. Currently the Lawton Brook corridor consists of an undeveloped parcel owned by Raytheon and Bay View apartments along West Main Road and the Navy property along Burma Road (Defense Highway) and in a wetland corridor along Tank Farm #3. Public access could begin at a picnic area on the east side of West Main Road with passage under the road via a major culvert. It could provide recreational access to the public, to Raytheon employees as part of their trail network, and to Bay View residents once developed. Therefore, it needs to be created in a way that protects a wetland/wildlife corridor, preserves views, and preserves mature trees.

Regarding Lawton Valley gorge, there have been preliminary discussions with ALT to conserve the rugged beauty, habitat, and connectivity to other resource areas that this property offers. Access to this area is currently limited by fence lines and secure property. An agreement has been reached with the City of Newport, the Town of Portsmouth, and ALT for public access from Old West Main Road (City of Newport Lawton Valley Reservoir) where parking and a picnic table are provided. Visitors may walk through the conduit under West Main Road, for access to the waterfalls and gorge. The ultimate goal is to provide a connection to Weaver Cove and Narragansett Bay from the Center Island Greenway. This is an example of a multiple-entity, multiple-tool approach to land conservancy that may be applied to conservancy of other priority parcels on the West Side.

Preserving the open space and natural resources of Lawton Valley can be accomplished through the concerted contributions of multiple participants using several methods. Relevant approaches discussed in the *Implementation* include *Tool: Conservation Easements, Restrictions, and Evaluations,* 6-11; *Performance Standards and Design Guidelines,* p. 6-27; and *Appendix A: Performance Standards*.

Preserving Other Open Space Assets

In addition to Lawton Brook, an entire system of brooks (Gomes, Normans, and Barker), wetlands and coastal resources needs to be systematically preserved as part of natural reserves protected across the West Side area. Preservation of Gomes and Normans Brook, currently located on tank farm property, would assure protection and restoration of these habitats. This would augment protection of the chain of ponds north of Melville, which are protected conservation land by the Town of Portsmouth.

Carnegie Abbey property in Portsmouth should be protected through conservation easements to assure that any future use safeguards the natural and historic resources of this property, currently owned by the St. Benedictine Brothers.

Many areas of the Raytheon campus in Portsmouth should be protected through conservation easements. The open meadows, woods, ledges and Lawton Valley provide habitat worthy of protection.

Portions of Freedom Bay, under construction on the Middletown-Portsmouth line, should be protected through conservation easements. Critical areas include the lower portion of the property along Norman's Brook. This could be extended northward to include restrictions on the course of Norman's Brook as it flows through Town of Portsmouth land at the end of Redwood Road, and Navy land on Tank Farm #4. A trail from Redwood Road, through the neighborhood playground, to Freedom Bay and the shoreline of Narragansett Bay would provide an east-west link via Union Street to ALT's Sakonnet Greenway Trail.

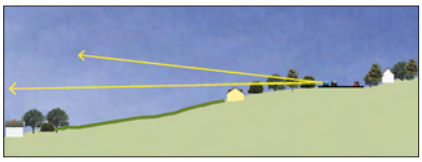
Green Animals on Cory's Lane and the Van Hoff property off Bristol Ferry Road in Portsmouth should be protected with conservation easements as well.

Scenic Roads and Vistas

Protection of scenic roadways could be implemented at the state and local level on Aquidneck Island. Specifically, the northern portion of West Main Road, which is a continuation of the state-designated scenic roadway in Bristol, the Defense Highway, and the Stringham Road connector are apt for state designation. This recommended approach would function as a scenic roadway system, a loop supported by adjacent uses. Local designation could be used to supplement the state status. In addition to nominating select roadways on the West Side for the state designation, municipal designations and design standards would ensure the integrity of the character of roadways and vistas with historic, cultural, natural, and visual value. Municipal legislation corresponding to this parallel designation process could specify local review processes and crafted design guidelines to retain and enhance the desired agricultural landscape setting for the roadways.

Important scenic vistas could also be identified in this process, similar to Newport's designation of the Ocean Drive district. New construction and expansion of buildings could impact and cumulatively reduce these vistas over time. Selected views across agricultural land should be maintained to uphold the unique rural, waterfront quality of the West Side. Local-level design guidelines and performance standards provide mechanisms for protecting the visual and spatial integrity of the scenic roadways and vistas. For more information regarding the specific content of these performance standards, and how they could be tailored for the West Side, please consult *Appendix A*.

In addition to locally-designated Ocean Drive, Aquidneck Island contains state-designated scenic roadways. Paradise Avenue, Berkeley Avenue, Wyatt Road, Mitchell's Lane, Wapping Road, Peckham Avenue, Indian Avenue and Hanging Rock Road comprise the 8.3-mile scenic roadway network in Middletown, designated



Preservation of Views from West Main Road

View south of Greene Lane unpaved parking area along the Newport Secondary

in 1993. Located in Bristol, abutting Portsmouth, Route 114 (Hope Street and Ferry Road) and High Street comprise a five-mile scenic roadway designated in 2000.

Protection of scenic roads and vistas can be accomplished through mechanisms described in the *Implementation* section *(Tools for Establishing Scenic Roads and Protecting Vistas, p.* 6-16).

Identification of Opportunities for Expanded Recreation

According to a 1999 Newport County Convention and Visitors Bureau survey, sixty percent of the visitors cited recreation as one of their primary reasons for coming to the Newport Area. Twenty-three percent said they visited the Newport region to see and experience its unique historic architecture. While there are quite a few indoor and outdoor recreational sites on Aquidneck Island, the West Side has a relatively small proportion of them. There is, however, a good potential for developing West Side recreational sites for use by residents and visitors. The following section describes some areas that can be developed in the near term as recreational open space with good public access facilities.

Greene Lane Park - Scenic Vista and Fishing Area

The Midway Pier area has the potential for development as a scenic overlook on Burma Road (future Shoreline Drive) near Greene Lane. This Navy property is currently an unpaved parking lot between Burma Road (Defense Highway) and the Newport Secondary rail line. Both the rail and the road are at the same elevation with a slight drop to a maintained grass strip and vegetated buffer along the cobble shoreline. The area provides scenic vistas of the Bay, Pell Bridge, and Islands and could be developed as a public picnic area, scenic outlook, shoreline trailhead to a scenic overlook at McAllister Point, access to a fishing pier, and as a destination on the Blue Trail. The area also provides access to the scenic rail bridge over Gomes Brook and a connection to the Burma Road bike lane. A fishing pier could be developed at the former Midway Pier abutment with interpretive panels about Navy history, mussel aquaculture and bay ecology. This park could also provide access to the shoreline for walking, wading, and possibly swimming. This site should include parking (thirty to forty spaces) for four-season enjoyment of the views across the bay, Pell Bridge, islands, and boat traffic.

Picnic tables, bicycle racks, and a pedestrian trail would provide a recreational resource for residents of the Town of Middletown (currently there is no public access to the Narragansett Bay shoreline), tourists and Shoreline Drive motorists (see *Figure 5-3, Greene Lane Shoreline Access*, p. 5-12). The trail could cross the tracks to the proposed Newport Secondary bike path, descend to the shore, and continue along the shore to a scenic outlook at McAllister Point. This park would be a key attraction along the upgraded Shoreline Drive and would serve as a node for the bike path, a shoreline trail, and a Blue Trail for kayaks and other small boats. The Navy Greene Lane convenience store would be popular with many cyclists, walkers and boaters.

Heritage Corridor

The West Side project area is a local link in the Newport to Bristol Heritage

Views, Heritage...and Getting to the Bay

Recreational open space should be expanded with the goals of accenting scenic vistas, supporting the heritage corridor, and achieving greater waterfront access.

Passage. Current destinations along the corridor include the Old Colony and Newport Railway, Great Friends Meeting House, Battery Park, Hunter House, Coddington Burial Ground, Wanton Lyman Hazard House, Naval War College Museum, and Miantonomi Park in Newport, and Green Animals and Cory Farm in Portsmouth. Additional sites could include Simmons Farm, and the existing interpretive panel commemorating the Revolutionary War Battle of Rhode Island, and the New England Gardens/Benedictine Monks/Carnegie Abbey site. The corridor could be further developed to include a series of vehicle pullovers with interpretive panels on West Main Road.

A panel posted near Gate 4 on Coddington Highway could provide information on the importance of the Navy to local history, the economy, naval education, and its past role as host to the fleet. This parking area pull-off could be connected with a rail shuttle/busway stop serving the Navy and CCRI. A panel at the historic home at Simmons Farm, which is protected from development, could discuss early Island architecture and settlement patterns. The West Main Road near Stringham Road could have information on Melville and its role during the Spanish American War, World Wars I and II, and its roles in Patrol Torpedo (PT) boat training and the Defense Fuel Supply Point for New England.

Any marketing strategies or maps developed for the Newport to Bristol Heritage corridor could reference these interpretive panels. It would also bolster the Navy heritage along the Corridor as sailors stationed at Naval Station Newport through the 1970's now represent a potential tourism demographic.

Waterfront/Shoreline Access

Access to the waterfront on the West Side is currently limited. This is partly due to security issues on the Navy-owned land and the barrier created by the Newport Secondary rail line. However with the privatization of Navy land in the northwestern part of Middletown and the tank farms in Portsmouth, there will be opportunities to develop the waterfront and provide access to the shoreline at numerous points all along the coast.

The stretch from McAllister Point to Weaver Cove could be developed with a shoreline path and walking trails designed in an environmentally sensitive way to preserve the coastal ecosystem. Trails could be developed along the riparian corridors for Gomes Brook, Normans Brook, and Lawton Brook. The shoreline trail would required wading across these brooks.

A shoreline access point from the proposed Greene Lane Park in Middletown would provide access to McAllister Point to the south, and north to Carr Point, the Navy recreation facility (see *Figure 5-3, Greene Lane Shoreline Access*, p. 5-12). Construction of a gazebo or shelter at the high point of McAllister Point should not disturb the capped landfill. Benches and paths could be an alternative that would attract people to walk from the shoreline trail or the proposed Newport Secondary bike path, to the panoramic vistas available from this point. Access from Carr Point to the shoreline would be a benefit for Navy personnel who are currently limited to upland portions of the site.

Weaver Cove boat ramp is owned by the Town of Portsmouth and is open to the public. This site provides shoreline

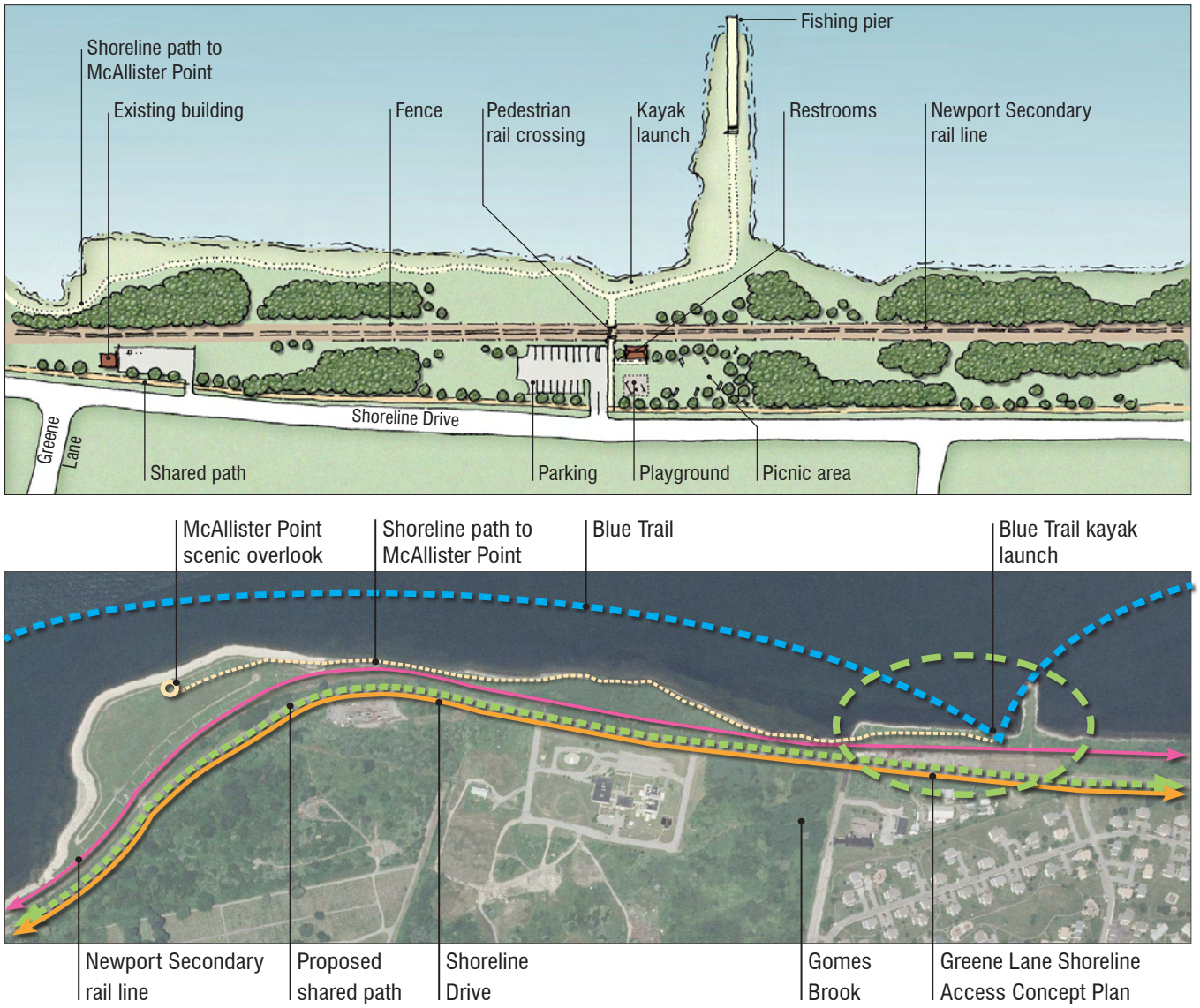
access with vistas of Narragansett Bay, Prudence Island and the scenic arch railroad bridge over Lawton Brook. Access from the Melville Ponds' newly marked Red Trail would connect with a shoreline trail (no parking or vehicular access is envisioned at this time).

The cobble waterfront at the end of Cory's Lane in Portsmouth is currently undeveloped, although an unpaved area is available for parking one or two cars. Parking for up to five cars could be considered at the end of Cory's Lane. A stone foundation located near the Cory's Lane access area provides a link to past use of the site and thus an opportunity for interpretation.

A marina proposed by Carnegie Abbey at the end of Willow Lane in Portsmouth would provide public parking for approximately twenty trailers.

A Blue Trail with put-in places and shoreline stops for kayakers and other small boats would provide access and destinations. Blue Trail destinations, indicated in *Figure 5-2*, *Conservation Recommendations* (p. 5-6) include Perrotti Park and piers along the Point neighborhood, Rose Island, and the Stone Pier north of Pell Bridge in Newport, Greene Lane in Middletown, and Weaver Cove boat ramp, Dyer Island, Cory's Lane, and Willow Lane in Portsmouth. Put-in locations for car-top boats could include Greene Lane in Middletown, and Cory's Lane in Portsmouth. Put-ins currently are located at Elm Street in Newport and Weaver Cove in Portsmouth. Public access is included as part of the CRMC application for a marina at Willow Lane in Portsmouth.

Greene Lane Shoreline Access Figure 5-3



Bay and Coastal Uses

Narragansett Bay along the West Side of Aquidneck Island is an active waterway with intensive marine uses – commercial boating and shipping at Melville, Navy mooring, docking and active operations, recreational boating, and fishing. Most of these uses have a landside and waterside implication. In addition, there are important environmental and ecological relationships between the landside and waterside uses.

Use of the Bay

The waterside of Narragansett Bay is subject to state regulation and management under the guidance of the Coastal Resources Management Council (CRMC). Among other mechanisms, they employ a system of categories that guide permissible maritime uses in the waters of Rhode Island (see *Figure 4-2, Natural Resources, Water Classifications and Types, Historic Resources*, p. 4-18). For the West Side, this classification restricts uses to those that are compatible with both environmental conditions and economic goals for the state.

Waterside areas most sensitive to change consist of the portions of the planning area from Weaver Cove to the Mt. Hope Bridge. The majority of this area is indicated as a Type 4 (Multipurpose Waters) category, which appears to be consistent with the vision of the *West Side Master Plan* and would continue to allow recreational boating, water transportation, marinas and the type of commercial marine enterprises that exist or are contemplated. No increase in the use category should occur.

The AIPC may consider the process to review existing CRMC type use designations off the West Side shoreline. This review would be directed to more adequately protecting the quality of off-shore waters by upgrading the CRMC water type designation (see *Figure 4-2*, p. 4-18) for the water areas 500 feet seaward and generally parallel with the mean high water mark from Type 4 Multipurpose Waters to Type 3 High Intensity Boating. Type 1 or 2 waters should be considered 500 feet seaward of land proposed for conservation. This would require concurrence of all stakeholders and a modification of the CRMC program.

Melville is listed as a Type 6 (Industrial Waterfronts and Commercial Navigation Channels) area, which provides for the types of large maritime operations and marine business needs that have occurred there. The use of the Melville basin for large ship operations essentially ended when the Navy relocated these operations to other ports. However, in recent years, some specialized large ship needs have been met here, such as the docking of cruise vessels.

This *Master Plan* recommends that large tankers and bulk container shipments (such as that previously proposed at Quonset) be excluded from both landside and waterside areas at Melville, as well as the other coastal edges of the West Side. However, there are many commercial enterprises in the Melville area that will need to rely on the ability to conduct marine industrial activities including associated use of the nearby watersheet for shipping and other operational purposes. These needs must be preserved in any regulatory scheme for this portion of Narragansett Bay. The ability to conduct passenger operations or provide for temporary mooring and docking of large vessels may also be appropriate to preserve.

Waters off the West Side are used for aquaculture. American Mussel currently has a lease north of the former Midway Pier west of Green Lane in Middletown. Waters off the West Side are also used for fishing, lobstering, and quahogging. Any upland change in use could affect the quality of waters for habitat of local species.

This may require a refined approach to the CRMC use classifications. This *Master Plan* strongly recommends that the state prepare a Special Area Management Plan (SAMP) for Melville to tailor the landside and waterside framework. This approach is discussed in more detail in the *Implementation* section in *Processes: Special Area Management Planning (SAMP),* p. 6-18.

Coastal Use

Many specific concepts are advanced within this *Master Plan* for uses along and near the coastal edge; they are described in other portions of this chapter. However, there are important interactions between the landside and waterside conditions that must be managed in order to accomplish the vision of this *Master Plan*. Landside practices need to protect and enhance the water quality of Narragansett Bay. CRMC has jurisdiction 200 feet inland from any coastal feature, including watersheds and certain activities that occur anywhere within the state.

Problems that arise range from erosion, stormwater runoff and its impacts on water quality, pollution associated with human activities and agriculture and degradation of interactive landside, tidal and marine habitats.

The *West Side Master Plan* recommends the application of a system of high performance standards that use "best management practices" in site planning, design and operational aspects of projects that will occur along the West Side's coastal edge. These will need to be tailored to each community and the uses that are anticipated. This system of performance standards and design guidelines is discussed in the *Implementation* section under *Standards: Performance Standards*, p. 6-27, including *Marine and Marina-Related Use Performance Standards,* p. 6-29. Greater detail regarding such standards is provided in *Appendix A. Performance Standards*, as well.

In anticipation of the advancement of new municipal and state standards for the landside/waterside interaction, this *Master Plan* recommends that additional buffer areas be established along the water's edge as an interim measure consistent with municipal planning and goals relative to prospective projects and uses. An additional buffer may be applied through a combination of state and local regulatory process, and is triggered by a formal request from municipalities to the CRMC.

The preparation of the SAMP discussed above also provides a key tool to integrate landside and waterside implementation at both the state and local level. The scope of the SAMP should explicitly use the *West Side Master Plan* as the basis of landside and waterside use recommendations in order to provide a matching regulatory framework.

Conversion of Agricultural Land

The history of Aquidneck Island is closely connected to the agricultural history of Rhode Island. The means and methods of farming have significantly changed since Rhode Island was economically driven by agriculture. However, the vestiges of agriculture that remain offer several important functions. The remaining farms provide greater diversity of land forms, relief from intense commercial development elsewhere, attractive and interesting views and vistas, and unique commodities that enhance the quality of life on the Island. These agricultural landscapes should be protected.

Until very recently, agricultural lands comprised eighteen percent of Aquidneck Island's total area. Between 1988 and 1997 however, agricultural land decreased by 11.4 percent, about the same amount that residential land area increased during the same time period. In 1988, Newport, Middletown, and Portsmouth had 3 percent (143 acres), 24 percent (2,023 acres) and 19 percent (2,907 acres) agricultural uses, respectively, which have all reduced in total acreage over time.

Currently Simmons Farm is the only large tract of agricultural land protected with a perpetual conservation restriction. Other pieces of farmland along West Main Road are not under any sort of protection and might be subject to development in the future:

- Vanicek/Rhode Island Nurseries Farms – A zoning amendment to convert these parcels to mixed use has been approved. At least forty percent will be preserved as open space and the view corridor will be protected. This is in accordance with the Comprehensive Plan. However, it is recommended that at least a part of the land be protected; it is the last agricultural land seen going south on West Main Road. Performance standards for future development should assure that resource areas are conserved.
- Chase Farm, which abuts Raytheon, is a valued agricultural resource in the community and thus might be worthy of preservation.
- The agricultural land further north on West Main Road, adjoining the privately conserved parcels of the Priory, St. Philomene's and the Carnegie Golf Course, is also very valuable as an agricultural/open space resource, especially since it is critical to preserving the views from West Main Road looking towards the shoreline.
- Depending on how the parcels of land between Arnold Point and the West Main Road are developed, it will be important to conserve some parcels of agricultural land (existing pastures, crop lands or Orchards/ Nurseries) as open spaces, which can add value to the development proposed in the area.

Land Use and the Military

Military Properties

Naval Station Newport occupies close to 1500 acres of land entirely located on the West Side, or approximately 30 percent of the study area. The Navy is the single major landowner on the West Side, and Navy properties are shown on the diagram below. The properties consist of a series of large parcels stretching along the coast, and interconnected by Burma Road (Defense Highway) with the largest concentration of activities straddling the boundary between Newport and Middletown. A prime land use goal of the *West Side Master Plan* is to preserve the overall territorial and functional integrity of the Naval Station in ways that support internal security and capacity for future growth.

Economic activities generated and supported by the Naval Station do not rely solely on Navy land and personnel, but also employ services from local businesses and related subcontractors. Protecting the land use capacity for access and expansion of the existing military and military-related uses is a prime economic goal of the *Master Plan* as well. It is thus closely interrelated with other economic development goals. This includes preserving the land use capacity to support current and future military-related contractors and businesses that would depend on close proximity to the Naval Station for success. These may include commercial, industrial, research & development, and light manufacturing uses.

Vacant and underutilized land is scarce on Aquidneck Island and the West Side. However, it is possible that some excess land may be divested by the Navy in the future as a result of an ongoing military Base Realignment and Closure (BRAC) process or other forms of land disposition. When this happens, planning procedures and zoning should be in place to ensure that an appropriate portion of the disposed land is preserved for military-related businesses that will support the defense industry in the future, while enhancing the local economy.

The West Side communities could work to designate potential redevelopment areas in the vicinity of the Naval Station for office uses, research & development, light manufacturing, and high-tech companies that may work directly with the Navy and the Naval Undersea Warfare Center (NUWC). This could include commercial and industrial districts along J. T. Connell Highway, Coddington Highway, and West Main Road. In light of future expansion, the communities are recommended to protect the main rights-of-way that access the Naval Station.

This *Master Plan* fosters the continued presence of military and military-related uses on the West Side. Planning tools and standards such as interim

Diagram illustrating location of Navy properties

planning overlay districts, sustainable zoning requirements and site planning standards, and density bonuses are tools that can help mediate military uses, non-military uses and transitional stages. These tools qualify the types of businesses and industries to be developed on transferred Navy land, advance "green" building standards, and plan for increased demands on public utilities and infrastructure. These are discussed at length in *Implementation*.

Principal Areas for Military-Related Civilian Use

It is important to note that the development of new office and research space associated with BRAC programs and overall economic growth may be subject to competitive positioning within Aquidneck Island in general. Planning decisions aimed at attracting these types of development to the West Side need to be made in advance. The best practical strategy is to provide multiple opportunities within suitable locations, so that good and attractive choices for potential private sector investment are preserved.

Potential locations for the development of military-related uses would include redevelopment sites within a short driving time/distance from the Navy Base. Assuming a ten-minute time limit and an average speed of thirty miles per hour, this would include any potential sites within a five-mile radius of the Base. The following locations on the West Side study area fall within this category:

- All Navy land that could be potentially disposed of as part of BRAC or other land disposition processes, including former tank farm areas.
- Navy properties that may be leased or privatized, such as the Naval Hospital site.
- Publicly-owned land that may become available as a result of the reconfiguration of the Pell Bridge access ramps.
- Undeveloped portions of the Raytheon industrial site.
- Other smaller commercial and mixed use properties that may be subject to redevelopment.

The results of the economic market trends analysis indicate that needs for military-related defense contractors may amount to approximately 175,000 square feet over the mid- to long-term. The existing land use capacity for redevelopment in the above-mentioned areas more than exceeds this estimate and, therefore, uses other than military-related businesses may also be located on many of those properties. Specific zoning provisions for future military-related uses should be primarily focused on potential redevelopment areas actually closer to the Naval Station, such as former Tank Farm # 4, the Vanicek properties, the Naval Hospital site, and properties in transition along J.T. Connell Highway.

Conversion of Military Land

Recent legislation and new approaches to military organization and land use by the U.S. Department of Defense (DOD) has an important role on the Island. The communities could have a strong influential position in many of the potential and current changes in military land disposition. This will best be accomplished using new approaches to organization of community goals and authorities, and em-

bracing a new approach to the process of land use decision-making.

By the time this *Master Plan* is fully disseminated, there will be a clearer picture of exactly where DOD wants to position the Naval Station in its plans for future military and federal operations. Even at this stage, changes on the property is strongly predicted. In fact, conversion of the military housing to a private housing management corporation has already begun with negotiations occurring in each of the Island communities.

With a community-based *and* regionally-coordinated strategy for all of the military parcels, the position of the Island will be greatly enhanced in the complex process of land disposition. Well-developed plans will lead to better regional stewardship of the land with coordinated development, transportation and environmental considerations incorporated into the management.

There are several different processes that can be employed to enable the conversion of military land to either other public or civilian uses. The typical processes are described in *Implementation* under *Processes for the Disposition of Military Land,* p. 6-20.

Special Considerations for Former Tank Farms

The largest extensions of land that may become available for future redevelopment on the West Side, as a result of potential military land disposition, are the former tank farms. Redevelopment opportunities are generated by their large size, their proximity to the Navy Base, and easy connectivity through Burma Road (and future upgrade as Shoreline Drive). Reuse concepts and illustrative sketches of these ideas are shown in *Figure 5-4, Tank Farm Reuse Concepts* (p. 5-20), *Figure 5-5 Melville Reuse Concept* (p. 5-36) and *Figure 5-6, Melville Illustrative Concept Plan* (p. 5-38).

It is important to note that a portion of the former Tank Farm #5 has been redeveloped for military use and is occupied by the Naval Station's Fire Fighting Training Facility. Consequently, it is not expected that the U. S. Government will dispose of this parcel in the foreseeable future, and land use planning considerations for the reuse of Tank Farm #5 are not included in this *Master Plan*. However, degraded environmental conditions resulting from its past use as fuel depots and storage pose reuse limitations that need to be considered. As further described in the *Implementation* section (*Processes to Manage the Reuse of Former Military Land,* p. 6-22), tank farm sites are subject to restoration under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) regulations. CERCLA, also known as Superfund, is the federal law which guides and finances cleanup of hazardous waste sites. Tank farm restoration is also regulated under RCRA by RIDEM as storage tank closures. As a result, remediation would be required prior to redevelopment. AIPC should continue to participate in the Navy Restoration Advisory Board (RAB) for the latest status on tank farm remediation.

Cleanup processes in all the former tank farms are currently underway and overseen by the Navy. According to information posted on the Navy web site for Tank Farms #4 and #5, the

Navy is evaluating a proposal to build a golf course in 2005 and is working with regulators to complete cleanup plans at that time. On these tank farms, tanks were imploded in place, and the ground was later regraded and reseeded. A groundwater collection and treatment plant was operated between 1994 and 1996 to treat groundwater passing underneath two tanks that had been used to store hazardous waste. Groundwater quality monitoring from 1998 to 2004 indicated that efforts have been effective in reducing contaminant concentrations to meet RIDEM groundwater standards. EPA and RIDEM have requested a search for and remediation of sludge disposal pits. Completion of this effort is planned for 2005. Additional steps for remediation might be needed if the tank farms are redeveloped for uses that require higher cleanup standards. The presence of underground tank remnants on the former tank farms presents important constraints for redevelopment. At issue are engineering challenges, site subsidence, and economic feasibility of new construction.

Although useful information has been distributed regarding the environmental conditions at the tank farms, it has not been recently compiled and comprehensively reported for public distribution. Part of the reuse strategy for the tank farms includes establishing a clear and complete report on the current status of remediation processes and hazardous materials conditions in the near future, to aid specific planning for reuse.

Nevertheless, reuse of the tank farms is anticipated to be feasible for a range of uses recommended within this *Master Plan*. Remediation procedures and site constraints are expected to reduce the purchase value of the land from the Navy, depending upon the specific reuse projects that are eventually proposed, but these conditions do not appear likely to preclude reasonable site planning or economically viable redevelopment.

Estimated Site Capacity

General estimates of site capacity for each tank farm are indicated below. These estimates are based on an assumed area-wide Floor Area Ratio (FAR) of 0.2. Floor Area Ratio has been used as a standard method for projecting maximum densities that would comply with site planning standards that seek to preserve the balance of open space and development that is of moderate density. It is calculated by multiplying the overall site developable area for each tank farm site by the assumed FAR representing this moderate density.

Table 5-1
Estimated Tank Farm Site Capacity

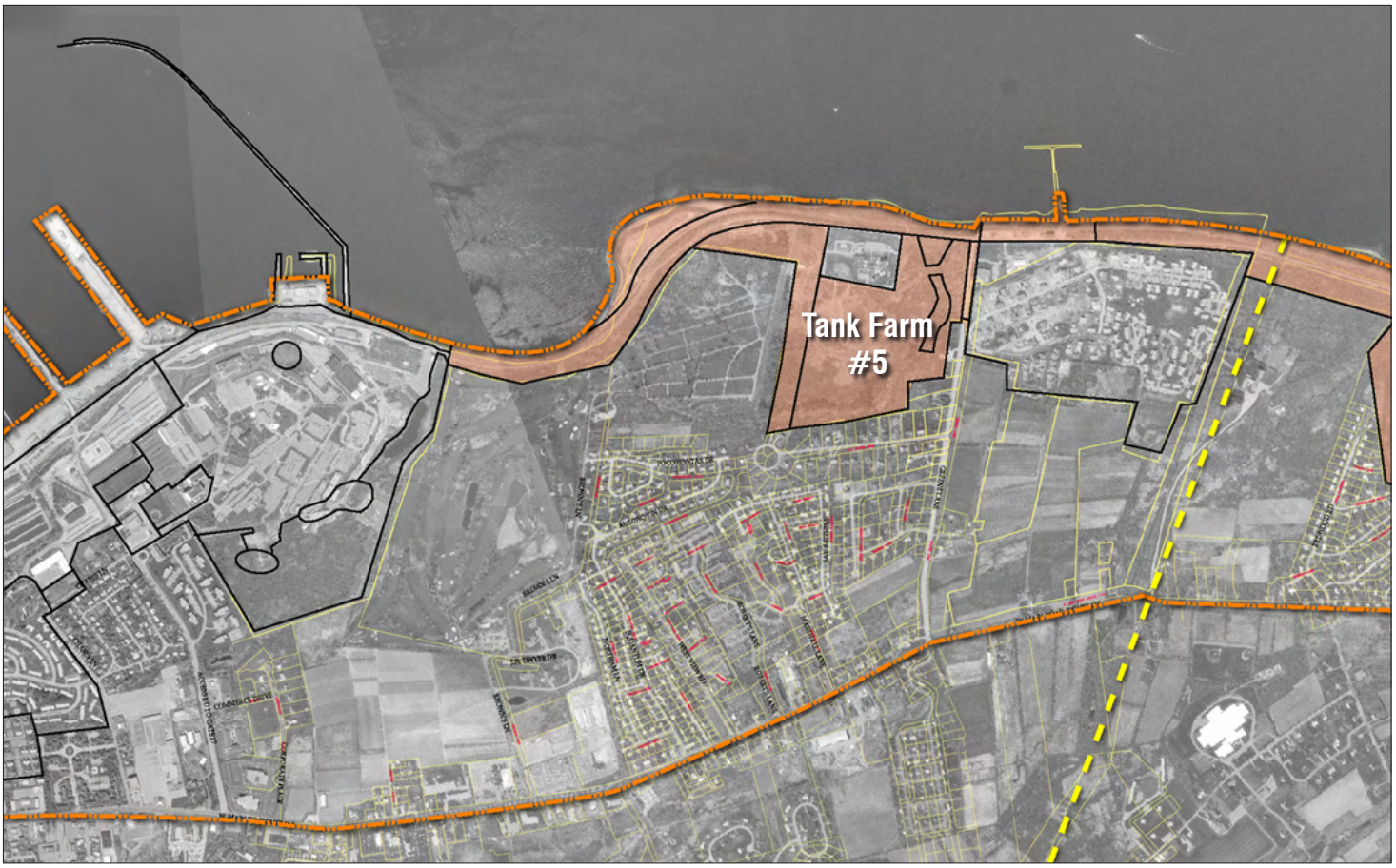
	Tank Farm #1	Tank Farm #2	Tank Farm #3	Tank Farm #4	Tank Farm #5
Site Area	45 acres	93 acres	29 acres	94 acres	85 acres
Non-Developable Area/Open Space*	8.5 acres	15 acres	12.5 acres	14 acres	N.A.
Developable Area	36.5 acres	78 acres	16.5 acres	80 acres	N.A.
Development Volume (Based on FAR = 0.2)	318,000 s.f.	679,500 s.f.	143,750 s.f.	697,000 s.f.	N.A.

**N.A. - Not Applicable; not anticipated for military disposition, at least in the short-term.*

**Not including non-buildable areas over USTs.*

Tank Farm Reuse Concepts

Figure 5-4



Tank Farm #5
Area: 85 acres

Assumed continued Navy use.

Tank Farm #4
Area: 94 acres

Non-developable Area: 14 acres
Developable Area: 80 acres
Development Volume: 697,000 sf

<u>Reuse Options:</u>

- Commercial/Light Industrial
- Open Space
- Hospitality/Resort
- Wind Turbines
- Seasonal Outdoor Theater
- Residential (Affordable Housing)

Tank Farm #3
Area: 29 acres

Non-developable Area: 12.5 acres
Developable Area: 16.5 acres
Development Volume: 143,750 sf

<u>Reuse Options:</u>

- Waste Water Treatment Facility (+/- 10 acres)
- Wind Turbines
- Recreation/Outdoor Theater
- Open Space
- Marina Accessory Uses (storage, parking)
- Marine Industrial Uses

Tank Farm #2
Area: 93 acres

Non-developable Area: 15 acres
Developable Area: 78 acres
Development Volume: 679,000 sf

Reuse Options:

- Marine Industrial Uses
- Marina Accessory Uses (storage, parking)
- Residential (Affordable Housing)
- Light Industrial/Commercial
- Research and Development
- Open Space

Tank Farm #1
Area: 45 acres

Non-developable Area: 8.5 acres
Developable Area: 36.5 acres
Development Volume: 318,000 sf

Reuse Options:

- Marine Industrial Uses
- Transit Support (parking)
- Light Industrial
- Marine Accessory Uses (storage, parking)
- Open Space

Use Options for the Tank Farms

During the course of the planning process, the reuse potential of the existing tank farms was evaluated from several vantage points. The recommendations reflect the conviction that the reuse decisions should consistently protect the long-term ability of the land to meet public needs, result in direct and indirect economic benefits and preserve open space. The distribution of uses within the tank farms should also serve to reinforce, support or expand desirable development patterns in their vicinity.

Site planning for reuse should begin with dedication of valuable open space for permanent conservation and contribution to the network of recreational opportunities along the West Side, including trails and bikeways. The tank farms are composed of terraces cut into the hillside of the Island; their steep slopes remain wooded and should largely be preserved to serve as visual buffers and natural corridors. Where adjacent uses may be negatively affected by redevelopment, open space buffers should be retained. Previously disturbed land should be used for new development and uses, to the greatest extent practical.

Recommended land uses that should be considered as reuse options for the former tank farms consist of the following:

- Marine Industrial Uses – Melville represents an economically important cluster of marine industrial uses that have a competitive advantage because of the proximity to each other and the extent of available land adjacent to deep water, protected port and marina facilities. Land should be made available (and a reasonable amount held in reserve) for expansion or new businesses and supporting functions.

- Marina Accessory Uses (Storage, Parking) – Portions of the tank farms should be made available for "backland" uses supporting nearby marinas. This could include parking and/or boat storage as well as other accessory uses. Availability of the tank farms for this type of use will enable other, more valuable uses, to take advantage of adjacency to the waterfront, such as the mixed-use marina village envisioned for the edge of Weaver Cove. Land banking portions of tank farms in anticipation of long-term needs is advisable, if there is limited demand in the short term.

- Light Industrial/Commercial Uses – The tank farms offer good locations for light industrial and commercial uses should there be demand. In addition to the economic advantages of these uses, they may be well suited to lower cost remediation of environmental conditions than some other options that may be considered. These uses could include public works yards and facilities, construction layout yards and storage areas and similar facilities that are needed on the Island. Locating such uses at the tank farms (at least over the short term) may be an effective regional strategy that allows other locations to be better employed with lower impacts on their surroundings.

- Research & Development – Portions of the tank farms may prove to be desirable locations for re-

search and development activities due to their relative accessibility to Naval Station Newport and the Raytheon campus, the scale of the sites and the amenities found here.

- Residential (Affordable Housing) – Portions of some tank farms could be beneficially used for affordable housing.

- Open Space – Open space should remain as a substantial portion of the tank farms after redevelopment has been completed.

- Hospitality/Resort – Some of the tank farm land may be advantageously used in conjunction with master planned hospitality or resort development. Such development should comply with the other recommendations of this *Master Plan* for similar uses.

- Recreation/Outdoor Theater – As noted in the discussion of *Economic Development* in this section of the *Master Plan*, portions of a tank farm may be appropriate to support an appropriately-sized outdoor theater/performance venue.

- Wastewater Treatment Plant – Land should be conserved for a potential wastewater treatment plant facility, unless and until resolution has been accomplished that it is not needed as a possible long-term option.

- Wind Turbines – As noted in the *Utilities* section of this *Master Plan*, portions of the Tank Farms may be suitable and appropriate for power-generating wind turbines.

- Transit Support – Land should either be used or conserved for future transit support in locations where rail or bus transit operations may reasonably require.

The potential distribution of these use options are represented in *Figure 5-4, Tank Farm Reuse Concepts*, p. 5-20.

Marina and Marine-Related Uses

Aquidneck Island makes multiple demands on its waterfront. From public access and recreation to military uses, the waterfront is pulled toward competing and sometimes conflicting ends. Changes in waterfront uses are possible, given reuse decisions linked to future Navy dispositions and redevelopment initiatives. In consideration of these demands, it is important to ensure that land use decisions and market forces not ignore the value that the waterfront has to marine and marine-related uses.

Even current regulatory requirements for waterfront development may not directly address the full range of opportunities that appear for water-dependent uses on land that is outside coastal jurisdictions. In these instances, supporting marine-related uses become important in order to enhance waterfront development. Supporting marine-related uses, such as mixed-use development that includes housing, restaurants, retail and other integrated uses, creates a higher level of activity and an investment opportunity that improves the project potential for public benefits and higher quality design. The uses and adjacencies could be linked through a master plan concept. This requires the appropriate performance criteria to ensure the best concept is promoted.

In addition, because of the limited market strength of marine and certain marine-related uses, the opportunities to achieve new marine-based projects may be restricted by the faster-paced real estate market that drives use of the waterfront lands. To balance against the real estate market potential, the protection of land and land-banking is recommended. This will help preserve the areas and lands that will be most appropriate for future marine and marine-related projects.

Marina and Marine-Industrial Proposals

An important result of the market trends analysis was that marine industrial uses represent development potential for the West Side and, in particular, for the Melville area. The existing marine trades are growing and in need for expansion. Rhode Island boat registrations indicate the presence of a strong market for slip and mooring demand. In 2002, the Rhode Island Marine Trades Association found that there was a 3000-slip waiting list in Rhode Island. Currently proposed marinas will add 3,200 boat-slips in the next few years, including a proposal for 1,500 boats in Melville (Weaver Cove). This reduces the waiting list, but does not consider additional needs for growth. Conversations with local business representatives and landowners have provided the following information:

- O'Neill Properties Group, a development company headquartered in Pennsylvania, has purchased the Melville Boat Basin Marina, and with it a previous developer's proposal for the construction of a 1,500 boat-slip marina in the area (the former Weaver Cove proposal). This marina would become the largest in New England, and it would generate up to 4,500 jobs in various industries along the waterfront, according to a recent press release. The developer may also be interested in acquiring a number of upland parcels to support marina expansion. They are

considering a marina village concept, including trade services and boat servicing capability. They have also purchased other properties including the former Kaiser Tower and cottage lots at the base of Willow Lane.

- Three local boat builders (Hinckley, Alden, NEB) have discussed buying Navy land adjacent to the Melville Basin if a Navy transfer of property takes place. The state EDC would take possession of the land first, and then the land would have to be sold at fair market value.

Based on this information and longer-term projections for marine trade development, it can be assumed that approximately fifty to sixty acres may need to be dedicated to industrial marine development in the Melville area (in addition to the proposed 1,500 boat-slip expansion of the Melville Boat Basin Marina). This amount of acreage would be needed to include:

- Potential land transfer from Tank Farm #1 (Navy) to boat builders – thirty-two acres (mid-term projection).

- An additional estimate of thirty acres of land to be preserved for future marine-related industries in other tank farm areas (Tank Farms #1 and #2) that may be subject to land disposition (long-term projection).

The development of a large marina at Weaver Cove and a marina/commercial village will require the support of additional inland boat storage areas and marine services. These could be initially accommodated on former Tank Farms #1 and #2 as part of the above anticipated industrial marine development. In the long term, additional space on Tank Farms #3 and #4 could also be potentially available.

Another important reuse opportunity may be represented by marina-related residential uses and affordable housing. These could be located on uphill areas enjoying views and vistas of the ocean, possibly on Tank Farm #2.

Planning for the location of a potential transit stop in the area, proposed by the Aquidneck Island Passenger Rail/Bicycle Path Project, is another important consideration. According to the study, the provision of twenty to thirty parking spaces with access from Stringham Road would be needed.

Land for the potential development of a wastewater treatment plant should also be reserved in the vicinity of the Melville area. This infrastructure would support new and existing uses in North Portsmouth. More detailed recommendations for water infrastructure improvements are provided in the *Utilities* section (p. 5-87). Investigations of other comparable facilities in the region indicate that approximately four acres of land would be needed. Bristol's facility provides service for a population roughly the same size than Portsmouth, and occupies 3.98 acres, in comparison. A tentative site area of nine acres is recommended in order to provide for long-term potential expansion. Tank Farm #3 has been proposed as the preferred location for this facility. Related land use options could also include space for wind turbines capable of generating enough power to support treatment plant operations. Additional reuse options considered for Tank Farm #3 include recreational facilities, such as an outdoor performance theater, and open space.

Mixed Use within Commercial Corridors

The commercial areas of the West Side are mainly located along the busiest traffic areas - the West Main Road network. For the purposes of this *Master Plan*, "commercial uses" consist of office, retail and service establishments. These uses are spread along several miles of road frontage and are very diverse in size and type. The typical response to growth in the past has been to set aside new areas for commercial development and build newer forms of buildings that attempt to achieve higher retail sales and rents. Alternatively, the objective of this *Master Plan* is to combine uses in ways that create commercial areas with better character, reduce highway traffic, reduce infrastructure costs, and preserve remaining undeveloped land. These multiple goals can be accomplished with mixed use development that combines commercial with other land uses such as residential and recreation. Local performance standards are necessary to properly mix these uses without creating internal conflicts and promote high quality design. This is often accomplished through additions to site planning and design review standards that are already in existence within community regulations.

Strip Commercial Corridors

Strip commercial corridors have incrementally developed through the years as a result of increasing reliance on the automobile; they are hence essentially car oriented. Most people experience these strips through driving. The fast pace of visual change along the road is reflected in the signs of the businesses, which are designed to grab attention through size, color, and originality.

It is within this environment that the search for visual continuity, image identity, and good design character becomes more critical. Design guidelines can significantly improve the overall quality of the built environment. At the same time, recognition and appreciation of the natural landscape, and its cultural and environmental value should also be incorporated into design and site planning principles for these strips.

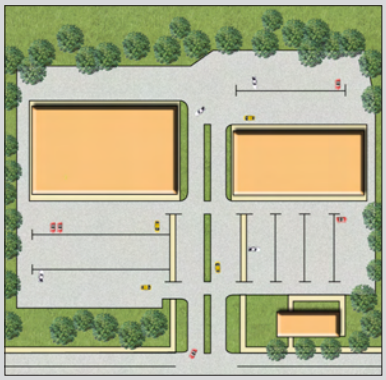
West Main Road and J. T. Connell Highway are the main corridors along the West Side and, as such, they present their own challenges in terms of design and visual quality. Recommendations for streetscape improvements and design guidelines should be aimed at the businesses located there, such as improving the quality of the front property edges, and the design of buildings and signs visible from the road.

West Main Road is zoned for commercial uses along most of its length from Newport to Oliphant Lane in Middletown. This particular area is adjacent to the existing Town Center Overlay Zoning District. The highway segment could be subject to area-specific streetscape improvements and design guidelines that are tailored to commercial uses that will enhance pedestrian-level connectivity, amenities and visual quality.

J. T. Connell Highway also offers an opportunity for the implementation of area-specific streetscape improvements and design guidelines. Guidelines and improvements for the area could promote the generation of an identifiable, pedestrian-friendly commercial district that connects to the ongoing redesign of the Pell Bridge ramps. Land will become available for redevelopment as a result of the ramps reconstruction.

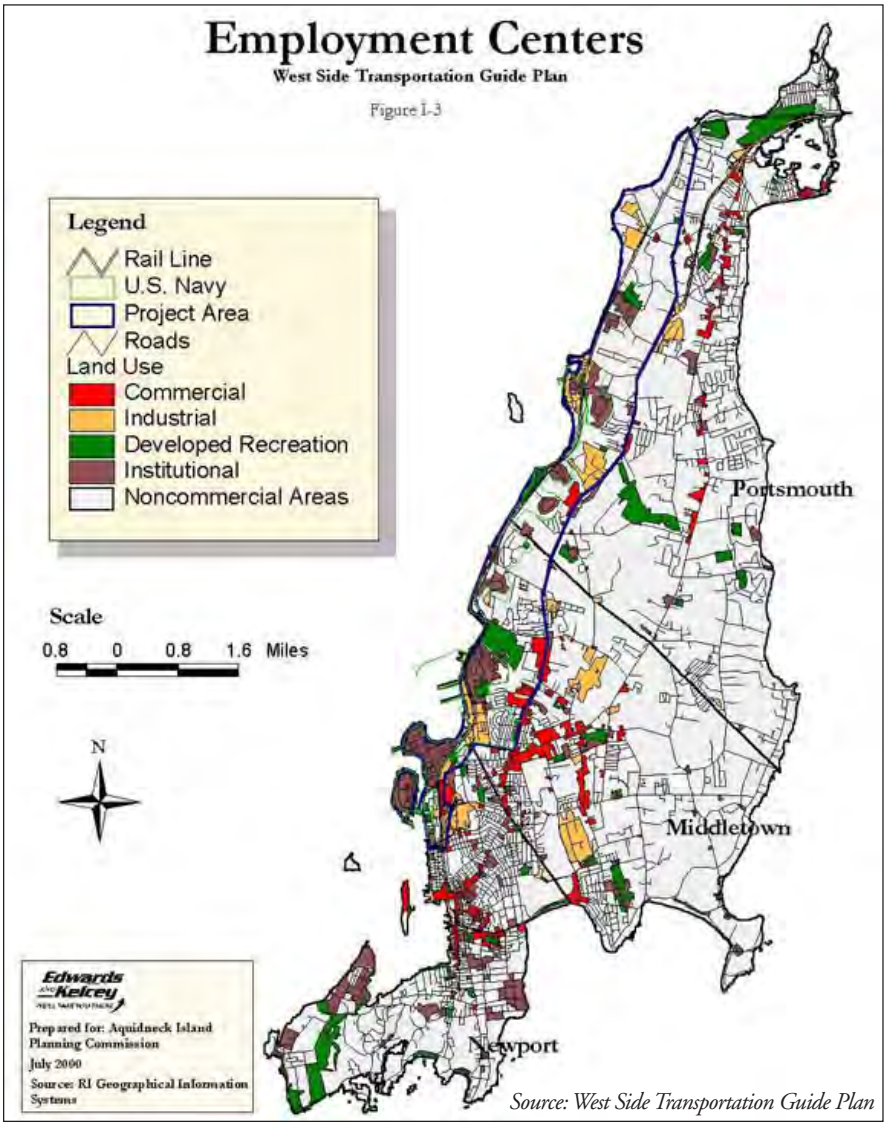
Converting the Strip

Design guidelines can be used to convert the strip-like character of commercial corridors. For example, shared curb cuts and common access drives simplify traffic and allow more landscaping. Allowing small establishments to be built along the street edge relieves the monotony of large parking lots and provides a better pedestrian environment. These and other principles are recommended as standards for Implementation, and are discussed within Performance Standards on p. 6-27.



Adjacent commercial sections of J. T. Connell Highway could be landscaped as a boulevard, including a landscaped median, sidewalks, and landscaped areas along front property lines.

Examples of communities that are initiating or applying mixed use planning principles to enrich former "strip" commercial districts can be found throughout the country. Among the notable initiatives include corridor planning in La Brea, California and portions of Highway 1 in Florida. Regional relevant examples that may be considered include North Kingstown's recent studies for its Route 1 corridor and relevant sections of Massachusetts' *Smart Growth Toolkit*. Specialized studies of mixed-use corridors are being undertaken by institutions such as the Urban Land Institute in order to provide technical information to assist local planners.



Source: West Side Transportation Guide Plan

Commercial and Industrial Uses

The location of major employment sources in Aquidneck Island was documented in 2000 for the AIPC, as part of the *West Side Transportation Guide Plan*. Major employment centers identified included commercial and industrial areas and other types of economic activities.

As the map from that *Guide Plan* shows, the majority of commercial uses in Aquidneck Island are located outside of the West Side study area, mainly along East Main Road/Route 138 and in downtown Newport. The largest commercial properties on the West Side are found along the West Main Road/Route 114 corridor, with the highest concentration located between Coddington Highway and Greene Lane, in Middletown. Additional commercial development has taken place in that area since the map was prepared. The existing commercial areas consist of Corporate Place, an office park, several retail developments with large supermarkets, and Middletown Square. Middletown Square tenants include large-format retailers such as Barnes & Noble, Eastern Mountain Sports, and Linen n Things and draws customers from beyond the Island region.

The map also indicates the location of major industrial areas. Not counting military industrial activities, which for the purposes of this *Master Plan* have been considered as military uses, industrial activities on the West Side are concentrated

Directing Commercial Office and Research & Development Uses

Even if there are sites that may be well-positioned to attract office or research & development uses, it can be assumed that large-scale office development is not likely to happen on the West Side in the near to mid-term future, unless related to military uses. In such a case, development would be based on the competitive advantage that sites on the West Side may have for military-related uses over other locations.

in Portsmouth. Main locations include Raytheon, along West Main Road, and the Melville waterfront district (marine-related uses). An old industrial site formerly occupied by the Kaiser aluminum factory is currently in the process of being redeveloped for waterfront residential use (the proposed Tower and Royal Cottages at Carnegie Abbey).

Ideas for Commercial Growth

Commercial growth on Aquidneck Island is projected to progress slowly. This projection is based on economic forecasts of "organic" employment growth, by a cumulative total of approximately 5 percent over the next several years. By definition, this predicts jobs created by existing companies based on "normal" economic conditions and business activities, and excludes relocation or closures of facilities. This would translate into a mid-range absorption rate of approximately 20,000 square feet per year of new professional office space for the entire island region, subject to competitive positioning. From this point of view, land use plans for the future of the West Side do not necessarily need to include large areas for new commercial (office) development in addition to the ones already existing. However, potential redevelopment areas may be set aside for the development of military-related businesses, as recommended in the earlier section.

Ideas for Industrial Growth

The prospects for Raytheon's growth in Portsmouth are very much linked to the future of military programs for the development of naval warfare technologies at Naval Station Newport, in particular the DDX and LCS ship programs. Raytheon is a major contractor for these programs. Continuation of these programs may drive the need for additional build-out at the Raytheon campus. Raytheon properties likely have enough acreage to cover any anticipated needs for expansion due to these programs. This is based on the estimation of roughly 80 acres of new development for a potential "Planned Corporate Development" that might include subcontractors who want to be located on-site during the development and testing phases of new systems.

Because of its location and infrastructure assets, the West Side is well positioned to support continued and expanded marine-industrial uses and military-related industrial, as discussed in this section of the *West Side Master Plan.* Significant additional public or private sector industrial uses and land requirements were not anticipated in the analyses of trends prepared for the *West Side Master Plan*. However, the availability of land for such uses within the West Side can be an opportunity for reorganizing existing uses and to support unanticipated private sector

Diagram illustrating the location of commercial and industrial uses

uses that are also consistent with the goals and objectives for the West Side.

Such uses could include relocation of existing uses from other parts of Aquidneck Island, in order to promote a higher and better use in the original location. Examples include the use of construction supply and layout yards and support facilities for municipal Departments of Public Works.

While significant new industrial uses other than marine or military-related uses has not been anticipated, the convergence of available land and infrastructure could attract future private sector industrial use proposals. Such proposals could be compatibly absorbed within the overall land use and economic development strategy for the West Side, provided that the proposed uses meet the following criteria:

- Performance Standards - The development should meet the land use, environmental and other performance standards advocated by the *West Side Master Plan* and as adopted by the communities in which such development would occur.

- Phasing - Industrial uses (such as site storage, for example), might beneficially use land on a phased basis until higher and better uses are advanced that will better meet community and economic development goals. In the event that such phased use of land is contemplated, the review and approval criteria should ensure that development is compatible with adjacent and nearby areas and that the land may be converted without significant expense for more intensive or alternative uses.

Retail Uses

Market demand trends for retail uses on Aquidneck Island indicate that there is potential for the development of new retail uses, based on the analysis of net inflow/outflow of retail expending. As previously mentioned, the Island serves as a major retail destination for the region and beyond, with Newport attracting the majority of retail net inflow. A detailed analysis of spending vs. sales for retail categories indicates that there may be an opportunity to capture an additional $28 million in spending, mainly in the food/groceries and general merchandise categories. Projections for the future, however, indicate that this potential is rather low, estimated at a need for up to a total of 70,000 square feet of new development in the near to mid-term future.

Given this analysis, the *Master Plan* recommends limiting new retail development, and instead proposes to steer the potential demand for new retail uses towards the redevelopment of existing commercial properties rather than the creation of new areas for future retail development. In these regards, the extension and limits of zoning districts for retail use should remain unchanged.

This recommendation has been found to be consistent with the perception and directives of members of the West Side Master Plan Task Force. They have agreed that there is already enough commercial activity on the Island and the formulation of policies aimed at encouraging redevelopment and reuse of the existing properties would be a step in the right direction.

To this extent, the AIPC and the three Island municipalities should work

together to develop design and development review guidelines that support adaptive reuse and concentrated development. These are concepts based on general site planning and design principles that encourage redevelopment where buildings are clustered together within walking distance, while the perimeter of the site is dedicated to the preservation and restoration of open space, to the extent possible.

Large Developments

Large development projects are distinct in their impacts and execution. They afford a broader range of opportunities and higher quality results that can support more public benefits. However, they are more difficult to accomplish because of their greater complexity.

The communities of Aquidneck Island should encourage managed processes that result in well-planned large developments that provide the greatest public benefit without jeopardizing the project economic feasibility. For example, larger parcels provide many more options for clustering of development in order to preserve important features. This allows protection of the landscape heritage, provision for public access, improved accessibility, and protection of views. The projects can also be pragmatically held to a higher accountability for quality architectural and site design. Density bonuses can be used in these cases to obtain more public benefits, because the opportunities for incorporation of additional development clusters are greater. Higher quality developments will garner higher tax benefit over time.

This *Master Plan* provides many implementation mechanisms to assist the communities in managing large project development. Among the many relevant recommendations, the *Implementation* includes useful reference to: *Tools for Promoting Desirable Development Patterns,* p. 6-14; *Tools: Inclusionary Zoning, Inclusionary Conditions or Impact Fees for Affordable Housing,* p. 6-33, *Processes: Regional Consistency Statements,* p. 6-8; *Resources: Development Impact Fees*, p. 6-38; and *Large Project Development Performance Standards,* p. 6-28.

Hospitality, Tourism and Resort Land Use

In general, there is a direct relationship between the proximity of a hotel or lodging property to Newport Harbor and its average occupancy rate. During the last few years, the Middletown and Portsmouth market has under-performed Newport, and the Newport market has been unable to sustain healthy occupancy rates. These low occupancy levels are a result of the highly seasonal character of tourist population on the Island. Hotels are full during the summer and half-vacant during the winter months (except for weekends). In spite of high seasonal demand, the relative weakness of the market during the winter precludes the potential for the development of new tourist-oriented hotels in the foreseeable future, unless new tourist amenities are created that would attract large numbers of additional visitors to the Island.

However, there is some demand for increased business-type hotels, which could also be partially supported by tourism. Accompanying this type of hotel may be additional meeting or small conference spaces. This demand is not centered on Newport Harbor, but rather seems to be oriented to-

Market Structure for Hotels

The analysis of the lodging market trends in Aquidneck Island has indicated the presence of two distinct lodging sub-markets – one in downtown Newport, and the other in Middletown and Portsmouth.

Directing Residential Use

The West Side needs to establish limitations to future residential expansion in favor of other development and the protection of natural resources. Most of the existing residential districts within the study area are close to build-out. Even when there are real market pressures for new development, the subdivision of more developable land for single-family homes would come at the expense of existing agricultural uses and open space.

wards Middletown and the northern edges of Newport, away from the tourist centers.

Meetings, interviews, and conversations with the West Side Master Plan Steering Committee and members of the local communities have consistently indicated that encouraging the development of new tourist attractions on the Island is considered neither practical nor desirable. One major concern is that additional amounts of visitors would exacerbate already critical problems of traffic and congestion on the Island roads, particularly during the summer.

"Heritage" tourism and amenities that emphasize and celebrate the Island's traditions should be further encouraged and developed, especially on the West Side. Efforts in this direction should build upon the preservation and promotion of existing historical and archaeological resources. The Island communities should work together towards implementing the proposed Newport-Bristol Heritage Trail, further described in the Natural and Cultural Resources section of this *Master Plan*.

Resort-type land use developments are flourishing along the West Side of Aquidneck Island, taking advantage of the spectacular views, open and developable land, ability to offer recreational amenities and the reputation of the Island as a second home and resort location. Recent acquisitions have assembled substantial landholdings in Portsmouth, expanding upon the Carnegie Abbey redevelopment. In addition to the potential development of open land, this trend may unlock the long-planned marina development at Weaver Cove. The resort development provides for linked amenities in a planned community setting, catering populations that tend to use the resorts as a second home. In this vein, "resort use" and "residential use" overlap along the West Side, and should be considered from both vantage points.

Construction of New Residences

The strongest development response to the current high demand for new housing on Aquidneck Island centers on second homes and luxury residences, as has been documented in the *Trends* report prepared for this *Master Plan*. This type of development is generally built on the waterfront, in places that command views of the water and access to recreational amenities such as marinas, golf clubs, and shopping "villages". High premium costs are paid for these amenities, which are sought after by empty nesters and affluent householders from large metropolitan areas such as Providence, Boston and New York.

These types of development often require large parcels of land located on the water or next to amenities, which are not often available. The northern portions of the study area contain locations that are most likely to experience change in the near to mid-term future. Recent development projects include the Carnegie Abbey development in Portsmouth and plans for the expansion of the Melville Boat Basin Marina, which are currently underway. Additional demand for the development of luxury housing in close proximity to these amenities will likely continue, although the development of new large "lifestyle" residential complexes on the West Side may be subject to competitive positioning in relation to other parts of the Island. In general, the op-

Diagram illustrating the location of privatized Navy housing

portunity to assemble large parcels of land with water views and amenities is still available.

On the other hand, even though demand for low- and mid-priced housing is high, the private market has not responded with substantial new production in these price ranges. For example, very few units of new townhomes and single-family housing have been built in recent years (including Overlook Point and King's Grant in Portsmouth) and all have been mostly sold to year-round residents. No multifamily rental apartments have been built on the Island in fifteen years. The largest existing rental complexes on the West Side comprise over 1,000 units of 1- and 2-bedroom apartments; they report overall healthy occupancy rates.

Ideas for New Residential Development

Municipal authorities currently discourage the development of traditional single-family residential units on the West Side in favor of mixed use and multifamily residential development.

This trend is consistent with the overall planning vision and strategies herein recommended. Mixed use and multifamily residential developments also offer opportunities for the provision of affordable housing in places that have convenient access to jobs, transportation and amenities.

While it is wise to limit market rate single family homes, second homes and residences for empty nesters may advance some of the economic development goals. The creation of "lifestyle" communities, where living, business, and recreational activities are mixed, would support the growth of marine-related uses and create jobs for local residents.

"Marina-village" development concepts, popular in Florida and on the West Coast, are based on the combination of housing, recreational amenities, and commercial space in a compact setting, not very different from development concepts already proposed for marina and golf-based communities in Melville and the Carnegie Abbey area. Residential components are important elements for the success of this type of development. They could be supported by zoning as long as they are mixed with other uses in an appropriate balance.

The prominent location of the tank farms along the waterfront, often commanding impressive views of the water, makes them attractive for the potential location of high-end residential uses and marine-related resort services in the long term. These would likely have strong market support based on demographic and real estate market trends, as is true for Tank Farms #1 and 2 located closer to the Melville Basin. However, the West Side Master Plan Steering Committee has indicated that, in general, economic development should have priority planning consideration over housing or tourism for these areas. In exceptional cases, residential uses could become an option if they were included as part of mixed use development projects that would positively contribute to create jobs, increase the local tax base, or help solve the affordable housing shortage.

Affordable Housing

Affordable housing in general should be considered within the Island context. Each of the three local municipalities has distinct goals and plans in place regarding affordable housing, as established in their respective Comprehensive Plans and according to the re-

quirements of the Rhode Island Public General Laws. Each Town should continue its efforts to reach and uphold their goals in terms of the amount of affordable housing units and their spatial distribution.

The Statewide Planning Program in Rhode Island requires that each Town Comprehensive Plan include an affordable housing plan as part of its Land Use component, and establishes requirements such as the following:

- affordable housing must meet the State definition
- a minimum of 10% affordable housing should be provided
- affordable units must remain affordable for not less than thirty years, enforced though a land lease and/or deed restriction enforceable by the municipality and the state of Rhode Island

State public general laws also require that housing strategies applicable to all municipalities must address the housing needs of different populations, including workers earning less than 120% of median income and their families, older citizens, college and university students, low and very low income individuals and families, and vulnerable populations.

Navy Housing Privatization

The process of privatization of Navy housing currently underway for the New England region represents an opportunity for the local municipalities to increase the supply of affordable housing and support the local military operations.

The majority of former Navy housing units will remain available to military personnel on a rental basis, but they will be held and operated by a private housing developer during the next 50 years. GMH, the designated operational entity, has entered into an agreement with the Navy through which some of the houses will remain available to military families, some will be demolished, and some will be traded in the private market.

Housing for military personnel will be affordable and will hopefully maintain the balance of military personnel and their families with their housing needs. The factor that could possibly alter the balance of affordable housing is the number of units that were previously controlled by the Navy and thereby kept affordable, but will be now sold on the open market. If a balance could be reached to include new affordable units within those shifted to private holdings, then local housing groups would be able to supply services and funds to "buy down" the costs of those units and the region's housing problem would be addressed.

Putting it All Together: Growth Centers

A Marina Village and a Marine-Oriented Growth Center in Portsmouth

The recommended uses and emerging proposals in the Melville and Weaver Cove area can be composed to create a well-planned Growth Center that combines employment, housing and public uses. The Growth Center concept is explained in *Implementation* see *Tools: Growth Center*s, p. 6-14. This strategy builds upon a transportation and utility infrastructure that is already partially in place and that can be expanded in order to provide high quality and concentrated investment opportunities. Concepts for land planning are contained in the diagrams in *Figure 5-5* (p. 5-36); the resulting development and open space opportunities have been illustrated in *Figure 5-6* (p. 5-38).

The Marina Village is conceived as a water-edge cluster of boating and residential uses that includes the possibility of restaurants, marine-related retail or other appropriate business enterprises in the mix. Marina slips would extend out into the cove, and feature a convenient docking location for future ferry or water shuttles along the Bay. A continuous band of public walkways and open space would line the Cove, except in locations where marina operations would make access dangerous. As noted above, off-site storage of boats and parking for cars may be accomplished at the former tank farms, which could hold additional housing or marine-related businesses. The realignment of the Burma Road-Stringham Road hairpin turn would allow additional redevelopment contiguous to the Cove, allowing the Marina Village to step landwards in low-rise terraces and townhouses. The transfer of this public land to the private development entities would be accomplished in exchange for a variety of public benefits and special conditions to ensure that the overall development is well planned and meets public goals.

Concept illustrating waterfront redevelopment of a former Navy shipyard. Image courtesy of Sea Chain, LLC.

The Melville marine industrial complex would be maintained and expanded over time to support the unique concentration of uses that are advantaged by its location. Long term capacity for these uses would be maintained until needed within former military and tank farm land. Excess land could be employed for complementary uses.

A connected series of open spaces would be preserved along the steep slopes and natural resource areas that thread through – and surround – this Growth Center. Some of this land would be preserved through public benefit transfers to public agencies, while other areas would be preserved as private property through site planning restrictions.

The terraced hillsides leading from West Main Road to Narragansett Bay provide many opportunities to advance development while protecting views and open space. These siting relationships are considered in *Figure 5-7, Site Planning Principles for the West Side*, p. 5-40.

Transportation enhancements will serve this area well. Shoreline Drive can provide convenient vehicular connections to this growth center. Trails and bikeways can be threaded through the area, including use of the Newport

Aerial view of Pell Bridge North End Area

Secondary as part of the West Side bicycle networks as discussed in the sections on local trains and rail shuttles. Possible future transit technologies could provide convenient stops along the Newport Secondary with the Weaver Cove and Melville Area.

This area contains available locations to help provide future utility infrastructure that can, in part, support this growth in an environmentally responsible manner. Recommendations for future utility networks are discussed in *Utilities*.

Implementation mechanisms associated with the redevelopment of the Weaver Cove/Melville area and the growth center it represents are numerous. In addition to the methods discussed for reuse of the tank farms above, recommended approaches listed in *Implementation* include *Tools for Promoting Desirable Development Patterns,* p. 6-14; *Performance Standards and Design Guidelines,* p. 6-27 and *Appendix A: Performance Standards*.

Anchorage and West Main Road: A Growth Center in Middletown

Middletown may be able to take advantage of currently planned changes to substantially shift the civic, residential and commercial environment of the area near the intersection of West Main Road and Coddington Highway. In "Smart Growth" terms, it could become a Growth Center. Contributing elements are already anticipated: the comprehensive redevelopment of the Anchorage Housing area with potential market rate, military and affordable housing; the transportation improvements along Coddington Highway; and the anticipated redevelopment of large parcels south of Brown Lane. The Town and the region will benefit from a continued concentration of public and private reinvestment that will enhance the visual qualities of the area and provide an improved environment for pedestrians and the residents who live within or adjacent to the West Main corridor. This *Master Plan* recommends targeting a number of implementation mechanisms in this area. Reference may be made to the *Implementation* discussions on *Tools: Growth Centers* p. 6-14; *Tools: Density Bonuses,* p. 6-15*; and Tools: Façade and Landscape Improvement Programs* p. 6-18, *Commercial and Mixed Use Development Performance Standards* p. 6-28, and *Appendix A: Performance Standards.*

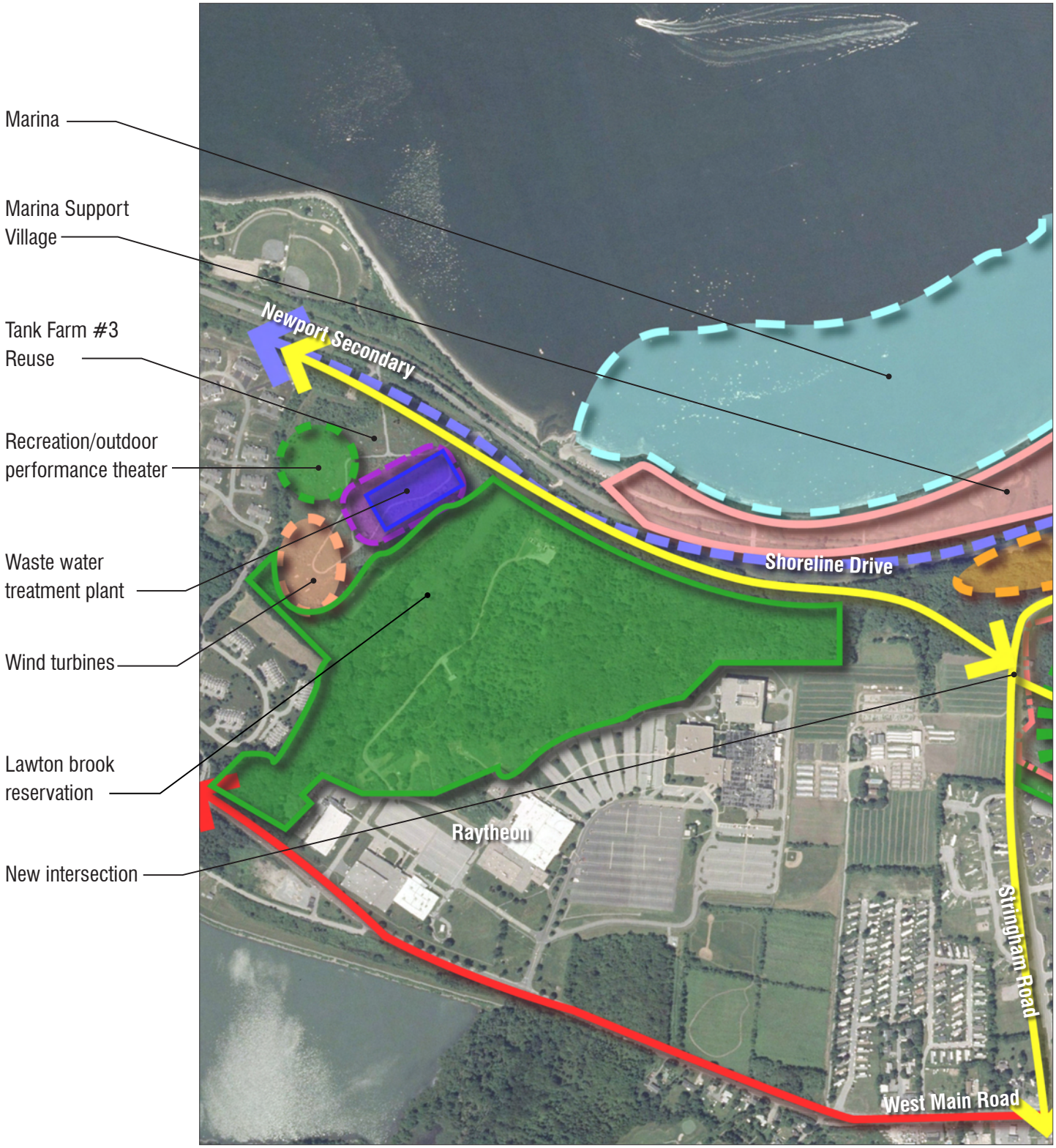
Anchorage Illustrative Concept Plan

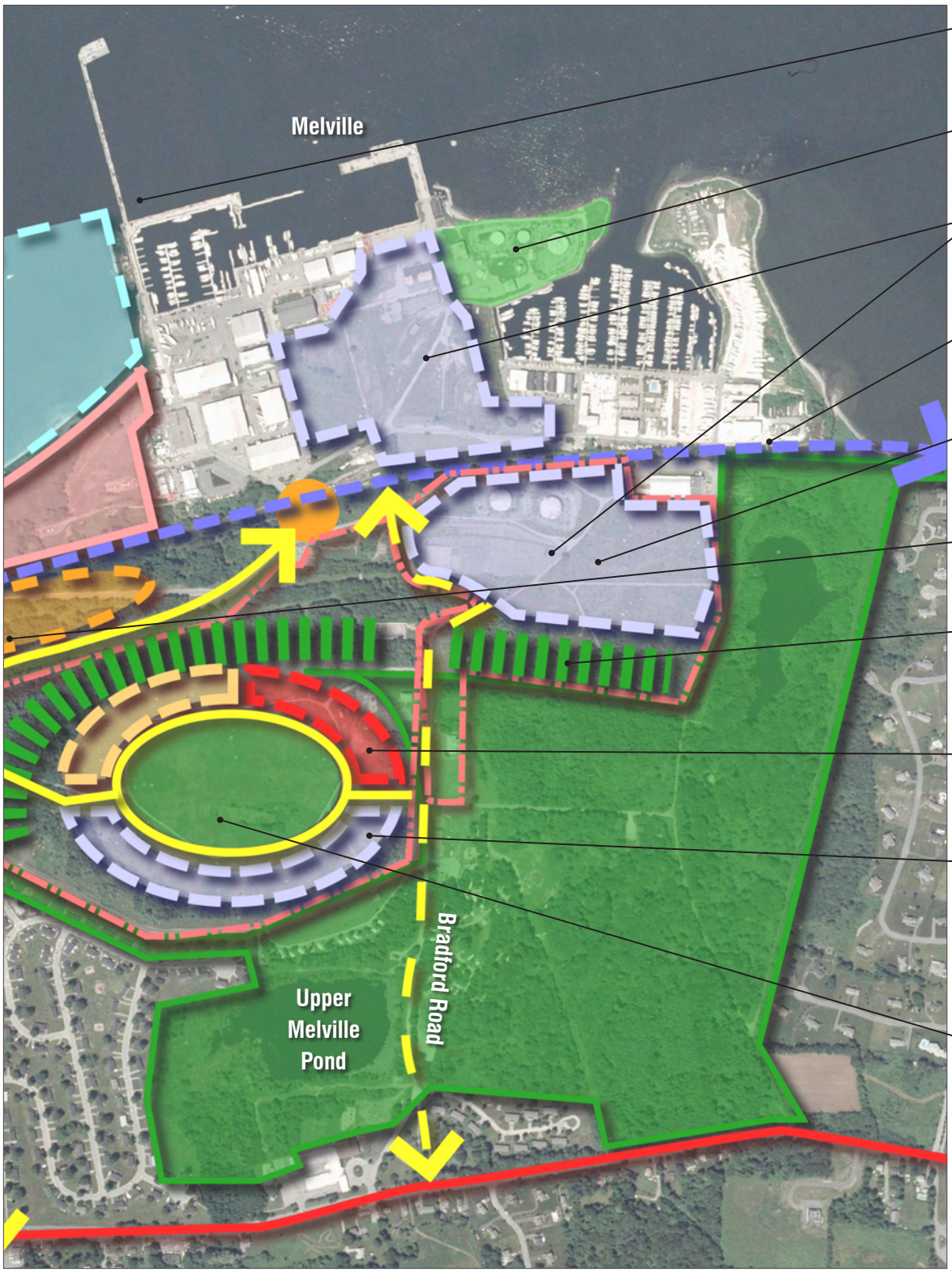
Pell Bridge/North End Area: A Growth Center in Newport

Newport is positioned to advance a mixed-use conversion of underutilized land assets that will be unlocked with the reconstruction of the Pell Bridge ramps. When the ramps are relocated, former RIDOT land east of J.T. Connell Highway can be re-graded and made available for redevelopment. This land has adjacent parcels that are susceptible to change because of the economic advantages associated with redevelopment: the former Newport Jai

Melville Reuse Concept

Figure 5-5





Ferry/water shuttle dock

Park

Marine industrial services

Bike path

Tank Farm #1 Reuse

Uphill residential development

Steep sloped woodland area to be preserved

Commercial development

Light industrial and marine industrial services

Tank Farm #2 Reuse

Melville Illustrative Concept Plan

Figure 5-6

Ferry/water shuttle dock

Park

Mid-term expansion of boat building services

Mixed-use marina support development

Potential location of future transit stop

Bike path

Long-term expansion of marine industrial services

Residential development on the hill

Residential/commercial development

Future roadway connection

New intersections

Buffer zone

Steep sloped woodland area to be preserved

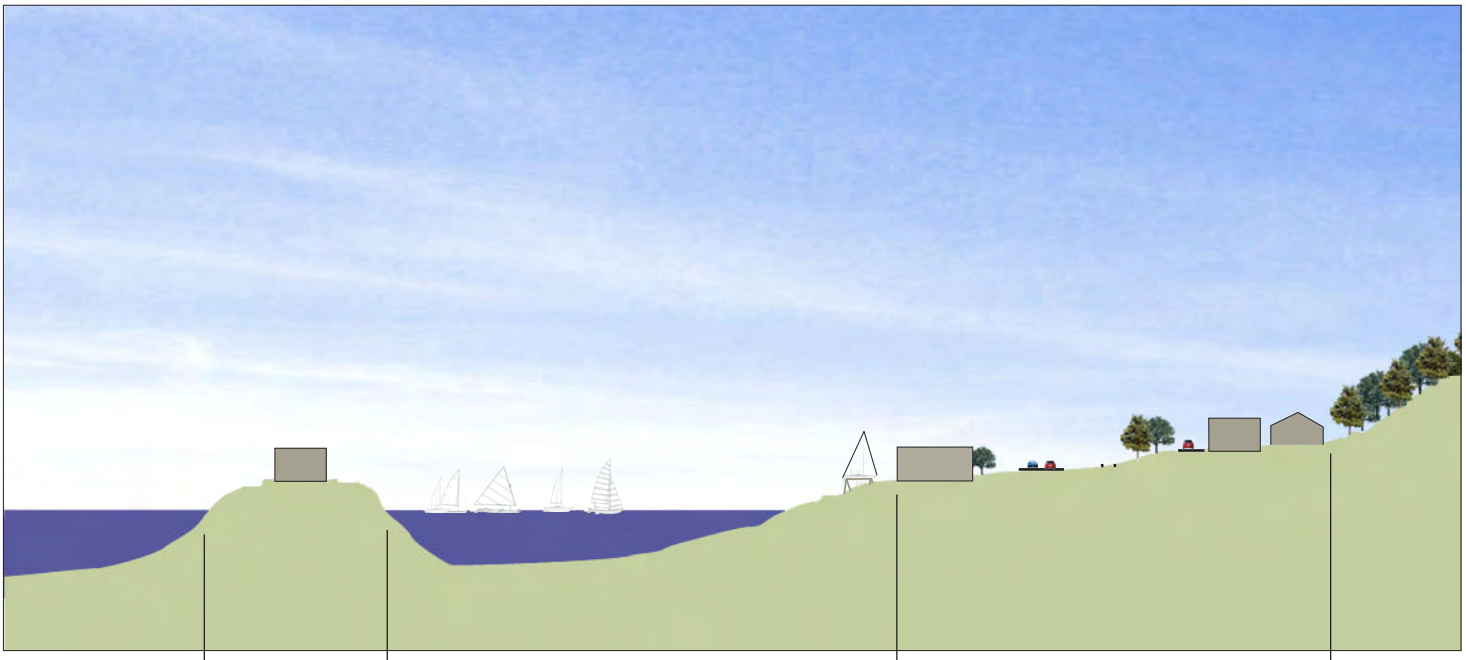
Light industrial and Marine-related Business

Upland seasonal boat storage and remote parking

N

Site Planning Principles for the West Side

Figure 5-7



Preserve steeply sloped wooded areas with selective development that maximizes views

Low scale development on Tank Farm #2 with no visibility from West Main Road

Preserve existing woodlands along Upper Melville Pond

Maintain low-scale development

Maintain rural, informal landscape on West Main Road

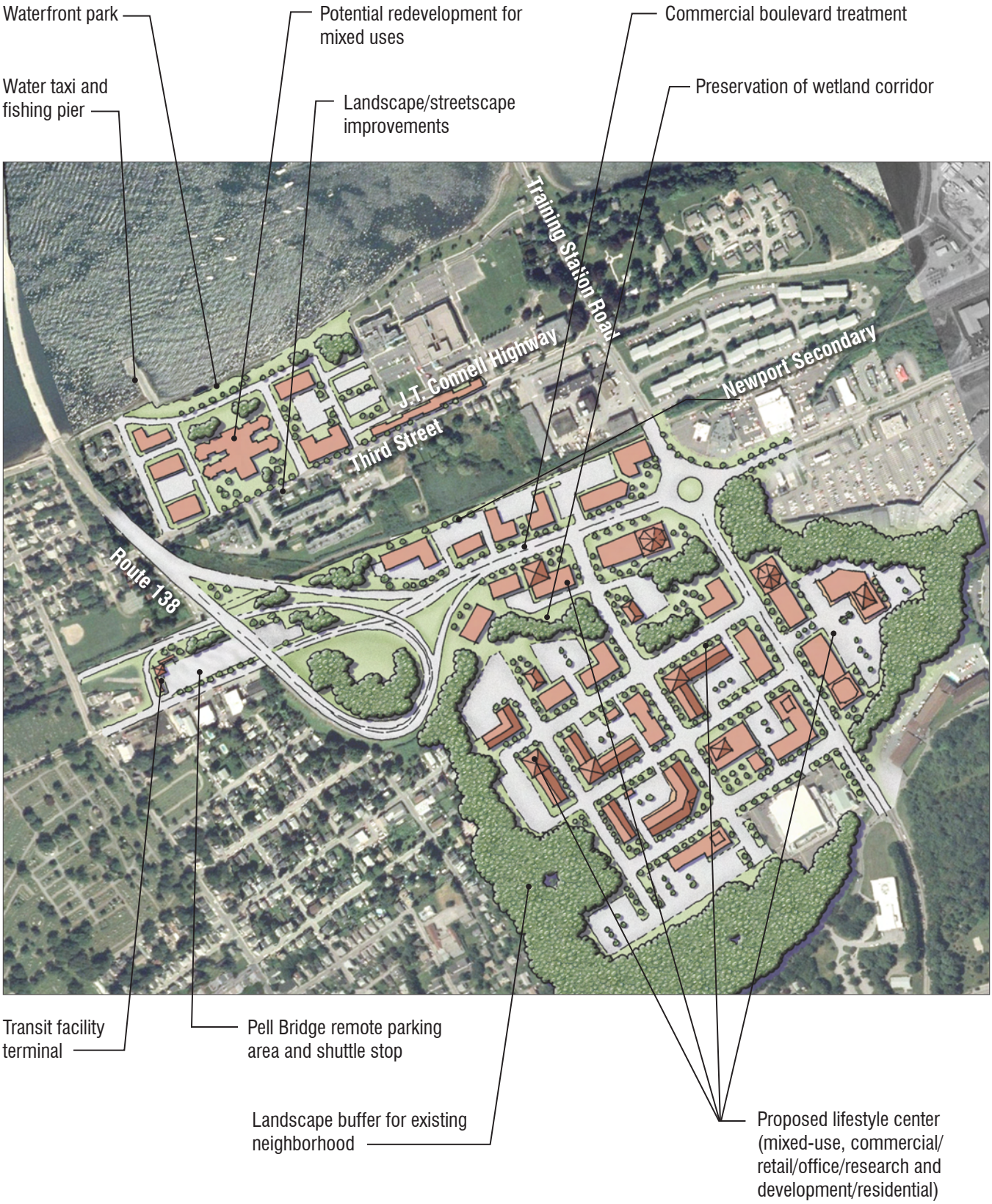
Preserve wetlands, drainage corridors and stream systems with adequate buffer areas

Preserve farmland and historic farmhouses in critical viewsheds

Maintain rural, informal landscape on West Main Road with large setbacks and open space provision to preserve view corridors

Pell Bridge North End Area Land Use Concept

Figure 5-8



Alai site, Newport DPW facilities, and a row of properties that line J.T. Connell Highway. This area will have excellent access and visibility and comprises a substantial amount of land within the context of densely-developed Newport.

By helping to assemble the land and providing a coordinated development approach, the public stewards of the West Side can advance a mixed-use vision that assembles a range of uses that is oriented toward Island residents and provides new options as a location to live, work, shop or be entertained. Some of the land could also be set aside to create a commuter and visitor parking facility, serving as a remote lot linked by shuttles and buses and the adjacent train line to local and off-island destinations. The result can be a Pell Bridge/North End Area Growth Center that fulfills important Smart Growth principles endorsed by this *Master Plan.* An illustration of the potential composition of streets, spaces, buildings and uses is contained in *Figure 5-8* (p. 5-42).

The state and the local entities must collaborate on the economic redevelopment vision as well as the transportation solutions for this area. A key to this vision is the future ability of the City and future private sector redevelopment interests to obtain the RIDOT land that will no longer be required when the ramps are realigned.

Recognizing the potential of this area, the City of Newport has initiated a focused North End planning process to establish the framework for positive change. Additional mechanisms that can be applied to this area are in *Implementation*, including *Tools for Managing the Conversion of Military or Other Public Land to Other Uses,* p. 6-12; *Tools for Promoting Desirable Development Patterns,* p. 6-14; *Large Project Development Performance Standards,* p. 6-28; *Tools*: *Intergovernmental Agreements,* p. 6-35; and *Economic Development Resources,* p. 6-37, among others.

Concept illustrating mixed-use redevelopment of a former Naval Station. *Image courtesy of SMWM.*

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ECONOMIC DEVELOPMENT

The discussion of economic development recommendations is preceded by advice concerning priorities that should be advanced as the stewards of the West Side implement this *Master Plan*.

Economic Priorities

The following priorities have been articulated because they promote a long-term balance of uses that will provide both high income jobs and diverse opportunities. They have been selected because they reinforce the existing competitive advantages associated with the cluster of businesses, activities, investments and quality of life found on the Island. In short, focusing on these priorities will bring a particularly high return for the time and resources invested. The priorities direct the stewards of the West Side to:

- **Actively support the existing cluster of military activities and associated research and development businesses** – A fundamental precept driving future decisions should be reinforcing the highly valued and unique activities associated with Aquidneck Island's largest employment sector. This priority should extend to entrepreneurial actions that take advantage of the confluence of knowledge and technology to grow new business opportunities.

- **Actively support the specialized cluster of marine-related and marina uses to the greatest extent practical and necessary to take advantage of the unique physical assets and concentration of activities found along the West Side** – The landside and waterside opportunities associated with the cluster of uses that can congregate at Melville, Weaver Cove and other locations is compelling and compatible with all of the goals of this *Master Plan*. This priority entails pro-active steps.

- **Preserve land assets that are potentially prime development opportunities for job-generating development *rather than* maximizing short-term benefits associated with current market conditions and the high demand for housing** – The opportunities to create high quality, year-round jobs is narrowly focused on specialized sectors that have land, location and adjacency requirements that are critical to success. It is wise to protect the opportunities for the long term future.

- **Ensure that the reuse and redevelopment of excessed Navy property accomplishes both local and regional economic goals as the highest priorities**. Success is dependent upon a disposition process that is conducted through a coordinated plan that joins municipal consensus with the economic development interests and resources at the state and federal levels.

- **Promote high value, high quality tourism, resort and second home development** – This type of development provides important economic benefits relative to other land use options to the extent that such development respects the environmental and cultural heritage of Aquidneck Island, expands the tourism values, creates positive fiscal benefits, and engages in coordinated planning.

- **Promote mixed-use development that appeals to the citizens of Aquidneck Island and the quality of life they seek, rather than new large scale or isolated commercial and retail concentration.** Continued sprawl and dedication of large land parcels to retail and commercial complexes is likely to continue to degrade the image, convenience and quality of life of Island citizens over time. Given the relatively limited projected growth in demand for such uses, it is economically wiser to concentrate development in locations that can take advantage of joint development with other uses in line with the image of village or small-city life valued by today.

- **Consistently support all actions that improve the quality of life for residents of Aquidneck Island, including the expansion and maintenance of quality affordable housing.** The quality of life and the quality of the environment on Aquidneck Island are its greatest long term assets. This quality of life must engage people of diverse incomes and interests.

Specific Recommendations

Naval Station Newport

The economic strategies that focus on Naval Station Newport provide support for ongoing activities. In the event of base realignment that brings new military or federal functions to the Base, this support should be similarly extended to the extent that these uses are mutually beneficial for the state, region and municipalities. This approach embraces the emerging concept of a "purple" military, which uses its facilities and resources to the best benefit of national security beyond the traditional limits of separate military services (Navy "blue", Army "green", and the other services colors).

The recommendations and associated actions include promoting effective privatization of military facilities (including the infrastructure) through efforts that achieve compatibility with the other goals of the *West Side Master Plan.* The Public Private Venture programs (PPV) are a major benefit for continued military presence at Naval Station Newport, by reducing costs and enhancing ancillary services. There are two privatization initiatives that need to be taken into account; the first is the housing privatization currently being implemented, while the second is the possible privatization of the military's utility infrastructure.

The housing privatization program that is being implemented with GMH Housing offers significant opportunities for mutual benefit. Both GMH and the municipalities will benefit from a planned transition process based on approved plans for the redevelopment of sites, improvement of the housing stock, and better integration of amenities and services with the surrounding communities. Actions should include the following:

- A predictable and objective process should be used to establish equitable compensation and provision of municipal services for all parties involved in the PPV program, including periodic re-evaluations.
- A site planning and design review program should be established either through local regulations or by agreement by all parties so that mutually beneficial design strategies can be created through a predictable process, using the performance standards for redevelopment of former military provided in the *West Side Master Plan*.
- Any lease of excessed land or facilities disposed of through the PPV process should be first offered to the host communities at market rates so that economic redevelopment goals and/or affordable housing needs can be met.
- Any lease of excessed land or facilities disposed of through the PPV process that is offered through the market should first be approved through a local disposition plan that is approved by both parties and addresses the performance standards for redevelopment of former military provided in the *West Side Master Plan*.

The infrastructure privatization program has not been implemented at Naval Station Newport because it has been an unattractive investment from a private sector vantage point. However, there may be mutual benefit in rationalizing and privately-managing a utility infrastructure if the process could extend beyond the limits of the Base. There may be an opportunity to

repair and improve the performance of the military utility network and extend the system to serve desirable redevelopment of large land areas in Portsmouth, at Weaver Cove, the Melville area and the former tank farms. Actions should include the following:

- An organized dialogue that is initiated among the participants and possible beneficiaries in a rationalized and extended system, including the military, the effected municipalities and utility authorities and property owners.
- Funding that is sought and dedicated from federal sources to examine the financial feasibility of a hybrid system relative to other possible alternatives.
- If opportunities are mutually beneficial and feasible, the constituent parties should advance a proposal and establish a PPV to implement the services.

Initiating a military-oriented Transportation Management Plan (TMP) will maximize accessibility and prioritized transportation improvements for the large traffic flows associated with Naval Station Newport. This should be coordinated with RIDOT's active assistance and engage the recommended AIPC Transportation Implementation Committee to coordinate preparation of a plan. State and local funding should be employed to help implement a program that would support Park and Ride opportunities, management of routes and work schedules and other measures that could help make travel to and from Naval Station Newport faster and more convenient.

Another strategy supports the retention of existing dedicated military recreation areas and provide complementary public recreational amenities attractive to the personnel, employees, students and residents at Naval Station Newport. The provision of additional open space amenities and recreational assets such as bikeways and pedestrian paths along the West Side can be a shared asset.

Naval Station Newport will require the ability to flexibly shift uses to adapt to its evolving mission without interference from adjacent uses such as housing that could be resistant to changing security requirements or other constraints. This *Master Plan* discourages land uses adjacent to active military functions that would tend to be incompatible.

Consistent communication should be maintained about shared interests in the activities and economic impacts related to the Navy's activities. The AIPC can help provide a forum through an Intergovernmental Working Group (IWG) to advance common causes. For information on *Implementation*, refer to *Tools: Special Area Reuse Plans,* p. 6-34 and *Tools: Intergovernmental Agreements,* p. 6-35.

Defense-Related Research and Development

The cluster of specialized defense-related research and development activities along the West Side involve private companies as well as federal entities. Additional private market opportunities should be promoted through an active program to accomplish "technology transfer". This term indicates the potential to leverage the industry's physical and intellectual capital (for example, skills, expertise, patents, facilities) to generate new services and products.

This concept is can be applied along the West Side through several actions:

- Create a technology transfer center to leverage the clustered human and technical resources already associated with military-research and development. The RIEDC should bring its "Innovation Factory" concept to Newport to assist existing businesses with new ventures, facilitate local industry partnerships, encourage entrepreneurship, and generally assist in an overall effort to diversify the focus, applications, and client base of defense-related research. This initiative should also seek cross-over opportunities by assembling shared opportunities with other local industries such as health care, boat-building, and other marine-related technologies.

- Target the reuse of the former Naval Hospital as a technology transfer center using the emerging "Innovation Factory" concept being advanced by RIEDC. The former Naval Hospital is likely to be released for reuse through the Housing PPV or other land disposition process. This 160,000 square foot historic complex is well located relative to the regional transportation network as well as being conveniently located near NUWC, Raytheon and other technology centers. A feasibility study should be undertaken with the intention of acquiring the property, providing necessary improvements, attracting tenants, and putting the center into operation. The City of Newport should use its land use regulations and performance standards contained in this *Master Plan* to encourage this economically promising opportunity.

- Support efforts by Raytheon to expand its facilities and to create facilities for related enterprises on its campus, utilizing the PUD zoning framework.

Information on technology transfer *Implementation* is discussed in *Tools: Innovation Factory,* p. 6-35*; Processes: Creating a Technology Transfer Center,* p. 6-36*;* and *Performance Standards and Design Guidelines*, p. 6-27.

Reuse of Former Military Land

It will be important to advance the reuse of military land in the event of disposition by focusing on economically beneficial uses. The economic segments and initiatives that might be associated with parcels like the Naval Hospital and former tank farms are addressed as part of other economic recommendations. However, the process used for land transfer has important economic implications.

To advance the land disposition process, the Island communities should use the *West Side Master Plan* as the basis for a reuse plan that accomplishes the necessary economic objectives and defines the process for transfer. In preparing for a land transfer scenario, the Aquidneck Island community must prepare a base reuse plan and designate a local redevelopment agency (LRA), approved by the federal Office of Economic Adjustment. This process must proceed swiftly. Unlike its procedures in previous base closure rounds, in this round the federal Department of Defense has been expecting to proceed quickly with public sales of property rather than engaging in extensive negotiations with LRAs, if they cannot resolve local issues and present disposition strategies and procedures. There-

Serving the Sea

Marine–related businesses comprise an important component of Aquidneck Island's and Narragansett Bay's economy – accounting for 22 percent of local employment according to a recent study[1] *– as well as its local culture. Given the importance of this sector, this plan seeks to preserve Aquidneck Island's marine-related business base and maritime heritage.*

fore, in the event of a disposition, the Island communities must prepare a reuse plan that:

- designates land uses for the military property that remains unclaimed by federal agencies and homeless providers, pursuant to land disposition procedures; and
- sets forth a clear process for disposition, identifying properties to be conveyed at public sale, properties to be used to provide public benefits (for example, recreational facilities, educational facilities), and properties allocated for economic development purposes.

For information on *Implementation*, consult *Tools: Local Redevelopment Authorities (LRAs),* p. 6-12*; Tools: Special Area Reuse Plans,* p. 6-34*;* and *Tools: Intergovernmental Agreements,* p. 6-35.

Marine-related Business and Recreational Boating

While the boat-building industry has not shown high growth trends in recent years, Rhode Island's critical mass of service providers (for example, yacht design, outfitting, and brokerage businesses) that support the existing sailing and yachting community provide an asset for further development. Much of this activity is co-located with either marinas or shipbuilding facilities, as in the Melville district. This *Master Plan* seeks to build upon Aquidneck Island's strong and growing local marina sector, ongoing strength in local shipbuilding, and Aquidneck Island's continued brand presence as one of the premiere yachting regions of the world. Working with these advantages, this *Master Plan* seeks to promote Aquidneck Island as a location that can capture an increasing share of the regional market for builders as well as related businesses involved in boat repair, boat parts and retrofitting, boat financing, insurance, and the like. In targeting this objective, the following must be addressed:

The marine-related trades established in the Study Area include boat-building and various service uses. These uses face formidable competition for waterfront land. The uses such as those established at the Melville basin area generate relatively low financial returns as compared to waterfront residential or commercial developments. Consequently, any effort to maintain these uses will require the stewards of the West Side to take the following proactive steps:

- Reserve land for marine-related uses – through purchase and/or regulation – in areas with access to the water and the backland facilities. Initial investigations indicate that roughly 30 acres in the near-term and an additional land area of 30 acres should provide an ample land inventory over the next 15 to 20 years.
- Reserve land for accessory uses, most likely involving upland boat storage, boatyard services, and remote parking for marina use.
- Promote marine-related training and information exchange through the Community College of Rhode Island, Newport County Campus (CCRI). Ongoing communications with the marine trades industry to identify labor issues, skills training issues, and training programs, and other needs might be coordinated through this new local campus resource.

[1] *Aquidneck Island's Economic Clusters: An Analysis*, University of Rhode Island, Rhode Island Economic Development Commission, 2002.

Aquidneck Island may be able to capture a larger share of marine-related industries. In addition to various boat building niches, the area's access to water and its mass of boat service industries will benefit from an increased number of boats in the area. This number can be increased through the following:

- Facilitate marina development, through local policies focusing on permitting of upland as well as waterside improvements and promote marina-supporting upland resort development that enhance the investment opportunities through a mixed-use approach. By capitalizing on the strong demand for new second-home development, suitable areas could be allocated as strategic land areas. Full-service, mixed-use marina village areas offering access to high-quality marinas as well as other amenities could cater to those affluent persons seeking leisurely lifestyle alternatives. By providing this residential feature, the Island would help keep high-end, locally-purchased boats in the area, thus fueling increased demand for services, parts and other such employment.

- Promulgate marine-related land and development performance standards through zoning, zoning overlays, or direct involvement in an LRA to manage growth. These actions will protect waterfront land against highly profitable residential development and other high-value waterfront uses. Such zoning schemes have helped maintain the depth and breadth of marine-related uses in Annapolis, Maryland. The overlay should contain land use regulatory restrictions as well as tax incentives, which might include "current use" provisions, tax abatement, and marine-based business tax exemptions. Given the dwindling availability of water-accessible land for boat-building/servicing industries, such measures will give Aquidneck Island an increasingly important regional and national competitive advantage in capturing greater shares of these industries.

- Promote the use of the State's Project of Critical Economic Concern (CEC) mechanism that is already available to accelerate marina and marina-village development.

Implementation suggestions for marina and marine-related uses are *Processes: Special Area Management Planning (SAMP),* p. 6-18*; Standards: Marina and Marine-Related Uses,* p. 6-29*;* and *Tools: Projects of Critical Economic Concern,* p. 6-33*,* among others.

Tourism and Recreation

Despite its importance to the local economy, the trends analyses presented earlier in this *Master Plan* identify tourism as an industry with modest growth trends and prospects. Notwithstanding these findings, this *Master Plan* attributes the weakness of these outlooks to the somewhat limited focus associated with current attractions and supporting uses. By diversifying the character and locations of the Island's tourism amenities, this *Master Plan* seeks to promote additional growth in tourism/recreational development.

The economic strategy for the West Side should facilitate marina and marina-related upland resort developments. Marina development and

boater-focused resorts are likely to enjoy strong market support, and will enhance an already-strong market for second-home, affluent householders. While typical visitors currently spend money on dining, accommodations, and souvenirs, the increased presence of second-homes – rather than additional lodging facilities – will increase visitor spending and diversity such spending to items such as home improvement products, furnishings, groceries and boating services and supplies for marina resort developments.

The strategy includes developing portions of a heritage/recreational trail along the West Side. Aquidneck Island's current tourism amenities cluster around Newport Harbor and the Newport Mansions. Despite its rich array of historic features and scenic qualities, Aquidneck Island's towns currently offer limited exposure to such amenities, as well as limited opportunities for active outdoor activities. Specific components of this trail concept should include:

- Development of a high quality graphic system for identification and interpretation of area heritage and recreational resources. The system should be graphically linked to a West Side way-finding system, which will direct seasonal travelers along the north/south corridors to better distribute traffic and direct motorists to transit alternatives.
- Commitment to a multi-year promotional and informational program to market the trail system.

Development opportunities may be revealed by investigating the potential for a multi-purpose/arts/entertainment facility and advance its development in a location that is well served by parking and transit. While Aquidneck Island's tourism attractions currently focus on historic mansions, sailing, and dining, its proximity to Providence and Boston, combined with its scenic/resort qualities, give it a strong location for large-scale entertainment venues. Despite Newport's music festivals and its active arts community, the Island does not contain adequate venues to host events and/or educational programs. Given its array of historic, scenic, and waterfront amenities, areas targeted for mixed-use development could present excellent opportunities for such development. For *Implementation* suggestions, see *Processes: Heritage Trail/Tourism Programs,* p. 6-37 and *Standards: Commercial and Mixed Use Development,* p. 6-28.

Affordable Housing as an Economic Strategy

The need for affordable housing should be advanced within the West Side as part of the overall economic strategy. This approach fulfills social needs and community goals of diversity. In addition, the provision of affordable housing is directly linked to the ability of the Island to support the range of employment opportunities needed to fulfill the vision for the West Side. This *Master Plan* promotes the development of affordable housing by leveraging the transfer and redevelopment of publicly owned land. The prospective transfers of large land areas and former military housing under the auspices of BRAC, PPV or other initiatives, open a doorway for providing affordable housing. There are many ways in which internal subsidies and external resources can be combined to provide below-market unit costs.

These include utilizing regionally-available subsidies linked to Newport's Hope VI project commitments. Information on *Implementation* includes *Tools: Provision of Affordable Housing as a Condition on Approval of PPV Housing Redevelopment,* p. 6-33 and *Tools: Inclusionary Zoning, Inclusionary Conditions or Impact Fees for Affordable Housing,* p. 6-33.

Mixed-use "Lifestyle Center" Development

As discussed in the Growth Center concept for Newport, the anticipated realignments to the Pell bridge access ramps will create substantial new development parcels. Given its general location and size, over time this property will likely present an attractive development opportunity. While the housing market offers the strongest short-term opportunities, this property should more appropriately be reserved for developments that can provide amenities, contribute new elements or fill unserved niches in the community. Such niches offering potential include health care or fitness-related facilities, entertainment venues, office uses, as well as housing, supportive retail uses, and other complementary uses, such as recreation. Properties such as this present rare opportunities for the Aquidneck Island community and should be reserved for developments that can serve the economic and community values supported within this overall plan, rather than to serve more easily identified development solutions that provide shorter-term answers.

Entertainment

Certain types of entertainment venues may comprise a "niche" market opportunity that could be supported in appropriate locations along the West Side. While Aquidneck Island's tourism currently focuses on such attractions as historic mansions, sailing, and dining, its proximity to Providence and Boston and scenic/resort qualities make the West Side a viable candidate for some types of entertainment venues. Despite Newport's large music festivals and its active arts community, the Island does not contain practical moderate scale venues to host regular performances or arts-oriented events and/or educational programs. Wolf Trap in Virginia and Tanglewood in Massachusetts are examples of attractive venues in communities that have built reputations as arts-related destinations. Given its array of historic, scenic, and waterfront amenities, areas targeted for resort-related, or mixed-use development along the waterfront could present excellent opportunities for such facilities. Redevelopment of one of the tank farms with such an entertainment venue should be considered, among other options.

Commercial Offices and Health Care

The health care industry may offer opportunities for additional growth and development. While such do not present immediate, large-scale development opportunities, the West Side Study could most likely support additional health care-related development over intermediate and long-term time frames. In encouraging this growth, it should identify locations for medical office development, and possibly for outpatient service centers. Such locations are likely to include locations in the northern segments of the West Side corridor, as well as locations in or near new mixed-use developments.

The commercial office market is not likely to support significant new development in the foreseeable future, but circumstances could change, depending in part on the evolution of uses at the Newport Naval Station and the success of technology transfer in creating new opportunities. Steps to prepare for potential office expansion on the West Side could include:

Following the BRAC round, analyze base co-location scenarios based on the closures at other naval bases, along with the potential for continued defense funding involving missions that may be related or similar to the local Navy missions.

The economic strategy should identify new land areas in the Study Area that will offer suitable areas for high-end office and/or business park development. Such land areas are likely to include the former Naval Hospital, tank farm areas, and other land located between West Main Road and Burma Road (future Shoreline Drive).

Other helpful actions could include:

- Assemble business parkland.
- Promulgate zoning overlays to accommodate office/lab uses, along with supporting uses such as lodging. Such overlays should impose upscale design standards addressing issues such as signage, lighting, curb materials, and the like.
- Fund new infrastructure needs through industrial bond issues, issued by authorities such as the RIEDC, Rhode Island Industrial Finance Commission, and others.

Business Retention/ Assistance

In addition to accommodating emerging development opportunities, the stewards of the West Side should also take measures to assist business and anticipate long-range business issues in the community. Such measures include:

- Promulgate home-based business zoning – this measure enhances local entrepreneurs' opportunities for remote commuting (by computer) as well as in new business formation.
- Initiate community discussions regarding airport improvements – As a business location, Aquidneck Island suffers from relatively difficult access. The local airport provides an access mode that can serve as an important amenity in attracting and retaining executive as well as staff labor and corporations. While airport improvements need not involve intensified flight activity, it will require investments in the airport's facilities and amenities.
- Maintain job training programs – This recommendation must accompany ongoing communications with the business community (various industries) in order to identify changing skill requirements and monitor effectiveness.

For *Implementation* items, see *Tools: Innovation Factory,* 6-36*; Tools: Home-based Business Zoning,* 6-36; and *Standards: Commercial and Mixed Use Development,* 6-28.

TRANSPORTATION

Objectives of the *West Side Master Plan* include provision of transportation capacity and safety improvements that maximize use of existing infrastructure to avoid impacting privately owned land including businesses and residents. To date, many of the potential improvements along West Main Road have been made within the existing right-of-way, and limited (if any) publicly-owned land is available for intersection improvements.

The following section addresses north-south transportation improvements for the West Side planning area. These recommendations are also summarized in *Figures 5-9, 5-10 and 5-11* which portray potential improvements in Newport, Middletown and Portsmouth respectively (pp. 5-54, 5-59).

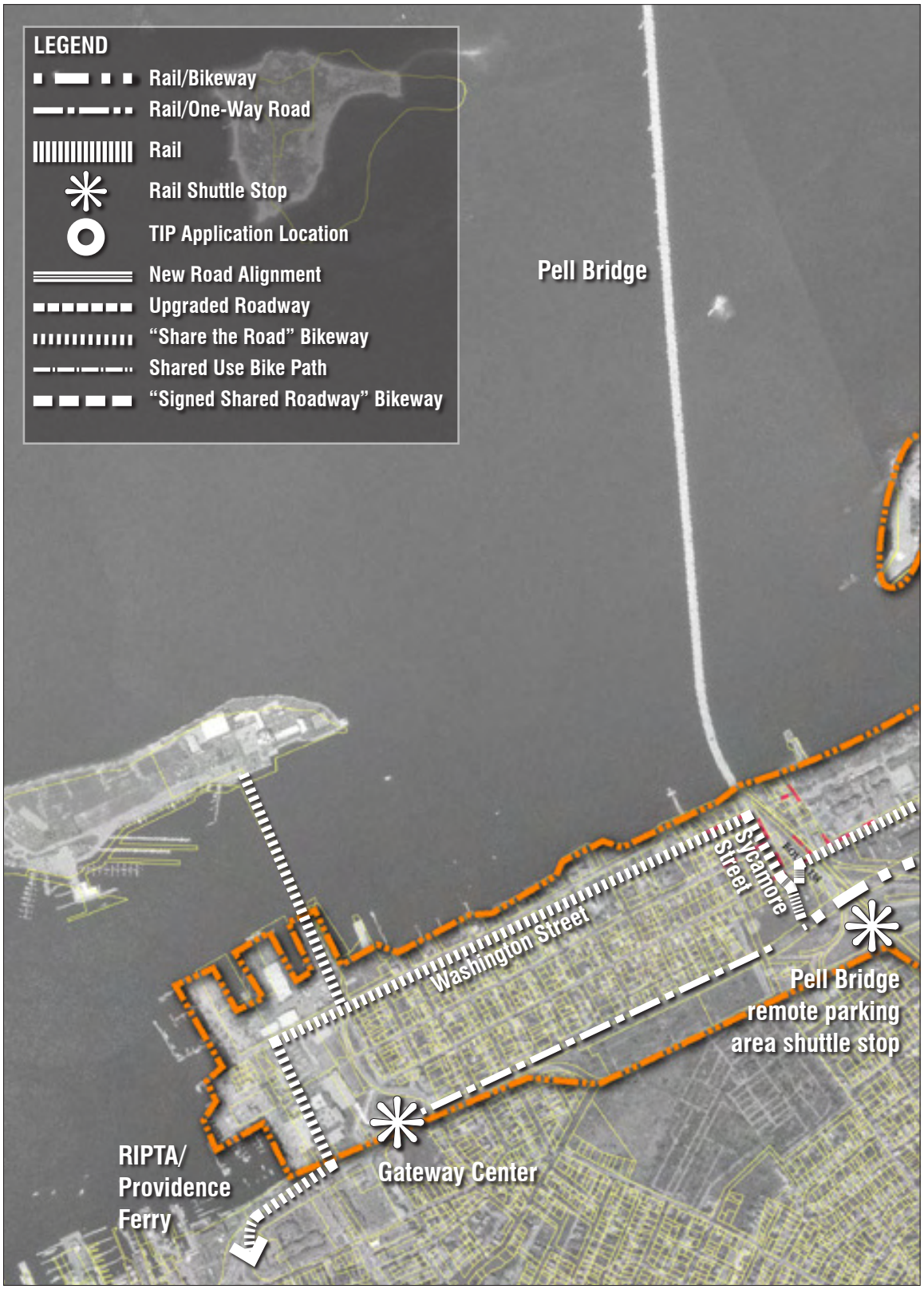
Multi-modal transportation improvements are recommended to fully utilize the existing infrastructure with minimal investment in new construction. These improvements include short term, interim, and long term improvements. Short term improvements are recommended for implementation as part of the Transportation Improvement Program (TIP). Interim improvements recommend that the environmental and design process be initiated now for implementation within ten years. Long term improvements include those that may be required ten to twenty years in the future. The planning strategy includes preserving corridor rights-of-way and other actions to protect future options so that implementation of longer term improvements are not precluded.

These strategies have been prepared to be consistent with local, state and federal goal-setting including *Transportation 2025 (State Guide Plan Element 611),* the *Aquidneck Island Passenger Rail Corridor Study*, various ongoing Rhode Island Department of Transportation (RIDOT) study and design projects, and the AIPC's *West Side Transportation Guide Plan.*

West Main Road

Transportation Recommendations: Newport

Figure 5-9




Gate 1
Gate 4/CCRI
shuttle stop
Third Street
J.T. Connell Highway
Admiral Kalfbus Road
Coddington Highway
Shoreline
Drive

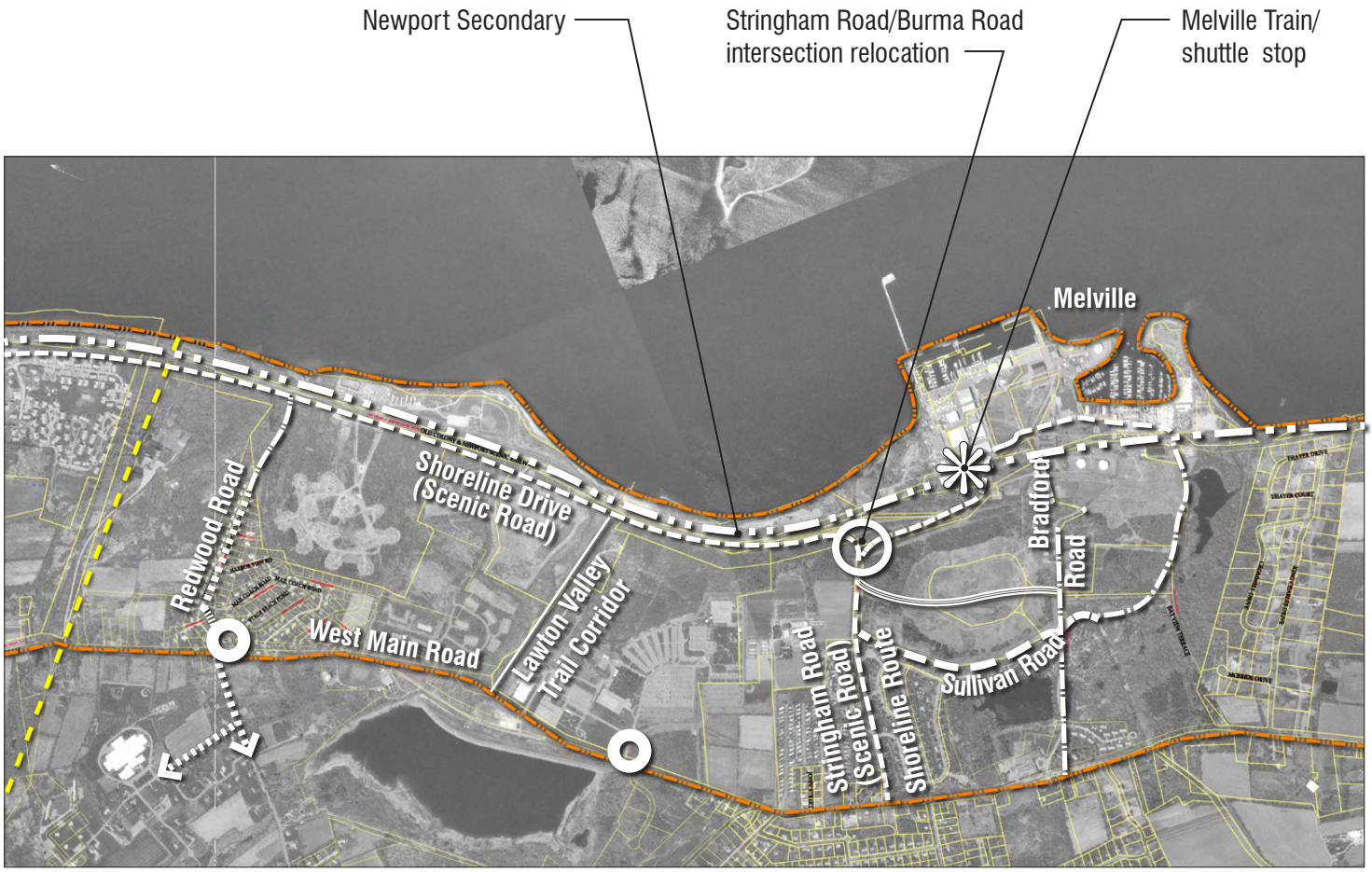
Transportation Recommendations: Middletown

Figure 5-10


Shoreline Trail
(McAllister's Point
to Carr Point)
Greene Lane scenic
overlook public access
(Scenic Road)
Greene Lane (Scenic Road)
Stop n'
Shop
Oliphant
Lane

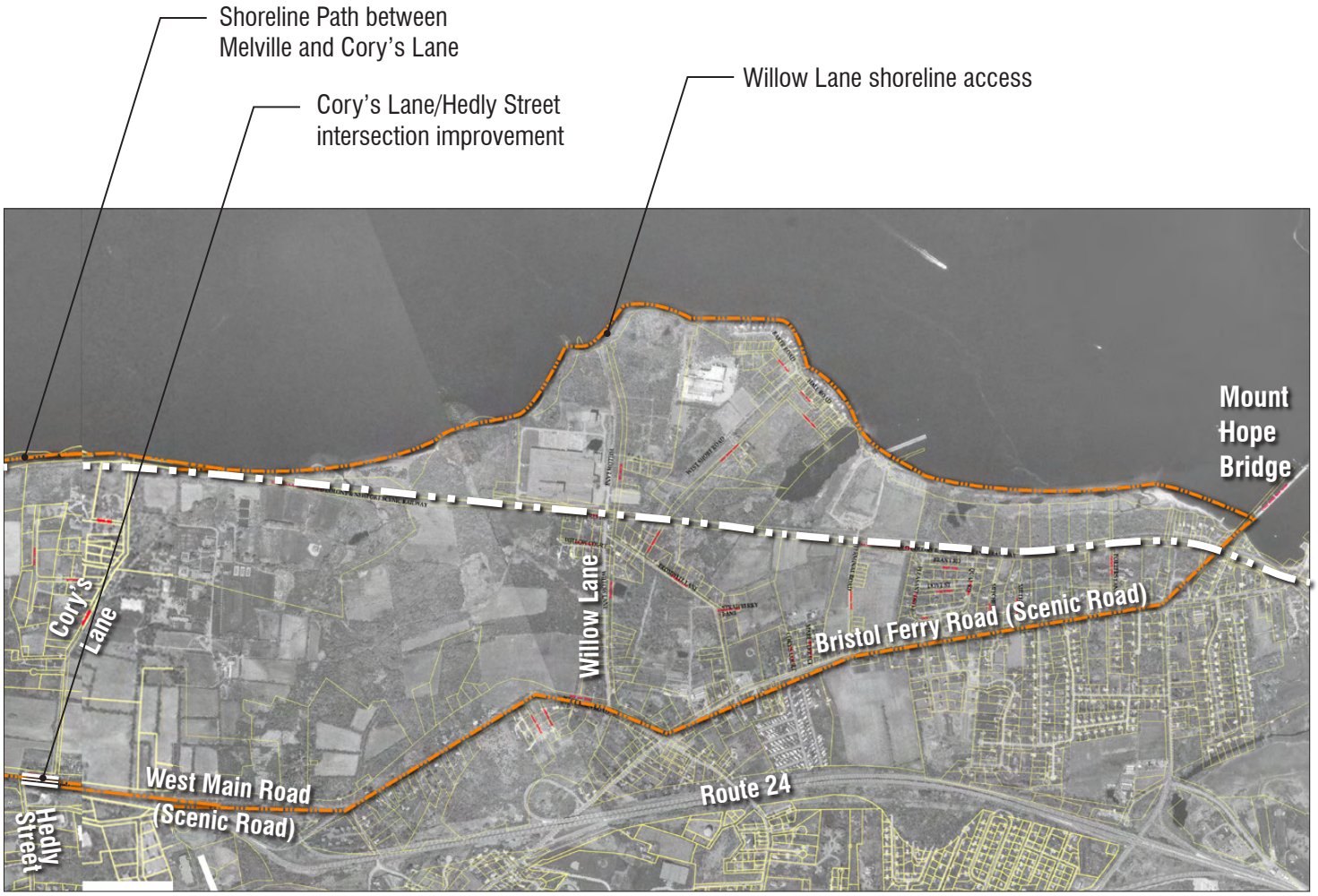
Transportation Recommendations: Portsmouth

Figure 5-11



LEGEND

- Rail/Bikeway
- Rail/One-Way Road
- Rail
- Rail Shuttle Stop
- TIP Application Location
- New Road Alignment
- Upgraded Roadway
- "Share the Road" Bikeway
- Shared Use Bike Path
- "Signed Shared Roadway" Bikeway


Shoreline Path between
Melville and Cory's Lane
Cory's Lane/Hedly Street
intersection improvement
Willow Lane shoreline access
Mount
Hope
Bridge
Cory's
Lane
Willow Lane
Bristol Ferry Road (Scenic Road)
West Main Road
(Scenic Road)
Route 24
Hedly
Street

Roadways and Streets

There are a number of ongoing transportation improvement projects being advanced by RIDOT that can help accomplish the vision of the *West Side Master Plan* as they are designed and constructed. Part of the pragmatic transportation planning strategy is to influence several ongoing study and design projects to assure that recommendations of the *West Side Master Plan* are integrated into them.

Ongoing Projects

RIDOT has several ongoing projects in the West Side. The following general positions are advocated as AIPC comment to RIDOT:

Pell Bridge Ramp Realignment

RIDOT is currently considering the right-of-way and real estate issues associated with two alternatives. Realigning the Pell Bridge Ramp, Concept-4A2 (VHB 3/11/03), represents the preferred alternative to simplify access to Island destinations including downtown Newport and the Navy property, improve safety, and open up land for private development. Constructing this alignment would facilitate mode-transfer integration from private vehicles to bus, rail or bikeway. A remote parking lot would provide seasonal parking during the peak tourism season and facilitate access to Newport events such as the Jazz and Folk Festivals, Tall Ships, and July Fourth fireworks. This seasonal lot could be surfaced with porous pavers to minimize stormwater runoff. Safe pedestrian access must be provided to a busway or rail shuttle station located west of and immediately adjacent to the eastbound off-ramp to Newport and the Newport Secondary. A one-way southbound roadway, located within the right-of-way of the Newport Secondary, is proposed to provide direct traffic access to downtown Newport.

The *West Side Master Plan* advocates that a priority be placed on reserving the Newport Secondary right-of-way between the Pell Bridge and the Gateway Center for rail and transit service. The one-way southbound road could be used by buses in the southbound direction (northbound busway service would use local roads including America's Cup Avenue and Farewell Street). Construction of the roadway should not affect operation of the Old Colony and Newport Railway and Newport Dinner Train in this section. If sufficient right-of-way is available, a bike path could also be considered. This would be a lower priority as cyclists may choose an alternative route via local streets in the Point neighborhood.

For information on coordination, BRT and bikeway implementation, see *Processes: RIDOT Endorsement and Regional Input,* p. 6-48; and *Standards: RIDOT Criteria and Standards for Bicycle Network Designation,* p. 6-51.

Coddington Highway/ J.T. Connell Highway

RIDOT is reviewing several proposals including RIDOT's preferred four-lane undivided roadway with left turn lanes at signalized intersections. The Pell Bridge Alignment must be finalized prior to proceeding with the concept for this project. This *Master Plan* includes recommendations for this area that reinforce the opportunity to create an attractive "boulevard" appearance and a pedestrian-friendly edge along both sides of the roadway. A boulevard would be created with robust landscaping along the side of the street and not with a landscaped median.

The cross sections in *Figure 5-12* (p. 5-62) portray these ideas. This concept would restrain lane width to 11 feet (reduced from the 12-foot AASHTO standard in accordance with Context Sensitive Design) to accommodate a 2-foot textured pavement between travel directions for traffic calming. No additional right-of-way would be required for the textured median compared to the RIDOT preferred alignment.

Assuming that bike path recommendations of the *Aquidneck Island Passenger Rail Study* are implemented with construction of a bike lane along the Newport Secondary south of Gate 4, curb offsets should be reduced to three feet south of Gate 4 and increased to five feet north of Gate 4 to accommodate "signed shared roadway" bike access. Crosswalks with neckdowns should be provided at signalized intersections at CCRI/Gate 4 and at the RK Town Center to improve pedestrian safety, increase mobility, and decrease pavement width.

There is a current plan to close off the northern end of Girard Avenue (between Maple Avenue and Coddington Highway). Closing Girard Avenue will create an additional amount of traffic at the newly constructed John F. Chafee Boulevard intersection with Coddington Highway. Although this intersection does not currently meet signal warrants, RIDOT will install signal conduits as part of a roadway upgrade. A roundabout could be considered at this intersection to avoid the need for a signal.

A uniform five feet of grass or landscaping should separate the curb from a five-foot sidewalk. Any utility poles relocated as part of this project should be located between the sidewalk and the adjacent property if sufficient right-of-way is available. In areas with constrained right-of-way, poles should be located within the landscaped area between the curb and the sidewalk. Curb cuts should be reduced to one, or at most two, access point from the roadway to each property. The *Implementation* discussion on *Standards: General Principles of Design* provides further access management recommendations for redeveloped property. For ideas regarding RIDOT coordination, bikeways and roadway landscape standards refer to *Processes: RIDOT Endorsement and Regional Input,* p. 6-48*; Processes: Bicycle Route Suitability Reports,* p. 6-49*; Standards: RIDOT Criteria and Standards for Bicycle Network Designation,* p. 6-51; and *Standards: Scenic Roadways and Vistas,* p. 6-30.

Armstrong Bridge Replacement/ Gate 4 Access

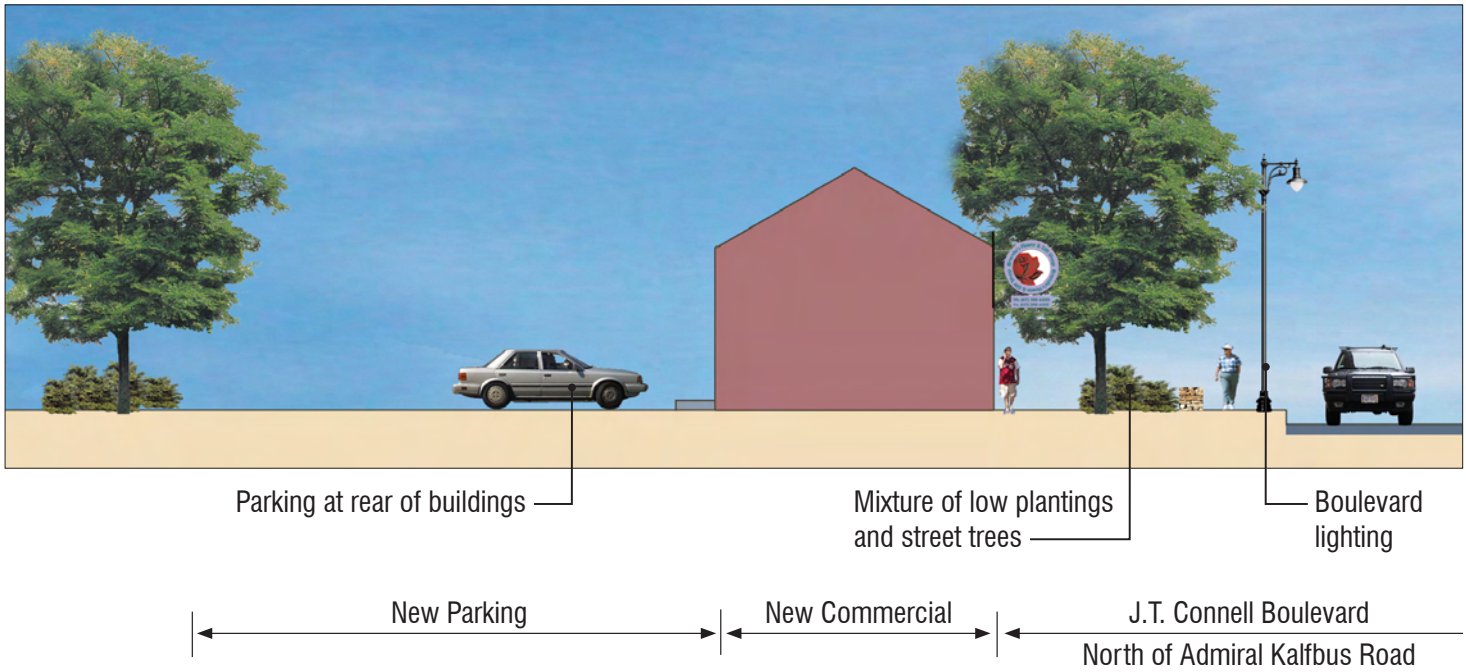
It is recommended that improvements to this Coddington Highway intersection include adequate pedestrian crosswalks, a connection from a "signed shared roadway" bikeway on Highway to the Newport Secondary, and that land be reserved for future construction of a transit stop and passenger drop off area. See *Processes: RIDOT Endorsement and Regional Input,* p. 6-48 for *Implementation.*

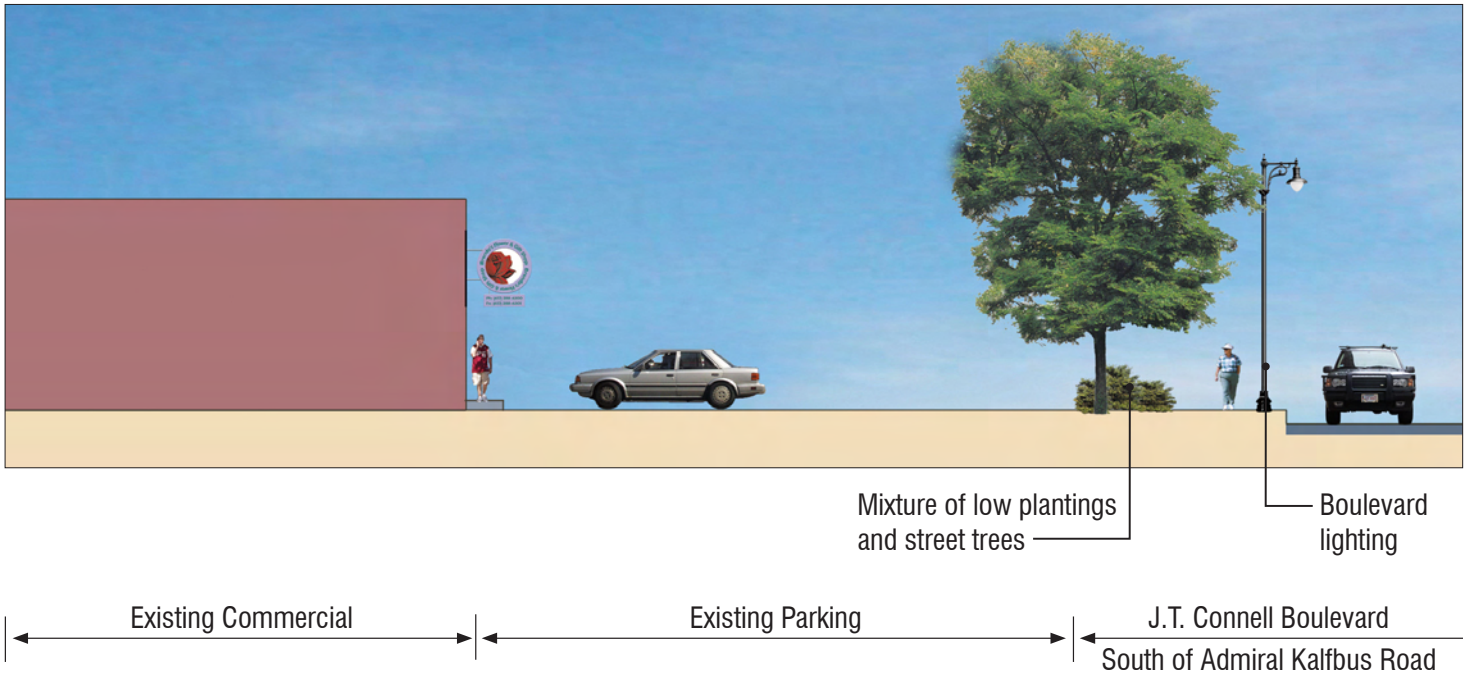
West Main Road, Coddington Highway to East Main Road

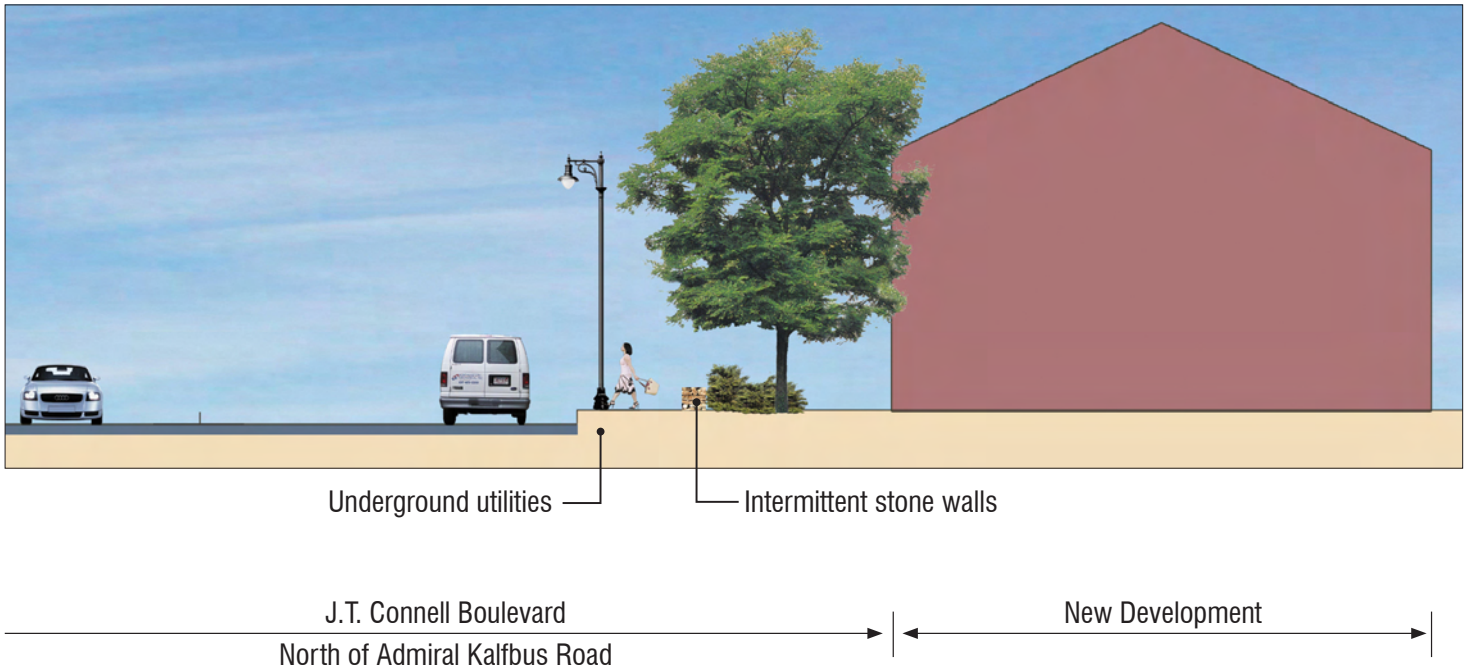
RIDOT is proceeding with design improvements for this congested roadway segment. This project is currently at the 75% design stage. East Main Road construction must be completed prior to proceeding with this West Main Road project. It is recommended that left turn lanes, pedestrian crossings and sidewalks be included as part of the project design. The addition of a

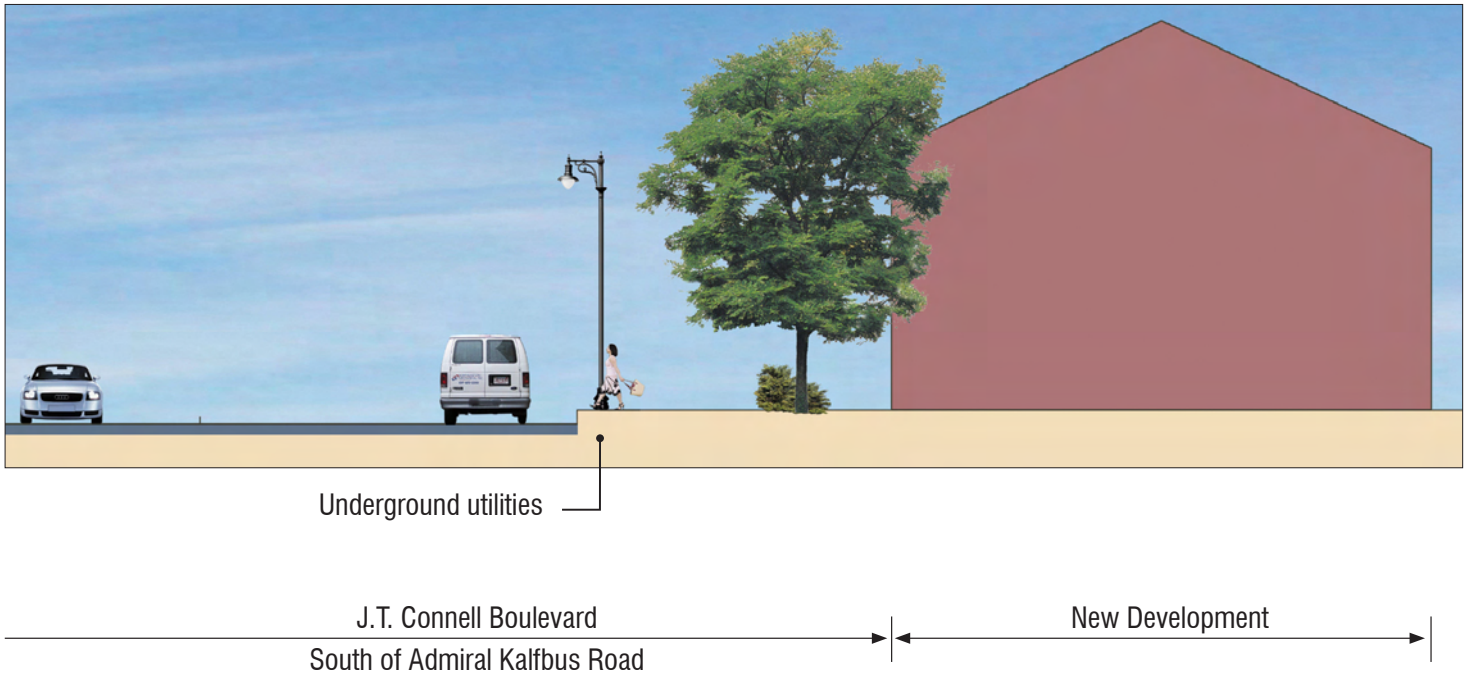
Sections at J.T. Connell Highway

Figure 5-12






Underground utilities
Intermittent stone walls
J.T. Connell Boulevard
North of Admiral Kalfbus Road
New Development


Underground utilities
J.T. Connell Boulevard
South of Admiral Kalfbus Road
New Development

long, free right turn lane (not signal controlled) would be a significant improvement to traffic flow from West Main Road southbound to Newport Harbor. It is recognized, however, that a free right turn would make this intersection more challenging for pedestrians. These issues must be addressed through final design. *Note*: The RIDOT study considered extending Coddington Highway east through a neighborhood to meet with East Main Road near Valley Road. This alignment is *not* part of the *West Side Master Plan*. For *Implementation* coordination, consult *Processes: RIDOT Endorsement and Regional Input,* p. 6-48.

West Main Road Resurfacing Project, Middletown

RIDOT is scheduled to resurface Route 114 in Middletown in 2006. Sidewalk resurfacing is in accordance with recommendations of the *West Side Master Plan* and recommendations of the Walkability Workshop held in May, 2004 in Middletown. Sidewalks will provide a major improvement in pedestrian safety and will improve access for Rhode Island Public Transportation Authority (RIPTA) bus patrons. Pedestrian crosswalks will be restriped as part of this project. Typical sections at West Main Road are presented in *Figure 5-13* (p. 5-66).

For more information on advancing the regional positions on these projects, see *Processes: RIDOT Endorsement and Regional Input,* p. 6-48.

Short Term Improvements

Two clusters of short term recommendations have been advanced to improve current transportation deficiencies in the corridor: improvements along West Main Road and a combination of alignment changes and other improvements along Stringham Road and its connections to Burma Road (Defense Highway).

The West Main Road project has been selected for further consideration in the FY06-07 Transportation Improvement Program (TIP). The Stringham Road/Burma Road application was not selected and should be submitted again for consideration in the FY08-09 TIP process, following transfer of these roadways from the Navy to state or local control. For more information on the TIP process, see *Processes: Transportation Improvement Program*. Any short term improvements should adhere to principles outlined in the *Implementation* section of this document to the greatest extent possible (see *Standards: General Principals of Design*, p 6-51). Prominent aspects of the short term improvements include the following ideas.

West Main Road Left Turn Lanes

Although the volume of vehicular traffic on West Main Road (Route 114) and East Main Road (Route 138) is roughly equivalent, West Main Road is more congested, due to more traffic signals and adjacent commercial development. This road provides access to many Aquidneck Island destinations including the Navy base, Raytheon, retail developments, Middletown Library, and other services. To date, RIDOT has conducted traffic improvements within the existing right-of-way. Additional improvements, including construction of free right turns and left turn storage lanes, will require acquisition of private land.

Left turns cause significant disruption to the West Main Road corridor by blocking a travel lane and forcing vehicles to utilize one lane of travel.

This occurs at many of the crossroad locations where left-turn lanes are not provided. In addition, access into the many retail and commercial driveways cause even further disruption to flow. Of the 14 signalized intersections between Route 24 in Portsmouth and Coddington Highway in Middletown, all but five major intersections include left turn lanes. Many new West Main Road developments have constructed left turn lanes and signalized intersections. RIDOT is currently designing intersection improvements for the East Main Road and Coddington Highway intersections on West Main Road. The current TIP application includes left turn lanes and geometric improvements to increase capacity and improve safety between Raytheon in Portsmouth and Forest Avenue in Middletown. Intersections to be considered include:

- Raytheon and Union/Redwood in Portsmouth
- Oliphant Lane in Middletown
- Super Stop & Shop in Middletown
- Browns Lane in Middletown
- Forest Avenue in Middletown

A northbound left turn lane is proposed to increase safety for left turning vehicles at the Raytheon campus in Portsmouth. A left turn lane would serve as a safety refuge for vehicles along this section of Route 114, where adjacent development decreases in comparison to locations further south, and traffic speeds increase. RIPTA provides service to Raytheon employees on the Route 60 line. The potential for bus pullouts should be considered during design to improve capacity of the travel lanes. It is recognized, however, that RIPTA does not favor the use of bus pullouts since they claim that the time needed to get busses back into the traffic flow impedes the schedule. Future defense–related development is possible at the Raytheon campus in Portsmouth. Safety along this segment is a major consideration for the 1,800 Raytheon employees and for any future defense-related employees. A fatal accident in 1999 demonstrates the need for a northbound left turn lane. Construction of Boys Town on the east side of this intersection will increase the need for safety improvements.

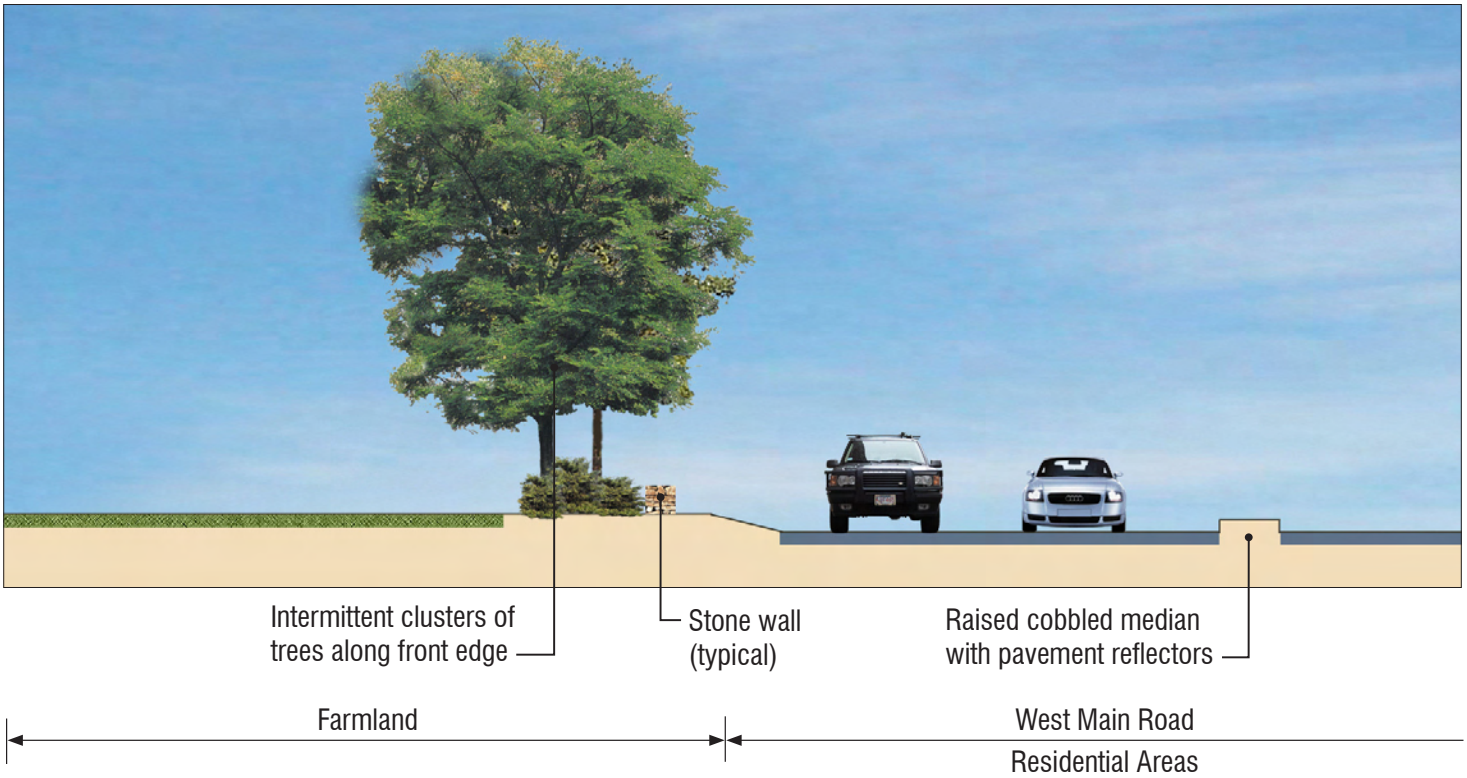
Union Street connects East and West Main Roads and provides access to Portsmouth Middle School. Southbound school buses must make this left turn without the benefit of a dedicated turn lane. This decreases safety for students aboard the bus and decreases capacity of West Main Road during the morning commute by reducing through traffic to the right lane.

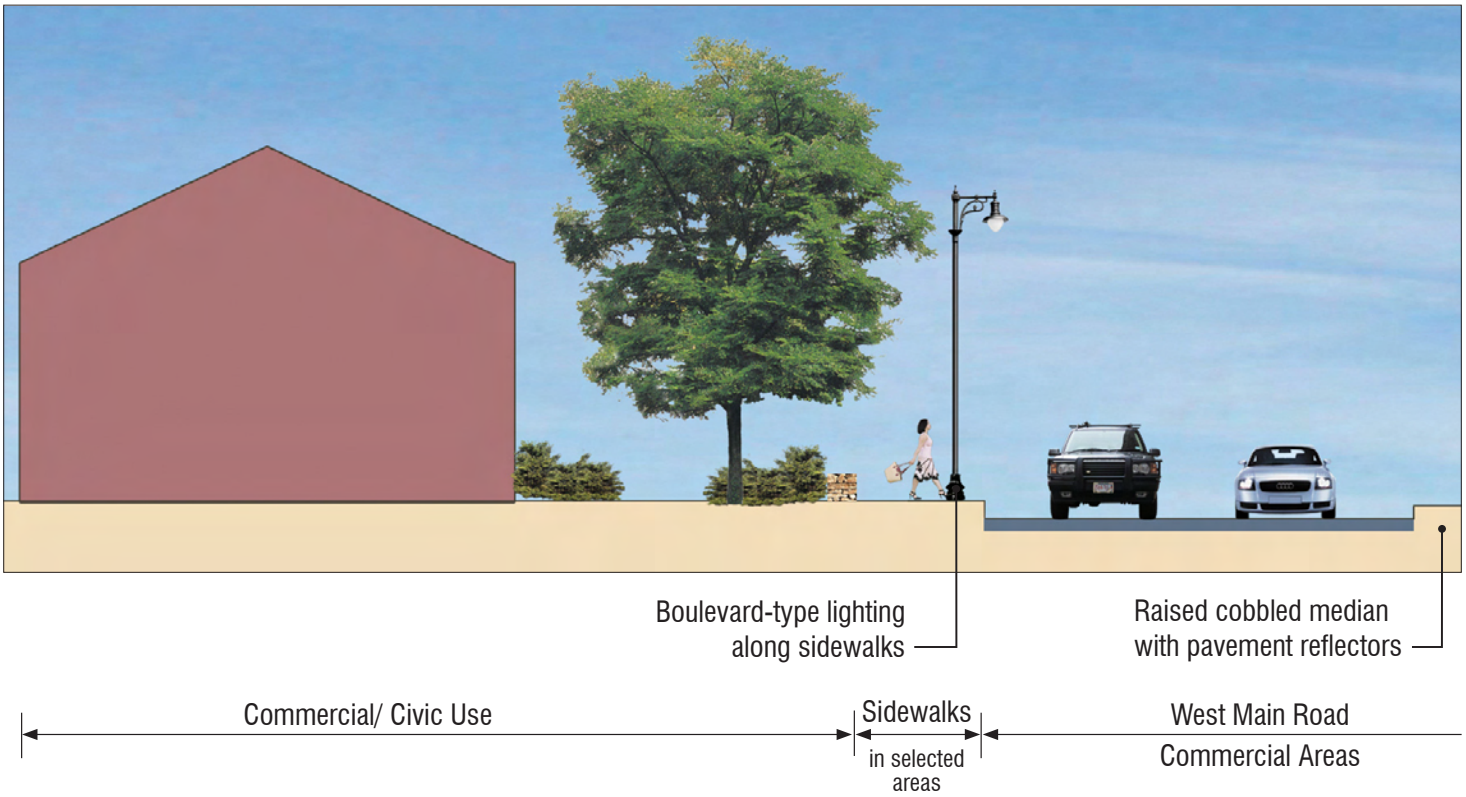
A cross-Island connection is provided between West Main Road and East Main Road at Oliphant Lane in Middletown. A left turn southbound lane is proposed to provide a safety refuge for left turning vehicles and to improve the capacity by providing two through travel lanes. Oliphant Lane provides access to industrial development located north of Newport State Airport and therefore includes truck traffic.

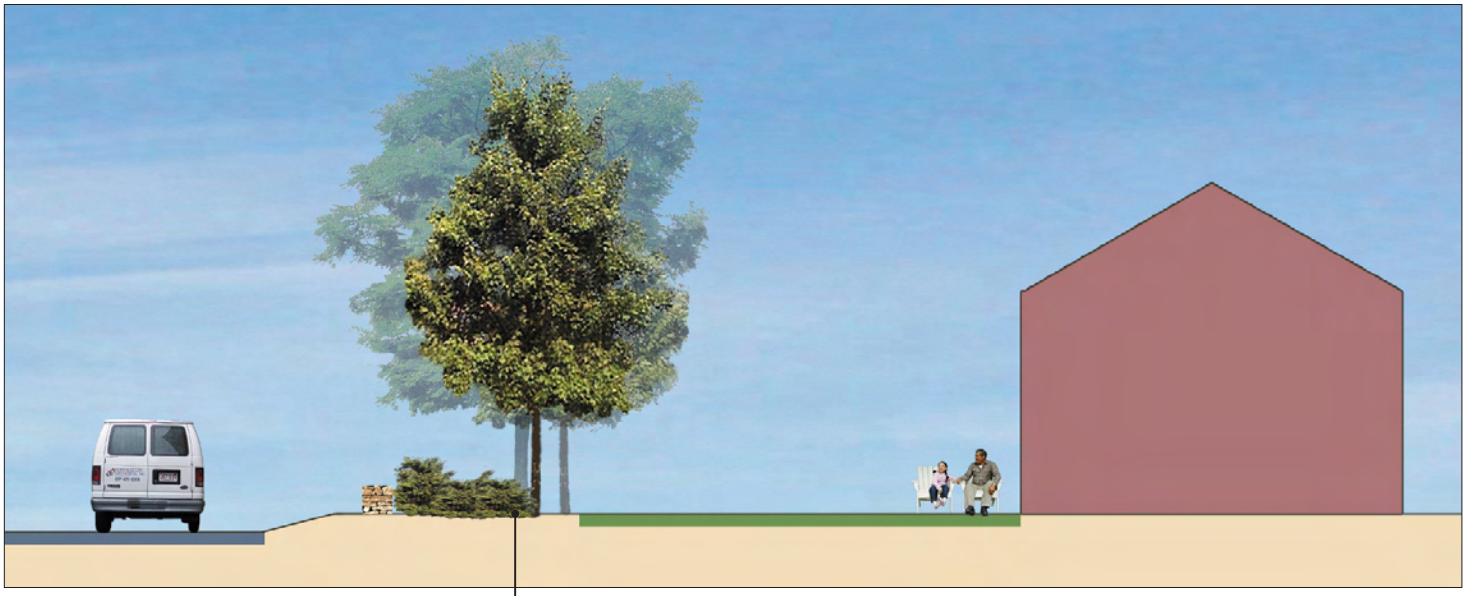
Turning lanes are proposed to accommodate both northbound and southbound traffic at the Super Stop & Shop/McDonald's existing traffic signal in Middletown. Stop & Shop is a stop on RIPTA's Route 60 line, providing service for both employees and customers. The potential for bus pullouts should be considered during design to improve capacity of the travel lanes.

Sections at West Main Road

Figure 5-13







Landscaped buffer along residential edge

West Main Road
Residential Areas

Residential Property

Clusters of street trees and low plantings

West Main Road
Commercial Areas

Sidewalks
in selected areas

Commercial Building

Parking in Back

Browns Lane provides access to neighborhoods, the golf course, cemetery, office building and auto dealers in an area of West Main Road with peak traffic volumes. A left turn lane is proposed to improve safety for northbound motorists turning left onto Browns Lane.

Forest Avenue provides access to residential neighborhoods, Newport State Airport, and East Main Road. It also provides convenient access to Middletown Town Hall, Gaudet Middle School and the beaches from Middletown neighborhoods to the north and west. Construction of a left turn southbound lane at this intersection would increase capacity along the more congested southern section of West Main Road in Middletown, improve access to the Navy, and improve access to tourist destinations in Newport. *Implementation* for these improvements is detailed in *Processes: West Main Road Left Turn Improvements,* p. 6-48.

Hedly Street/Cory's Lane Intersection Improvement and Visitor Center

Realignment of the west end of Cory's Lane to intersect with Hedly Street at the existing signalized intersection or roundabout would remove the first and possibly the second signalized intersections encountered southbound from Route 24. By combining these two intersections (currently located within 300 feet) with left turn lanes, safety would be improved for turning traffic and for through traffic on West Main Road. Hedly Street is a connector road to the town transfer station, industrial park, Middle Road, East Main Road and Portsmouth Town Hall. Cory's Lane is the location of Carnegie Abbey Golf Course, several private schools, and Green Animals. Careful realignment could retain the beauty of the agricultural land west of West Main Road and provide an opportunity to construct a visitor center. This new gateway and Aquidneck Island welcome center could help reduce traffic congestion island wide by providing efficient directions to island attractions. Ideas about *Implementation* are described in *Processes: Hedly Street/Cory's Lane Intersection Improvement and Visitor Center,* p. 6-48.

Stringham Road/Burma Road Intersection Improvements

Improvement of this intersection, together with construction of a connection through the Navy base, will be one of the most important transportation improvements in the corridor as it will encourage use of the Burma Road (future Shoreline Drive) corridor as an alternative to West Main Road. By improving the north- and south-end connections, Island residents, employees, and tourists will be afforded a scenic and uncongested bypass.

Removal of the awkward and dangerous turn at this intersection will reduce roadway length by approximately a half mile in the immediate project vicinity. Both Stringham Road and Burma Road (Defense Highway) rights-of-way are owned by the Navy. The Navy would have to relinquish the land voluntarily for construction. Intersection improvements will make the underutilized Burma Road (Defense Highway) a more attractive alternative north-south route on Aquidneck Island and will improve access to the Navy base. Access to existing and proposed marine related development in Melville will also be improved.

The steeply graded wooded land in this area is currently either owned

privately by Founders Homestead Farms, Inc. or is Navy property. The proposed intersection would extend approximately 1300 feet from elevation 125 at the west end of Chases Farm field to elevation 30 along Burma Road near the Weaver Cove boat ramp access ramp. This 7.7 percent grade would not be suitable for truck traffic without a climbing lane but would be appropriate for passenger automobiles. The West Side Task Force has indicated that none of the agricultural fields at Chases Farm should be impacted by roadway realignment. Retaining walls and grading will be required to avoid this impact.

Burma Road is a north-south, two-lane urban collector with an approximate roadway width of 28 feet (including bike lanes), with a posted speed limit of 35 mph. The speed limit has been reduced from 45 mph to increase safety for cyclists on the commuter bicycle lane. Stringham Road is a minor east-west, two-lane urban collector with a 20- to 24-foot (approximate) roadway width and with a posted 25 mph speed limit. Several Navy residences have driveways onto Stringham Road.

Future Improvements

Shoreline Drive

Beyond the initiatives discussed above, no single additional transportation improvement would better serve the traffic on this island than to open a road between Coddington Highway in Middletown and Stringham Road in Portsmouth via Burma Road. This change in accessibility to Burma Road would be a significant enhancement to the traffic flow on the island and to the quality of life of its residents. The ability to avoid fourteen traffic signals on West Main Road via a scenic Shoreline Drive would have many benefits:

- West Main Road traffic volumes would be reduced with resultant improvements in safety. This would reduce traffic congestion and enable the road to function at a higher level of service, especially during peak traffic periods.
- Shoreline Drive would provide a convenient and direct access from Route 24 and other up-island locations to downtown Newport destinations.
- Shoreline Drive would provide convenient scenic access from Newport Harbor, Pell Bridge, and the Navy to Melville and Raytheon (via a rear entrance) from Newport Harbor. The Navy would benefit with improved access for employees, contractors and truck deliveries (via Greene Lane), especially with construction of the new North Gate, located near Burma Road and Coddington Cove.
- Retail and other commercial uses on West Main Road would benefit from increased patronage as traffic becomes more manageable.
- Tourism would benefit from an additional scenic attraction. The Shoreline Drive would be an important addition to Ocean Drive as a road with unparalleled views of the East Passage of Narragansett Bay, Pell Bridge, Jamestown, and Prudence Island.
- Melville marine businesses would benefit from increased access to Newport destinations. This would make the marine condo development proposed at Weaver Cove more attractive.

- Burma Road, would be more fully utilized to bear its burden of north-south traffic on the island.
- A continual utility corridor along Shoreline Drive and / or the Newport Secondary could provide public right of way for future subsurface utility installations.

Stringham Road and Defense Highway rights-of-way and roadways are currently owned by the Navy. The right-of-way must be transferred to state or local control or an agreement must be reached between the Navy and state/ local transportation agencies prior to advancing Shoreline Drive as a viable north-south transportation alternative on the West Side. Such a route would require the Navy to relinquish the land voluntarily for construction since it is not subject to the State of Rhode Island's power of eminent domain for highway construction.

By extending Simonpietri Drive north to the Gate 17 Access Road and relocating the secure Navy fence line to the west, a key connection would be made to create a viable and attractive alternative to West Main Road. This Navy connection would provide the missing link necessary to avoid West Main Road congestion, especially on the southern section of this road. Further coordination is required with the Navy to secure the commitment of the federal government to relocate the secure perimeter.

Several Navy issues must be addressed to secure the alignment for a Shoreline Drive. Navy utilities must be protected. Response time from the Navy's relocated fire and emergency services building must be considered. Depending upon the final alignment, relocation or demolition of parking and building facilities could also be required.

The following issues must be resolved to advance this alignment:

- Agreements would have to be established for roadway ownership, maintenance, and jurisdiction. Jurisdiction of the roadway could be Exclusive (federal), Concurrent (federal and state) or Proprietary (state or local). This would be based on Navy law and reflect the original purchase of the property.
- This alignment would create two secure "islands." Building 11 (NUWC) and Building 10 would be separated from other secure areas, east of Shoreline Drive and would require a separate gate. The alignment would separate the new North Gate and Consolidated Headquarters from the rest of the base (railroad, Gate 17 Access Road, relocated security fence along Simonpietri Drive, and warehouse buildings would surround this area).
- Steam and utility lines must be considered with any grading required along this steep hillside. Access to Navy water lines must be secure.
- Response time from the Navy's relocated fire and emergency services building must be considered.

For related *Implementation* recommendations, see *Processes: Creating a Shoreline Drive*, p. 6-47 and *Resources: Creating Shoreline Drive,* p. 6-54.

Stringham Road and Burma Road Upgrades

Future upgrades on Stringham Road and Burma Road would be required to achieve attractive travel times on Shoreline Drive. All roadway improvements assume that the hairpin turn

at the intersection of these roads has been eliminated. Upgrades would retain the current two-lane roadway configuration while retaining sufficient right-of-way for long term roadway widening, if and when warranted. Minor improvements would be required to increase design speeds and resultant posted speeds to 40 mph on Stringham Road and 45 mph on Burma Road. One way to accomplish this would be to relocate the Defense Highway Commuter Bicycle Lane to the adjacent Newport Secondary right-of-way. Improvements in site distance (clearing brush), drainage, and minor grade and geometric improvements could likely be conducted within the existing right-of-way (assuming the land is transferred from the Navy). Access controls should be implemented to limit the number of curb cuts from future development. As indicated in the *Implementation* section *Standards: General Principles of Design*, p. 6-50, performance standards and design guidelines for highway corridors are included. Local land use controls are critical to maintaining the character and capacity of this road as the Shoreline Drive so that it does not become as densely developed as West Main Road. Assuming that the Burma Road is transferred to RIDOT, any curb cuts would be subject to the state's requirement for a Physical Alteration Permit.

Due to steep grades at the Stringham Road/Burma Road intersection, Burma Road may not be suitable for truck through-traffic. The northern portion of Burma Road should therefore be posted to warn trucks of steep grades. This would enhance the scenic character of this local roadway connection and serve as a traffic calming measure. Melville Marine Industries has a deeded right from the Navy to use Burma and Stringham Roads while East Passage Yachting Center's deed indicates the right to use Stringham Road. The Navy has designated that all truck traffic access the new North Gate via Greene Lane and the southern section of Burma Road (Defense Highway).

It is not feasible to create a parkway-type roadway which prohibits truck traffic. State legislation is required to enact a truck traffic restriction on a state road (presuming the roadway becomes state-owned). Neither RIDOT nor the State Traffic Commission has authority to enact a restriction on its own. It is very unlikely that a roadway with a truck traffic restriction could use federal funds for construction or maintenance since federal funds typically require the road to permit access to all users. Shoreline Drive, by its nature, will have several features which will limit its attraction to through trucking and buses. The 7.5% grade at the Stringham/Burma Road intersection and tight corners at four intersections (West Main Road/Stringham Road, Gate 17 Access Road/Burma Road, Simonpietri Drive extension/Gate 17 Access Road and Simonpietri Drive/Coddington Highway) will not be attractive for through trucking.

With these improvements, travel time from the West Main Road / Stringham Road intersection to the North Gate entrance would be reduced to approximately 8 minutes (or 9 minutes with 20 second signal delay). This would provide an attractive peak hour alternative to West Main Road with travel time between these two points of 9 minutes (or 11 minutes with a more likely 20 second signal delay at the 14 intersections).

The improvement and realignment of Burma Road (Defense Highway)

should be designed to accommodate an access drive along its border with the Raytheon campus, to the extent that a connection is determined to be desirable by the owners of that property. With anticipated expansion of the campus for defense-related industry, it would be prudent for Raytheon to reconfigure the internal vehicular circulation and parking lots for dual secure access to both Route 114 and Burma Road (future Shoreline Drive). This connection could provide congestion relief and a convenient route for employees who commute via the Pell Bridge and business-related traffic to NUWC. The specific location of such a connection would need to be coordinated to establish both low environmental impacts and a cost effective alignment, given the steep grades in this area. Its implementation would need to be coordinated with open space planning and trail networks that may be established along this portion of the West Side as well.

For related *Implementation* recommendations, see *Processes: Creating a Shoreline Drive*, p. 6-47 and *Processes: Interagency Coordination,* p. 6-48.

Managing Traffic for Safety, Convenience and Reduced Congestion

Traffic should be better managed to improve safety and convenience while reducing congestion through advanced technologies and management systems that are coordinated to achieve regional benefits. New strategies that create sustainable and managed transportation can improve existing traffic flows and help meet future demands using the West Side's streets and roads. This strategy can minimize the need for expanded roadways by better using existing facilities. This strategy also recognizes that expanded use of alternative transportation options - bicycle paths, ferry / water taxi service, and improved RIPTA bus service - will not significantly decrease traffic volumes unless and until the typical motorist perceives that alternatives offer more attractive travel times or travel conditions. Into the foreseeable future, vehicular traffic will remain a dominant mode of travel along the West Side.

Generating and Using Information to Direct Traffic Flows

A key part of the strategy is to create greatly enhanced information that can be used to marshall the flow of vehicles in a more effective manner. Information about traffic flows can be used to coordinate signals and allow a more smooth flow of traffic. Information about traffic congestion and available routes can guide motorists towards the most effective route as conditions change on the region's roadway network. The cluster of tools that use traffic information to improve roadway management are Intelligent Transportation Systems (ITS). Specific recommended tools are discussed in the *Implementation* section of this *Master Plan*. These include continued or expanded use of the Highway Advisory Radio (HAR), Dynamic Message Signs (DMS), camera surveillance, the 511 Traveler Information System, and Arterial Traffic Systems. For related *Implementation* recommendations, see *Tools: Intelligent Transportation Systems*, p. 6-40 and *Tools: Using New Intelligent Transportation System (ITS) Technologies,* p. 6-41.

Managing Peak Traffic Demand to and from Employment Centers

A companion strategy will reduce congestion by increasing the proportion of vehicles with multiple passengers and

distributing trips over greater time periods, so that the traffic peaks are reduced to more manageable levels. This will improve traffic flow on West Main Road. Pro-active steps to promote high occupant vehicles (HOVs) and reduce peak period demand can be accomplished by applying a number of techniques. The *Implementation* section of this *Master Plan* describes key tools including Transportation Management Associations (TMAs) at major employers and/or employment locations. For information about *Implementation* recommendations, see *Tools: Transit Management Associations*, p. 6-43 and *Processes: Creating Transit Management Associations*, p. 6-46.

Attracting and Serving Transit Users

Encouraging increased bus ridership is another traffic reduction strategy. Various methods can be used to increase bus ridership so that additional bus service and additional convenient stops are employed over time. Along the West Side, the focus of these efforts should be enhanced service for area employers. RIPTA has established a number of programs that can be used to fulfill this strategy that are discussed in more detail in *Implementation.* For related recommendations, see *Tools: Transit Ridership Enhancements*, p. 6-44.

Controlling Traffic Speeds and Increasing Safety

Traffic calming should be employed as a consistent strategy in the planning and design of all street and roadway improvements along the West Side. Traffic calming focuses on providing design and operational enhancements that reduce excessive speeds, direct vehicles into safer patterns, and provide a more pedestrian and bicycle-friendly environment. This strategy will be a benefit for motorists by providing for safe and appropriate travel speeds in an environment that reduces potential conflicts with pedestrians and other vehicles. Traffic calming will benefit pedestrians and bicyclists by reducing dangerous conditions. Finally, an applied traffic calming strategy will benefit land uses along streets and roads by reducing noise and providing more reasonable access on and off adjacent land. For related *Implementation* recommendations, see *Tools: Traffic Calming,* p. 6-44.

Where practical, it is preferable to provide for more continuous traffic flows at slower and safer speeds, rather than increasing the number of locations that contribute to the distracting "stop and go" pattern of movement created by strings of signalized intersections. Roundabouts should be introduced where they are practical because they are a safe and convenient alternative. For related *Implementation* recommendations, see *Tools: Roundabouts*, p. 6-44 and *Transportation Standards*, p. 6-50 - 6-53.

Access Management and Access Improvements

A strategy that better manages access to and from abutting uses can enhance traffic flows and safety. Reducing the number of curb cuts or access points limits the number of conflict points, separate conflict areas, remove turning vehicles from through traffic lanes, reduce the number of turning movements, and improve traffic operations on the roadway. Arranging joint access from adjoining properties can allow consolidation of multiple driveways into a single shared location along the property line (with recorded joint use easements that run with the land) and reduce the number of conflict points.

Developing alternate routes along a "frontage road" connecting properties may be considered to provide access for multiple uses. If these can be located at the rear of adjacent properties, this strategy can reduce broad expanses of unattractive pavement along the major roads and allow the design of more safe connections at periodic locations.

Local collector roads will also require new construction to create access to future development, especially in the Melville area. Stringham Road currently provides access to marinas, marine trades, Navy housing, and the Portsmouth campground.

With additional marine trades, marina and mixed use development in this area, additional access from West Main Road will be warranted in the future. It is recommended that the West Main Road / Bradford Road intersection be realigned and moved north to form a "T" intersection. This would move the current intersection from the parking lot of the Melville Elementary School and would require reconfiguration of Navy property at Melville Quarters "A." This property will be sold by the Navy for private redevelopment of the adjacent Rainbow Heights housing area as part of GMH privatization.

Bay View Terrace, a former Navy unimproved roadway and utility pole corridor located south of King's Grant, also provides access from West Main Road to the Town of Portsmouth conservation area and the Melville shoreline. An upgrade of this alignment, with a connection to the proposed development at the former tank farms and the Melville waterfront, could be considered in the future if traffic volumes warrant it. Any roadway upgrade or realignment must address steep grade, wetland issues, conservation use, potential impacts on the campground and adjacent residential area, and reconstruction of a bridge over the Newport Secondary, among others as part of permitting and design. Land swaps and mitigation would be considered during preliminary planning to assure the feasibility of an alignment along this route.

An internal circulation system for future development at the former Navy tank farms should provide access from Stringham Road to existing roadways along the Melville waterfront. Consolidated curb cuts and sidewalks should be required in the design and construction of this system.

The access management strategy should discourage additional at-grade intersections with the Newport Secondary rail line as it passes through the Weaver Cove, Melville and Pell Bridge areas to the extent practical. For related *Implementation* recommendations, see *Standards: Access Management*, p. 6-50.

Long Term Opportunities and Transportation Options

Several long term strategies would expand transportation options on the Island to further reduce congestion or environmental impacts. Concepts include long term upgrade of Shoreline Drive as a four lane parkway, and construction of rail transit or a busway facility along the Newport Secondary. The time horizons for such strategies may be very long - perhaps ten to twenty years in the future. However, it is very important that no short-term decisions preclude these future choices. In particular, the public right-of-way along the Newport Secondary should be retained for potential transit options along its entire length where it is not needed for roadway, bikeway or existing rail use.

Any of these options would require major commitment of public funding and would have to be justified by a detailed alternatives analysis that demonstrates adequate traffic improvement for roadway projects or adequate ridership for rail and busway projects. Cost effectiveness, engineering feasibility and environmental permitablity must also be demonstrated for these projects to be advanced for design and construction funding. It may not be economically prudent to pursue all three alternatives (parkway, busway, and rail transit).

Potential connection to future Shoreline Drive

Other options are not consistent with the vision for the West Side. The West Side Task Force does not advocate the general widening of West Main Road network (Route 114) to increase capacity. General widening would adversely affect existing businesses, would irreparably change the character of this local roadway, and would make it increasingly difficult for pedestrian access. This option has been dropped from further consideration.

Option: Additional Capacity for Shoreline Drive

Improved vehicular north-south access may result in the definition of an alternative route along the shoreline at some point in the future, as recommended by this *Master Plan.* The potential for an upgrade of a two-lane Shoreline Drive as a four-lane parkway along the shore should be reserved for long term needs. The construction of a four-lane parkway is not currently an attractive or necessary alternative to improve traffic flow on the Island and this option should only be considered if the Shoreline Drive, busway/rail transit alternative and routine upgrades of West Main Road are ineffective in minimizing roadway congestion. Any upgrade along this corridor should be subject to the general principals of roadway design outlined in the *Implementation* section, see *Standards: General Principles of Design*, p. 6-50 and *Processes: Creating a Shoreline Drive,* p. 6-47.

An extended Shoreline Drive would reach from West Main Road at the Stringham Road intersection, follow

Stringham Road to Burma Road and continue south along Burma Road (Defense Highway). A "parkway" concept could be designed with two lanes in each direction, separated by a variable-width median, and using grades to provide views of the Bay. North end connections to Burma Road may include Stringham Road as a four-lane road or on an alignment via Bradford Road to Sullivan Road to Stringham Road, as described above. Priority should be placed on upgrading Stringham Road with secondary priority being to upgrade Bradford Road with a connection to Sullivan Road. A Bay View Terrace connection (south of King's Grant) should not be precluded by future roadway alignments, but it is premature to recommend this as a preference; an evaluation of environmental and transportation costs and benefits would need to be undertaken at a time when demand appears to warrant an extended roadway connection. The Bay View Terrace connection through the Melville Ponds conservation area would require Department of Interior coordination/permitting as well as have extensive wetland impacts.

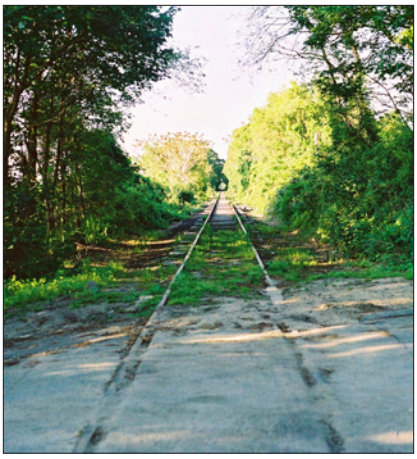
A route through Naval Station Newport is required to provide a complete north-south connection via Shoreline Drive from Route 24 at the north end of the island to Coddington Highway and the Pell Bridge at the south end. Naval Station Newport would be required to provide a connection to Coddington Highway (if the Simonpietri Drive alignment to the Shoreline Drive is not feasible, as described above under Future Improvements, Shoreline Drive). Such a route would serve as a bypass for West Main Road in Middletown, extending between Portsmouth and Coddington Highway in Middletown, near the Newport municipal line. A four-lane roadway would require the support, cooperation and dedication of the Navy, RIDOT, and local communities. It is recommended that sufficient right-of-way be retained along Burma Road to accommodate future widening to four lanes. This corridor could be used for landscaping in the short term. Adjacent development should not preclude any future upgrade of this corridor.

Any major roadway widening would require completion of an Environmental Impact Statement (EIS) for the Federal Highway Administration and the RIDOT. For information on EIS see *Implementation*, *Processes: Environmental Impact Study (EIS),* p. 6-49. Alternatives analysis is an important component of the evaluation process. In addition to the "no build" alternative, it is likely that alternatives would include a range of design concepts (2-lane, 4-lane), and transportation management system improvements that would avoid roadway construction. Lead time from concept to opening of any new roadway would likely require several decades.

Option: Expanded Rail Transit

There is currently a single operational rail line along portions of a West Side corridor known as the "Newport Secondary." Over the long term, options could be pursued to expand the ability of this rail alignment to serve as an effective rail transit corridor.

Two organizations currently operate under separate RIDOT agreements on the Newport Secondary Line. The National Railroad Foundation & Museum, Inc., doing business as the Old Colony & Newport Railway (OCNRR), is a Rhode Island not-for-profit 501(c)3 corporation which operates as



Newport Secondary alignment at Cory's Lane

a regularly scheduled scenic train on the Newport Secondary Line. The second organization is a privately owned business, Dinner Trains of New England LLC which operates the Newport Dinner Train.

RIDOT's *Aquidneck Island Passenger Rail Study* outlined issues relating to the resumption of passenger rail service along the Newport Secondary. According to the September 2002 executive summary, "Operation of passenger service would lead to a small but positive effect on roadway congestion and open the future possibility of much larger reductions in traffic." On and off-island passenger rail shuttle services were addressed (all would include continuation of excursion services on the Old Colony and Dinner Train).

According to RIDOT's study, on-island shuttles would provide rail passenger service between Park and Ride lots on the north end of the Island and the Depot, immediately north of Newport's Gateway Center. Each one-way trip on self-propelled cars would take 17 to 20 minutes. Summer service would operate nearly every half-hour over a 14-hour service day. Capital cost for this service was estimated at $28.6 million with equipment costs requiring an additional $7.5 million. Annual operations and maintenance would cost approximately $2.1 million. This level of expenditure would result in a forecast ridership of 121 to 481 boardings daily.

Another option addressed in the RIDOT study was that Fall River commuter shuttles that could eventually provide 31-minute rail passenger service between Newport and Fall River for connection to future MBTA commuter rail service to Boston. This would require construction of a new rail bridge across the Sakonnet River. Capital costs were estimated at $73.6 million, and equipment at $7.5 to $10.0 million. Annual operations and maintenance would cost approximately $3.5 to $3.7 million. This level of expenditure would result in a forecast ridership of 229-889 boardings daily.

Remote parking at stations and stops would be an important component of any rail or bus transit concept. The *Aquidneck Island Passenger Rail Study* considered stations at the following West Side locations: downtown Newport with parking at the Gateway Center garage and surface lot, Navy Gate 4/CCRI (parking for 20 vehicles) on J.T. Connell Highway in Newport, Melville (parking for 30 vehicles), and Mt. Hope Marine Terminal (parking for 100 vehicles) in Portsmouth. With the provision of a remote/seasonal parking lot with proposed reconfiguration of the Pell Bridge ramps, an additional station stop should be provided from that location.

The Newport Dinner Train submitted an FY06-07 TIP application to improve 7.25 miles of track from Melville Marine boat basin (Portsmouth) to Downtown Newport in order to create a shuttle service between the Weaver Cove Marina project and downtown Newport. The listed benefits would "improve the rail infrastructure and allow for the implementation of an island shuttle train, which will reduce traffic congestion and improve air quality." The schedule would be seasonal, from May through October and would include six round trip runs per day. The Islander Shuttle project was subsequently selected for the FY06-07 TIP. This project includes purchase of a lightweight diesel car which would operate from a new station north of

the Gateway Center in Newport to Melville. The historic depot would be relocated to Melville.

Over the long term, the effectiveness of a fixed route rail service schedule to improve traffic congestion will be significantly limited because a one track facility cannot carry substantial passenger volumes on a shuttle basis. Planning for implementation of this concept can be pursued through a number of processes, consult *Processes: Transportation Improvement Program*, p. 6-53 and *Environmental Impact Study (EIS)*, p. 6-49.

Option: Busway Transit

Busway transit should only be considered if projected ridership would substantially decrease traffic volumes on island roads. Busway transit may become a long-term option to support substantial ridership volumes with attendant congestion relief along West Main Road, especially during peak commuter hours and during the peak summer season when volumes on local arterials are 49 percent higher than during winter months. This option would more fully utilize the existing state-owned Newport Secondary right-of-way with a one-way reversible dedicated "busway". A dedicated busway is essentially a paved express roadway reserved exclusively for bus use. Because of right-of-way restrictions along the Newport Secondary, only a single lane may be feasible, unless additional width is obtained. This single lane roadway with shoulders would be constructed adjacent to and inland of the existing rail line. Access to this roadway would be restricted to buses, although it could also be considered for other high occupancy vehicles. Operation of the existing rail line would continue for tourist excursion trains and rail shuttles.

A busway could extend from the Newport Gateway Center north 13 miles to a Park and Ride lot proposed at the Sakonnet River bridge. The busway would be an exclusive dedicated roadway with minimal at-grade intersections (three road crossings would require traffic control). Peak hour flow would be on the busway with the off-peak return trip via existing roads including America's Cup Avenue, Farwell Street, J.T. Connell Highway, Coddington Highway, and West Main Road. In the section between the Pell Bridge ramps and the Gateway Center, the buses would share the southbound one-way roadway proposed by RIDOT along the rail right-of-way.

The busway would be used to divert buses and other high-occupancy rubber-tired vehicles off island roads. This system would provide the flexibility to serve buses from Park and Ride lots in the greater Fall River area with convenient and uncongested access to busway stops at Melville, Raytheon (if access is provided between Raytheon and Shoreline Drive), the Navy base, and the Gateway Center in Newport. Once buses reach the Gateway Center, travel could continue on city streets to reach destinations. The busway could also be used by emergency response vehicles including fire, police, and emergency medical services.

Design, permitting and construction of a busway along the Newport Secondary would require completion of an Environmental Impact Statement (EIS) for the Federal Transit Administration and RIDOT. Alternatives analysis, impact on other public and private carriers, and stormwater management would be some of the key

issues to be addressed. It is recognized that the process from application to the Transportation Improvement Program (TIP) could easily exceed a decade or more. Local support from adjacent towns and the US Navy would be critical to advance this long-term option through the design process.

For more information on studying and perhaps implementing a busway, see the *Implementation* discussion in *Tools: Bus Rapid Transit*, p. 6-45 and *Processes: Environmental Impact Study (EIS)*, p. 6-49.

Water Transportation Opportunities

Public water transportation is currently provided at Long Wharf Landing at Perrotti Park, Newport. This public wharf provides dockage for RIPTA's Providence-to-Newport high-speed ferry, the Jamestown Ferry, and cruise ship tenders and is located within a convenient walk of the Gateway Center. The Gateway Center offers a wealth of tourist information. Trolleys, buses, cabs, and tour companies are all on hand at that location. Long Wharf will also serve proposed water taxi service with stops throughout Newport Harbor. Most service is tourist oriented and is not provided in the winter. A tourist-oriented seasonal schedule on RIPTA's Newport to Providence ferry was initiated in 2003 when commuter service to Providence was discontinued due to lack of ridership.

The West Side of Aquidneck Island, with locations along the East Passage of Narragansett Bay, offers opportunities for future public water transportation service. This service would likely be tourist-oriented and limited to the summer season. Possible service points in addition to Perrotti Park in Newport could include the stone pier off the Naval Hospital, the former Navy Midway pier at Greene Lane in Middletown (new pier would be required since Midway Pier has been removed), and docks at Melville and Mt. Hope Marine Terminal in Portsmouth. Service to Coasters Harbor Island at Naval Station Newport has been precluded by Force Protection and limited access to waters off the base.

Concept rendering of water taxi landing

Bus and rail shuttle connections to potential ferry service could eventually be available at Melville and Mt. Hope Marine Terminal. Any future development in these areas should incorporate parking for approximately 20 cars. With marina expansion in Melville and Willow Lane/Mt. Hope Marine Terminal, and limited mooring and docking spaces in Newport for transient use, it may be anticipated that a convenient water shuttle between these two points would be attractive in the future.

For more *Implementation* information water transportation opportunities, see *Resources: Ferry Improvements*, p. 6-54.

Recommended Bicycle Trails and Networks

The implementation of a network of bicycle facilities both on- and off-roads will provide residents, local employees, and visitors recreational and transportation opportunities. Bike racks and bike storage are needed in locations where transit is provided, to facilitate intermodal travel. Bike racks should be provided at any rail shuttle or busway transit stops. Bike lockers should also be considered at the Gateway Center in Newport.

This *Master Plan* supports the bike path recommendations of RIDOT's *Aquidneck Island Passenger Rail Study* and the AIPC's regional TIP application for construction of a bike path along the Newport Secondary, especially in the area north of Melville. This will require design and mitigation measures in steep areas or where natural resources are located within the railroad right-of-way.

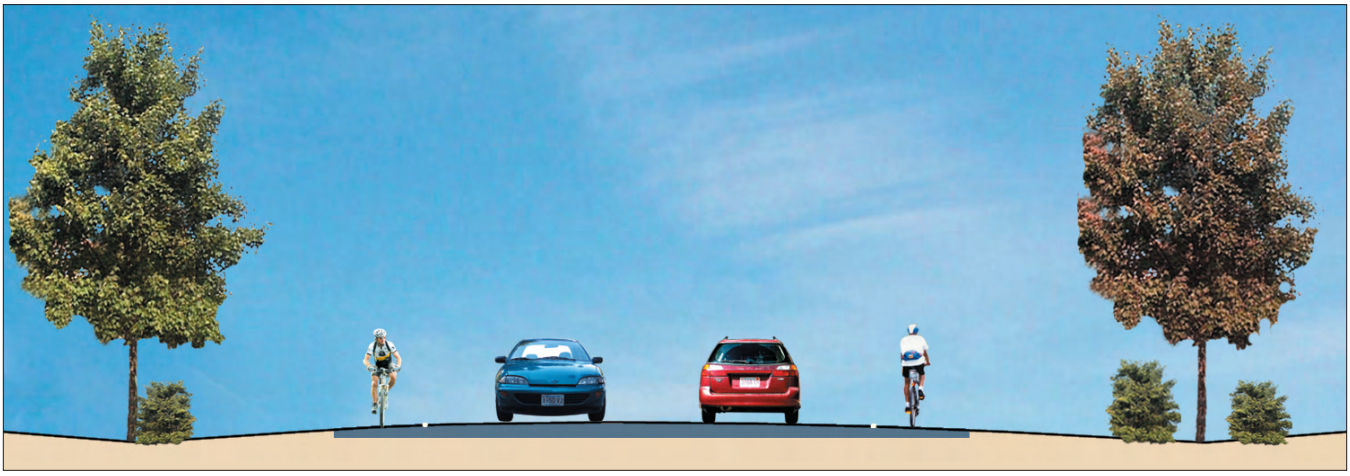
Where roadway design allows, the bicycle network should extend along connector routes to the major north/south bicycle corridor along the Newport Secondary. This extended network is subject to specific processes and standards. In some cases, exclusive off-road bikeways may be defined. In many cases, either shared on-road or shared path solutions are advocated. On-road solutions provide additional pavement width for bicycle travel, which can take the form of dedicated, marked bike lanes where dictated by adjacent traffic conditions. Shared paths allow bicyclists and pedestrians to use the same way, if circumstances allow. All of these solutions should be advanced using standards and processes that are further described in the *Implementation* section of this *Master Plan.* Refert to *Processes: Bicycle Route Suitability Report*, p. 6-49 and *Standards: RIDOT Criteria for Bicycle Network Designation*, p. 6-51.

Segments that should be evaluated for designation as "Share the Road" bikeways within the West Side planning areas include:

- Long Wharf, Washington Street, Sycamore Street, Third Street and Admiral Kalbfus Road (to Gate 1) in Newport as a short-term alternative prior to completion of a potential "Shared Use" path

Illustrations of "Share the Road" Bikeway Concept

Figure 5-14



A portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are one-way directional travel lanes, corresponding with the direction of vehicular traffic.

along the Newport Secondary. It is recognized that the Newport Secondary right-of-way narrows through the Point neighborhood and that it may not be possible to accommodate the rail line, southbound roadway proposed under the Pell Bridge ramp project, and a "shared use path."

- In Middletown, "Share the Road" bikeways are proposed on local roads adjacent to the Navy base and Greene Lane.
- In Portsmouth, "Share the Road" bikeways are proposed on Redwood Road, and Willow Lane.

A segment of Coddington Highway/ J.T. Connell Highway in Newport and Middletown is proposed for signed bikeways taking the form of dedicated, marked bike lanes.

Recommended bicycle network enhancements are indicated in *Figure 5-14* (p. 5-80) and further discussed below. Ideas to advance implementation of these concepts can be found in *Processes: Interagency Coordination,* p. 6-48*; Standards: RIDOT Criteria and Standards for Bicycle Network Designation*, p. 6-51 and *Resources: Resources for Bicycles*, p. 6-55.

Shoreline Drive/Newport Secondary Bike Path

Construction of shared use bike paths, bike lanes, signed shared roadways, and shared roadways within the West Side planning area offer significant recreational, tourism and commuter opportunities for cyclists and provide important connections between neighborhoods and local destinations including the shoreline of Narragansett Bay.

In the short-term, bikeways along local roads including Long Wharf, Washington Street, Sycamore Street, and Third Street will continue to provide access between Coasters Harbor Island and downtown Newport. Construction of the Newport Secondary bike path north of Melville, as included in the FY06-07 TIP and recommended in the *Aquidneck Island Passenger Rail Study*, represents a significant north south cycling connection in the planning area. This bike path, together with a southward continuation along Shoreline Drive or the Newport Secondary would be successful in diverting bike traffic from local roads and neighborhoods to a dedicated off-road path.

To avoid security issues at the Navy base, the bikeway should be diverted to local streets between Gate 4 and Gate 17 Access Road. Construction of Shoreline Drive via the Gate 17 Access Road and Simonpietri Drive should be designed to accommodate a "signed shared roadway" or bike lane. RIDOT's proposed upgrade of Coddington Highway should include adequate shoulders for designation as a "signed shared roadway." This segment would provide access for residents of Newport Heights, CCRI student and staff, and employees and sailors stationed at Naval Station Newport. The north-south bike path should rejoin the Newport Secondary right-of-way between Gate 4 and Van Zandt Avenue for connection to the Gateway Center and Newport Harbor destinations via local roads.

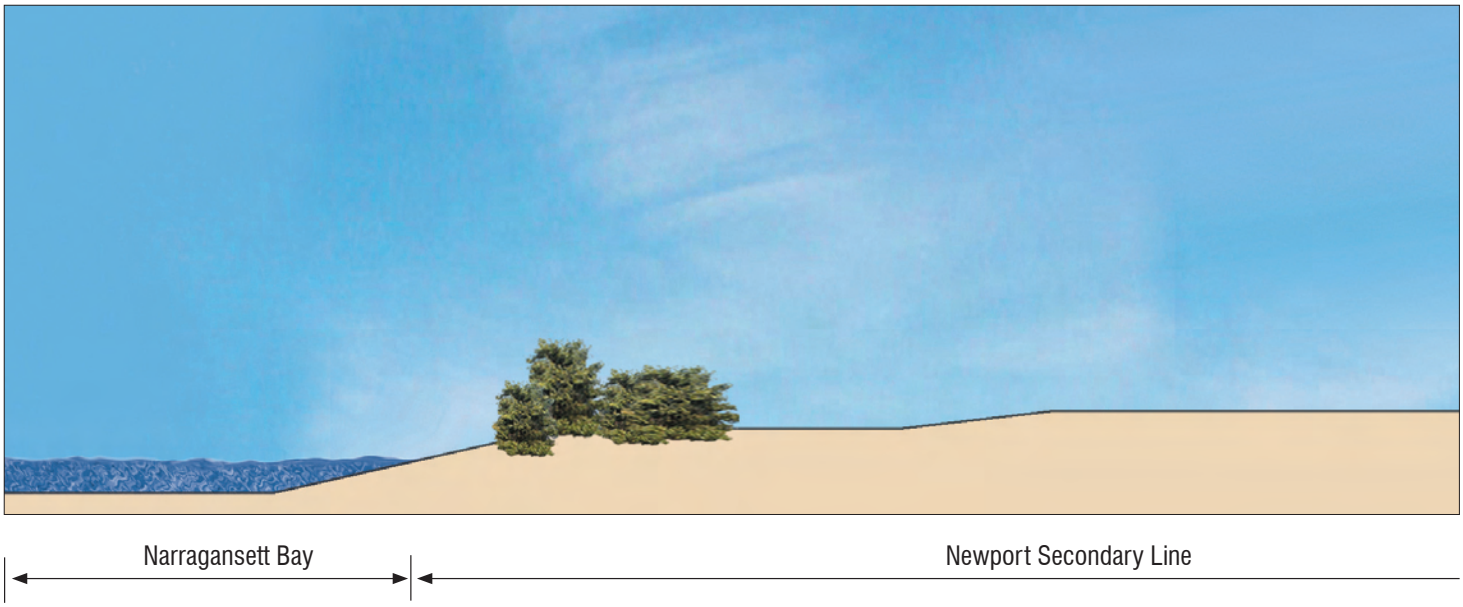
Although the Defense Highway Commuter Bike Lane along the Burma Road currently provides a connection between the Navy base, Greene Lane, and Melville, it is recognized that this

is not an attractive or safe alternative to an off-road bike path. Shoreline Drive offers an unparalleled opportunity to provide a scenic roadway with a scenic bike path, separated by low but robust landscaping. A bike path or shared use path could be designed to hug the existing topography, on an alignment which ranges from the rail line to the roadway. The shared use path would also be suitable for pedestrians, thereby providing an alternative to sidewalk construction. Bike racks should be provided at connections from the bike path to the following overlook or rest areas:

- **Melville:** Create connections to the bike lane north along the Newport Secondary to the Sakonnet Bridge, east to a proposed shared use path through the Melville Ponds conservation area to the campground, and west to the vibrant Melville waterfront - Existing rail crossings should be utilized in Melville. Reconstruction of an abandoned rail bridge could provide a connection from the campground area to the Melville waterfront. By including a bike rack on the proposed Island Shuttle (FY06-07 TIP), cyclists would have multimodal options in the Melville to Gateway Center segment.
- **Weaver Cove boat ramp parking area** with a connection to the proposed conservation area along Lawton Brook. This connection would utilize an existing rail crossing.
- **Carr Point:** Access by Navy personnel to the recreation area would utilize an existing rail crossing.
- **Norman's Brook:** Construct a shared use path between the Shoreline Drive bike path and Redwood Road with connections to the Center Island Greenway and Portsmouth and Middletown neighborhoods. No rail crossing would be required.
- **Greene Lane Park:** Include a parking lot, picnic area, fishing pier, and shoreline access. A new rail crossing would be required.
- **McAllister Point scenic overlook:** A new rail crossing would be required for direct access from the bike path to a scenic overlook. A

Illustrations of Bike Lanes and Transit Concept

Figure 5-15

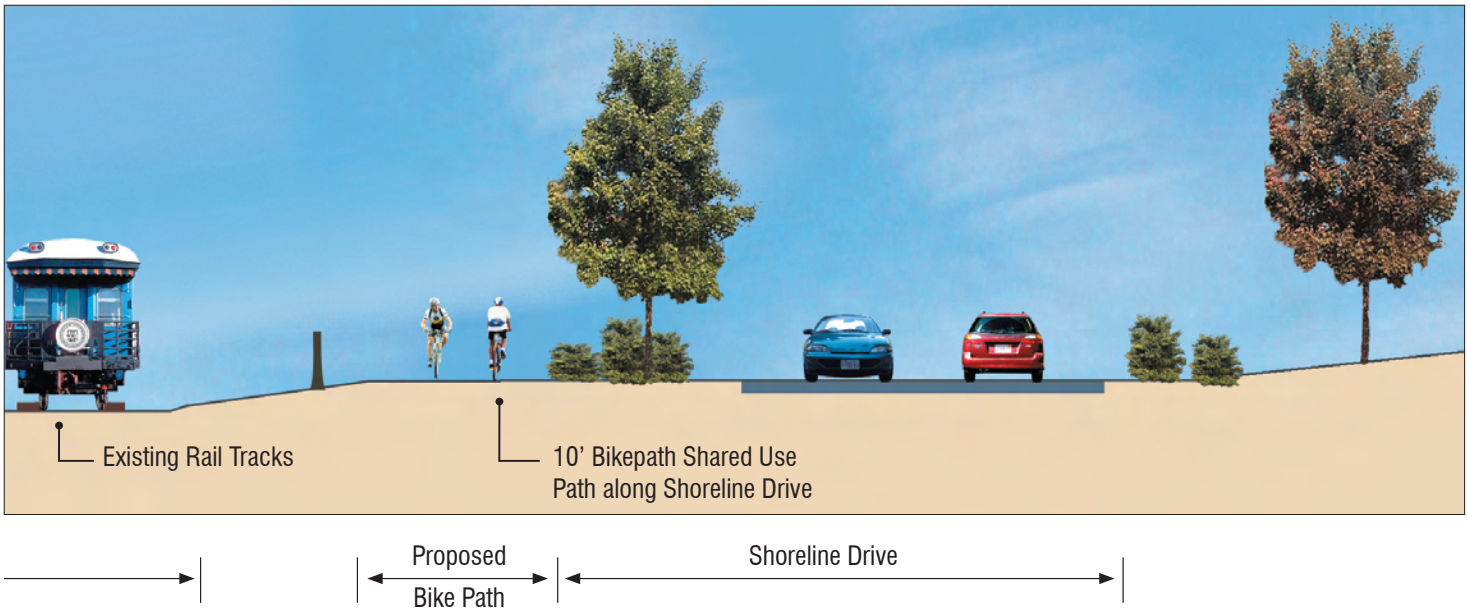


rail crossing could be avoided by providing a shoreline connection from Greene Lane Park.

Scenic views should be emphasized with construction of the Shoreline Drive/Newport Secondary bike path. Clearing may be required along the Newport Secondary right of way to open vistas to the bay. Annual maintenance would be required to prevent these vistas from becoming overgrown. It is recognized that connections will be required across the rail line for access to the shoreline. As indicated above, existing rail crossings should be used to the greatest extent possible. An additional crossing is recommended at Greene Lane Park.

The Shoreline Drive shared use path would extend from the bike path along the Newport Secondary north of Melville south to NUWC where it would likely return to the road as either a bike lane or a signed shared roadway. Construction of the shared use path should be conducted with upgrade of Burma Road as Shoreline Drive. Further analysis is required to determine if this bike path could be constructed on what is currently Navy property along the Defense Highway or along state property on the Newport Secondary rail line. All effort should be made to locate this path separate from the roadway. The use of a rumble strip would not be appropriate to separate the bi-directional bike path from the southbound lane of Shoreline Drive under RIDOT or AASHTO guidelines (raised pavements can cause steering difficulties for bicyclists and should not be used to delineate bicycle lanes).

A "signed shared roadway" bikeway on Greene Lane in Middletown would provide a spur from the Shoreline Drive bike path to Simmons Farm and adjacent neighborhoods both east and west of West Main Road. This spur would begin at the proposed Greene Lane scenic vista and picnic area on Shoreline Drive and provide views of Narragansett Bay. The proposed park/scenic overlook should include bike racks so that cyclists can walk the shoreline trail to the McAllister Point overlook. It would not be safe to extend this spur along West Main Road, a road not suitable or safe for cyclists. The existing West Main Road signal-



ized intersection at Greene Lane could be adjusted to accommodate bike traffic to Pasture Farm Drive.

An off-road "shared use path" is recommended connecting Redwood Road with the Shoreline Drive bike path. This segment would provide access from this neighborhood and a playground at the west end of this road, to the shoreline. This alignment is currently Navy property adjacent to former Tank Farm #4. A connection to proposed trails at Freedom Bay would provide a continuous recreation path between these two areas. An on-road "share the road" bikeway on Redwood Road would connect with Union Street and Jepson Lane (with access to the Portsmouth Middle School) east of the planning area. These bike routes are identified on *A Bicyclist's Guide to Aquidneck Island* map. The existing West Main Road signalized intersection at Redwood Road could be adjusted to accommodate bike traffic.

An off-road "shared use path" is recommended through the Town of Portsmouth's conservation property in Melville. Shared use paths through the Melville Ponds area would provide an attractive activity for those staying at the campground and provide a positive improvement in this underutilized gem. A link from the campground to the waterfront would upgrade this facility by connecting it to the shore by ways other than private motor vehicle. This may be routed along existing roadways and trails. This path would connect with the bike path proposed along the Newport Secondary, providing access to the north and south. This path would also intersect a shoreline path from Melville to Cory's Lane for those interested in saltwater fishing or walking along the cobble beach. An on-road "share the road" route is proposed along Sullivan from the campground to Stringham Road. Coordination would be required with the Melville Committee and the Town of Portsmouth for location and construction.

RIDOT's *Aquidneck Island Passenger Rail Study* recommended that a bike path be constructed along the Newport Secondary between Melville and the Sakonnet River Bridge (including the West Side planning area segment, with a connection to the Mt. Hope Bridge). Bicycles are currently prohibited on this bridge. This project was submitted as a regional Transportation Improvement Program application by the Aquidneck Island Planning Commission and accepted on the FY06-07 TIP. If this segment is not implemented, the passenger rail study presents an alternative route connecting the Mt. Hope Bridge and the Newport Secondary via an on-road bikeway on Bristol Ferry Road and Willow Lane. RIDOT DPM criteria must be applied to this route to determine suitability for a "share the road" bikeway designation (see *Standards: RIDOT Criteria and Standards for Bicycle Network Designation*, p 6-52). This bikeway would provide an asset to existing and proposed residential development in the Bristol Ferry and Willow Lane area by providing connections to the East Bay Bike Path in Bristol (via the Mt. Hope Bridge) and Newport.

For *Implementation* regarding bikeways, consult *Tools: Bicycle Map,* p. 6-45; *Processes: Bicycle Route Suitability Reports,* p. 6-49*; Standards: RIDOT Criteria and Standards for Bicycle Network Designation,* p. 6-51*; Standards: AASHTO,* p. 6-53; *Resources: Congestion Mitigation and Air Quality (CMAQ) Program,* p. 6-55; and *Resources: Bicycles,* p. 6-55.

Trails, Paths and Sidewalks

Facilities for pedestrians need to be extended throughout the West Side Planning Area to provide safe and convenient pedestrian access. Along streets and roadways, sidewalks should normally be required as part of any roadway construction or reconstruction. However, sidewalks should neither be required or provided along portions of scenic roads that are both poorly situated for pedestrian traffic and where rural landscapes and vistas would be disrupted.

Many planning area locations offer spectacular vistas of the East Passage of Narragansett Bay and islands and would provide excellent opportunities for pedestrian improvements. For example, any office park construction should consider construction of trail and / or sidewalks for employee benefit, like the trail network that has been constructed at Raytheon.

Currently, shoreline access is limited to the Weaver Cove boat launch and minor public accesses at local roads. Access to the shoreline is generally restricted by a lack of parking, a lack of connections across the Newport Secondary, and steep and overgrown banks leading down to the water's edge. Shoreline access is especially restricted in Middletown where no public access is currently available. To improve access to the shoreline between Coddington Cove and Melville, a shoreline trail is proposed.

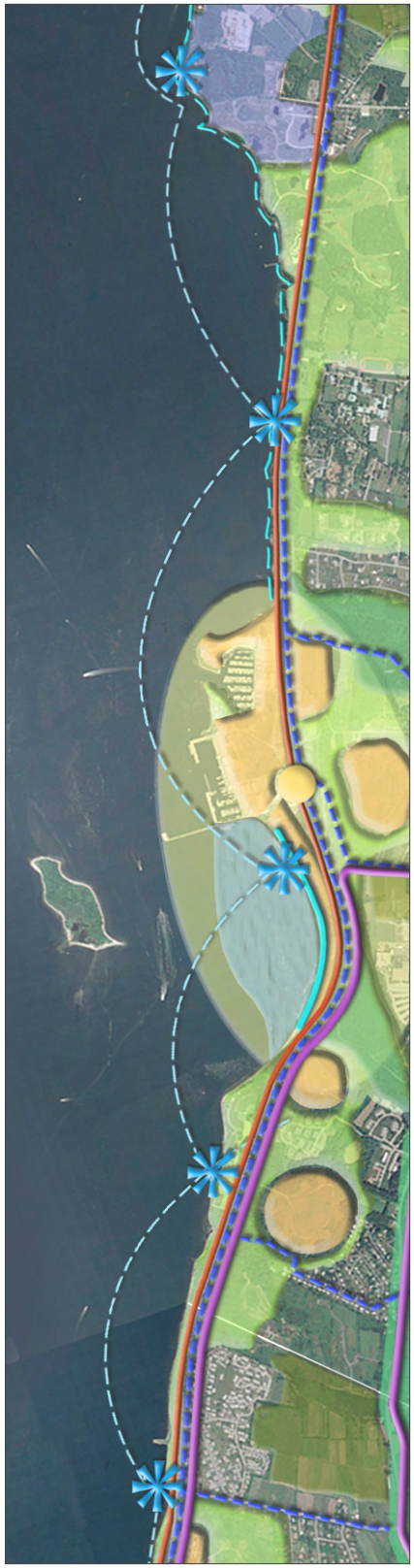
A shoreline trail could extend from the proposed scenic overlook at McAllister's Point north to Carr Point (a Navy recreation area not open to the public). Access to the trail would be via a proposed Greene Lane Park scenic overlook. This beach trail would require wading across Gomes and Normans Brooks. A shoreline trail is also proposed between Melville and Cory's Lane. This trail would connect with trails (existing and proposed by the Melville Committee) in the Town of Portsmouth conservation area around the Chain of Ponds. Signage for shoreline trails would be posted at parking areas. No pathways, benches, or trash cans would be proposed along the shoreline to retain the natural beauty and protect the natural resources of these areas.

Further assessment must be made to determine if development of a trail network along Lawton Brook is appropriate. This resource area is steep and rugged. Trail construction could lead to erosion and require grading that could adversely affect the beauty, tranquility, and habitats along this brook. It is recognized that any trail would probably not be ADA-accessible because of the steep grade. If a trail is designated, connections to a parking area east of West Main Road (near the Lawton Valley Reservoir) could be made via the existing culvert / bridge under the roadway. A trail could connect Lawton Valley Reservoir with the Narragansett shoreline, providing a missing link in the Aquidneck Land Trust's Center Island Greenway.

Phasing of trail, paths and sidewalk improvements can be conducted with roadway construction or reconstruction, with adjacent property development or redevelopment, or as funding becomes available for trail construction and signage.

For ideas regarding *Implementation*, refer to *Standards: Sidewalk and Trail,* p. 6-52; *Resources: Trails and Open Space Networks,* p. 6-31; and *Processes: Creating and Promoting Shoreline Access,* p. 6-23.

A Blue Trail for Small Craft



The edge of Narragansett Bay is perfectly suited to establishing a "Blue Trail" that would allow small craft to make journeys up and down the picturesque coastline. Kayaks and other small boats currently use many landings along the West Side which can serve as initial portions of this network.

Figure 2-1 (p. 2-6) identifies a series of landings for a possible "Blue Trail". Newport points along the Blue Trail include Long Wharf Landing at Perrotti Park, Point neighborhood public piers and the Elm Street landing, and the stone pier near the Navy Hospital. McAllister's Point (with proposed paths to a scenic overlook but no roadway access) and the proposed park at Greene Lane (carry put-in) in Middletown are nodes in the Blue Trail. In Portsmouth, Blue Trail access points include the Weaver Cove boat ramp, proposed Weaver Cove marina, Cory's Lane (carry put-in), and Willow Lane (boat ramp at proposed marina). Several of these points are currently posted on websites or included in Narragansett Bay landing locations. The sites above should be used to market a comprehensive Blue Trail for the west side of the Island. For information on *Implementation*, see *Processes: Creating and Promoting Shoreline Access,* p. 6-23 and *Resources: Rhode Island Open Space, Recreation, Bay and Watershed Protection Bond,* p. 6-31.

UTILITIES

The West Side planning process was able to conclude that utilities need not be a determining constraint on desirable patterns of use along the West Side. Either adequate resources and systems exist or good technical and operational solutions are available for the full range of land uses contemplated within the West Side. However, there are numerous issues associated with the utility network that should be resolved in order to provide cost effective and environmentally responsible services. The decisions regarding future investment and operations in the infrastructure are within the control of the federal, state and local entities that will be the stewards of the West Side's future. The following recommendations suggest productive ways to move ahead.

Water Supply and Service Recommendations

Most drinking water on Aquidneck Island is treated by the City of Newport and is either distributed via the municipal system to Newport and Middletown or is sold wholesale to the Navy and the Portsmouth Water and Fire District (PWFD) and distributed through their respective water systems. It is recognized that adequate water is available to meet projected needs but that several issues must be resolved to assure delivery to all Island residents, businesses and institutions.

Opportunities for Coordination and Collaboration

The *West Side Master Plan* supports a forum for discussion such as that begun by the AIPC among representatives from the City of Newport, Towns of Middletown and Portsmouth, the Navy, PWFD, and the Rhode Island Economic Development Corporation (RIEDC) regarding water treatment and distribution issues. Such a forum is discussed in *Implementation* under *Processes: The Intergovernmental Working Group: Utility Forum* and *Utility Working Group Agenda Items*, p. 6-57).

Future coordination and collaboration could reopen discussions of the following specific opportunities:

- Consideration of these alternatives or service options: 1) Regionalization of treatment and distribution for the City of Newport system, Navy, and PWFD; 2) Regional treatment but not distribution; and 3) Formation of an advisory committee with continued treatment by the City of Newport and distribution by the City of Newport, Navy, and PWFD. Rhode Island Economic Development Commission (RIEDC) has prepared a Cost Benefit Analysis of these options.

- Resolution of issues related to the Safe Drinking Water Act, especially the Disinfectants Byproducts Rule. PWFD and Navy customers at the ends of the distribution system have experienced water quality which does not meet these requirements. Treatment facility upgrades are required for compliance.

- Resolution of issues relating to the City of Newport's delivery of water to Melville private businesses which is "wheeled through" the Navy distribution system. Although the City of Newport issues water bills to these customers, the

City cannot assure the water quality since it is delivered through the Navy distribution system. The Navy system was sized for the Base population when the fleet was in port in the 1970's. With reduced demand on the system, stagnation results in over-sized pipes.

- Negotiation of a contract between the City of Newport and the PWFD which assures that adequate quantity and quality of supply will be available at an equitable fee for future needs in Portsmouth. The PWFD is currently operating without a contract specifying the quantity of water to be provided.

- Funding implications, restricted to government obligation bonds and the State Revolving Fund.

Most critical to the *West Side Master Plan* is the resolution of water distribution issues for future private development in the Melville area of Portsmouth. This section is currently served by two redundant Navy lines (10-inch low pressure and 12-inch high pressure service). The PWFD 36-inch line on West Main Road is currently not accessible for use in Melville because it is outside the service area, pumps are not sized for distribution to this area, and the PWFD does not have a contract with the City of Newport to assure that it will have the quantity of water to meet future expanded needs.

Recommendations: Water Supply and Services

The *Master Plan* offers the following opportunities for water service to existing and proposed development in Melville:

Negotiation with the Navy for transfer or purchase of the 10-inch low pressure line – The Navy Public Private Venture (PPV) Office has indicated that for the short-term it intends to continue to provide water and sewer service to both the Melville housing area and the Anchorage housing area (including Quarters A), two Navy housing areas that are in the process of being privatized by GMH. GMH will lease the Anchorage housing until the property is sold by the Navy for redevelopment. According to the PPV Office, the Navy intends to offer the Anchorage with the provision of sewer and water although the future developer may seek other alternatives. The Navy would retain the elevated storage tank at Melville together with an easement. The Navy intends to abandon the existing asbestos concrete pipes in place and provide new PVC service in approximately one quarter of the roadway in the housing areas (Phil Hakey, US Navy PPV Office, August 27, 2004).

The Navy Public Works Officer (PWO) has indicated that water service to GMH housing areas is separable, i.e. able to be separated from the Navy distribution system. (Naval Station Newport PWO, March 15, 2005). GMH may negotiate with local municipalities for water service if the Navy does not intend to continue water service to these housing areas. GMH is currently responsible for all water quality monitoring and issuance of any violation notices.

Disposition of either the 10-inch or 12-inch water line to Melville could be considered in the future. Engineering solutions appear to be feasible. Process and policy issues regarding liability, points of demarcation, easements and

access points (including security of the Navy water supply) must be resolved. Prior to any negotiation the following information must be obtained:

- Layout and mapping of the subject line.
- Pipe type (%), age, and size of piping.
- Configuration of laterals, separate laterals for each unit or shared and divided within structure.
- Current population and uses served.
- Inventory of infrastructure components: number of valves, meters, hydrants, booster pump stations (specific details of booster pump stations, i.e. number and size of pumps, age), chlorination stations (including chlorination protocol), sampling stations, vaults (valve or meters), and the like within subject areas.
- Water demand records and records of operations and improvements: main breaks, relays of water line, cleaning, flushing, maintenance of hydrants, hydrant tests/testing, C-Value testing, water quality testing.
- Water pressures within the subject areas, with seasonal figures if available.
- All readily available past system data detailing subject areas inclusive of system wide reports/studies and testing/sampling data and results.

Based on this information, the following should be completed to fully understand the system and costs of necessary upgrades prior to negotiation:

- Conduct water quality analysis to determine any deficiencies in water quality.
- Consider required system changes for implementation to counteract any determined deficiencies in water quality. Prepare opinions of probable costs to reconfigure the system layout to eliminate dead end mains or stagnant areas within the system.
- Conduct pressure testing to evaluate system pressures and prepare opinions of probable costs to develop system changes for implementation to counteract any determined deficiencies in pressures.
- Perform hydrant test to evaluate fire flows. Prepare opinions of probable costs to develop and implement system changes to counteract any determined deficiencies in fire flows.
- Perform C-Value testing to determine conditions of pipes within the system. Prepare opinions of probable costs to develop and implement system changes to counteract any determined deficiencies in piping condition.
- Perform operation of all system components to insure their working ability. Prepare opinions of probable costs to replace or correct any components with poor operational characteristics. Components should include but not be limited to valves, meters, hydrants, booster pump stations, sampling stations, and vaults (valve or meters).

This information would provide the basis of negotiation. Options for ownership of the line could include the PWFD (with extension of the service

area), the City of Newport (Newport currently provides water service to Raytheon, Bayview and the Redwood Road subdivision), a community water supply board, or RIEDC (similar to the system at Quonset).

Extension of PWFD Service to Melville – As indicated above, this would require a contract with the City of Newport to assure adequate quantity to meet projected needs, extension of the service area to Melville, and reconfiguration of pumps to service this area. This option would require that water lines be extended to serve new development.

Extension of City of Newport Municipal Service to Melville – Two options could be considered: extension of service through Raytheon or extension of service from Freedom Bay north along Burma Road to Melville. Further analysis would be required to determine if adequate supply and distribution networks would be available for either of these options.

Continuation of "Wheeling Through" the Navy System – This option is not favored by either the Navy or the City of Newport.

Desalinization – Past developers have considered this option but found costs to be prohibitive. A community water supply board would be required for operation and distribution.

Private or Community Wells – Past developers have considered this option but found that yield was only sufficient south of the tank farms. This information would have to be confirmed and further investigated to determine the cost of implementation. A community water supply board would be required for operation and distribution.

Further analysis is warranted to investigate these options.

Sewer Systems

Wastewater treatment for the City of Newport, Town of Middletown, and Naval Station Newport is provided by the privately operated Newport Wastewater Treatment Plant. With the exception of Naval Station Newport property, no municipal sewage treatment is offered in Portsmouth. Individual Sewage Disposal Systems (ISDS), package treatment plants (Carnegie Abbey development) or hauling of septage to the Newport Wastewater Treatment Plant (Raytheon) are used in Portsmouth. Provision of wastewater treatment is especially critical in Melville where increased development is proposed.

Opportunities and Recommendations

The *Master Plan* offers the following opportunities for wastewater treatment for existing and proposed development in Melville and other West Side locations in Portsmouth:

Municipal Wastewater Treatment (WWTF) Facility – Former Tank Farm #3 may be suitable for construction of a municipal WWTF. Approximately 10 acres should be reserved for current and projected use. Although this location is not convenient to areas of Town where failed ISDSs must be addressed per RIDEM, the Town of Portsmouth may realize several cost savings with a plant in the vicinity of Melville. By routing a sewer interceptor along the Newport Secondary, the need for pump stations could be reduced and traffic on local roads would not be disrupted for construction. Federal grants through the Economic Development Administration would offset costs.

Land Cost Savings – A "hot transfer" may be arranged for the transfer of property from the Navy to US Health and Human Services to the Town of Portsmouth for public benefit. This public purpose conveyance would be at no cost to the Town.

Treatment Cost Savings – Discharge from a plant at this location would be to Class SB waters, requiring a lower standard of treatment than to Class SA waters.

Permitting Cost Savings – According to RIDEM's Water Quality Regulations antidegradation clause, there must be a compelling public project to discharge to SA waters (located off all other Portsmouth shorelines, including areas more convenient to failed ISDSs). If an alternative discharge to Class SB waters is available, the Town might be compelled by RIDEM to select that site. Note: one of the "tests" for degradation of SA waters would be to assess alternatives. If the tank farm site is a feasible alternative, it might preclude consideration of a plant in the northern section of Portsmouth with discharge to Mount Hope Bay or the Sakonnet River.

Operation Savings – Installation of a wind farm adjacent to the WWTF could be considered to generate power to defray operating cost. Information obtained from a test wind turbine installed in Bristol by Roger Williams University should be considered to determine if conditions at Tank Farm #3 would be suitable.

Economic Development – Provision of municipal wastewater treatment would improve the attraction for the expansion of marine trades in Melville and future expansion of the Raytheon campus. Representatives of Raytheon have indicated their support for municipal treatment as this would

eliminate costly and inefficient hauling to the Newport WWTF. Increased commercial and industrial property tax return would help counterbalance the town's current dependence on residential property value. Public private partnerships and tax increment financing could be considered to reduce the cost burden on Portsmouth neighborhoods.

Relative Isolation – The site of former Tank Farm #3 is relatively isolated from adjacent development and is exposed to prevailing southwesterly to northwesterly winds off the bay. Dispersion of any odors is best accomplished with exposure to prevailing winds. The proposed Weaver Cove residential development would be at a lower elevation and therefore should not generally be subject to any odors. Existing homes/apartments at Bay View / Rolling Hills Road would be uphill and upwind from prevailing winds. Buffering around a plant (1,000-foot minimum would be best) would help mitigate any odors. Raytheon's decommissioned WWTF is in the same general location, located on the north side of Lawton Brook instead of to the south.

Conventional ISDS – This would be a suitable wastewater treatment for single-family residential development. This land use is not proposed in Melville as part of the *West Side Master Plan*.

Innovative ISDS – RIDEM has approved a series of Innovative or Alternative (I/A) ISDS Technologies for sites that do not meet the location, design or construction requirements of a conventional ISDS system. I/A Technology could be considered where sloping sites, high groundwater, soils with either slow or very rapid percolation rates, and sites close to wetlands, coastal ponds, drinking water supplies or other critical water resources would constrain suitability for conventional ISDS construction. Under current RIDEM policy, all new development sites must meet existing requirements for conventional systems before being granted a permit to install an enhanced treatment system using I/A technology. Multiple homes or businesses may be served by a single enhanced I/A ISDS in some situations.

Community Wastewater System – A homeowner association must be formed on site with responsibility based on percent of ownership. The homeowner association must be bonded. The system must be located on the property served.

Private Industrial Wastewater Treatment (for multiple users) – RIDEM would have concerns about a privately owned and operated wastewater treatment plant for the Melville area that would serve multiple marine trade businesses. Municipalities or RIEDC would be best suited to operate a facility with diverse industrial pre-treatment requirements.

Septage Hauling to the Newport WWTF – Future development along the Burma Road could be served by possible wastewater storage and primary treatment in former Navy tank farms with septage hauled to the Newport Wastewater Treatment Plant. This would be subject to a rigorous facilities planning review at the State and local levels. Raytheon currently collects its wastewater in the holding tanks of its former treatment plant and then hauls the septage to the Newport Wastewater Treatment Plant daily. As indicated above, Raytheon is interested in seeking alternatives to this arrangement.

Newport Secondary line

Off-peak Discharge to the Newport WWTF – Melville Marine Industries has an agreement with the US Navy to store up to 60,000 gallons of wastewater per day to be pumped back through the Navy system during off-peak hours. This service was negotiated to accommodate future marina/condo development in the Weaver Cove area. The Navy has indicated that it is not interested in negotiating similar arrangements in the future.

Newport WWTF – Portsmouth is not currently party to the agreement between the City of Newport and the Town of Middletown and the US Navy, which has allocated percentage of wastewater capacity based on the contributions each made for plant upgrades and future needs for wastewater treatment. This allocation was determined on wastewater flows at a time when the Navy's demand was significantly higher and does not represent the current distribution of flows between the three parties. A portion of the Navy's allocation is currently unused. As one option, the Town of Portsmouth could pursue discussions with the City of Newport to renegotiate the allocations and initiate new contracts with the Town of Middletown, US Navy and the Town of Portsmouth. The strategic allocation of wastewater treatment capacity at Naval Station Newport is a consideration under federal land disposition processes. The commanding officer must preserve the base's sewer capacity to be flexible for potential expansion under the BRAC process. Any negotiation for private WWTF service would reduce this strategic capacity. The Navy may be precluded from providing sewer service for private use based on security and legal issues.

Newport Secondary Utility Corridor – The Newport Secondary right-of-way and the Burma Road (Defense Highway) corridor should be retained for use as utility corridors. By designating the rail corridor for utilities, local roads would not be disrupted by construction or repair. The Newport Secondary could be utilized as an interceptor alignment from the Island Park and Common Fence Point neighborhoods to a potential municipal wastewater treatment facility at Tank Farm #3 in Portsmouth. In Newport, the rail right-of-way is used for a major sewer line and for the major electrical connection to Newport from the Pell Bridge. Any rail upgrade, bike path construction, or busway connection should consider relocation, repair or upgrade of these utilities during construction. Construction south of the Pell Bridge should address possible stormwater intrusion in the sewer line.

For information on sewerage *Implementation*, see *Processes: The Intergovernmental Working Group: Utility Forum,* p. 6-56; *Processes: Utility Working Group Agenda Items,* p. 6-57*; Resources: State Revolving Loan Fund,* p. 6-58; *Tools: Density Bonuses,* p. 6-15; and *Resources: Development Impact Fees,* p. 6-38.

Sustainable Energy

Former Tank Farms #3 and #4 are proposed for siting wind turbines. Electricity generated could be used to defray operating costs at a municipal wastewater treatment facility or other municipal need. An industry standard turbine yields 1 to 1.5 megawatts of electricity with a 200-foot tower and a 160-foot diameter rotor. Use is compatible with a farm, picnic area, or parking lot among others. For comparison, the proposed Cape Wind project would yield 400 mW. With two turbines, 10 to 15 megawatts of energy may be generated. This would provide more than enough energy for operation of a municipal wastewater treatment and would enable the operator of the plant to sell electricity to utilities on the spot market and generate Renewable Energy Certificates (RECs).

The data generated by the turbine installed by the Roger Williams University architecture department should be consulted to determine if this data is applicable to the tank farm site and if it would be cost effective to construct one or more turbines along the West Side. For the Implementation discussion regarding sustainable energy refer to *Processes: Wind Turbines,* p. 6-58 and *Resources: Rhode Island Renewable Energy Fund,* p. 6-58.

6 IMPLEMENTATION

As discussed in the *Prologue*, this *Master Plan* is a coordinated series of strategies that can be accomplished with the applied stewardship of local, regional, state and federal levels, which is called "Implementation".

The **Overall Coordination Approach** at the beginning of this section describes how coordination can be maintained to help "put the pieces together", with the AIPC serving a critical role.

Then, **Implementation Approaches** are presented for each of the *Master Plan's* components found in *Section 5, Planning Strategies* - land use, economics, transportation, and utilities. Helpful ideas for implementation are listed and identified as a Tool, a Process, a Standard or a Resource. These ideas are indicated with page references to allow readers to understand the relationship of these ideas to the strategies that they seek to fulfill.

- A **Tool** is a technique or method that can be employed to fulfill a strategy. Typical examples of planning tools include zoning and other regulations, capital improvements, intergovernmental agreements, traffic management technologies, or special governmental entities or committees that advance the *Master Plan*'s strategies.
- A **Process** is an organized series of procedures or events that allow planning strategies to be pursued. Typical examples of processes include the State's Transportation Improvement Program (TIP), technical studies such as an Environmental Impact Statement, review and approval steps such as those associated with comprehensive plan adoption, or coordination activities such as the convening of meetings and forums by the AIPC.
- A **Standard** sets the level of performance that should be achieved in order to fulfill the *Master Plan's* strategies. Examples of standards include design guidelines, sustainable land development practices, or use standards for the reuse of former military land.
- A **Resource** enables a strategy to be pursued. Typical examples of resources include direct funding, subsidies and grants, publicly-owned land, or human resources such as staff time.

Roles and Timelines summarize implementation priorities from the perspective of key public vantage points. A separate timeline in the form of a flow chart is provided for Portsmouth, Middletown, Newport, the State of Rhode Island and the AIPC.

East Passage of Narragansett Bay

In some cases, the implementation concepts have been advanced to a greater level of detail than is appropriate for the body of this *Master Plan*. The **Appendices** have been created as a more convenient method to expand discussion of the following components:

- *Appendix A: Performance Standards*
  - Baseline Performance Standards
  - Specific Land Use Performance Standards – Including specific standards for large project development, commercial and mixed use development, reuse of military land, marina and marine-related development, agricultural land, open space, and scenic roadways and vistas.
  - Sustainable Site Planning and Design Performance Standards
- *Appendix B: Interim Planning Overlay Districts*
- *Appendix C: Special Area Reuse Plan Process*
- *Appendix D: Outline Agreement for Special Area Reuse Plans*

An additional separate document has been created to further aid the implementation of the *West Side Master Plan*. The Implementation sections of the *West Side Master Plan* have been complied into an **Implementation Plan** – a volume with checklists that track all of the major recommendations from the perspective of each of the municipalities, the state and the AIPC.

Single-family residential use in the West Side

Overall Coordination Approach

The overall implementation approach for the *West Side Master Plan* can be expressed in three words: **consistent organized stewardship**.

- **Consistent** – Managing change will take time and there will be many other demands on the time and resources of those guiding the future. The implementation must rely on continuity in staffing and assigned roles among a designated cluster of organizations to maintain the vision for the West Side.

- **Organized** – Many of the recommendations of the *West Side Master Plan* are complicated, and most of them are related to one another. They will involve different jurisdictions, unpredictable funding and endure changing circumstances that are impossible to predict. In this context, organization is essential.

- **Stewardship** – The benefits of a shared interest in the West Side can only be achieved if those that responsible for change serve as stewards for a balanced outcome with widespread benefits, rather than limiting their perspective to immediate needs.

West Side Master Plan public meeting

By grasping the necessity of this overall approach, the essential role of the AIPC becomes more clear. The existence and support of the AIPC indicates the foresight and efforts of scores of citizens and elected officials. They have created and placed the AIPC in the position to offer this "master key" to the West Side's future and guide its implementation.

The AIPC is the only public entity whose mission is devoted to Island-wide stewardship, facilitating regional benefits through information, professional assistance and advocacy.

On an organizational level, the AIPC will require new approaches and resources to fulfill its role successfully. A follow-up task to the completion of the *West Side Master Plan* is a study of the best methods to organize and fund the AIPC's coordinating role on the West Side for the future.

While the AIPC must maintain a central role in the implementation of this *Master Plan*, most of the actions will be taken by the constituent municipalities, participating public agencies, dedicated organizations and private sector stewards of the West Side. The recommendations of this *Master Plan* cannot - and should not - be implemented through the assignment of a central, single entity responsible for accomplishing them. Each community on Aquidneck Island retains its own choices and powers, for good reason. The state and federal agencies have interests that extend beyond the Island that must be considered. Private sector businesses and institutions have discrete missions that must be accomplished.

Regional Coordination Tools

Among the principal tools that can be employed to coordinate the *West Side Master Plan* are the following:

Intergovernmental Agreements and an Intergovernmental Working Group

The West Side is entering an era when there are many intertwined layers of jurisdictional control and responsibilities that must evolve to manage change. Large areas of Naval Station

Newport are poised for disposition, and tracts of land are being converted from military to private responsibility through the PPV initiative. Large land areas will change in use and ownership, and the utility infrastructure is not yet organized to address some current and future needs. The transportation network is highly dependent upon multiple jurisdictions agreeing on routing, access and priorities of investment. The research and discussions that led to the *Master Plan's* recommendations revealed that there are very few fundamental departures among the participating jurisdictions in terms of perspectives on common regional interests or goals. It also revealed that much of the resolution will take the form of intergovernmental agreements that assign responsibilities, costs and benefits among multiple parties. To this end, the *West Side Master Plan* recommends the creation of a West Side Intergovernmental Working Group facilitated by the AIPC to create a formalized forum for advancing initiatives and finding early agreement – at least in principle – about how key procedures and organizational frameworks should be mutually addressed. Such a forum will also limit the potential for misinformation and simple mistakes that can easily occur in the absence of consistent communication.

The Intergovernmental Working Group should be organized around a series of periodic meetings with agreed-upon agendas and a designated chair. It should meet no less than quarterly for three years, at which point the participants may choose to continue the process, end the Working Group, or alter the format for coordination. In the current context of active issues and initiatives, meetings may be productively held as frequently as monthly.

Representatives of the meetings should be formally designated by the participating entities, and membership should be limited to the major jurisdictions, agencies and government representatives responsible for the West Side. The Intergovernmental Working Group should be attended by individuals who are in positions to actively advance discussions toward intergovernmental agreements on topics of common concern.

The membership of the Intergovernmental Working Group should consist of a core group of appointed participants from:

- Congressional delegation
- Naval Station Newport
- The Office of the Governor
- State legislative delegation from Aquidneck Island
- RIDOT
- RIEDC
- AIPC
- Town of Middletown
- Town of Portsmouth
- City of Newport

Additional participants should be invited to participate in specific meetings or meeting agenda items. Additional participation could be solicited from other federal or state agencies, local redevelopment authorities or commissions.

A series of special forums or meetings should be advanced on significant topics, such as utility issues for example – in effect, a utility subcommittee should be created as one of several possible subcommittees. However, key land planning and development topics will be linked to utility infrastructure solutions, so the agendas must be coordinated in time and topics. Additional

ideas regarding the utility forum are discussed at length in *Utility Processes*, p. 6-56 below.

It is important to differentiate between the roles of the Intergovernmental Working Group (IWG) and the AIPC. The IWG will be focused on particular issues during specific periods of time, while the AIPC will retain an overall coordination and stewardship role in planning for the future of the West Side.

Site Planning and Design Awards to Commend Success

The AIPC should initiate a biannual program of site planning and design awards for projects that fulfill the land use recommendations of the *West Side Master Plan*. This awards program should be jointly sponsored with the Rhode Island chapters of the American Institute of Architects, the American Society of Landscape Architects, and the American Planning Association. The awards program results should be publicized on-island, in addition to the publicity provided by the collaborating professional associations.

AIPC Website for Information and Advocacy

The AIPC website will increasingly become a common ground for information and updates regarding West Side planning progress. The organization should aggressively pursue specific funding and professional resources to expand the range of activities and information available on-line.

West Side Master Plan Update

The *West Side Master Plan* should be comprehensively reviewed and updated after ten years. The master plan update process should invite broad public participation. Progress towards the long term vision should be charted and new issues examined, using technical studies and reports as a foundation for further planning. An updated plan should be distributed and employed to advance revised priorities that take into account the changing context of the West Side.

Regional Coordination Processes

The AIPC can sponsor and conduct various processes that will help lead to successful implementation of the *West Side Master Plan*.

Periodic Progress Reviews

The AIPC should continue to play its leadership role in ensuring that regional coordination occurs so that shared interests can be achieved in a timely and cost effective manner. This responsibility rests with its Executive Committee and its staff. The Executive Committee should maintain a review of the *West Side Master Plan* implementation as a scheduled item on its agenda, and AIPC staff can prepare periodic updates that describe progress and recommend adjustments in the implementation approaches.

Endorsing and Adopting the *West Side Master Plan*

The *Master Plan* should be endorsed or adopted by communities, institutions, agencies and organizations. The process should be managed by the AIPC. The manner and import of endorsement or adoption will vary; in some cases, either all of the *Master Plan's* recommendations or selected portions may be adopted as formalized policy. More commonly, the *Master Plan* is expected to be endorsed and then used as the basis for more specific planning actions and incorporated

into plans and decisions tailored to each municipality or agency using established procedures. There will need to be an organized and managed process to provide consistent information, updates regarding adoptions and endorsements, and provide mutual support among communities. The effort is expected to require website support, special publications and staffed outreach/support.

Annual Community Updates

The AIPC should prepare, distribute and present a brief annual update on progress on the *West Side Master Plan* to the constituent municipalities, jurisdictions and key organizations involved in its implementation. This should take the form of a short briefing paper and could be accompanied by a staff and Board presentation at Town and City Council meetings.

Annual West Side Transportation "Summit"

The AIPC should host an annual discussion of transportation issues, projects and plans that assemble key participants in the regional transportation network. This discussion should be structured around a progress review relative to the recommendations of the *West Side Master Plan*. It should be employed as a means to inform the AIPC's input to the State's TIP, which is discussed below.

Regional Transportation Improvement Plan (TIP) Input

The AIPC should continue focused monitoring, advocacy and input to the biannual state Transportation Improvement Program from the regional perspective for the West Side planning area. This process augments local input prior to the State's finalized list of project and funding priorities.

Special Studies

The AIPC should continue to sponsor and conduct special studies that benefit multiple jurisdictions and constituencies and help implement the *Master Plan*. In some cases, these studies may be facilitated by the AIPC, as was the case for the Fiscal Impact Analysis prepared to gauge the impact of Navy Housing privatization on municipal services and budgets. In other cases, these initiatives may be co-sponsored with collaborating jurisdictions, institutions or organizations. Among the special studies and services recommended for short term action are the following:

- **Land Planning: Military Land Reuse Technical Studies** – Technical studies to support the land disposition process such as environmental mitigation models and remediation cost estimates, legal services on land transfer and disposition issues, evaluation of transportation impacts, detailed road or rail alignment studies, detailed environmental resource studies, technical review of Federal/Department of Defense reports, proposals or studies, technical studies of funding or financing options.
- **Land Planning: Military Land and Ongoing Coordination** – Ongoing coordination with the BRAC realignment at Naval Station Newport, Privatization, Congressional or other land disposition processes consisting of meetings, review of proposed actions, policies and procedures, preparation of information and status reports for distribution.
- **Site Planning and Design Standards** – Preparation of tailored site

planning and design standards to assist adoption and implementation by constituent municipalities, including meetings and coordination support.

- **Land Preservation Tools** – Studies and activities to advance the preferred additional open space and agricultural land preservation tools identified in the *Master Plan*, such as financial evaluation and feasibility studies, preparation of legislation or legal documents, grant applications or other tools.

- **Affordable Housing** – Staffing of coordination meetings and information resources among interested constituencies: municipalities, GMH, non-profit housing providers, others.

- **Military-related Use Marketing Plan and Activities** – Targeted marketing and information materials for military-related business, ongoing coordination and support among interested parties.

- **Marine-related Use Marketing Plan and Activities** – Preparation of targeted marketing and information materials for desirable marine-related business, ongoing coordination and support among existing businesses, municipalities, state agencies, organizations and landowners.

- **Heritage Trail Implementation Planning** – Planning and design for specific sites, coordination with related programs and facilities, preparation of promotional information, identification of additional funding sources, contribution to fabrication and placement of signage, site improvements.

- **Wind Power** – Site specific technical and financial feasibility studies to provide additional municipal power generation sources.

- **Transit Planning** – Technical and coordination efforts to advance the preferred transit technologies and operations for the West Side.

- **Bicycle Path and Trail Program** – Technical studies and detailed engineering to advance segments of the bicycle path and trail program in concert with public land, conservation actions, military land transfers and large property redevelopment. Ongoing identification and advocacy for funding and resources.

- **Wayfinding/Identification Program** – Environmental signage/graphic design program to create consistent and attractive wayfinding/identification program, preparation of signage designs and specifications, identification of funding, fabrication and placement.

- **Roadway Aesthetics: Specific Landscape and Roadway Standards for the West Side** - Landscape architecture, graphic and other detailed design standards to be incorporated into public roadway and transit projects for the West Side, including standard details, conditions, and specifications.

- **Green Development** – Sustainable "green development" principles to be applied through public improvements and land use regulations, or possible Request for Proposals for development.

- **Utility Planning** – Technical studies to advance regional utility issues on the West Side including water and wastewater service to Melville, and potential transfer of Navy lines to municipal, regional or private infrastructure operators.

Regional Coordination Standards

Standards can be used as a means to encourage and gauge a high level of coordinated activity where recommendations span jurisdictional lines.

Implementation Matrix: Measuring Success of the *West Side Master Plan*

A *West Side Master Plan* implementation matrix has been provided to the AIPC to track the many diverse activities that will help implement the *Master Plan*. The summary matrix can be used as a common reference resource and practical checklist regarding each of the *Master Plan's* major recommendations. The matrix is composed of a list of each major recommendation, the time frame in which it might best be accomplished, and related roles and responsibilities.

Regional Consistency Statements

The AIPC should be employed to provide formalized input into large scale development and public infrastructure approval processes by providing professional planning opinions concerning their consistency with regional planning contained in the *West Side Master Plan*. This can take the form of Regional Consistency Statements that could be required by local or state policy and regulation to ensure that the impacts and benefits of regionally-important actions are considered prior to final approvals being advanced.

The reviews would be advisory to the municipalities and participants. The Regional Consistency Statement would be prepared prior to final approval of major projects, comparing the impacts of the proposed project relative to the recommendations contained in the *West Side Master Plan*. The requirement for a Statement of Regional Consistency could be inserted into zoning or subdivision regulations at the local level by the participating municipalities. Such Regional Consistency Statements could be required through intergovernmental agreements for major public projects as part of the public participation program. These Statements could also be a required step for creating approved Special Area Reuse Plans for the disposition of former military land through intergovernmental agreements (see p. 6-22).

Qualifying projects would be within the West Side and could be distinguished by scale or type (for example, large developments that would have a master plan required as part of the review and approval process). These reviews would respond to a list of specific questions regarding any of the components of the *West Side Master Plan* (a "Scope of Review"). The AIPC would be responsible for providing the response, and would employ staff and/or professional assistance in regard to technical matters. The response would be prepared in written form within a determined time frame: typically, one month.

Model Regulations

The AIPC could serve as a source of model regulations for consideration by Aquidneck Island's municipalities, gathered through interaction with other state and regional planning entities throughout Rhode Island and

New England that encounter similar issues. While this activity is likely to have applications for many other areas of Aquidneck Island, the *West Side Master Plan* implementation will also benefit from such standards.

Regional Coordination Resources

Resources used for the regional coordination activities of the AIPC will include continued dedication of a portion of the organization's financial and staff and volunteer resources that are funded through ongoing commitments. As a follow-up to the completion of the *West Side Master Plan*, the AIPC will be investigating organizational and resource requirements in order to pursue its stewardship of the West Side and the other aspects of its mission. Among the additional resources that should be considered as part of this process are the following:

AIPC Services

These services may include professional support for a variety of activities associated with the implementation of the *West Side Master Plan* that directly benefit other stakeholders in the future of the West Side – municipalities, agencies and institutions. Examples of such services could range from facilitation of the Intergovernmental Working Group, preparation and coordination of special studies, or facilitation of workshops and meetings on base realignment and disposition of land.

Fees for Regional Consistency Statements

A schedule of fees could be established for provision of Regional Consistency Statements. This schedule could be incorporated into local zoning or subdivision ordinances for qualifying projects or as a part of intergovernmental agreements as discussed in the *Regional Coordination Tools* section on p. 6-3 .

Grant Sources

The AIPC should use the balance of grant proceeds dedicated to the *West Side Master Plan* process to advance its implementation, as well as targeting and pursuing other federal, state and institutional grant sources in the context of its overall fundraising priorities.

Land Use Tools

Tools for Preserving and Enhancing Open Space, Recreation, Natural Resources and Agricultural Character

Transfer of Development Rights (TDR)

Transfer of development rights (TDR) is an effective tool for spurring intensified, urban development in some areas, while preserving rural character in others. The West Side should establish transfer of development rights from agricultural lands or valued open spaces to areas well-suited to new development. Fundamentally, the TDR concept involves a designated "sending zone" and "receiving zone". The sending zone is targeted for limited development. Landowners are entitled to relinquish a portion of their development rights in the sending zone and transfer them to the receiving zone, which is slated for higher-density development. For the receiving zone, landowners are then able to derive density bonuses in excess of those permitted under otherwise applicable zoning regulations. Sending zone landowners relinquishing development rights receive compensation in exchange for effectively downzoning their properties; landowners receiving the transferred development rights pay for their increased density allowances.

TDR concepts are often advanced in communities as an attractive tool, but are rarely implemented; while there is often consensus about where development should not happen, there is usually resistance to creating "receiving zones" with more development than was permitted under base zoning. This may not be the case for the West Side. There are obvious candidates for "sending zones" (developable agricultural and open space parcels). There are at least three good candidates for receiving areas, as well:

- **Tank Farms** – the former Navy tank farms are not currently under local jurisdiction. Upon disposition, they will require new land use regulations and are projected sites for redevelopment opportunities.
- **Roadway land** – There are two large parcels of land currently occupied by roadways that could become sites for redevelopment after proposed realignment: land now occupied by Pell Bridge ramps and land along Weaver Cove that will become available with the realignment of the Burma Road/Stringham Road connection.
- **Large undeveloped parcels** – There are several large undeveloped parcels of land in the northern portions of the West Side that do not have established zoning densities and that are probable locations for resort and recreation development.

Agricultural land use patterns
Photo: Rhode Island Tourism Division

Montgomery County, Maryland provides the best-known model for successful TDR programs. In April 2001, the Rhode Island Department of Environmental Management published a report that explored the possibility of TDR programs at the local and regional level. Subsequent to this publication, the Rhode Island legislature passed enabling legislation, codified at RIGL sec. 45.24.33. With such models and state-enabling legislation available, the Aquidneck communities are well positioned to advance land planning goals with the TDR tool.

Farm land in Portsmouth

Conservation Easements, Restrictions, and Evaluations

Land conservation tools vary in their strength and applicability. Some are more permanent and secure than others. The use of these tools is dependent upon many factors: the open space value of the land being conserved, the financial and regulatory mechanisms and resources available, and the structure of the entity that owns the land or restrictions on its use. Applicable categories of conservation for the West Side include the following, listed in order of strength and permanence:

- **Perpetual Conservation Easements** – Perpetual Conservation Easements are one of the Aquidneck Land Trust's (ALT) preferred conservation tools. There are various reasons for this preference: limits on liability; cost; ALT's inability to act as the primary steward/ landowner for every parcel; and conservation duration. However, ALT can implement other methods (for example, fee ownership, conservation leases, term easements) where appropriate.

  This category includes land that has a Conservation Easement or Deed to Development Rights held by an entity, besides the landowner, that is recognized as a qualified organization under s. 170 (h) of the Internal Revenue Code.

- **Land Conserved with a Deed Restriction** – Land encumbered by permanent conservation deed covenants and owned by a qualified organization, as recognized under s. 170 (h) of the Internal Revenue Code, for conservation purposes, but land lacks a perpetual conservation restriction.

- **Land held with Conservation Intent Alone** – Land owned by a qualified organization, as recognized under s. 170 (h) of the Internal Revenue Code, for conservation purposes, but land lacks permanent conservation deed covenants and a perpetual conservation restriction.

The previous two categories could be further conserved and secured with a Conservation Restriction such as a Conservation Easement. For example, the concern is that land in the "Conservation Intent Alone" category could be easily converted to non-conservation uses.

Land Evaluation Forms

ALT uses Land Evaluation Forms to evaluate a property individually, ensure that it has sufficient conservation values, or assess a group of properties for acquisition prioritization purposes. The main categories that are used as criteria for evaluating land include

wildlife habitat values, water resource values, agricultural values, scenic values and recreational values in addition to a few other considerations listed on the form. At a minimum, each Land Evaluation Form is jointly completed by ALT's Land Protection Director and a qualified biologist/naturalist and used in a confidential, truthful, and objective manner. This system has worked very well for the Island and thus should be endorsed in terms of the approach and institutional procedures. For open space performance standards, refer to *Appendix A. Performance Standards*

Tools for Managing the Conversion of Military or Other Public Land to Other Uses

Local Redevelopment Authorities (LRAs)

Local Redevelopment Authorities (LRAs) facilitate local management and control of redevelopment projects; they are excellent tools to effectuate the disposition process of public land to private sector use. Such a redevelopment authority possesses the advantages of a single, community-based entity with clear responsibility for accomplishing the planning and implementation of a unique, large-parcel reuse and redevelopment. The agency serves as a single point of contact for the community and a cohesive intermediary among local, state, and possibly federal parties. This step is useful in creating local control to facilitate desirable redevelopment in the context of disposition of either federal or state land, and can be accomplished in several ways.

This *Master Plan* suggests advantages for the municipalities to empower a local redevelopment agency that unites the functions of the Local Redevelopment Authority (LRA), similar to the BRAC planning process, with the State-legislated Redevelopment Agency (RDA) model. Inspired by BRAC procedures and enabled by RDA legislation, this distinctive redevelopment agency would be enabled for the purposes of redeveloping large, prior-selected military or public lands. The reuse plans for these special areas are described more fully in *Appendix C. Special Area Reuse Plans.*

The powers that are granted to an LRA are entirely dependent upon the range of actions that are reasonably anticipated - and for which clear advantages exist in vesting these powers in such a specialized public entity. In view of the recommended redevelopment activities suggested in this *Master Plan*, the powers assigned to an LRA could reasonably include all of the powers allowed within the enabling legislation (Title 45, Chapter 45-32 of the *Rhode Island General Laws*) with the exception of the following: the ability of the LRA to exercise eminent domain should be carefully considered. The criteria for granting this power should be a determination - based on professional planning analyses - that eminent domain is likely to be needed to accomplish an defined redevelopment mission in the specific context of private property within the proposed redevelopment project area.

On Aquidneck Island, an LRA structure could be effectively used in the transfer and redevelopment of Tank Farms #1 and #2 or other portions of the Weaver Cove/Melville area for public and private reuse, for example. Should the Island adopt a cohesive strategy regarding multiple redevelopment areas in the future, a hybrid model could also offer the flexibility

of implementing a reuse plan based on a consensus vision of effected municipalities for land development with regional implications. This would include creating a joint operating agreement among LRA's, forming a region-wide LRA, or formally designating an existing authority to act on behalf of multiple jurisdictions. Similarly, LRA in Newport could be essential in facilitating productive redevelopment of the Pell Bridge/North End Area. This could be accomplished through a new entity, or by revising the structure and mission of the existing Newport Redevelopment Authority.

The RIEDC as an Implementation Tool

As an alternative to LRA's, at a state level the RIEDC provides similar redevelopment tools and structure that can be used to enable key redevelopment actions. It may serve as the best vehicle for some – or even all – of the redevelopment activities associated with the reuse of military land and public property recommended in this *Master Plan*. However, it will be important to ensure that the state, regional and local priorities are fully coordinated. To this end, the communities and the state should employ the mechanism of the Intergovernmental Working Group and intergovernmental agreements to clearly define roles, responsibilities and distribute costs and benefits appropriately.

Other than the RIEDC or LRAs discussed above, this *Master Plan* discourages the formation of other state-enabled redevelopment authorities to advance projects within the West Side. In part, this recommendation reflects a consistent consideration that local and regional considerations must play a very strong role in shaping future land use and development.

Intergovernmental Agreements

Intergovernmental Agreements can effectively be employed to establish lease or use agreements for land and facilities, provide for services and associated compensation, assign management responsibilities for programs and redevelopment, and apply performance standards and design guidelines that are in keeping with this *Master Plan.* Under certain circumstances, intergovernmental agreements can be used to establish or distribute impact fees for new projects. The agreements could be enacted through the Intergovernmental Working Group. This is an alternative that addresses local priorities through agreement instead of via regulatory processes. For more information on the *Intergovernmental Working Group*, consult page 6-4.

Technical Tools for Building on Disturbed Land

Preliminary evaluations performed for this *Master Plan* suggest that the site planning for new buildings or structures at the former tank farms is not likely to be significantly impeded because of the remnants of the tanks and their foundations. However, technical tools are available to solve such issues, if they arise.

Deep Dynamic Compaction (DDC) is one of various engineering techniques used to test and resolve particular structural and environmental concerns on sites slated for reuse where removal of pre-existing material is not practically feasible. This tool may be applicable for the tank farms on the West Side in the event that buildings or structures need to be placed over land disturbed by the foundations and demolition of the former tanks. DDC conducts borings studies to determine

the relative density of materials, surveys to determine if there are sensitive structures in the vicinity, and assesses weight compaction by means of a large crane with a tall and narrow load at multiple points on the site. Another alternative approach is to construct any buildings with a pile structure or deep foundations where the load is born by the native material beneath the area disturbed by implosion. Both methods are technically complex and expensive. Test borings to determine the exact density of material and suitability for construction would need to be carried out prior to any formal development proposal.

Tools for Promoting Desirable Development Patterns

Interim Planning Overlay Districts (IPODs)

Interim Planning Overlay Districts (IPODs) address the conflict between the realities of a fast-moving real estate market and slower municipal processes. This is essentially a conflict between the development rights of the property owner and the interests of the community. IPODs allow for the improvement of local regulations and public policy without inhibiting development opportunities. The overlay is geared to coexist with the extant zoning of a large area and yet supplement that zoning with new policies. The policies might focus on improved environmental standards, design guidelines, or density and mixed-use development stipulations. IPODs are designed to control development within a specific and limited time period; ordinances are in effect temporary, with 'sunset' provisions. It is this provisional aspect that ensures the IPOD will not infringe on property rights.

An IPOD is a zoning amendment which is supported by a comprehensive plan revision. The overlay zoning is enabled by a Planning Board recommendation and approval by Town Council. On the West Side, IPODs could be established to best advance regional and local goals and the principles and strategies of the *West Side Master Plan*. IPODs could be effectively implemented in underutilized commercial districts or areas that may be subject to redevelopment, such as near the Pell Bridge in Newport.

For more detailed IPOD implementation information, consult *Appendix B: Interim Planning Overlay Districts.*

Growth Centers

Growth centers, or "priority investment areas", are local Smart Growth initiatives in Rhode Island. According to the State Guide Plan, growth centers should "encourage compact, mixed-use development; preserve open space; conserve natural resources; fit the type of development to the capability of the land to support development; and promote a sense of community." Growth centers are "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." They advance a range of transportation modes and housing types, advocate historic preservation, and increase access to employment.

The municipal identification of growth centers creates pinpointed areas for the investment of State support. Municipalities volunteer to identify a growth center, for possible State approval. Both the municipality and the State benefit from this identification,

which discourages sprawl and adverse impacts on natural resources, while spurring economic development.

Growth centers can be identified as existing, developed centers and also those slated for development. There is a degree of flexibility in these schemes—growth centers differ in size, regional importance, and services provided. However, they do share common characteristics. They must comply with the elements of the State Guide Plan and advance the following general criteria:

West Main Road in Middletown

1. Strengthen and encourage growth in existing centers.
2. Scale new infrastructure to support compact growth.
3. Include mixed land uses.
4. Create a range of housing opportunities and choices.
5. Protect and enhance critical environmental resources.
6. Provide a variety of transportation choices with access to mass transit
7. Promote community design that contributes to a sense of place.
8. Encourage growth in appropriately scaled centers.

The process for the identification and designation of Growth Centers begins with the local municipal government. This identification process is voluntary, but offers the potential incentive of priority status for state resources. The identification process is completed within, or as an amendment to, a comprehensive planning effort. The growth center proposal is reviewed by the Statewide Planning Program and the Director of the Department of Administration. Approved growth centers are designated for targeted investment of state resources. On the West Side, Growth Centers could be considered for Pell Bridge/North End Area in Newport, the Anchorage Area in Middletown, and the Weaver Cove/ Melville Area in Portsmouth. Housing and development densities in these locations should match state planning and transportation policy goals, which could also lead to priority funding of future transportation and infrastructure investment by the state.

The following documents and websites are useful for more information:

- www.growsmartri.com
- *Handbook 16: State Guidelines for designating "Growth Centers"* (pdf)
- *Handbook on Comprehensive Planning: Growth Centers Amendment.* RI Statewide Planning Program, June 2004
- *Growth Centers: Recommendations for Encouraging Growth and Investment in Economically and Environmentally Sound Locations in Rhode Island*, Governor's Growth Planning Council

Density Bonuses

Density bonuses are an inclusionary zoning tool that function as a developer incentive. While density bonuses

are customarily used for affordable housing initiatives in residential projects, they can also be used to generally address a community need. The physical, cultural and even social goals of a community can be promoted by allowing land developers to provide specific amenities and benefits in exchange for zoning incentives. Density bonuses allow developers to build more housing units than would normally be permitted in a zoning district, in exchange for providing a public benefit. The public benefit could range from the preservation or enhancement of a natural resource or open space to the development of a wastewater treatment plant on the property. To similar effect, other incentives could include adjustments to height restrictions or modifications of some other requirements in the zoning ordinance.

Transportation Improvements

Transportation improvements can fulfill land use and economic development goals. Through local budgeting, Transportation Improvement Programs (TIP), or impact fees from private development, the enhancement of highway corridors provides for high quality landscaping, removal of private encroachments, consolidated access, high quality signing and circulation improvements which support higher value, mixed-use commercial corridors. On the West Side, this could be applied along the West Main Road/ J.T. Connell and Coddington Highway corridors.

Similarly, former transportation land can become a Smart Growth redevelopment opportunity. If transportation land is made available through an improvements process, that excess land could be transferred to a LRA. This approach transfers former RIDOT and/or state land at minimal cost to a designated LRA for planning, reuse and disposition. The strategy requires regional coordination and assistance in the preparation of a master plan for the area that helps identify alternative locations for existing uses in the area. The Pell Ramp relocations offer this opportunity on the West Side. The Newport DPW facilities may have to be relocated in this scenario. This recommendation will need the provision of study, design and implementation funds for a parking/transit multi-modal facility in the area. It will further entail the adoption of large development performance criteria and guidelines either through the local regulatory process or as direct conditions on the transfer of public property.

As will be shown later, this tool may also be effective for transportation improvements on military land.

Tools for Establishing Scenic Roads and Protecting Vistas

State Scenic Roadway Designation

Designated scenic roadways and scenic vistas can be established at the state level to protect the cultural, historic, and visual character of travel along the West Side of Aquidneck Island. These designations:

- acknowledge local history and historical significance of a corridor;
- establish links among open space areas;
- ensure public notification of the visual qualities of an area as viewed from the road;
- support economic development initiatives that take advantage of this public designation with its views and vistas; and,

- provide an alternative to suburban development landforms by ensuring adjacent development conforms to the scenic qualities.

The Rhode Island Scenic Roadways Board, affiliated with RIDOT, helps identify and protect scenic roads through a municipal nomination and approvals process. The purpose of the scenic roadway program is to "create and preserve rustic and scenic highways for vehicular, bicycle, and pedestrian travel in unhurried, quiet and leisurely enjoyment." (R.I. Gen. Laws., § 24-15-1.) The Board has 11 members, including a representative from the Rhode Island Audubon Society, the chairperson of the Historic Preservation Commission, and the director of the Rhode Island Department of Environmental Management (or their designees). The Board has formed criteria for approving a scenic road designation. These criteria are based on natural, historic, cultural, archaeological, recreational, and visual characteristics.

The Board has also structured an approvals process to regulate any proposed modifications to the scenic roadway, upon its designation. The application for permission to perform construction, repair, or alter a state-designated scenic roadway is based upon the determination of adverse effect. The scope of the Board's review is largely focused on the right-of-way, adjacent vegetation, curb cuts and access points. However, the language surrounding the determination of adverse effect remains flexible in its discussion of the setting and atmosphere of the roadway. It is through this flexible language that the determination of adverse effect could be extended from the bounds of the right-of-way and applied to the surrounding landscape character.

While the Scenic Roadways Board does not fund road improvements that preserve scenic elements, it establishes review procedures to avoid publicly-funded improvement projects which would be detrimental and promotes municipal stewardship plans to preserve the character of roadways. Rhode Island currently has eight state-designated scenic roadways.

Local Scenic Roadway Designation

The scenic roadway designation has also been applied at a municipal level. As in Newport, local ordinances can be formed to acknowledge and reinforce the state designations, where "*Scenic*

Recreational area in Portsmouth

highway means any *road*, street, avenue, drive or other vehicular, pedestrian or bicycle route which has been designated as a component of the state system of *scenic* highways pursuant to Title 24 Chapter 15 of the General Laws." (Newport City Ordinance, Section 17.92.020., Usages). Such is the basis for the designation of Ocean Drive in Newport.

There are several instances in which a local scenic designation has been supplemented with additional classification to ensure its character. Newport's Ocean Drive District has been locally designated as a scenic vista, "a defined angle of perception within the landscape which limits the view to a particular part of the landscape while providing the viewer with an unobstructed sight line to distant land, water, structure of historic or cultural significance or in the continuation of a series of such sight lines or vistas. This shall include all *scenic* vistas along a designated *scenic* highway." (Newport City Ord. 4-97 § 1 (part), 1994: prior code § 1262.05.02) The designation of scenic vistas for districts and roadways can further inhibit adverse modifications to natural, historic, cultural and visual character.

For information regarding the specific content of scenic roadway performance standards, and how they could be tailored for the West Side, please consult *Appendix A*.

Façade and Landscape Improvement Programs

Façade and landscape improvement programs use a combination of public funding sources such as CDBG funding, loans and private loan pools to provide incentives for private sector enhancements.

Land Use Processes

Processes to Preserve Open Space, Natural Resources and Agricultural Character

Special Area Management Planning (SAMP)

The Special Area Management Planning (SAMP) is a comprehensive planning process for natural resource protection and reasonable economic growth in coastal areas. The uses and users of coastal resources are not always mutually compatible and often in conflict. Special Area Management Plans (SAMPs) recognize these discrepancies within:

- Areas where resource degradation conflicts with existing, important economic facilities and infrastructure.
- Zones slated for major, new economic development, experiencing rapid economic transition, or burdened by substantial user conflicts.
- Pollution hot-spots.
- Trans-boundary areas with significant coastal management issues.
- Areas of high risk for erosion and flooding.

SAMPs address and resolve these environmental and economic relationships in coastal areas. They also work to resolve social and recreational issues. Where these conflicts are widespread, a SAMP is used to collect and examine data, identify potential development trends and clarify anticipated or existing conflicts between different uses. SAMPs form strategies to protect and manage resources in order to insure that the goals of the various

users of the resource are compatible. The preparation of a SAMP explores alternatives that address and manage coastal resource conflicts and identifies policies to implement the chosen alternatives. The plans then contain detailed and comprehensive policy statements; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone.

The Coastal Resources Management Council manages multiple SAMP initiatives for critical watersheds. Section 309 of the Coastal Zone Management Act of 1972 can also be implemented to fund SAMPs. The planning mechanism partners central government with local government to manage the geographic areas of particular national concern or interest. The planning approach is consensus-driven through participation by key stakeholders. It results in binding commitments among participating entities and agencies, and has proven to be very effective in dealing with complex projects having major environmental impacts. This type of planning is especially useful for problems which cross political boundaries and require the cooperation of numerous different groups, sometimes with conflicting interests. Special Area Management Planning could be used along the West Side waterfront, Weaver Cove and Melville.

SAMPs can also function as effective Economic Development processes for coastal properties.

Legal and Policy Processes for Land Conservation

The Aquidneck Land Trust (ALT) employs a number of legal processes that should be applied to preserve valued open spaces, natural resources and agricultural lands. To the greatest extent practical, all future conserved land not owned by federal, state, municipalities or non-profit organizations should be conserved through conservation easements. The AIPC and the municipalities should formally support (through official endorsements) the efforts of the ALT to conserve land through such conservation easements. The AIPC and the municipalities should also support the efforts of the ALT to strength conservation language for properties that are conserved through deed restrictions or conservation intent only. The AIPC can augment the open space preservation criteria and prioritization process of the ALT through use of the Statement of Regional Consistency tool (see p. 6-8 above), in keeping with the additional considerations contained in this *Master Plan*. The land conservation tools are described above (p. 6-10 to 6-14).

U.S. Fish and Wildlife Service Habitat Assessment

The U.S. Fish and Wildlife Service (USFWS) should be involved in any assessment of habitat and habitat restoration that will be part of the reuse process of former military land. They may be especially interested in habitat restoration for tank farms or for habitat improvements at Melville Ponds. The Special Area Reuse Plan process advocated in the *West Side Master Plan* should explicitly request a USFWS habitat assessment and promote direct USFWS involvement in habitat restoration standards and reviews.

Parallel Implementation Processes

Interagency coordination and support will allow the AIPC and other West Side stewards to promote the principles and

strategies of the *West Side Master Plan* through parallel initiatives of local agencies, institutions, and corporations.

For example, the AIPC should support the efforts of Portsmouth's Melville Pond Committee and the Raytheon Employees' Wildlife Habitat Committee to connect routes into local trail networks. A trail network could connect existing trails at Raytheon northward with the expanding trail system at Melville Ponds. This would link well-documented habitats at Raytheon with trails through overgrown and undocumented areas in Melville. Trails could also extend into Lawton Valley, via the pull-off on the old West Main Road near the Lawton water treatment plant. It is recognized that this "canyon" is steep, and that any "trail" would involve hopping from rock to rock within the brook itself.

In addition, the AIPC should support the efforts of ALT, Raytheon, Bay View Apartments, the Navy and Newport in any actions regarding preservation of Lawton Brook. This property should be conserved with conservation easements to assure that the land is never developed.

Processes for the Disposition of Military Land

There are several different processes that are commonly used to transfer the use of federally-owned military land so that it can be used for either other public uses or for private sector redevelopment. Typical processes are described below. The specific disposition process to be employed is fundamentally determined by the federal government – through Congress or through federal agencies. Each of the processes has different implications for the state and local jurisdictions.

Special Legislation

Congress can pass special legislation that disposes of military land that supersedes all other procedures or actions. If approved by the President, special legislation can be used to transfer specific land areas for specific purposes. This approach may specify the process or set conditions on the disposition process, such as its use or the entity that will receive and manage the land.

Base Realignment and Closure (BRAC)

A highly organized and planned selection process for closure and/or reorganization of military properties is the Base Realignment and Closure (BRAC) process (section 2909 of Title 10). This process has occurred on a periodic basis; the most recent preliminary recommendations for realignment and closure throughout the U.S. and overseas were announced in May 2005 Under the current recommendation, Naval Station Newport will be a recipient of some additional military activities, and no land disposition of property was proposed.

If land is chosen for closure in future BRAC processes, this procedure requires the land to be put up for bid for private development unless the land, or any portion of it, is:

- Requested by the Navy or another military division;
- Requested for housing for the homeless (McKinney Act);
- The land is redeveloped for economic development. In this case the land can be given to a redevelopment authority at no cost if a formally adopted Base Reuse Plan is prepared according to federal

procedures that proposes economic development uses for the land. The Secretary of Defense must confer with the Governor of the State and the heads of local government prior to any action for disposal.

- Provided as Public Benefit Conveyance for open space or recreation that is taken and either maintained or transferred to a state or local entity by the Department of Interior, National Park Service.

The disposition process is run through the Department of Defense (DOD) with the Navy as land owner. The Navy has a real estate office that provides a face to the process. Typical negotiations require time or contact with Washington D.C. offices. The communities and the state are consulted in the process.

In the event that an economic development disposition is sought, a redevelopment authority may be authorized under state law that fulfills federal legal standards and would become the point for negotiation and eventual transfer of the property. The authority is given seven years to complete the transfer process and six years for the planning and reuse process, which is, by previous experience a very tight schedule for action for a project of any significance. If no redevelopment authority exists, then the Secretary of Defense must confer with the local government, or the agency designated by the Governor.

Early Transfer

In the event that portions of Naval Station Newport are disposed through the BRAC process, the communities proceed with a redevelopment plan for economic development, the communities could opt for 'Early Transfer.' This option puts the land into the hands of the private or redevelopment interests who may then proceed to initiate environmental clean-up instead of waiting for the military to complete the clean-up. This typically saves many years in the clean-up effort, while it keeps the former military owners responsible for the pollution and remediation. This requires a contract involving a developer, a remediation team, and an insurance program – all of which should be part of the redevelopment planning.

Government Service Administration (GSA) Disposition

In some cases, the GSA, through its Public Buildings Service, is authorized to dispose of land under Title 40 of the U.S. Code for federal agencies finding no use for their holdings. Just as with BRAC, the GSA land disposition process follows the same steps:

- offer first to another division of the Navy;
- then offered to another military division;
- then offered to other federal agencies;
- then offered to State agencies and authorities;
- then offered for housing for the homeless (McKinney Act);
- then offered to the local communities for economic development;
- then open to private bid.

Public Benefit Conveyance

A Public Benefit Conveyance is a land transfer option that occurs through a federal agency as part of a land disposition process. As an example, portions of land can be provided to the Department of Interior, National Parks Ser-

vice (DOI/NPS) by the Department of Defense (federal to federal transfer) on the basis that they will be used for open space preservation or public recreation and will be turned over to either another federal agency, a state agency, or a local authority for management. This option can be negotiated directly between a community and the federal agency.

Lease or Use Agreements

The Navy and Department of Defense are empowered to execute lease or use agreements for facilities and land that are not currently needed for military purposes. This could include leases or agreements for public facilities or for the use (including improvements) of infrastructure, such as the proposed Burma Road/Shoreline Drive corridor.

Interim Lease Agreements are also possible, wherein a property is used for non-federal purposes while it is undergoing the lengthy disposal and/or cleanup process.

Processes to Manage the Reuse of Former Military Land

Creating Local Redevelopment Authorities (LRAs)

These tools can be created using the state Redevelopment Agency (RDA) process. The enabling legislation for an RDA is contained in Chapters 31-33 of Title 45 of the *Rhode Island General Laws*. The *Laws* specify that an RDA and its functions are established and authorized through a resolution adopted via municipal council vote. The member appointments, compensation, tenure, officer appointments, and findings of the agency are also detailed in the State Laws.

Special Area Reuse Planning

A "Special Area Reuse Plan" is a new process that is recommended for application to significant dispositions of former military land. The Special Area Reuse Plan would be created through a joint planning agreement among the local, regional and state jurisdictions. *Appendix D: Outline Agreement for Special Area Reuse Plans* presents more information on the nature of this process and the structure of agreements among the participating jurisdictions to employ this method. The joint planning process would help ensure an informed and coordinated approach to reuse and redevelopment of critical land and infrastructure resources that are likely to be disposed of in the future – the tank farms, Burma Road, the Naval Hospital and other assets.

The Special Area Reuse Plan process would mirror the Base Realignment and Closure (BRAC) Reuse Plan process, which has proven highly effective in providing a shared public process for specific reuse decisions. It is an excellent method to ensure coordinated regional planning, provide appropriate local control and that private sector reuse will be unlocked to meet state, regional and local economic development goals. In the BRAC process, the Reuse Plan is managed through a Local Redevelopment Authority (LRA). A Special Area Reuse Plan could be managed by a municipality or a LRA, which in Rhode Island practice is typically called a "Redevelopment Agency" (RDA). A state entity such as the RIEDC could also manage the process. The contents of a Special Area Reuse Plan would be established through a preliminary scoping process and could combine fiscal, land-use, environmental remediation, infrastructure, transportation, open space and recreation,

natural resources and implementation elements. Principles related to environmental sustainability, Smart Growth, and public benefit could be included. For detailed descriptions of the Special Area Reuse Plan tactic, its planning principles and elements, and subsequent implementation, please refer to *Appendix C: Special Area Reuse Plan* and *Appendix D: Outline Agreement for Special Area Reuse Plans*.

Land Banking

Public entities can "land bank" strategic sites for long-term development purposes. Land banking must be linked to economic development initiatives or policies where short-term use of land responding to market forces conflicts with the best long term directions. For example, former Navy land or facilities that might be able to be profitably redeveloped in the short term for housing might better be reserved for more beneficial public or commercial uses that are not currently needed or feasible. For example, setting aside portions of Tank Farm #3 for possible sewer treatment facilities could be a wise strategy until final decisions on future sewage treatment options are concluded.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) "Superfund" Clean-up Process

This federally-established process can help manage the environmental mitigation for the tank farms in the event that they are developed for reuse. This process provides for special financing mechanisms that could enable full reuse of the tank farms, without any restriction or expense to the state, communities or future development entities. Using this process may allow damaged land to be remediated according to the reuse strategies intended by the community plans, the *West Side Master Plan*, or Special Area Reuse Plans that may be created in the future.

Processes to Manage the Character of Land Use

Creating and Promoting Shoreline Access

CRMC public access designation will support the AIPC's and the communities' efforts to promote shoreline access along the West Side. Three specific locations are proposed for public shoreline access points: Cory's Lane and Melville Ponds in Portsmouth, and Greene Lane in Middletown.

To complete the shoreline access initiative, the AIPC and the Town of Middletown should work together with Naval Station Newport and RIDOT to develop a shoreline park near Greene Lane between Burma Road (future

Shoreline access at Cory's Lane

Shoreline Drive) and the Newport Secondary. This park would create a connection between Green Lane and the proposed fishing pier and kayak launch for parking, picnicking and service facilities. Portions of this property are currently owned by the Navy along Burma Road and RIDOT as part of the Newport Secondary right-of-way. Coordination would be required with both entities to either transfer land, provide a long-term lease or develop an intergovernmental agreement for public use, upgrades, operation, and maintenance.

Marketing Blue Trails will advance waterfront access strategies of the *West Side Master Plan*. The AIPC should work with organizations interested in marketing Blue Trails for kayaks and other small boats. Trails.com includes links to locations in Narragansett Bay including Newport Harbor and Fort Adams. These trails could be expanded to include waters off of the West Side with stops at McAllister's Point, Greene Lane Park (carry put-in), Weaver Cove boat ramp, Cory's Lane (carry put-in), and Willow Lane (boat ramp at proposed marina).

Creating Performance Standards and Design Guidelines

Performance standards and design guidelines are the next level of land use management beyond standard land use regulations. Where regulations are typically prescriptive and proscriptive, performance standards allow flexible paths to reach an objective. Assembled at the local level, communities can obtain high quality projects that are locally contextualized and site-specific. This section details the process of forming performance standards. The mechanisms and sample content of performance standards and design guidelines are discussed in more detail in *Appendix A: Performance Standards*.

The first step in the process of establishing new guidelines and standards is to decide on the goals that the community wishes to accomplish with these tools. This could include such purposes as higher quality design for private projects and better energy efficiency in public buildings. These could also be used to find the best solutions for a particular type of development such as agricultural land preservation or large mixed-use projects. For each goal, a separate combination of guidelines or performance standards may be found most appropriate.

The next step is a decision on the approach to defining community standards. There are distinctions between guidelines and performance standards that should be noted prior to determining which avenue to follow in developing the program.

Performance standards are the broader approach that allows the designer and developer to look at any number of options to meet those standards, and allows the community to make the determination as to whether those standards have been attained. Performance standards typically focus on environmentally-benign and energy-efficient design approaches, but can also deal with issues such as accessibility and mobility.

Design guidelines can be more specific architectural and site planning standards that create a specific character of place, such as a pedestrian-friendly location that is defined by certain features including streetscape, building entrances, fenestration and sign placement, or a 'New England' style character of a place.

After considering the differences, a combination of these approaches may be found appropriate for different procedures or project types. After noting these differences, there are further decisions as to how the guidelines and standards will be implemented, prior to looking at the specific review process. The key is to determine the relative weight of analysis that can be accomplished with the community's resources. With less specific standards, a higher review effort is necessary to determine achievement of the standards. The community may have a planner, but additional staff or additional technical experts may be needed if the determinations are complex and lengthy. On the other hand, with higher specificity in the standards there are fewer design options that the proponent can offer, and there is a greater chance that variance from the standards are needed to address specific circumstances. The earlier decisions on the goals of the process will help guide these choices.

The onus should be placed on the applicants to show how the proposed designs meet the intent of the guidelines. Applicants should demonstrate, through narrative text, photographic studies, site plan submittals and drawings of proposed improvements, how the proposed project conforms to the standards, or, describe why and where reasonable modifications are being proposed. The following information could be used to describe the design intent and specific design or performance elements.

- Define the landscape character and original architectural style(s) found in the area, including buildings in adjacent and nearby districts and then describe how the project intends to fit with, complement, or improve the area style(s).
- Describe the natural and man-made resources, the quality of those resources, and their relationship to the project proposal.
- Define the approach used in creating the proposed building and site design, and how the project conforms to the specific design guidelines and performance standards for the type of proposed project. This could include: the building façade treatments proposed in the design, describing how the site design creates an appropriate composition, listing access and visibility requirements unique to the business, define accessibility and transportation, show how energy efficiency is improved, and show how features and farmland is being preserved.

Design decisions that would significantly impact access or environmental mitigation to the projects but are outside the local development review process, such as highway design and coastal resources management, should be considered concurrently by the responsible public and state agencies.

Land Use Standards

Open Space Preservation Standards

Additional criteria for conservation of open space and public access could enhance the well-developed approach of the Aquidneck Land Trust and the communities in preserving open space. Two different types of standards are discussed below. The first are standards for selection that will help establish the environmental and civic value of the land to be preserved. The second list can de-

velop the linkages and connectivity between open space parcels and improve the ecological qualities of the land.

Open Space Land Values

In accordance with 170 (h) of the IRS Code, to be considered for preservation and related tax benefits, lands must exhibit at least one or more of the following criteria:

- The property must be for public outdoor recreation and education, for the "substantial and regular use of the general public or the community".
- The land must afford protection of a significant habitat or ecosystem, including "buffer zones" from other uses.
- The preservation of the open space must be either a) pursuant to a clearly delineated governmental policy and yield a significant public benefit, or b) dedicated for the scenic enjoyment of the general public and yield a significant public benefit.
- The property being preserved is historic (and has generally been classified as such).

Recreational area in Portsmouth

Other criteria are composed of standards already included in the ALT's process of land evaluation and additional criteria useful when land use decisions are being made within the West Side:

- The property contains endangered, threatened, or ecologically significant species, or natural system.
- The property is valuable to the community as open space due to its proximity to developing areas, or its impact on a view corridor.
- The land is valuable to a community because of its cultural value or its proximity to an historically significant area.
- The property includes or contributes to important wildlife habitat or migration corridors.
- The property includes significant agricultural or forestry resources.
- The property contains wetlands, flood plains or other lands necessary for the protection of water resources.
- The parcel contains significant or unique ecosystems or natural features (geological hazards and formations could apply);
- The land is adjacent to or in close proximity of land already preserved by federal, state, local, or other conservation agencies.
- The contributing qualities that make the land valuable for open space are unique – such as a unique ecosystem or natural feature.
- The land includes high quality coastal beaches, adjacent estuarine habitat.
- The parcel size is appropriate to benefit wildlife, views, and/or natural resources.
- The land contributes substantially to the preservation of water quality through prevention of erosion and sedimentation or flood control.
- The land may be needed for future development of appropriate traffic and pedestrian routes.

- The land enhances adjacent or nearby public lands for access, buffer or consolidation.
- Preservation of the land is consistent with Local Comprehensive Plan, Local Open Space Plan, Regional or Watershed Plan and Greenways/ Green space Element of the State Guide Plan.

Open Space Connectivity

Connectivity standards can be used to implement a strategy for creating a network of usable open spaces within the West Side, integrated with other existing open spaces throughout the Island. The purposes for linking parcels range from ecological goals to enhanced access. The standards would be implemented as part of either public projects or as a consequence of regulatory processes for private land development.

The quality of the connections that will create preserved natural corridors with appropriate views and vistas is a key goal of the *West Side Master Plan*. The following are some of the important standards and intended results:

- Create a network of biking and walking trails connecting the shoreline to open space reservations in the interior of the Island.
- Conserve the existing public access and rights-of-way and promote environmentally appropriate use of the shoreline (limited access in sensitive habitat areas for environmental protection).
- Require each new shoreline development to increase public access to the shoreline by permanent dedication of an easement and parking, as appropriate.
- Classify and measure the type of public access both in terms of quantity as well as quality.
- Create a shoreline trail that would link all shoreline parks and require every new development to contribute to the extension of the trail.
- Formulate public access design guidelines for siting development along the shore and maximizing visual and physical public access.
- Create a "Green Map" that would outline parks, wetlands, preservation areas, recreation areas, trails, and transit.
- Undertake capital improvement projects for enhancing the public realm, including signage programs, educational material, and guidebooks and the like.
- Prevent sprawl by concentrating development in higher density areas to allow more land to be set aside for open space.
- Adopt mechanisms like Transfer of Development Rights to preserve connections.

Performance Standards

The use of performance standards is a particular emphasis of this *Master Plan*. The addition of performance standards to the community toolkits for growth management offers a new way to judge proposals and guide development and design. By specifying standards of performance, the municipalities can supplement their as-of-right, special permit and subdivision approvals processes where they may be unable to address special problems. Performance standards can be used to supplement licensing, leasing,

and general regulations. In addition, the standards can influence municipal approaches to agreements, acquisitions and infrastructure investments, thus clarifying the expectations required to tailor community goals.

Performance standards can be employed through a variety of planning tools such as zoning, overlay zoning, site plan review, direct conditions on disposition of public property, through a Special Area Reuse Plan, or simply through advisory reviews.

The following sections briefly present these performance standards. They range from "Baseline Standards" to standards tailored to the specific land uses. More full delineations of baseline and specific land use performance standards are provided in *Appendix A. Performance Standards.*

Baseline Performance Standards

Baseline Performance Standards apply to the overall development of land and the management and improvement of roadways in the West Side. The development of land may adversely impact the surrounding resources, both on- and off-site. Performance standards for land clearing and construction can mitigate, if not eliminate, these impacts. Associated with land clearing, these standards preserve original topography, protect wildlife and archaeology, limit cut and fill, control erosion and sedimentation, and promote re-vegetation of the site. Street construction and improvement projects must also embrace performance standards to promote connectivity, transit continuity, and stormwater management. Detailed articulation of these baseline performance standards is provided in *Appendix A. Performance Standards*

Large Project Development Performance Standards

Large project development performance standards are relatively consistent with Smart Growth and Sustainable Design principles. The extended tenure and multiple phases of large projects create additional considerations aside from the standards for each element, which are described over the following pages. These standards enhance the long-term viability of large-scale projects by promoting sustainability, density, a range of housing types, commercial and cultural components, street and transit connectivity, ADA compliance, and aesthetic review processes.

The performance standards should recognize that length of time for full build-out may require the project to reconsider certain pieces or modify the original concepts. This could be very important in traffic management, for which long-term changes in traffic from unrelated development may require a different approach to maintaining flow, or allowing different traffic loads on the streets. This could also apply to utility systems and the standards that define long-term improvements and acceptable demands and loads. Design guidelines should also distinguish between different sections of the project to ensure that the project is not completely homogenous, but instead provides compatible variation and accented areas for continued interest and coherence.

Commercial and Mixed Use Development Performance Standards

Commercial and mixed use development performance standards work in conjunction with local dimensional requirements and zoning. Given compatibility among these requirements, these standards articulate the best

relationship among buildings and the street, open space, utilities, loading, landscaping, and signage to promote an efficient, attractive commercial or mixed use area with a high level of pedestrian activity. The standards can include design guidelines for site, signage and architectural quality.

Additional standards should be specified for mixed use projects to combine residential and commercial spaces in ways that ensure high quality spaces and functional units. These can address private and common open space, design and entrance features, and shared parking options to reduce total parking demands.

Performance Standards for the Reuse of Military Land

Performance standards for the reuse of military land modify large project development performance standards according to the demands and realities of military property. These properties need additional standards for public benefit and environmental restoration. Standards for access, utilities, open space, and economic viability also ensure a viable transition of the property. It has been commonly found that military properties have been subject to certain environmental remediation, due to earlier contamination. The standards must address the restoration process to ensure that it is compatible with all of the community's reuse scenarios. Any military operations that are continuing on or adjacent to the property must also not be impacted. This *Master Plan* recommends that military land reuse projects be accompanied by a special regional process, detailed in *Appendix C. Special Reuse Plan*.

Boat services in Melville

Marina and Marine-Related Use Performance Standards

Marina and marine-related use performance standards address the importance of increasing public access to the West Side waterfront. This increased access for public benefit and economic enhancement must be balanced with the demands of the existing marina and marine industrial uses. Coastal resources are areas with highly competitive land use demands. Public access, marinas, and supporting uses all must be accommodated in a finite resource area. Water area zoning, preservation of water-dependent uses, and improvement of water quality are some of the many considerations for the guidelines and performance standards. Land must also be reserved to support marine-related uses that support the working waterfront.

Agricultural Land Performance Standards

Agricultural land performance standards seek to protect these working landscapes by supporting farming operations during area development. Standards sequester development from agricultural resource areas, conserve prime soil, and encourage economic support for local farms. The conservation of the prime agricultural soils

Navy land in Portsmouth

is the principle means of ensuring that agriculture may continue. However, the market forces must also be supportive to preserve the activity. Standards can specify the ways that supporting commercial uses, such as a cooperative market, would be located on agricultural land.

Open Space Performance Standards

Open space performance standards ensure the preservation of wildlife and local ecology, enhancement of parcels with cultural, historic, agricultural, and community value, and facilitation of connectivity among the parcels, residential areas, and mixed-use centers. Plant species, design guidelines, and irrigation specifications can also ensure long-term value of the West Side open space system.

Scenic Roadways and Vistas Performance Standards

Scenic roadways and vistas performance standards preserve the rural and waterfront character of the West Side through drainage, grading, planting, setback, and signage requirements. While the performance standards for scenic roadways and vistas are included in *Appendix A, Performance Standards*, descriptions of the state and local designation processes are on p. 6-17.

Sustainable Site Planning and Design Performance Standards

Sustainable site planning performance standards must be integral to the planning process to be successful. While many communities already have sustainability standards, they may need to be updated in the municipal regulations to current national levels. The standards center around Low Impact Development (LID) and U.S. Green Building Design (USGBC) LEED Standards for buildings and site planning. Stormwater management, waste water treatment, energy conservation, erosion control and site selection are some of the focal components of these standards. *Appendix A* contains further information on sustainable site planning performance standards.

Land Use Resources

Resources for Open Space, Natural Resource and Agricultural Land Preservation

Resources for open space, natural resource and agricultural land preservation include a broad range of sources that are well stewarded by the ALT and others. This *Master Plan* includes several new sources that could be added to the list and that are associated with development management tools. Specifically, impact fees could be assessed for projects that negatively affect public open space values; a methodology and policy basis for this resource will need to be incorporated into the planning framework for the municipalities that choose to use this tool (see *Impact Fees*, p. 6-31). TDR mechanisms generate an exchange of value that can be used to preserve agricultural land and open spaces (see *Transfer of Development Rights*, p. 6-10). For open space "infrastructure" – bikeway, paths and public waterfront access – could arguably be financed through TIF mechanisms (see *Tax Increment Financing,* p. 6-37). Existing public ownership of valued open space on military land may also be though to as a resource that can directly employed to conserve land through the *Processes to Manage the Reuse of Former Military Land* (p. 6-22). Thoughtful project planning, design and implementation to allow

cost effective improvements should be consistently pursued. So, for example, the construction of trails at McAllister Point could be combined with construction of the Greene Lane Park to use similar funding opportunities.

Additional resources that might be considered include the following:

Open Space Acquisition and Preservation Resources

The Recreational Trails Program (RTP) is part of the U.S. Department of Transportation's Federal Highway Administration (FHWA). The RTP provides $50 million annually to develop and maintain recreational trails and/or related facilities for recreational trail uses. Among the trail uses include walking, bicycling, inline skating, cross-country skiing, and other non-motorized and motorized vehicles. The program is administered by the State. A State resource or park agency crafts procedures for project selection. RTP funds may be used for:

- maintenance and restoration of existing trails;
- development and rehabilitation of trailside and trailhead facilities and trail links;
- purchase and lease of trail construction and maintenance equipment;
- construction of new trails (with restrictions for new trails on Federal lands);
- acquisition of easements or property for trails;
- State administrative costs for the RTP (limited to 7 percent of a State's funds); and
- operation of educational programs to promote safety and environmental protection related to trails (limited to 5 percent of a State's funds).

There are stipulations on the percentages of funding applied to motorized, non-motorized, and mixed trail uses. Project suitability also depends on guaranteed public access.

Rhode Island Open Space, Recreation, Bay and Watershed Protection Bond

This initiative is a funding opportunity managed by RIDEM. The bond funds open space preservation efforts to offset pressures of growth and expansion into rural areas. The Island municipalities should continue to pursue fee acquisition of agricultural land for preservation of open space through this program.

Resources for Trails and Open Space Networks

Department of Interior Land and Water Conservation Fund, RIDEM Open Space Grants, and Off-site Impact Fees are all sources to fund new trails and open space networks that are available to the AIPC and the Island municipalities.

Resources for Mitigating Land Use Changes

Impact Fees

Local impact fee programs mitigate land use changes for large-scale development, including impacts associated with the reuse of military land. This resource is thus particularly appropriate for development on the West Side. The resource allocation concept should be incorporated into the performance criteria associated with large project reviews and approvals, reuse of former military land, and privatization of federal property.

As noted in the discussion of impact fees as a land management tool, impact fees are enabled at the local level through state legislation (Title 45, Chapter 45-22.4 – Rhode Island Development Impact Fee). This statute states that the amount of the impact fee is determined based on the cost associated with accommodating the new development. Prior to charging an impact fee, the governmental entity must conduct a needs assessment and identify the initiatives that will need to be funded to accommodate new project. Upon collection, the governmental entity then has 8 years to spend the impact fees on those programs that were identified in the needs assessment.

Melville Ponds

Economic Development Implementation

The economic priorities along the West Side will largely be implemented through private sector redevelopment. This *Master Plan* is focused on the public policy and actions that will support desirable, needed economic activities. As a result, many of the economic development strategies will be implemented through the coordinated land use, transportation and utility initiatives discussed in the balance of this section because they are most strongly linked to public action. However, supplemental economic strategies will involve additional public/private cooperation to leverage the best regional outcome. The redevelopment process for former Navy land will require substantial public sector assistance to overcome barriers to investment, including infrastructure construction and other forms of development assistance. The strategy for redevelopment must effectively employ the available tools and talent to advance redevelopment.

Economic Development Tools

Projects of Critical Economic Concern

Projects of Critical Economic Concern are initiatives designated by the Rhode Island Economic Development Corporation (RIEDC) to have significant job creation potential. These projects are considered to have the capability in their operational stages to enhance business, commerce, and industry, stimulate jobs, and relieve underemployment and unemployment. Upon successful application for a Certificate of Critical Economic Concern (CCEC) by the EDC Board, the project receives priority status in all permit review processes. Once obtained, the CCEC is valid for a renewable two years. The CCEC process thus provides a significant incentive to prospective businesses and industries seeking to generate jobs and revenue in Rhode Island. CCECs could present a further development incentive on Aquidneck Island, especially in areas such as Melville, for marine-related industries or other uses that meet the criteria of the program. The Melville area of the West Side has been designated as eligible for CCEC's.

Provision of Affordable Housing as a Condition on Approval of PPV Housing Redevelopment

Support for affordable housing has already been advanced in the initial stages of the Public Private Venture (PPV) process that manages the disposition of excess land and former Navy Housing. This strategy should continue and include preparation and approval of affordable housing proposals that also meet the requirements and preferences expressed through the local municipal Housing Plans. This should be accomplished through transactions that effectively subsidize the purchase price of the land from available public sources or as part of the community impact assessments that may properly be applied to transfer and development of such land as enabled through state legislation.

Inclusionary Zoning, Inclusionary Conditions or Impact Fees for Affordable Housing

Methods that may be required to advance the provision of affordable housing include three tools: inclusionary zoning, inclusionary conditions, or impact fees for affordable housing. All of these tools would require communities or private developers to help finance affordable housing. These tools may reasonably be applied to large project developments or large

mixed-use developments that include transfer, sale or lease of state or local public property.

- **Inclusionary zoning** – Local zoning may prescribe that qualifying residential projects include an established proportion of units that are deemed affordable using accepted methods for gauging appropriate income levels and corresponding price levels. Restrictions area placed on the initial and subsequent sale or lease of the units to residents who meet income standards. Many models of inclusionary zoning have emerged throughout New England and have served to significantly expand the supply of affordable housing and distribute it throughout communities. In some cases, payments in lieu of on-site compliance are permitted, and used to fund off-site affordable housing units.

- **Inclusionary conditions** – Requirements for the inclusion of affordable housing may be established as a condition on the sale or lease of public property for private sector redevelopment. So, for example, the redevelopment of some tank farm locations or the reuse of land formerly needed for roadways could be accompanied by inclusionary conditions.

- **Impact fees** – The impact fee mechanism may be applied to providing funds that support affordable housing initiatives if the municipality establishes the relationship between the economic impact of a project and the mitigation provided through affordable housing.

Special Area Reuse Plans

The application of the Special Area Reuse Plan tool should be primarily considered as an economic development tool to manage the reuse of the former military property into projects that directly contribute to the state, regional and local economy. The Special Area Reuse Plan mechanism can be used to establish the preferred use of land and link it to economic incentives or impact mitigation measures, as well as formulating the associated infrastructure, open space, land use patterns, performance criteria and approval procedures.

Extensive discussion of this proposed tool is also contained in *Appendix C: Special Area Reuse Plan* and *Appendix D. Outline Agreement for Special Area Reuse Plans*

This tool imitates the successful process used in the Base Reuse Plans of the BRAC process, which establish the reuse parameters for disposed military lands. BRAC Reuse Plans are necessary and useful procedures that set forth a clear process for disposition, property conveyance, properties for public benefit (for example, recreational facilities, educational facilities), and properties for economic development purposes. It is an excellent model that can be emulated, with modifications, to coordinate the similar decisions among local, regional and state levels in the event that federal land is disposed through non-BRAC procedures.

As has been described at length within this *Master Plan*, certain portions of the Navy's land are highly susceptible to being placed in one or more federal disposition processes. Because of recent congressional action, the BRAC process stands out as the most

significant of these. Consequently, the communities, and regional and state authorities should be prepared to act in concerted and proactive ways to respond to any disposition. This *Master Plan* recommends a series of steps to make the necessary choices efficiently and with the broadest representation of interests in these important decisions. A detailed description of Special Area Reuse Plans and their development is provided in *Appendix C. Special Reuse Plan*

Intergovernmental Agreements as an Economic Tool

Intergovernmental Agreements may be used as an economic tool by the constituent jurisdictions of Aquidneck Island and associated agencies and authorities to conveniently create enforceable contracts to advance development and limit the need for new legislation or burdensome regulations to meet public purposes. Intergovernmental agreements are discussed in more detail as a *Regional Coordination Tool,* p. 6-3).

Innovation Factory

The State's "Innovation Factory" concept should be tailored and applied to Aquidneck Island. The RIEDC has created a very applicable and highly inventive economic development tool that is perfectly matched to the trends in the Rhode Island and regional economies. This "Innovation Factory" program will focus reinvestment within buildings and complexes that leverage the advantages of shared proximity of both existing businesses and new ventures to facilitate local industry partnerships and synergy, and generally assist in an overall effort to diversify the focus, applications, and client base of defense-related research.

Special Economic Redevelopment Overlay Districts

Special economic redevelopment overlay districts on the West Side will enhance other redevelopment tools. In promoting or restricting specified types of development or redevelopment, municipalities – either individually or in collective agreement with other jurisdictions – can create economic "overlay" districts in which additional regulations, processes, and/or incentive programs may apply to new development proposals. For example, overlay zones seeking to promote maritime industrial uses may (1) provide tax incentives for marine-related uses, (2) impose development restrictions or conditions on adjacent residential types of development to avoid conflicts, (3) apply expedited development approval procedures, and/or apply other programs. Rhode Island's Enterprise Zone program comprises one form of overlay zone. State-created enterprise zones (including one in Portsmouth) currently provide various tax benefits to foster economic growth. In promoting objectives as set forth herein, the towns of Portsmouth, Middletown and Newport should explore possible alternative overlay zone objectives and available incentives, regulations and procedures.

Transfer of Development Rights (TDR) as an Economic Tool

This tool promotes intensified development in targeted zones while maintaining lower density uses in others. While this tool is geared toward land use concerns, the TDR provides financial incentives to developers that render it an attractive method for economic development. The density bonuses and downzoning compensation associated with the TDR are incentives that ensure development in line with the land use strategies

of the West Side. For more information regarding TDR programs, consult the *Land Use Tools* section, p. 6-10.

Home-based Business Zoning

Home-based business zoning is a tool that introduces flexible regulations for home-based businesses that address the growing trends in telecommuting and independent consulting that have developed in the information age. Zoning can further broaden the economic base in the Island municipalities and can be tailored to ensure the safety of the communities.

Roadway Realignment as an Economic Tool

Roadway realignments can indirectly advance land use and economic development goals. A realigned roadway can make land available and create improved access to a property that then contributes to the attractiveness and quality of future development. On the West Side, the realignment of Burma Road would provide for the viable disposition of former military land on its western side near Weaver Cove, contributing to a larger, more flexible development and site plan for marina and marine-related development in that area. The public authority that leases, sells or contributes the land for private sector redevelopment can place performance conditions (such as public access, open space, affordable housing) on the subsequent private redevelopment that is benefited by the realignment.

Economic Development Processes

Creating a Technology Transfer Center

"Technology transfer" is a process through which economic advantages are obtained by creating physical proximity and information links among related businesses or activities. This could be accomplished in selected locations and for selected technology clusters along the West Side, using land and building resources. For example, the State and Newport should work together to sponsor redevelopment of the former Navy Hospital complex using the RIEDC's "Innovation Factory" concepts to promote a technology transfer center for business, technology and knowledge linked to military-related research and development. This would involve:

- Acquiring the property through the PPV or Special Area Reuse Plan process, in which land is excessed by Congress or the DOD to a public entity for economic redevelopment purposes. Obtain funding for holding the facility and advancing the necessary reuse studies.
- Using the RIEDC "Innovation Factory" as a model, prepare a reuse feasibility, business and marketing plans for the facility.
- Providing financing and development management assistance, with the likelihood that the redevelopment and operation of the facility would be undertaken under private auspices through a Developer Request for Proposal, Land Disposition Agreement and related processes.
- Supporting marketing of the facility and linking its programs and operations to associated educational initiatives through the new Community College of Rhode Island campus.

Heritage Trail/Tourism Programs

Heritage Trail/Tourism Programs on the West Side are already underway to create, interpret and market tourism sites and a heritage trail for Aquidneck Island. The West Side's contributions to this network can best be achieved by:

- Channeling federal and state funding to complement the ongoing initiatives and support the graphic design, interpretive planning, site improvements and promotional costs of this system.
- Providing for additional tourism and heritage trail destinations by advocating and targeting public park reinvestment in areas such as portions of Melville (the difficult to develop "neck" at Coggeshell Point).
- Linking development impact fees to heritage trail improvements where this is a valid public purpose and compensating investment.

Business Retention and Assistance Programs are fundamental to a successful employment market on Aquidneck Island. The strategies for business retention and assistance will rely on the continued and increased funding for training and education; a key focus on these expenditures and programs should be the new CCRI campus, which should sponsor programs linked to tourism, the military and marine-related industries.

Operational Improvements at the Airport represent a potential focus for a State-run study. The AIPC should support and allocate funds toward this study, as enhancements of the local airport could better serve local businesses, without intensifying flight activity.

Economic Development Financial Resources

Tax Increment Financing

Tax Increment Financing helps fund infrastructure improvements which would enhance desirable private sector development. This approach to generating resources allows a portion of future tax proceeds associated with redevelopment to be used to finance the public infrastructure required to allow reinvestment to occur. This financing mechanism has been enabled in Rhode Island by the General Assembly (Tax Increment Financing Act, R.I. General Laws section 45-33.2-1 et seq. (2001). It can provide a highly useful mechanism to provide streets, roads, utilities, parking facilities and other critical aspects of redevelopment along the West Side, particular for redevelopment of the former Naval Hospital, Pell Bridge ramp area, Weaver Cove and Melville areas. A useful primer on TIF that includes useful references to the state legal framework can be found in the National Association of Realtors publication, Tax Increment Financing (TIF) published in 2002 and available on-line at http://assist.neded.org/TIFreport.pdf.

New Markets Tax Credits

New Markets Tax Credits serve as a mechanism to help fund improvements in qualifying areas. This federal program (administered by the U.S. Treasury Department's Community Development Financial Institutions Fund) awards tax credits to local certified entity seeking to provide capital to lower-income areas. Such Community Development Entities (CDEs) are eligible to receive awards to be allocated to a broad range of real estate or economic development

projects, in amounts of up to 39 percent of the project's private investment cost. Private investors provide capital, for which they receive these tax credits (which they can take over seven year periods). The first step in this process involves the creation or identification of the requisite local entities to apply for CDE certification, which then applies for tax credit allocations.

IRBA/Bond Mortgage Insurance

IRBA/Bond Mortgage Insurance reduces the risk and cost of desirable private sector development. The Rhode Island Industrial-Recreational Building Authority (IRBA) insures payments on private loans as well as bonds issued by the Rhode Island Industrial Facilities Corporation. Such insurance is available for a broad range of activities including commercial and industrial developments, investments in equipment, and recreational facilities (many of which are included in the above recommendations). Additional information on the program can be located through the IRBA.

Community Development Block Grant (CDBG) Program

CDBG Funding advances qualifying economic development projects. The U.S. Department of Housing and Urban Development's CDBG Program continues to grant and loan funding for various economic development endeavors. In the West Side study area, Newport is a small city entitlement CDBG community, and it receives funding annually. Middletown and Portsmouth are not entitlement communities, and they must compete for funding of eligible projects. For these communities not "entitled" to CDBG funds, such programs would likely be eligible through loans derived under Section 108, whereby communities pledge Rhode Island CDBG funds as collateral for loans. Such loans may be used for economic development, property acquisition, property rehabilitation, site improvements, environmental cleanup, construction of new public facilities, and other such activities. Information on the program funding can be located through the Rhode Island Office of Municipal Affairs.

Development Impact Fees

Development impact fees are paid by proponents of new projects to local municipalities to compensate the towns or cities for additional public costs associated with impacts of the development. Impact fees are enabled under state legislation (Rhode Island General Laws, Chapter 45-22.4, Rhode Island Development Impact Fee Act). The statute also states that impact fees may be imposed when property owned by the federal/state government is converted to private ownership (Title 45, Chapter 22.4-5). The impact fees are properly determined through the mechanisms that include studies that provide technical and professional evaluation of key changes and financial impacts that will result from a development. Relative to the *West Side Master Plan*, these mechanisms in Newport, Portsmouth and Middletown can be employed to provide needed compensation for traffic or infrastructure impacts, school population impacts and the like. These resources might usefully be expanded to quantify and compensate the communities for the loss of open space, funding resources to expand open space preservation, provide waterfront access, or recreational assets such as bikeways and parkland (see *Impact Fees as a Resource*, p. 6-31).

Tax Abatement

Tax abatement provides redevelopment incentives which can help attract commercial and industrial developers (and their tenants) by relieving ongoing tax burdens. Under typical tax abatement programs, for specified types of development identified as beneficial to the public interest, the value of new construction (or renovation) is phased in over time. At the beginning of this time period, new or renovated properties are assessed at their initial, predevelopment value; the municipality continues to collect taxes on its preexisting tax base. Over the specified time period, the properties are assessed at increasing fractions of their actual value, eventually reaching the full value at the expiration of the phase-in period. These measures provide cost benefits that help attract commercial and industrial developers as well as their tenants. It must be noted that this type of measure is incompatible with TIF programs: tax abatements eliminate the very tax "increment" that would be derived from TIF programs. Where TIF is not applied, however, this type of incentive can be tailored for overlay zones, where it can help attract developments that satisfy specified criteria. Specific statutes governing tax abatement programs are provided under Rhode Island General Laws sec. 44-3-9.

Special Loan Guarantee/Credit Enhancement Programs

Special loan guarantee/credit enhancement programs allow public agencies to finance development. Whereas planners often target unconventional or unusual types of development, lending institutions are often uncomfortable with the risks associated with the unfamiliar aspects of such projects. To address this barrier to development, duly authorized public agencies can organize funding mechanisms to guarantee conventionally financed loans, either partially or in their entirety. In a hypothetical example, the public agency might pledge funds to guarantee 75 percent of loans issued by a local bank. Depending on a variety of factors, the bank would require the agency to reserve only a certain specified percentage of the total loans. Given a "reserve requirement" of 33 percent, the agency in this example could use $100,000 to guarantee $300,000 in loans, which would insure $400,000 of capital. This sort of loan guarantee program significantly improves a developer's ability to obtain private financing. In addition, loan guarantee programs often result in below-market interest rates, further enhancing the development opportunity.

Transportation Tools

Upgrading Existing Intelligent Transportation System (ITS) Tools

A number of ITS technology tools have been implemented to date on the Aquidneck Island transportation system. These technologies have been augmented by ITS located outside of the Island to facilitate congestion mitigation and incident management activities through traffic surveillance and information dissemination systems. The existing ITS deployments should also be expanded to provide additional coverage and allow for an integrated approach to traffic information gathering and information dissemination. These systems include:

- **Highway Advisory Radio (HAR)** – RIDOT has installed five highway advisory radio transmitters, including installations in Providence and South Kingstown, and is in the process of installing transmitters in Newport and in Tiverton. These transmitters allow the RIDOT Transportation Management Center (TMC) to broadcast Aquidneck Island traffic and incident messages on 1610 AM over a 3-mile radius around each transmitter.
- **Dynamic Message Signs (DMS)** – The RIDOT TMC is currently managing a statewide network of fifteen permanent overhead message DMS as well as a number of portable Variable Message Signs (VMS). Several permanent signs are on approach routes to Aquidneck Island.
- **Camera Surveillance** – RIDOT has installed over 40 cameras to provide TMC Operators with a view of much of the interstate system around Rhode Island. This system will include several cameras in Newport. These cameras enable the TMC to better respond to incidents to keep the roadways clear for traffic.
- **511 Traveler Information System** – The 511 system is a 3-digit telephone number, available nationwide, that provides current information about travel conditions. This information allows travelers to make better choices - choice of time, choice of mode of transportation, and choice of route. Information is input from the RIDOT TMC, and is available to users free of charge.
- **Arterial Traffic Signal Systems** – Closed loop signal systems have been installed on West Main Road in Portsmouth and Middletown to improve traffic flow. Ten intersections are controlled by these systems. Additional closed loop signal systems have been installed on Aquidneck Island in Newport, Middletown, and Portsmouth.

Expanding the use of ITS technological tools as outlined below would greatly enhance transportation on Aquidneck Island.

The dissemination of traveler information to motorists entering Aquidneck Island provides an opportunity to alert motorists of incidents and congestion, provide alternate route information, and promote alternate forms of transportation, such as bus and ferry services as well as information regarding Park and Ride lots.

It is recommended that the current highway advisory radio (HAR) cover-

age be expanded throughout the Island and on the inbound routes. Additional HAR transmitters should be installed and synchronized to provide an uninterrupted message from Tiverton and Jamestown, and throughout Aquidneck Island. The goal would be for motorists to be provided with current travel and transportation conditions, as well as scheduled event information, at any time within these areas.

DMS and portable VMS should be stationed along the routes into Aquidneck Island (Route 138 in Jamestown, Route 114 North of the Mt. Hope Bridge, Route 24 in Tiverton, and on Interstate 195) to alert inbound motorists of travel conditions on the Island as well as HAR availability.

Additional signs on Aquidneck Island should be located at decision points for local (Burma Road/Shoreline Drive and West Main Road, Route 114) and regional (Rte 138 to I-95 or Rte 114) outbound travel.

The HAR and DMS should be controlled by the RIDOT TMC. TMC operators would also provide similar messages on the Rhode Island 511 system.

West Main Road Arterial Operations

In addition to geometric improvements recommended in the *West Side Master Plan*, it is recommended that close loop signal systems be expanded and augmented. Additional intersections should be integrated into the existing closed loop system. There are several intersection controllers along this arterial that exist as stand alone units (with remote dial up access). These signals should be integrated into the two existing signal systems for greater control of traffic flow.

Cameras should be added to strategic intersections along this corridor to provide TMC operators with greater surveillance capabilities for the detection of incidents and assessment of traffic flow. Images from these cameras should be made available online to provide information to travelers.

Signal timing plans should be developed to accommodate tourist and planned event travel patterns.

Arterial traffic signal/camera systems should be implemented on Burma Road and other routes to facilitate travel, measure traffic flow on these routes, and provide information to the TMC for dissemination to motorists.

Using New Intelligent Transportation System (ITS) Tools

New ITS technologies can be utilized to improve transit ridership by making it easier for motorists to utilize public transportation. It is recommended that an integrated transit system be implemented on Aquidneck Island to make transit an attractive alternative to automobiles. This transit system should include:

- **Fleet Management Systems** – The buses and ferries that serve Aquidneck Island should be equipped with Automatic Vehicle Location (AVL) systems and Computer Aided Dispatch (CAD). These systems, combined with driver interfaces, also allows for multimodal coordination (coordination between the bus and ferry systems to ensure passengers are not "stranded" between modes).
- **Passenger Information Display Systems (PIDS)** – PIDS represent roadside and terminal signage that

allows passengers to know the bus transit system status (how long until the next bus or ferry arrives). This information is invaluable to passengers. The PIDS should be located at strategic bus stops, ferry terminals, Park and Ride lots, and the Newport Gateway Center and Perrotti Park intermodal centers. PIDS should also be integrated with other traveler information systems (internet and 511) to furnish travelers with real-time travel information, continuously updated schedules, schedule adherence information, transfer options, and transit routes and fares.

- **Parking Facility Management** – ITS technologies at Park and Ride lots can be used to track lot capacity and provide advanced warning to drivers that the lot is full. These systems should be integrated with Fleet Management and PIDS to ensure travelers are aware when the next bus will arrive at the facility. These systems should also be integrated with the RIDOT TMC so that status may be included on the DMS, HAR and 511 systems.

- **Traffic Signal Prioritization** – The transit fleet should employ transmitters to communicate with the signal controllers along West Main Road, Burma Road (the future Shoreline Drive), and other key routes to adjust signal timing to assist transit schedule adherence.

- **Transit Security** – Video surveillance and passenger alarms should be included in Park and Ride lots as well as transit centers to enhance passenger safety. These systems should include the capability to alert operators and police to potential incidents identified by these security systems.

- **An Incident and Planned Event Management Response Team** develops a comprehensive management plan involving state and local agencies to address traffic and safety. The AIPC and the three municipalities including their emergency response departments, should work with RIDOT, RIPTA, and the State Police to form an emergency response team to handle traffic and incidents, particularly during Newport events. This team should meet regularly to identify and refine strategies to seamlessly respond to incidents, implement alternate routes, and provide information to travelers. Elements of these strategies should include: identification and notification of incidents; communications capabilities and needs; mutual aid response strategies; implementation of diversion routes; special event planning and traffic management systems and equipment; resource requirements and equipment locations. This team should integrate remote parking areas, ITS (including variable message signs), and shuttle busses to transport spectators and participants from remote sites on the island (and off, including Quonset and downtown Providence) to Newport venues. Motor coaches should also be involved in providing access from destinations outside Rhode Island. It is envisioned that recommendations for additional ITS deployments and resources would be identified by this team.

Transportation Management Associations

A Transportation Management Association (TMA) is a useful tool to reduce dependence on the single occupant vehicle (SOV) for commutation to large West Side area employers. By facilitating transit or high occupant vehicle (HOV) use the volume of peak-hour traffic on West Main Road may be reduced. Transportation options include RIPTA, busway/motor coach, vanpools and carpools, bicycling, and walking. TMAs are private non-profit organizations that have been successful not only in urban areas but in suburban settings in facilitating mode split options from the private SOV. Formation of a TMA with membership of Naval Station Newport, NUWC, Raytheon, boat industries in the Melville area, other major employment sites/office buildings, and future employers with 50 or more employees would effectively reduce roadway congestion through trip reduction measures. This could build upon the experience of NUWC which has been identified by the US Environmental Protection Agency and the US Department of Transportation as one of New England's Best Workplaces for Commuters.

A TMA would be instrumental in carpool matching, designating busway providers and routes, facilitating purchased or leased services from vanpool providers, advocating for flex time or telecommuting, or other HOV strategies outlined in *Section 5* of this *Master Plan*. Because commuters make logical commuting choices based on cost and time, savings must be realized in either or both for commuters to shift commuting patterns. One cost incentive for avoiding SOV commutes is the toll on the Pell Bridge. Other cost incentives include paid parking costs. Although paid parking lots are available in downtown Newport, parking in the planning area is free and therefore is not an incentive to HOV use. A time savings incentive could also be the avoidance of congestion on local bridges and West Main Road. Time savings could also result by providing preferential parking for carpools and vanpools.

Where time and cost savings incentives are not sufficient to induce changes in travel behavior, governmental regulations become critical to development and implementation of effective TMAs. Land development regulations for Newport, Middletown and Portsmouth should be revised to require the following as part of the local planning and zoning board approval process for proposed development or redevelopment sites with more than 50 employees:

- Reduce required parking lot sizes if TDM strategies are implemented. An incentive to businesses would be reduced parking lot construction costs.
- Implement Transportation Demand Management (TDM) strategies to reduce reliance on SOV by employees. This would reduce the demand for parking, reduce traffic on local roadways, attract an expanded work force, and improve commuting benefits and options for employees.
- Join or form a TMA to facilitate transit and HOV use by employees. Each firm would be levied an annual fee (amount determined) to fund the TMA's operating costs (staff, office space).

A TMA could serve numerous firms in the planning area (or throughout the Island) to facilitate ride-matching.

Traffic Calming

Traffic calming techniques reduce travel speed and increase safety for motorists and pedestrians to help retain the pedestrian scale of proposed development. Reduced pavement width (from AASHTO 12-foot standard width travel lanes for arterials, to 11-foot travel lanes), on-street parking, roundabouts, neckdowns at intersections to reduce pavement width and enhance pedestrian crossings, and speed humps or tables should be considered, depending on the application, to assure that newly constructed roadways reflect the context of the community. Additional techniques include special paving in intersections or on crosswalks to delineate a change or transition in adjacent land use and to create a sense of entrance or "gateway."

Roundabouts

Roundabouts slow the speed of approaching vehicles, reduce delays for both through and turning traffic, and improve air quality (by not requiring vehicles to idle at red lights). The Island communities should consider roundabouts when signal warrants are met. Traffic is directed by diverters at the approaches to traverse to the right of the center Island. This eliminates cross traffic crashes, slows vehicles, and requires simple decision-making for the motorists. An area in the center of the intersection that does not carry traffic may also provide landscaping opportunities. RIDOT now requires that roundabouts be considered as the first option for reconstruction of an existing or proposed signalized intersection.

Transit Ridership Enhancements

RIPTA will continue working with planning area employers to meet their transit needs. As additional developments come on line, project applicants should work with RIPTA to explore potential service expansion or rescheduling. Employers should also be encouraged (or required, for new developments) to participate in RIPTA alternatives to the single occupancy vehicle (SOV).

Land development regulations for Newport, Middletown and Portsmouth could be revised to require that proposed development sites with more than 50 employees work with RIPTA to identify how existing bus service could be modified to increase ridership, thereby decreasing SOV use.

All Aquidneck Island businesses, including existing and proposed businesses in the West Side planning area, should be encouraged to participate in the following RIPTA initiatives to provide alternatives to the SOV:

- **Express Traveler Program** – This program reduces transportation costs for those who choose to use transit to commute to work at least six times per month (or 11 one-way trips). RIPTA accepts commuting options via organized carpool / HOV, RIPTA bus, Park and Ride, vanpool, rail, biking or walking within the program. To remove the fear of being unable to leave work in case of an emergency, RIPTA offers a guaranteed ride home twice a year for commuters who use some form of transit (this could be a taxi from door to door).

- **AlterNet Ridership Program** – RIPTA matches carpool or vanpool participants with destinations in downtown Newport. Expansion of this program could serve Raytheon, the Navy base, and existing and potential marine trades in Melville.

- **Commuter Check Program** – Employers can offer up to $100 a month in tax-free benefits to employees who commute to work by public transit or vanpool. Employers can purchase Commuter Check vouchers for employees who can then apply the value toward the purchase of RIPTIKS, monthly passes or vanpool fares. Or, employers may set aside pre-tax dollars for the purchase of Commuter Check vouchers. Commuter Checks qualify as tax deductible business expenses and are free of payroll taxes.

Bus Rapid Transit

Bus Rapid Transit (BRT) uses new bus technologies and dedicated roadways to create express bus service that is particularly well suited to regions that experience seasonal and commuter peak travel demand and special event traffic. BRT buses are typically routed along dedicated busways for portions of their trip. Buses can also be equipped with technology that trips green lights at intersections as they arrive. Bus and roadway improvements can be less expensive than rail routes. Bus costs are generally lower than rail cars engine units and bring the additional advantage that the vehicles are not constrained to the limits of the rail – they can disperse to different destinations at the end of the "express" portion of their routes. In the long term (ten to twenty years), BRT could conceivably use portions of the Newport Secondary as a dedicated one-way, reversible route to relieve area roads and highways of congestion. As such, it should remain in the list of long-term options for the West Side.

Implementing bus rapid transit (BRT) will require imaginative and persistent attention to its potential, and funding to untangle the constraints that may block its introduction. For the West Side, this promising approach appears dependent upon a sophisticated application of a one-way reversible transit lane that must share a public right-of-way with rail and passes through sensitive areas including Naval Station Newport and near neighborhoods. The strategy for its implementation requires a knowledgeable, persistent advocate for its implementation. It appears that RIPTA is perfectly positioned to fulfill this role. RIDOT should coordinate all professional and technical activities, intergovernmental agreements and consequent organizational, operational and marketing activities in concert with RIPTA and the AIPC.

Bicycle Map

With the addition of off-road "shared use paths," on-road "share the road" and "signed shared roadway" routes, the AIPC's *A Bicyclists Guide to Aquidneck Island* brochure/map should be updated. Information on this map should coordinate with the RIDOT *Guide to Cycling in the Ocean State* map. It would be less confusing for cyclists if the AIPC guide used RIDOT terminology in identifying the suitability of routes for cycling. Updated maps should be distributed through bike shops, Chamber of Commerce, hotels, schools, and the like. Funding for this should be sought from charitable funds through grant applications.

Transportation Processes

Creating a Transportation Management Association

The AIPC should work with the Newport County Chamber of Commerce, the Navy, RIPTA and the EPA to investigate formation of a TMA for the Navy and defense contractors. RIPTA should advertise its rideshare matching program more fully in the Newport County area to expand this program to Aquidneck Island.

Three steps involved in the development of a TMA are investigation, implementation and operation. The AIPC would be integral to advancing each of these stages.

- **TMA Investigation Stage** – An investigation includes a Transit Needs Assessment to determine the need to establish a TMA and to identify its mission. This study would identify employer and community needs and concerns. A survey would be conducted to determine employee origin, current commuting patterns, and shift hours. Transportation-related problems or deficiencies would be identified. Funding opportunities should also be explored at this stage. The investigation stage is similar to the 2002 Transit Needs Assessment conducted by the RI Economic Development Corporation for the Quonset Davisville Port and Commerce Park. This plan was funded by RIDOT and the RI Statewide Planning Program as a transportation demand management (TDM) requirement of the Route 403 Environmental Impact Statement.
- **TMA Implementation Stage** – Regulatory issues are resolved, and legal and organizational structure and start-up and more permanent funding is established. The TMA office, with its defined procedures, is established. A membership base of local firms must be solidified. Close working relationships should be developed between the TMA and the member firms as well as governing and transportation agencies such as RIPTA, RIDOT, RI Statewide Planning Program, local municipalities and the Newport County Chamber of Commerce. Membership of non-regulated employers and agencies should be actively sought and encouraged. Specific TDM strategies should be identified and developed and then properly marketed and tested. Tools and resources are available through RIPTA, US EPA, USDOT, and private providers who have been established both regionally and nationally to assist in the growing demand for TDM strategies and TMA formation. The structure and bylaws of a TMA are critical to its implementation. A TMA can be established as an independent partnership with an independent corporate status or it can be established as part of another multi-purpose organization. If established as part of an existing organization such at the Newport County Chamber of Commerce, AIPC, or the LRA, many elements are (or will be) established including physical office space, financial controls, and working relationships. The development of the bylaws, establishment of fee structures and government structure, and the relationship of

the members are critical to the effectiveness of the TMA.

- **TMA Operation Stage** – This stage deals primarily with maintenance of service structures, membership and funding. Information on available transit options should be included at each member company. Adequate marketing and advertising is required to inform the public and provide the program with the best change for success. Ideally, TDM services are evaluated and refined, the TMA membership is expanded and long-term funding is secured. While the second stage of the TMA is getting the association off and running, it is the third stage where the TMA has to prove its worthiness. Continuing marketing is critical to encourage commuters to forsake the SOV for HOV travel options.

Creating a Shoreline Drive

A Shoreline Drive offers one of the greatest opportunities to improve transportation on Aquidneck Island. By diverting traffic from congested roads to an underutilized corridor, traffic on the island will improve. The following discussion details the process for accomplishing the Shoreline Drive strategy of the *West Side Master Plan*.

It is critical that the AIPC initiate discussions with the Navy commander regarding the disposition of Stringham Road and Burma Road (Defense Highway) as a high priority item. Based on a recent rejection of the Stringham Road/Burma Road TIP application (due in part to federal ownership of the land) it is imperative that a significant measure of control of this corridor be transferred to either the state or to local communities (Portsmouth and Middletown). This could be accomplished through long-term lease, ownership transfer or other type of intergovernmental agreement. Without a change in the status of this property, no improvements funded by the TIP may be made to the hairpin turn and no upgrades may be made to increase safety and capacity or to improve landscaping and scenic vistas. The State does not have the power of eminent domain over federal property; the concurrence of the Navy is required for any roadway upgrades.

Simultaneously, it is imperative that the AIPC continue talks with the Navy regarding improvements to the Shoreline Drive through Naval Station Newport. The Shoreline Drive should be a two-lane road with adequate shoulders and space for landscaping enhancements. The route would connect Defense Highway with the Gate 17 Access Road and an extension of Simonpietri Drive through to Coddington Highway. This discussion should be based on March 15, 2005 comments at the Navy Town Meeting. Critical issues include moving the secure perimeter of the Navy, extending Simonpietri Drive west to the Gate 17 Access Road with new construction, and addressing Navy concerns regarding utility security and emergency access. A memorandum of agreement or other intergovernmental agreement should be drafted regarding the role of the Navy, RIDOT, and the AIPC in extending the Shoreline Drive. RIEDC should also be involved in this effort, based on their role to enhance NUWC and Naval Station Newport.

The Shoreline Drive should be marketed as a tourist destination, similar to Ocean Drive. The Newport County Conven-

tion & Visitors Bureau, the Newport-Bristol Heritage Passage, and the Newport County Chamber of Commerce should collaborate on the marketing aspect of the Shoreline Drive.

RIDOT Endorsement and Regional Input

The implementation of the *West Side Master Plan* would be improved through communication and coordination with RIDOT. RIDOT has several ongoing projects with direct impact on the West Side and for which the *Master Plan* presents particular strategies and concerns. Since the *Master Plan* serves as a basis for regional policy, the AIPC should communicate with RIDOT regarding its goals for relevant ongoing project. A first step would be to inform RIDOT directors of the *Master Plan's* strategies regarding:

- Pell Bridge Ramps Project
- Coddington Highway / J.T. Connell Highway
- Armstrong Bridge/ Gate 4
- West Main Road, East Main Road to Coddington Highway

West Main Road Left Turn Improvements

The AIPC has submitted a TIP application for four left turn lanes on West Main Road. Preliminary response is that this project has been accepted for Study and Design. The AIPC should continue to monitor the progress of this *Master Plan* as the FY 06-07 TIP is finalized. The AIPC and Towns of Portsmouth and Middletown should work closely with RIDOT to assure that all appropriate intersections be considered for improvement in the section of West Main Road between Raytheon and Browns Lane in Middletown, including the following:

- Raytheon and Union Street/ Redwood Road in Portsmouth
- Oliphant Lane, Super Stop & Shop, Forest Avenue, and Browns Lane in Middletown.

By local communities contracting with consultants for study, design and permitting, the project will be expedited through the RIDOT process.

Hedly Street/ Cory's Lane Intersection Improvement and Visitor Center

The Town of Portsmouth has retained an engineering firm to investigate the feasibility of combining the Hedly Street and Cory's Lane intersection with West Main Road into one signalized intersection instead of two. Assuming this is feasible, the Town should also work with the RIEDC to secure enhancement-type funding to conduct preliminary feasibility studies for development of a gateway visitor center at this prominent location at the southern end of Route 24. By demonstrating local funding for preliminary project stages, this concept may be more readily supported by RIDOT for design and construction. The Town of Portsmouth should proceed with RIEDC grant applications and local funding of conceptual design. A FY08-09 TIP application should then be submitted to the Rhode Island Statewide Planning Program for study and design.

Interagency Coordination

Many of the strategies proposed by the *West Side Master Plan* will be accomplished via concerted communication, discussion, and assessment among related agencies, organizations, institutions and corporations. The following are two examples of processes that respond to specific *Master Plan* strategies and require such coordination.

- **Raytheon Access to Shoreline Drive** depends upon several steps. The desirability of such a connection should be confirmed with those company officials responsible for the campus. If the company wishes to establish this secondary connection, then the design requirements and costs should be incorporated into the process for enhancement of Shoreline Drive, taking into account an alignment that would have acceptable environmental impacts and be cost effective for those portions of the connection that would be constructed on private property.

- **The extension of bicycle connections** is a strategy that is supplemental to the a bike path along the Newport Secondary. The AIPC should work with the municipalities and property owners to facilitate bike path construction in the east-west direction. The municipalities can consider the construction or dedication of bicycle trails as a mitigating improvement eligible for impact fees or as a bonusable improvement associated with large project developments. ALT should assist the AIPC in the planning and implementation process, including provision of appropriate access easements across properties under their control.

Environmental Impact Study (EIS)

An Environmental Impact Study (EIS) is a federal action that can trigger a requirement for a comprehensive review of environmental impacts and benefits. This process helps implement the National Environmental Policy Act (NEPA). Through the EIS process, various alternatives to a proposed action must be studied and the net impacts and benefits of a project offered for public and agency review and comment. The EIS process is an excellent method for providing a thorough technical evaluation of projects that may have major implications for the community, region, or state in which they occur. The determination of the need for an EIS rests with the federal government. Should an EIS be required to study and advance an improvement (such as a major transportation initiative using federal funds), the process should be viewed as a planning opportunity. Two key phases are designed to seek input: scoping and the review of the Draft EIS. The scoping process establishes the issues that must be evaluated in the document. The lead agency responsible for the EIS also solicits comments and questions after the EIS is prepared in Draft form. The AIPC should routinely submit letters at both of these stages that request technical evaluation of the compliance of the proposed project and its alternatives with the *West Side Master Plan*.

Bicycle Route Suitability Reports

As roadway improvements are planned along the West Side, a Bicycle Route Suitability Report should be filed with RIDOT as a preliminary step in determining the suitability of any local roads for designation.

Creating Transportation Standards for the West Side

RIDOT and the AIPC should collaborate to establish agreed-upon techniques and aesthetic standards for special landscape, signage and traffic calming devices tailored to Aquidneck Island by funding a professional technical and design team to create a guidebook for the West Side. Sug-

gested transportation standards are included in the following section.

Transportation Standards

General Principles of Design

The following principles should be considered for any future roadway construction (or reconstruction) in the West Side planning area, as applicable.

- **Bike Lanes** – "Signed Shared Roadway" bikeways should be included to facilitate cycling as a safe and attractive transportation alternative.

- **Access Management** – Property owners could be provided incentives to consolidate driveways to provide cross access or be required to do so by zoning regulations (as in Portsmouth). Incentives could include a reduction in lot dimension, parking, or driveway spacing requirements. Requirements for access management could also be incorporated into local zoning or land development regulations for commercial and industrial zones along arterial roadways such as West Main Road, Coddington Highway, and J.T. Connell Highway. These regulations could require that existing nonconforming properties comply during redevelopment or when a change in use occurs. Joint and cross access overlay districts can also be established for local access management. RIDOT could attach conditions to Physical Alteration Permits requiring joint and cross access. Temporary driveways may be provided until adjacent properties develop (or redevelop) with the condition that the property owner closes the driveway when the joint access system is complete.

  Access management is especially important along roads currently owned and maintained by the Navy including Stringham Road, Burma Road, and Simonpietri Drive (all part of the alignment of Shoreline Drive). As any of these are transferred to either the State, Portsmouth or Middletown, adjacent development will result in increased curb cuts. Joint access should be considered from adjoining properties. Frontage roads to the rear of properties could reduce the number of curb cuts, while reducing excessive pavement along the building fronts.

- **Public Right-of-Way** – Acquisition of privately owned property for roadway improvements should be minimized. It is recognized, however, that maximum safety and capacity improvements have been conducted to date within the existing West Main Road right-of-way. Any future improvements including left turn lane construction will require the use of private land or state right-of-way currently used for parking. Reduction in parking requirements (through a zoning overlay zone or other revision to the local zoning ordinance) or joint use of parking in adjacent lots could be considered to assure the economic viability of affected properties.

- **Retaining Walls** – Any roadway construction should respect the natural terrain and minimize excessive grading. Use of retaining walls should be considered to avoid chasing grades on steep wooded slopes and to reduce impacts on adjacent privately owned property.

- **Landscaping** – Aesthetics are important considerations in es-

tablishing general principals of design. Requirements for tree-lined vegetated strips separating roadways and sidewalks, landscaped frontages on both private property and public right-of-way, and landscaping within parking lots should be incorporated, as necessary, into local land development and subdivision regulations and design guidelines.

- **Signage** – Graphic standards should be included in municipal regulations and guidelines to assure that private signage reflects community character. All efforts should be made to reduce the number of public signs along the highway while assuring that adequate information is available for motorists, including tourists and other visitors to the area. Scenic roads such as Burma Road (the future Shoreline Drive), Stringham Road, and Greene Lane should be designated with appropriate signage.

RIDOT Criteria and Standards for Bicycle Network Designation

RIDOT has established criteria for roads that are being considered for designation as statewide signed bike routes. A basis of these criteria are standards provided by the American Association of State Highway and Transportation Officials (AASHTO). This organization and its resources are described under the next heading in this chapter. Design Policy Memo (DPM) 920.06 provides technical guidance for the signing of state and local roadways as bike routes that are constructed utilizing federal and state funds. The intent of the DPM is to sign such roadways as an aid to navigation for experienced and/or commuter cyclists. This guidance may be used to determine roadways that may be designated as bike routes, utilizing the parameters of sound engineering judgment by considering a given roadway's posted speed limit, Average Annual Daily Traffic (AADT) volume, minimum usable width in feet, and other factors.

RIDOT uses several AASHTO designations for on- and off-road bike paths:

- **"Shared Use Path" Off-Road Bike Path** – Shared Use Paths should be thought of as a complementary system of off-road transportation routes for bicyclists and others that serve as a necessary extension to the roadway network. Most Shared Use Paths are facilities on exclusive rights-of-way, are designed off-road, and are physically separated from motor vehicle traffic. Shared Use Paths can be located along rivers, ocean fronts, canals, abandoned or active railroad and utility right-of-way, limited access freeways, within college campuses or within and between parks. Shared Use Paths are designed to work with on-road bicycle facilities to provide the greatest opportunities to bicyclists and pedestrians. For Shared Use Paths to be successful, it is very important to provide users with connections to the roadway network. A critical component of Shared Use Paths is the transitions to and from the roadway network.

- **"Share the Road" Bikeway** – A Shared Roadway or on-road facility has no bikeway classification or designation. According to AASHTO, different types of roadway conditions can result in a Shared Roadway designation. One condi-

tion is that the existing street system is currently being used for efficient bicycle travel without signing and striping. A second condition is that the existing roadway is not deemed suitable for bicycle travel and, therefore, bicycle travel should not be encouraged by designating the route by means of signing and/or marking as an approved bikeway. Another condition that could lead to a Shared Roadway classification is that the roadway is not considered a high demand bicycle corridor and as such the road should not be designated as a bikeway classification, regardless of roadway conditions. On roadways without bikeway designation, a minimum lane width of 12 feet, a width of 14 feet being desirable, can best accommodate both the bicyclist and motorist. Bike use should always be one-way, carrying bicyclists in the same direction as the adjacent travel lane and on the right side of the road.

- **"Signed Shared Roadway" On-Road Bikeway** – Signed Shared Roadways are those roads that have been identified by signing only as preferred routes through high demand corridors. This concept is illustrated in *Figure 5-15,* p. 5-82. RIDOT DPM criteria must be considered prior to signing a Signed Shared Roadway. These include, but are not limited to, the removal or restriction of on-street parking, smooth riding surface, regularly maintained roadways that meet the needs of bicyclists, and have wide shoulders. A Signed Shared Roadway should have particular advantages for bicyclists over alternative routes. According to AASHTO, Signed Shared Roadways should provide through and direct travel, connect to other bicycle facilities, and give priority to bicyclists. Signing also advises motorists that bicycles are present.

- **Bike Lane –** A Bike Lane is a portion of roadway that has been designated with striping, signing, and pavement markings for preferred or exclusive use by bicyclists. On-street parking is prohibited along a bike lane. The Defense Highway Commuter Bike Lane along Burma Road is an example although it is not currently posted for no parking. Bike Lanes should always be one-way, carrying bicyclists in the same direction as the adjacent travel lane and on the right side of the road. Width requirements for Bike Lanes vary according to roadway conditions. Bike Lanes may have a minimum width of 4 feet if the area beyond the paved shoulder can provide additional maneuvering width. A width of 5 feet or greater is preferred where truck traffic is present or where motor vehicle speeds exceed 50 MPH (such as Coddington Highway/ J.T. Connell Highway). Where on-street parking is permitted and striped, the Bike Lane should be placed between the parking area and the travel lane and have a minimum width of 5 feet. A Bike Lane should be delineated from motor vehicle travel lanes with a 6-inch solid white line.

Sidewalk and Trail Standards

It is recommended that design standards developed for the West Side include required construction of sidewalks, except along certain portions of scenic roadways as noted in the *Plan Strategies* section. Sidewalk con-

struction (with adequate curbing and stormwater management) should be tied to RIDOT's issuances of a Physical Alternation Permit for curb cuts for private development (or redevelopment) of adjacent parcels on state roadways. A similar requirement should be included within local zoning ordinances and land development regulations for projects on local roadways. Sidewalks should be constructed to the next logical destination or intersection to facilitate safe off-street pedestrian access. Sidewalks should be ADA accessible with a minimum 5-foot width.

AASHTO Standards

The American Association of State Highway and Transportation Officials (AASHTO) represents highway and transportation departments across the country. This includes a wide variety of modes including, air, highway, public transportation, rail transportation and water transportation. The organization fosters the development, operation and maintenance of an integrated national transportation system. AASHTO thus provides programs and services for bridges and structures, intelligent transportation systems, materials, outreach and pool funded programs. In addition to other West Side standards, the Island communities could look to AASHTO as an informational resource and a locus of specific transportation performance standards and guidelines, particularly regarding bikeways.

Transportation Resources

Transportation Improvement Program (TIP)

The statewide Transportation Improvement Program (TIP) organizes and prioritizes transportation projects eligible for state and federal funding. It is a biennial document developed by the Transportation Advisory Committee (TAC) and adopted by the State Planning Council. It programs federal transportation dollars to individual projects and programs that are implemented primarily by Rhode Island Department of Transportation (RIDOT) and Rhode Island Public Transit Authority (RIPTA). The process is managed by the Office of Statewide Planning, using input from local communities and agencies. The TIP takes the form of a list of transportation projects that the State intends to implement using the federal highway and transit funds. However, the program does not only apply to highway projects; the State has chosen to promote other transportation modes, such as bicycle and pedestrian programs, in addition to environmental projects.

As a state-approved planning entity, the AIPC has the opportunity of submitting its recommendations for funding. The AIPC should continue to submit requests for funding of projects listed in the *West Side Master Plan* on an annual basis, coordinating its submission with the constituent municipalities of Aquidneck Island. The TIP will help achieve the recommendations for West Main Road, Stringham Road, Burma Road (Defense Highway), and the bicycle path, for example.

Congestion Mitigation and Air Quality (CMAQ) Program

The Congestion Mitigation and Air Quality (CMAQ) Program was established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). It has been continued under subsequent reauthorization legislation known as TEA 21. The CMAQ Program directs funds toward transporta-

tion projects in areas that have been classified under the Clean Air Act as being in non-attainment of the ozone and carbon monoxide standards. Rhode Island is in non-attainment with national air quality standards for ozone levels. CMAQ funding is thus focused on investment in air quality improvements. The flexible guidelines of the CMAQ allow the program to span projects and initiatives related to highways, transit, and non-traditional areas. The State Planning Council's Technical Committee has established a Transportation Air Quality Subcommittee that has been charged with recommending CMAQ projects for inclusion in the TIP. The CMAQ Program is suitable for the highway improvements recommended by the *Master Plan*.

Resources for TMAs

The AIPC could devote some staff time with the Newport County Chamber of Commerce, the Navy, RIPTA and the EPA to investigate formation of a TMA for the Navy and defense contractors. An initial step would be to conduct a Transit Needs Assessment, similar to one conducted for Quonset Davisville Port and Commerce Park for the RIEDC. Statewide Planning should be approached for funding possibilities or a CMAQ TIP application (TIP) could be submitted in FY08-09.

Resources for Creating Shoreline Drive

Upon resolution of the ownership and use control issues, the AIPC should submit a TIP application for FY 08-09 funding for the Shoreline Drive. Assuming all property and agreements are in place, this application would include removal of the hairpin turn, geometric and safety improvements along Stringham Road and Burma Road to increase capacity and speed limits, and landscaping (including brush removal to open scenic vistas) as part of Shoreline Drive improvements. Special federal appropriation should be considered for construction of the Simonpietri Drive link on the Navy base (and the Burma Road/Stringham Road segments if a transfer of land cannot be accomplished from the Navy to state/local communities). The AIPC should work with the congressional delegation and RIEDC on these initiatives.

Resources for Incident and Planned Management Response Team

Assistance to help fund this transportation tool may be available as CMAQ grants through the TIP application process, and could be sought by the AIPC in conjunction with the participating municipalities on the Island.

Resources for Ferry Improvements

FHWA Ferry Boat Discretionary Funds will support the strategy to expand ferry service on Aquidneck Island. Through this program, the AIPC and the City of Newport may expand the water shuttle service in Newport Harbor and Jamestown for recreational/tourist (not commuter) use. In particular, the funding could be used to develop the additional infrastructure, such as docks and parking areas, that are required by the expansion of ferry service to other Aquidneck Island ports. Ferry service at Melville and Willow Lane/Mount Hope Marine Terminal should be considered as densities of development increase in these areas. Coordination is required with RIDOT Intermodal for information on these programs.

Resources for Bicycles

The future funding of a separated bike path along the Shoreline Drive should be accomplished within the same combination of state and federal funding that is used to undertake the roadway improvements. An application for the FY 08-09 TIP should be submitted to Statewide Planning for extension of the bike path south from Melville to the Gateway Center. It may be prudent to break the application down to include two segments: Melville to the Navy base and Gate 4 to the Gateway Center, depending on priority. The AIPC and the Town of Portsmouth should also work with RIDOT Intermodal and RIDEM Planning and Development for bike path funding. Potential federal recreational sources that might be sought include the Department of Interior Land and Water Conservation Fund. RIDEM funds bike path construction as part of its Greenways program.

Funding for an updated version of the AIPC's *A Bicyclists Guide to Aquidneck Island* brochure/map should be sought from charitable funds through grant applications.

Utilities: Tools

Intergovernmental Agreements on Utility Issues

Intergovernmental agreements can effectively provide the mechanisms to assess impact fees, provide services, manage redevelopment, and apply performance standards and design guidelines that are in keeping with this *Master Plan*. This is an alternative that addresses local priorities through agreement instead of via regulatory processes. The agreements can determine the best means to allocate roles and responsibilities regarding water supply, distribution, and treatment and wastewater collection and treatment on the Island. For more information on the intergovernmental agreements and the Intergovernmental Working Group, consult the *Regional Coordination Tools* section, p. 6-3.

Water Resources Board

Although not selected as an option in 2005 by the AIPC's Water Resource Discussion Group, at some point it may be possible to establish an Aquidneck Island Water Resources Board. Such a board might be established as a formalized entity through intergovernmental agreements that would allow consistent ongoing coordination of investment, supply, operational and other issues. Such boards are commonly used when multiple jurisdictions have interdependent system and supply needs. The scope of an Aquidneck Island Water Resources Board would clearly extend beyond the limits of the West Side planning area, and should be pursued in the context of a potential island-wide mechanism.

Wastewater Facilities Plan

The Town of Portsmouth should proceed with plans to conduct a wastewater facilities plan to address water quality violations at the northeast end of the community. This study should include a cost analysis of treatment options. If it is determined that a wastewater treatment facility in the West Side could cost effectively accommodate both the northeast neighborhoods and proposed development in the Melville and tank farms area, the town should proceed with coordination with the US Navy and Raytheon to secure a potential plant location.

Utilities: Processes

The Intergovernmental Working Group: Utility Forum

Organized coordination among interested entities will lead to the best solutions to existing issues regarding utility distribution on the West Side. An effective working group has been advancing concepts for water service for some time, and similar discussions have intermittently occurred regarding sewer and wastewater treatment options. The Intergovernmental Working Group proposed in this *Master Plan* can serve as an appropriate forum to ensure that effective discussions are advanced toward resolution on an organized and scheduled basis. For the purposes of utility agendas, participation by RIDEM and the state Water Resources Board (WRB) is strongly encouraged.

The special "Utility Forum" should be expanded to include representatives from the local utility authorities in addition to the municipalities, as well as RIDEM and the state Water Resources Board.

The principal options for solving future issues are found in the *Utilities Strategies* in *Section 5: Planning Strategies* (p. 5-87). However, the possibility

of linking future needs to privatization of the Navy utility system is worth underlining in this section. This prospect may not be viable, but conditions have changed considerably since earlier attempts to attract private sector interest failed. The implementation steps associated with this idea are as follows:

- A jointly funded cost/benefit evaluation should be undertaken in the very short term to establish whether a broad program of private utility provision is viable that would include the Navy systems, developing areas of northern portions of the West Side, and possibly the creation of services extending beyond these limits. This study should be funded through agreement among all interested parties and result in a conclusion regarding potential feasibility.

- If such an approach proves feasible, then intergovernmental agreements should be used to fund the more extensive studies and prepare the operating agreements, standards, procedures, financing mechanisms and host of other arrangement necessary to advance this approach, including coordination with the Navy/DOD regarding issuance of a request for proposals.

Utility Working Group Agenda Items

The IWG could be responsible for the discussion and coordination of utility issues on the Island. Early agenda items could be the problems surrounding water supply in the Melville area and sewage treatment in Portsmouth.

- **Water Supply for the Melville area** - Portsmouth, the AIPC, RIEDC and the Navy should work together to determine the suitability of transfer of one of the Navy's lines from Lawton Valley to Melville to RIEDC or the Portsmouth Water and Fire District. A water supply consulting firm should be hired to undertake the inspection and evaluation required to determine suitability of transfer. *Section 5* of this *Master Plan* includes steps that should be taken to evaluate this line. The role of RIEDC is critical to assure that the Melville area is developable for marine related industry, marina expansion, and related mixed use. Among the relevant options to be considered are the following:

  - Extend PWFD Service to Melville
  - Extension of City of Newport Municipal Service to Melville
  - Continuation of "wheeling through" the Navy System
  - Desalinization or other innovative technology
  - Private or community wells

- **Sewage Treatment in Portsmouth** - Portsmouth can be expected to continue its process to identify the demand for municipal sewage treatment. As part of any disposition scenario for the tank farms, the Town and State should jointly promote a direct public benefit transfer to the Town of the required acreage and most favorable location at Tank Farm #3 so that adequate land is reserved for a future treatment plant and buffers from other future uses. Should other sewer treatment options be chosen, Portsmouth should retain the ability to dispose of the land for economic benefit. The Town should work with RIDOT to identify any opportunities and

issues for construction of an interceptor along the Newport Secondary right-of-way as an important future land resource.

- **Additional Agenda Items** - Additional agenda items could include:
  - Work with the City of Newport and the Town of Portsmouth to finalize the contract assuring adequate water supply.
  - Continue cost benefit analysis (RIEDC) of service options for water supply. Key topics include: regionalization of treatment and distribution for the City of Newport system, Navy, and PWFD; regional treatment but not distribution; and formation of an advisory committee with continued treatment by the City of Newport and distribution by the City of Newport, Navy, and PWFD.
  - Consider formation for an Aquidneck Island Water Resources Board for regional treatment.
  - Work with the City of Newport, the Town of Middletown, and the Navy to renegotiate the sewer allocation to meet current and projected needs.
  - Work with the Town of Portsmouth on sewer issues. Key topics include: innovative technology for Melville, new development; wastewater treatment facility for Tank Farm #3; community system for new residential development; collection of wastewater in tank farm tank with off peak discharge to the Newport wastewater treatment facility.

Wind turbine

Wind Turbines

Wind turbines are a valuable source of sustainable energy. The Town of Portsmouth and the AIPC could promote private sector interest in developing wind turbines, which would provide the capital resources and technology for implementation. Further technical information on wind speed and direction should be available from Roger Williams University, based on the medium-sized turbine installed in 2005.

Utilities: Standards

Sustainable site and building standards will advance the *Master Plan* strategy to conserve energy on Aquidneck Island. The sustainable and renewable energy recommendations of this *Master Plan* will largely be accomplished through the performance criteria for development that are suggested. Regarding wind power, the strategy needs to specifically include provisions for appropriate location criteria within the Base Reuse Plans, to the extent that practical locations exist within the former tank farms (as seems likely).

Utilities: Resources

State Revolving Loan Fund

RIDEM's State Revolving Loan Fund is a viable state funding source for many of Aquidneck Island's utility issues and projects. Improvements for the Melville area water supply and the sewage treatment issues in Portsmouth could be funded through this loan.

Rhode Island Renewable Energy Fund

The Rhode Island Renewable Energy Fund is a possible source for wind-generated energy.

Roles and Timelines

Federal Roles in Implementation

Congressional Delegation

The congressional delegation is an essential link among federal legislation, actions, programs, agencies and funding that will be part of the West Side's future. The delegation should:

- **Participate in the West Side Intergovernmental Working Group** proposed in this *Master Plan.*
- **Support the utilization of a "Special Area Reuse Plan" process** (similar to the "BRAC" process) for all future disposition of federal land excessed by Congress or the DOD.
- **Advocate and provide information concerning grant and funding sources** that directly or indirectly will help implement the *Master Plan*.

Naval Station Newport and the Department of Defense

Naval Station Newport is a valued part of the West Side's future. To implement the *West Side Master Plan* Naval Station Newport should:

- **Participate in key implementation committees**, including the Task Force, Intergovernmental Working Group and the Transportation Committee.
- **Include applicable recommendations of the** *West Side Master Plan* **in the preparation of future military base master plans** to the extent that they are also compatible with military standards and policies as well as the operational needs of Naval Station Newport.
- **Participate in a special Transportation Management Association** (TMA) to improve traffic access for the employees, visitors and those stationed here.
- **Coordinate with state, regional and local entities** to advance the use and extension of Burma Road (Defense Highway) to Coddington Highway via Simonpietri Drive to the extent that it is compatible with security and operational needs.
- **Coordinate security and access procedures** to allow for future rail and busway operations along the Newport Secondary.
- **Participate in initiatives to resolve utility supply and distribution issues**.

Other Federal Agency Roles

Other federal agencies will be encouraged to consider the eligibility of relevant plans and projects called for in the for funding or support as model or demonstration programs for environmental sustainability, multi-modal and alternative transportation, and natural resource preservation.

State Roles in Implementation

A timeline tracks some of the key roles that the state and its agencies can take over the next decade to accomplish the *West Side Master Plan (*see *Figure 6-1,* p. 6-68). The left hand column is drawn from relevant components contained in the *Planning Strategies* section of this *Master Plan*. Key implementation measures are charted within an approximate time scale, beginning with the distribution of the *Master Plan* by the AIPC.

Legislative Delegation

The Aquidneck Island state legislative delegation will be a essential link among state legislation, actions, programs, agencies and funding that will be part of the West Side's future. The delegation should:

- **Participate in the Intergovernmental Working Group and the annual West Side Transportation Summit**.
- **Advocate for and support the utilization of the recommended processes** for all future disposition of Navy land.
- **Advocate and provide information concerning grant and funding sources** that directly or indirectly will help implement the *Master Plan*, including the no-cost disposition of excess RIDOT land for economic development purposes.
- **Support enabling legislation for Local Redevelopment Authorities** that may be approved and supported by the towns and city on Aquidneck Island.

Office of the Governor

- **Endorse the** *West Side Master Plan* as a guide for state programs and actions.
- **Enter into an intergovernmental agreement with other participating jurisdictions to use Special Area Reuse Plans** as described in this *Master Plan* to help manage future dispositions of military land.
- **Participate in the Intergovernmental Working Group.**

Rhode Island Department of Transportation (RIDOT)

Transportation is a major focus of the *West Side Master Plan* and many of its recommendations cannot be accomplished without RIDOT's active assistance. Among the many actions that involve their active assistance, RIDOT should:

- **Participate in the Intergovernmental Working Group and the annual West Side Transportation Summit**.
- **Advance the Shoreline Drive concept by working with the Navy, the AIPC and the municipalities** to secure the ability to improve and operate the Shoreline Drive concepts and lead the associated studies and future investments contained in this *Master Plan*.
- **Endorse and apply the transportation design principles** contained in the *Master Plan* by directing design and construction contracts to use the standards and guidelines for all West Side projects.
- **Work collaboratively with RIPTA** and others to advance the transit recommendations.
- **Work proactively to advance the multiple use of the Newport Secondary** corridor to advance the initiatives proposed in this *Master Plan.*
- **Participate in creating TMA's** along the West Side.
- **Cooperate with local municipalities and the AIPC** to ensure that transportation planning processes explicitly take into account the land use and economic development opportunities to which they are linked.

Rhode Island Economic Development Corporation (RIEDC)

The RIEDC has been an active participant in the redevelopment of the West Side through the roles it has played in the disposition and redevelopment of the Melville area. To contribute to the economic redevelopment of additional Navy dispositions, RIEDC should:

- **Participate in the Intergovernmental Working Group**.
- **Enter into appropriate intergovernmental agreements with other participating entities to use Special Area Reuse Plans** as described in this *Master Plan* to help manage future dispositions of military land.
- **Provide direct economic development assistance** through management, financing, development and property management, promotional activities or other programs for sites and facilities through intergovernmental agreements with the City, towns or their Local Redevelopment Authorities.
- **Secure formal Growth Center designation** by the Governor's Growth Council.

Rhode Island Public Transit Administration (RIPTA)

The State's transit agency has many roles that it must play in the implementation of the *West Side Master Plan*; it should:

- **Participate in the annual West Side Transportation Summit.**
- **Endorse and apply the transit and SOV-alternative planning recommendations** contained in the *Master Plan* by directing planning and programs to advance the West Side initiatives.
- **Work collaboratively with RIDOT and others to advance the transit recommendations.**
- **Work proactively to advance** the bus-related initiatives proposed in this *Master Plan*.
- **Participate in creating TMAs** along the West Side.

Rhode Island Coastal Resource Management Commission (RICRMC)

Through collaboration with the Coastal and Estuarine Land Conservation Program (CELCP), the CRMC can ensure conservation of coastal and estuarine lands for the benefit of future generations.

- **Submit CELCP applications** for land acquisitions considered important for their ecological, conservation, recreational, historic or aesthetic value.
- **Prepare a Special Area Management Plan (SAMP)** to guide the use of the waterways and coastal resources along the West Side.
- **Increase coastal buffer standards** for the purposes of habitat preservation and public access improvements.

Other State Agencies

Among the other state agencies that will have stewardship roles in the West Side are the Department of Environmental Management (RIDEM), the Rhode Island Emergency Management Agency (RIEMA), the Rhode Island Economic Policy Council (RIEPC), Rhode Island Statewide Planning, and the state's Water Resources Board (WRB). These and other agencies should:

- **Expand programs and program funding** where the West Side *Master Plan* includes public access,

open space or cultural interpretive initiatives in keeping with their agency's mission.

- **Provide accelerated permitting and approvals** when such processes are triggered through the area's status as for projects of Critical Economic Concern (CEC).
- **Participate in the utility forum** and other Intergovernmental Working Group meetings on an invited basis for special issues and input.
- **Participate in the preparation of a Special Area Management Plan (SAMP)** to guide the use of the waterways and coastal resources along the West Side.
- **Request technical and financial assistance for natural hazard mitigation** through disaster and pre-disaster mitigation funding sources.
- **Provide expertise and funding** to continue the effort for in regional transportation modeling.
- **Serve as a model for placemaking** by contributing expertise to other placemaking projects.
- **Solicit the active involvement of the Bridge Authority** as an influential, funding source.

Regional Implementation Roles

Regional implementation of the *West Side Master Plan* is largely the responsibility of the AIPC. The AIPC will continue its mission to create a coordinating forum and technical planning resources for the Island. Milestones and priorities along the path to the West Side Vision have been charted in a Timeline for the AIPC (*Figure 6-2*, p. 6-70), which reflects some of the key implementation recommendations listed in the *Overall Coordination Approach,* pp. 6-3 to 6-9.

Local Implementation Roles

Local implementation of the *West Side Master Plan* recommendations will take a different form for each of the constituent communities. Milestones and priorities along the path to the West Side Vision have been separately charted in Timelines for each community.

However, a common principle applies to all communities: the relevant recommendations of the *West Side Master Plan* should be endorsed and incorporated into the local comprehensive plans and land use management frameworks of each of the Island's three communities. This has an important legal implication: Rhode Island law requires that local land management be based upon – and be consistent with – the local comprehensive plan. By incorporating the relevant portions of the *West Side Master Plan* into the local planning framework, the municipalities will add legal weight to the regulatory decisions and local government actions that will be needed to accomplish the *Master Plan's* purposes.

Middletown

A timeline tracks some of the key measures that Middletown can take over the next decade to accomplish the *West Side Master Plan (*see *Figure 6-3,* p. 6-72). The left hand column is drawn from relevant components contained in the *Planning Strategies* section of this *Master Plan*. Key implementation measures are charted within an approximate time scale, beginning with the distribution of the *Master Plan* by the AIPC.

The Town of Middletown should:

- **Endorse the** *West Side Master Plan* through approvals by the Planning Board and the Town Council.
- **Allocate staff resources** to support the ongoing implementation of the *Master Plan* as it may benefit the Town.
- **Incorporate applicable elements** into its Comprehensive Plan.
- **Actively participate in the Intergovernmental Working Group, including participation in the utility forums**.
- **Enter into an intergovernmental agreement with other participating jurisdictions to use Special Area Reuse Plans** as described in this *Master Plan* to help manage future dispositions of military land.
- **Specifically endorse island-wide transportation strategies contained in this** *Master Plan* through the Town Council and the Planning Board and participate in the annual AIPC West Side Transportation Summit.
- **Incorporate applicable performance and design standard principles and tools** into the land use and development framework.
- **Direct the use of development impact fees** for projects along the West Side consistent with the *West Side Master Plan's* recommendations.
- **Invite and participate in an annual presentation and report by the AIPC** on progress in implementing the *West Side Master Plan* through the Town Council in joint session with the Planning Board.

Portsmouth

A timeline tracks some of the key measures that Portsmouth can take over the next decade to accomplish the *West Side Master Plan (*see *Figure 6-5,* p. 6-76). The left hand column is drawn from relevant components contained in the *Planning Strategies* section of this *Master Plan*. Key implementation measures are charted within an approximate time scale, beginning with the distribution of the *Master Plan* by the AIPC.

- **Endorse the** *West Side Master Plan* through approvals by the Planning Board and the Town Council.
- **Allocate staff resources** to support the ongoing implementation of the *Master Plan* as it may benefit the Town.
- **Incorporate applicable elements into its Comprehensive Plan**.
- **Assign participants** to each AIPC *West Side Master Plan* Implementation Committee.
- **Actively participate in the Intergovernmental Working Group, including participation in the utility forums**.
- **Enter into an intergovernmental agreement with other participating jurisdictions to use Special Area Reuse Plans** as described in this *Master Plan* to help manage future dispositions of military land.
- **Continue the process of determining the best method to establish a Local Redevelopment Authority** (**LRA**) and either create or designate a qualifying state-enabled entity through an intergovernmental agreement to serve in this role in anticipation of the disposition of

any former Navy land excessed by Congress or the DOD.

- **Specifically endorse island-wide transportation strategies contained in this** *Master Plan* through the Town Council and the Planning Board and participate in the annual AIPC West Side Transportation Summit.

- **Undertake zoning measures to manage redevelopment along the West Side.**

- **Incorporate applicable performance and design standard principles and tools** into the land use and development framework.

- **Direct the use of development impact fees** for projects along the West Side consistent with the *West Side Master Plan's* recommendations.

- **Invite and participate in an annual presentation and report by the AIPC** on progress in implementing the *West Side Master Plan* through the Town Council in joint session with the Planning Board.

- **Conduct a wastewater treatment cost analysis and technical feasibility study** to serve the Portsmouth section of the West Side, especially in the Melville and Tank Farm areas.

- **Allocate sufficient resources for construction of a municipal sewage treatment facility on or adjacent to Tank Farm 3** if the community decides to sewer residential areas in the northeast section of town, with a connection via the Newport Secondary.

- **Allocate sufficient resources for construction of as municipal wastewater treatment facility to serve West Side development only** if the community decides not to construct a municipal wastewater treatment facility to serve residential areas at the northeast end of town. The Town should allocate sufficient resources to keep pace with private development initiatives.

Newport

A timeline tracks some of the key measures that Newport can take over the next decade to accomplish the *West Side Master Plan* (see *Figure 6-4,* p. 6-74). The left hand column is drawn from relevant components contained in the *Planning Strategies* section of this *Master Plan*. Key implementation measures are charted within an approximate time scale, beginning with the distribution of the *Master Plan* by the AIPC.

- **Endorse the *West Side* Master Plan** through approvals by the Planning Board and the City Council.

- **Allocate staff resources** to support the ongoing implementation of the Plan as it may benefit the City.

- **Incorporate applicable elements** into its Comprehensive Plan.

- **Actively participate in the Intergovernmental Working Group, including participation in the utility forums**.

- **Enter into an intergovernmental agreement with other participating jurisdictions to use Special Area Reuse Plans** as described in this *Master Plan* to help manage future dispositions of military land.

- **Continue the process of determining the best method to establish a Local Redevelopment**

Authority (LRA) to help direct development along the West Side by designating the Newport Redevelopment Authority, creating a new entity, or designating a qualifying state-enabled entity through an intergovernmental agreement to serve in this role. This should be accomplished in anticipation of the reorganization, redevelopment and disposition of land associated with the Pell Bridge ramp relocations, the disposition of any former Navy property either excessed by Congress or the DOD, or land that may be transferred through the PPV Housing Privatization Program.

- **Specifically endorse through the City Council and the Planning Board island-wide transportation strategies** contained in this *Master Plan*.
- **Incorporate applicable performance and design standard principles and tools** into the land use and development framework.
- **Direct the use of development impact fees** for projects along the West Side consistent with the *West Side Master Plan's* recommendations.
- **Invite and participate in an annual presentation and report by the AIPC** on progress in implementing the *West Side Master Plan* through the City Council in joint session with the Planning Board.

Institutional Implementation Roles

Aquidneck Land Trust

The Aquidneck Land Trust should continue to contribute to the stewardship of the West Side through actions that:

- **Incorporate the recommendations of the *West Side* Master Plan into its prioritization of land preservation projects**.
- **Collaborate with the AIPC** in advancing trail and path connections through appropriate portions of land they may control or influence.
- **Collaborate with the municipalities, state and federal agencies and private land owners** to promote effective open space corridors and connections across property and jurisdictional lines.

Newport County Chamber of Commerce

The Newport County Chamber of Commerce should continue its substantial support and collaborative efforts as a partner with all of the businesses, jurisdictions and institutions that have a stake in the future of the West Side. Specifically, the Chamber of Commerce should:

- **Endorse the *West Side* Master Plan** through its Board of Directors.
- **Specifically endorse the island-wide transportation strategies** contained in this *Master Plan*.
- **Participate in a special Transportation Management Association** (TMA) to improve traffic access for the employees, visitors and those stationed here.

- **Allocate staff resources** to support the ongoing implementation of the *Master Plan* as it may be consistent with the mission of the organization.
- **Assign participants** to each AIPC *West Side Master Plan* Implementation Committee.
- **Invite and participate in an annual presentation and report by the AIPC** on progress in implementing the *West Side Master Plan* to its Board of Directors.

Non-Profit Development Corporations

Non-profit development entities, such as Church Community Housing and others should continue playing their mission role by providing for affordable and workforce housing in the West Side. In particular, these organizations should:

- **Continue leading** affordable housing redevelopment projects.
- **Participate** in future housing development efforts.

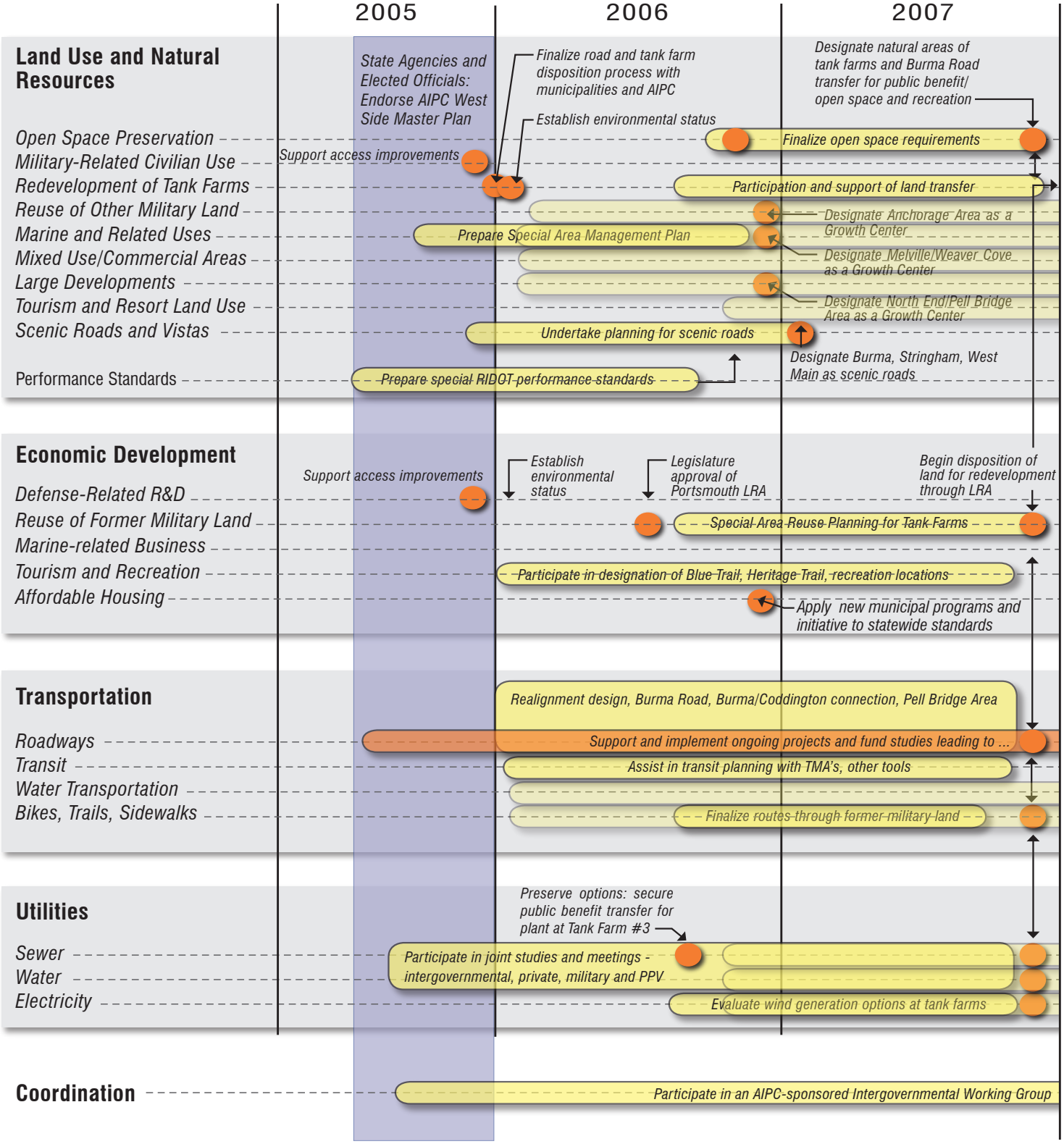
Other Interested Groups, Organizations and Institutions

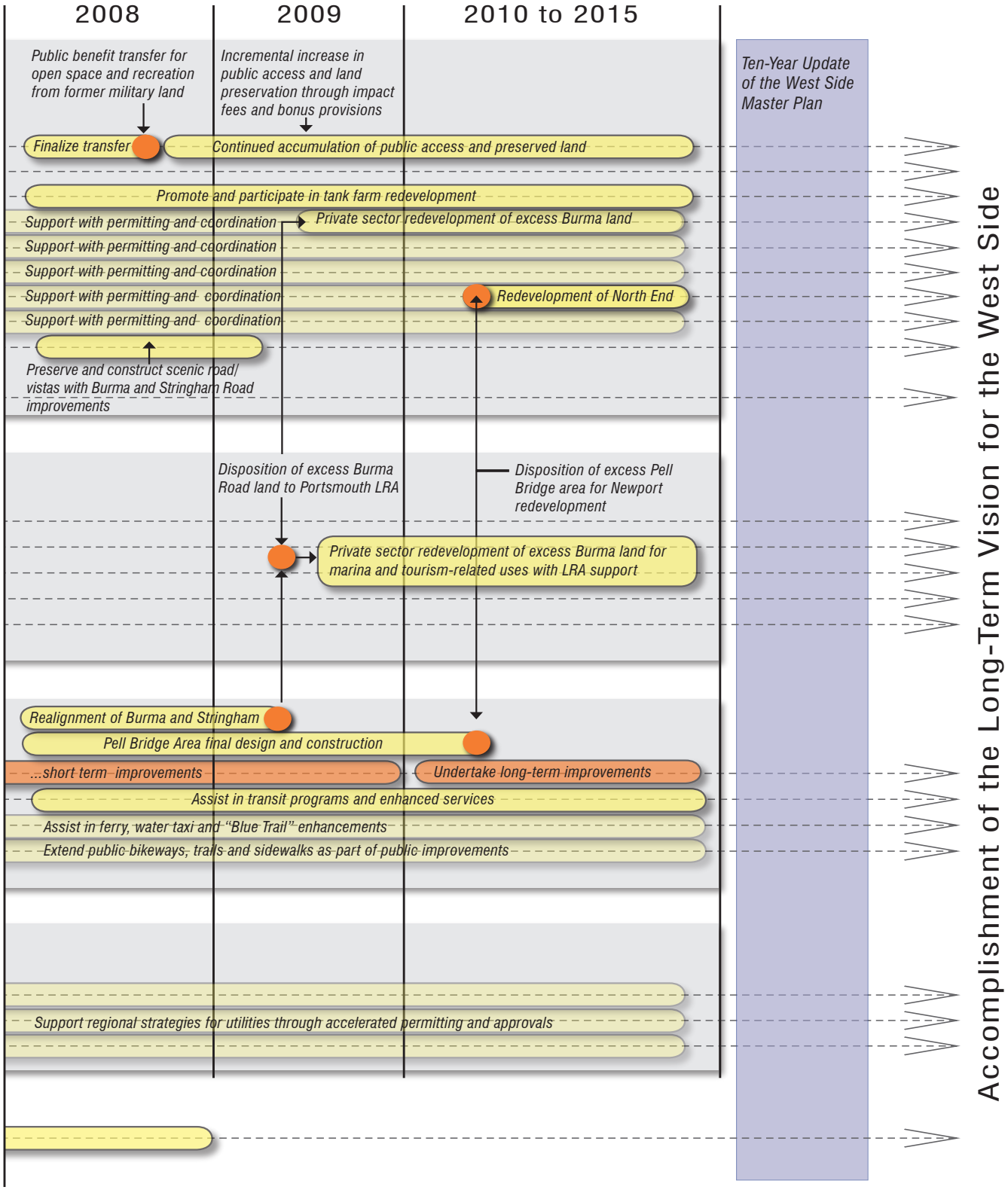
Other interested groups, organizations and institutions should:

- **Endorse the *West Side* Master Plan** through its Board of Directors.
- **Allocate staff resources** to support the ongoing implementation of the *Master Plan* as it may be consistent with the mission of the organization.
- **Actively participate** in the AIPC activities and events associated with the *West Side Master Plan.*

Implementation Timeline for the State of Rhode Island

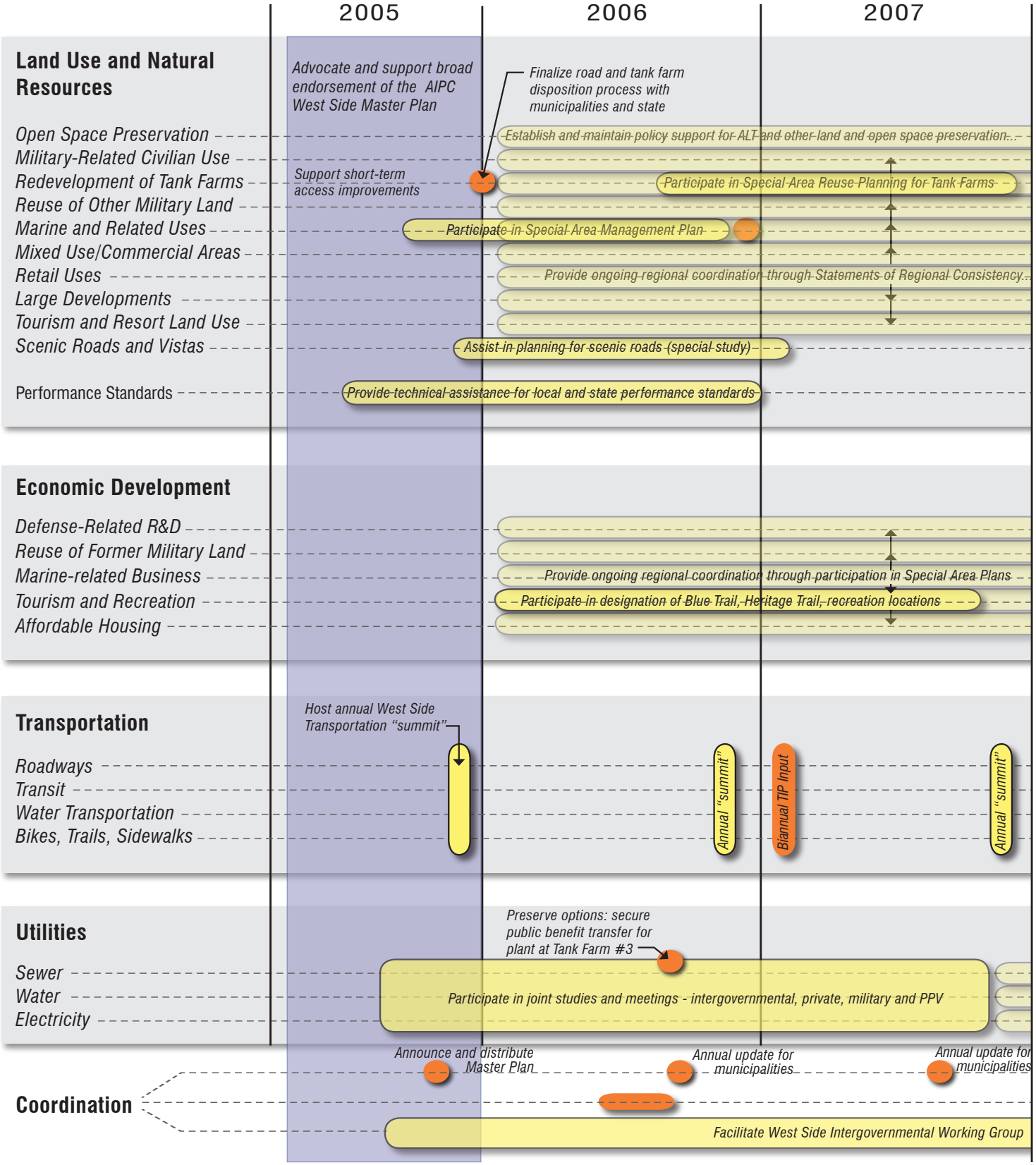
Figure 6-1

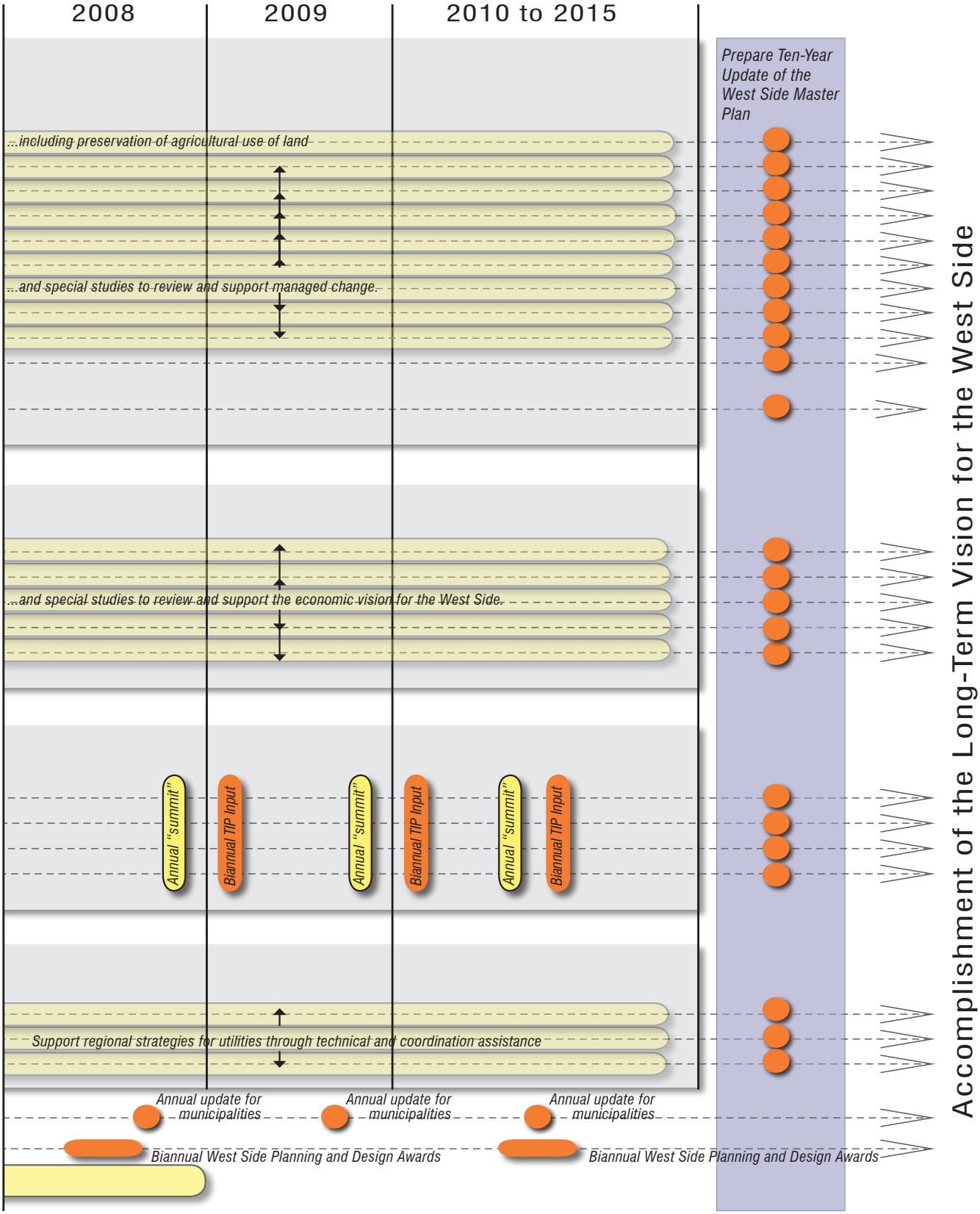



2008
2009
2010 to 2015
Public benefit transfer for open space and recreation from former military land
Incremental increase in public access and land preservation through impact fees and bonus provisions
Ten-Year Update of the West Side Master Plan
Finalize transfer
Continued accumulation of public access and preserved land
Promote and participate in tank farm redevelopment
Support with permitting and coordination
Private sector redevelopment of excess Burma land
Support with permitting and coordination
Support with permitting and coordination
Support with permitting and coordination
Redevelopment of North End
Support with permitting and coordination
Preserve and construct scenic road/ vistas with Burma and Stringham Road improvements
Disposition of excess Burma Road land to Portsmouth LRA
Disposition of excess Pell Bridge area for Newport redevelopment
Private sector redevelopment of excess Burma land for marina and tourism-related uses with LRA support
Realignment of Burma and Stringham
Pell Bridge Area final design and construction
...short term improvements
Undertake long-term improvements
Assist in transit programs and enhanced services
Assist in ferry, water taxi and "Blue Trail" enhancements
Extend public bikeways, trails and sidewalks as part of public improvements
Support regional strategies for utilities through accelerated permitting and approvals
Accomplishment of the Long-Term Vision for the West Side

Implementation Timeline for the AIPC

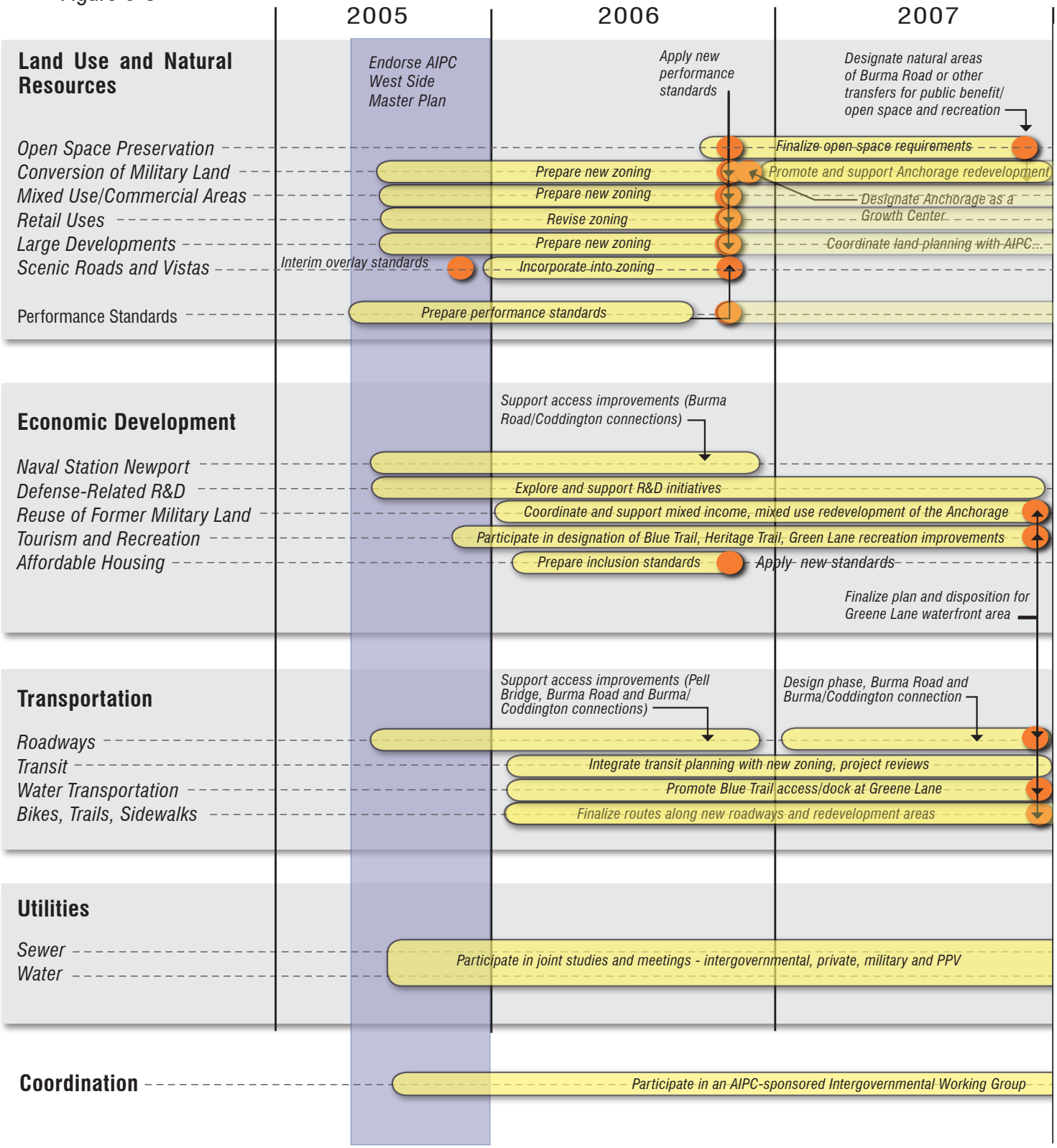
Figure 6-2

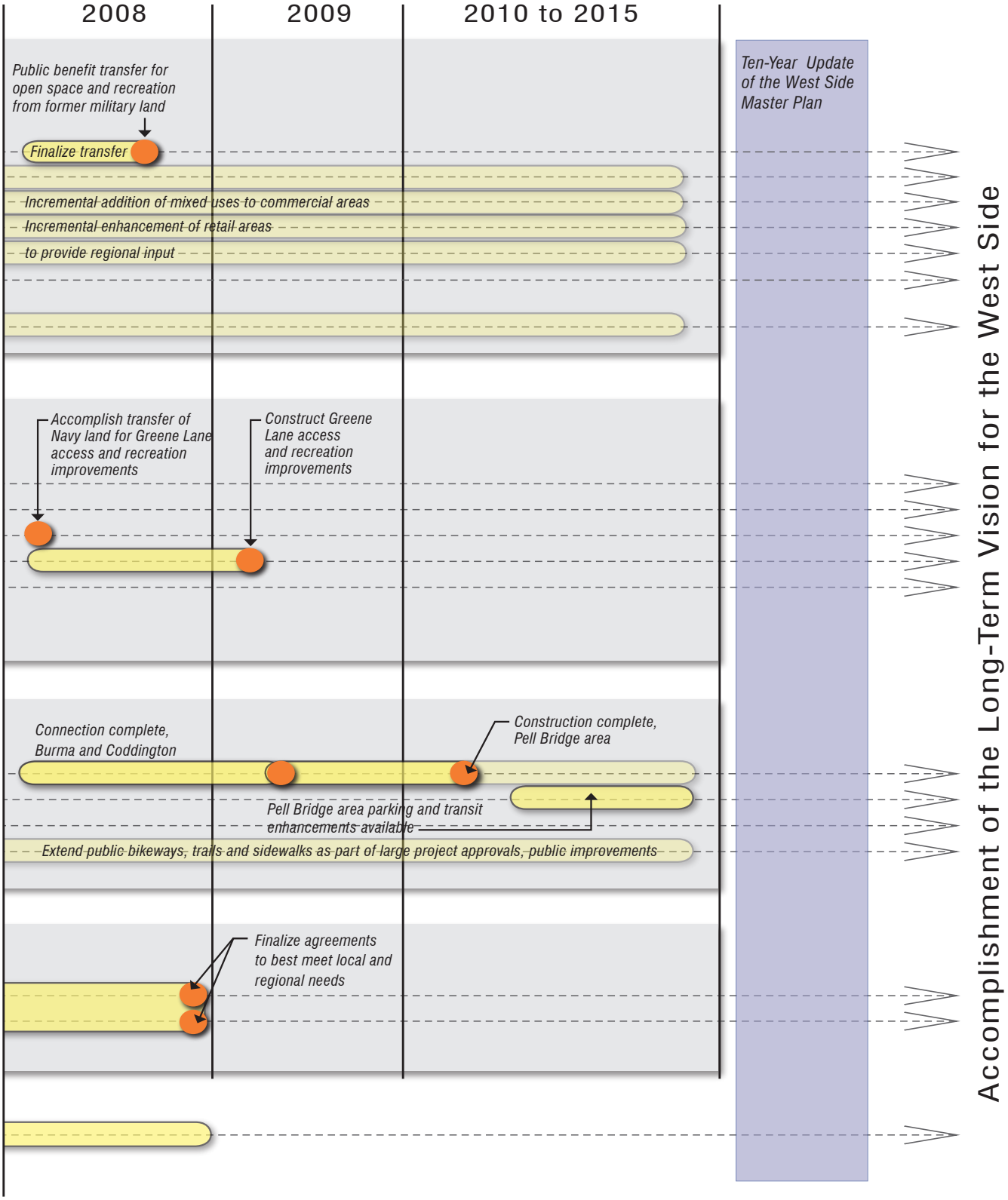



2008
2009
2010 to 2015
Prepare Ten-Year Update of the West Side Master Plan
...including preservation of agricultural use of land
...and special studies to review and support managed change.
...and special studies to review and support the economic vision for the West Side.
Annual "summit"
Biannual TIP Input
Annual "summit"
Biannual TIP Input
Annual "summit"
Biannual TIP Input
Support regional strategies for utilities through technical and coordination assistance
Annual update for municipalities
Annual update for municipalities
Annual update for municipalities
Biannual West Side Planning and Design Awards
Biannual West Side Planning and Design Awards
Accomplishment of the Long-Term Vision for the West Side

Implementation Timeline for Middletown

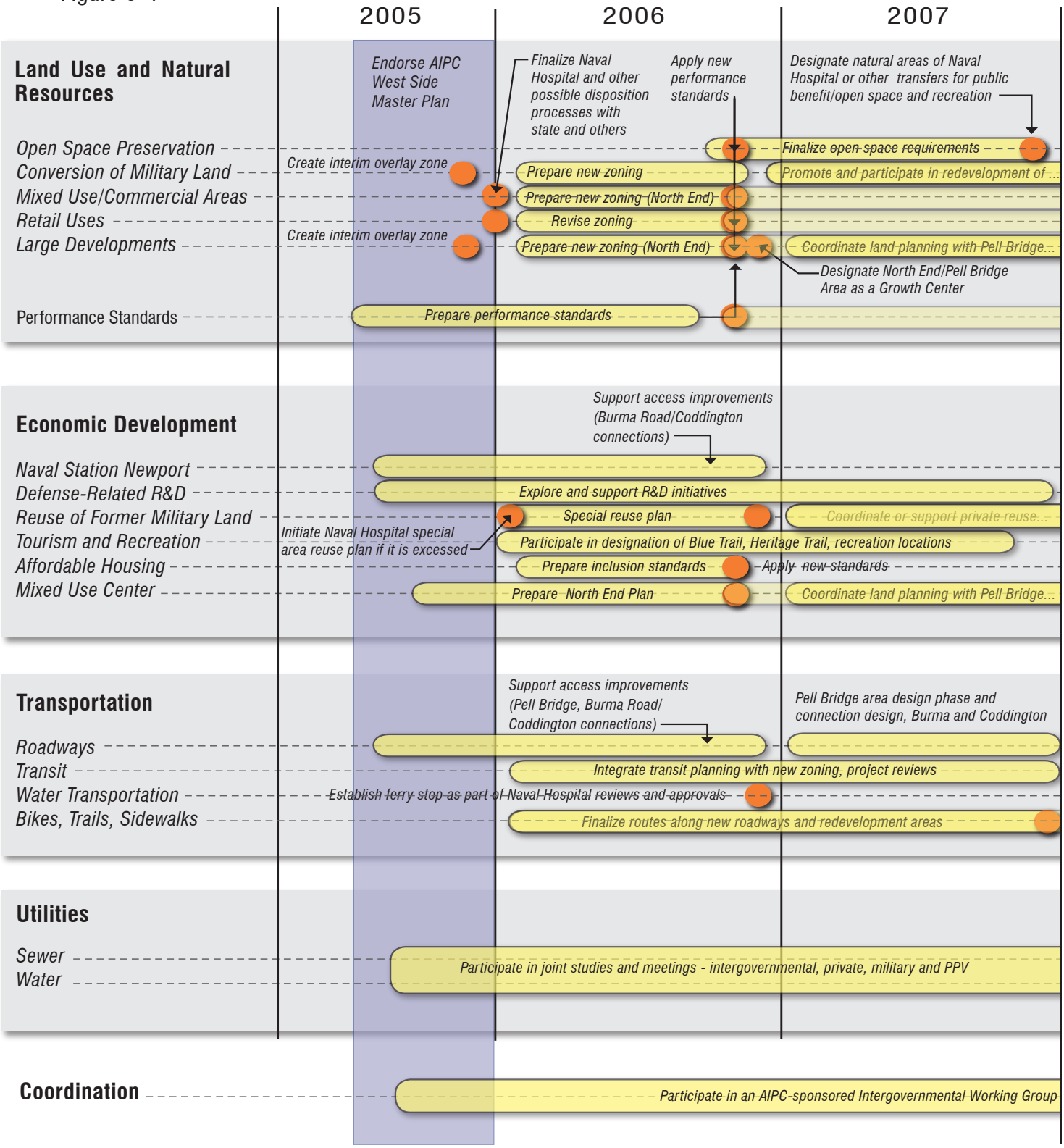
Figure 6-3

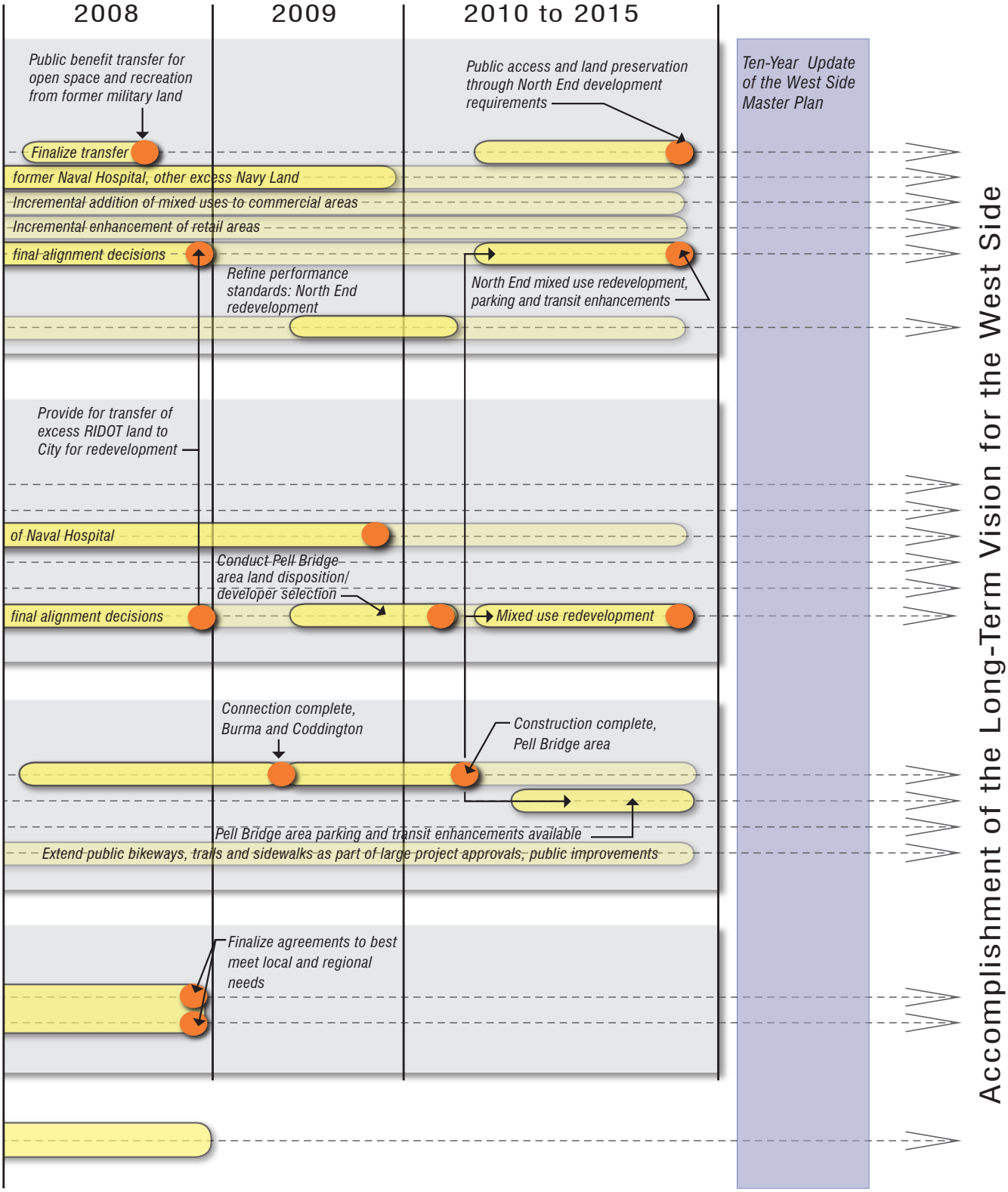



2008
2009
2010 to 2015
Public benefit transfer for open space and recreation from former military land
Finalize transfer
Incremental addition of mixed uses to commercial areas
Incremental enhancement of retail areas
to provide regional input
Ten-Year Update of the West Side Master Plan
Accomplish transfer of Navy land for Greene Lane access and recreation improvements
Construct Greene Lane access and recreation improvements
Connection complete, Burma and Coddington
Construction complete, Pell Bridge area
Pell Bridge area parking and transit enhancements available
Extend public bikeways, trails and sidewalks as part of large project approvals, public improvements
Finalize agreements to best meet local and regional needs
Accomplishment of the Long-Term Vision for the West Side

Implementation Timeline for Newport

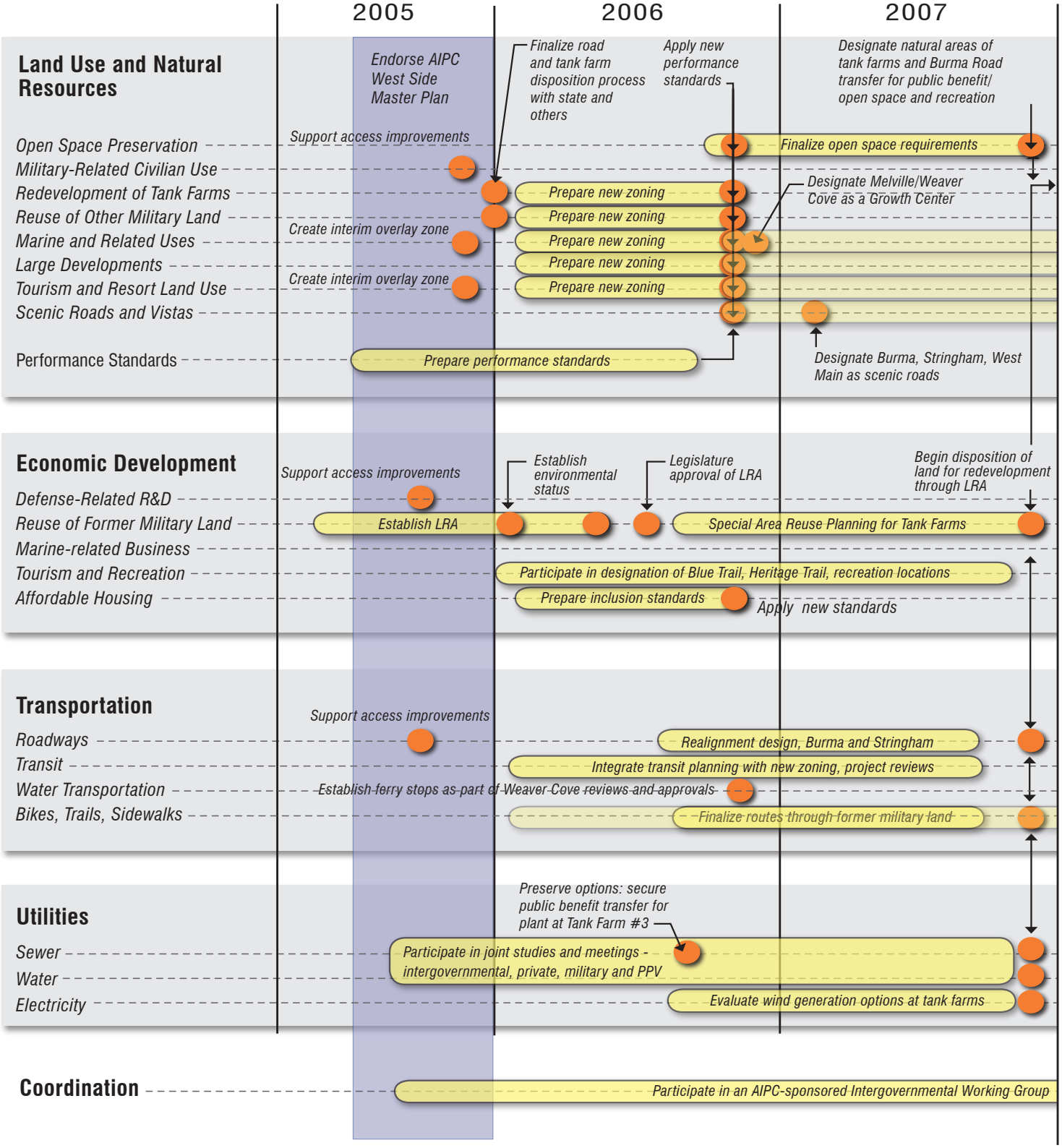
Figure 6-4

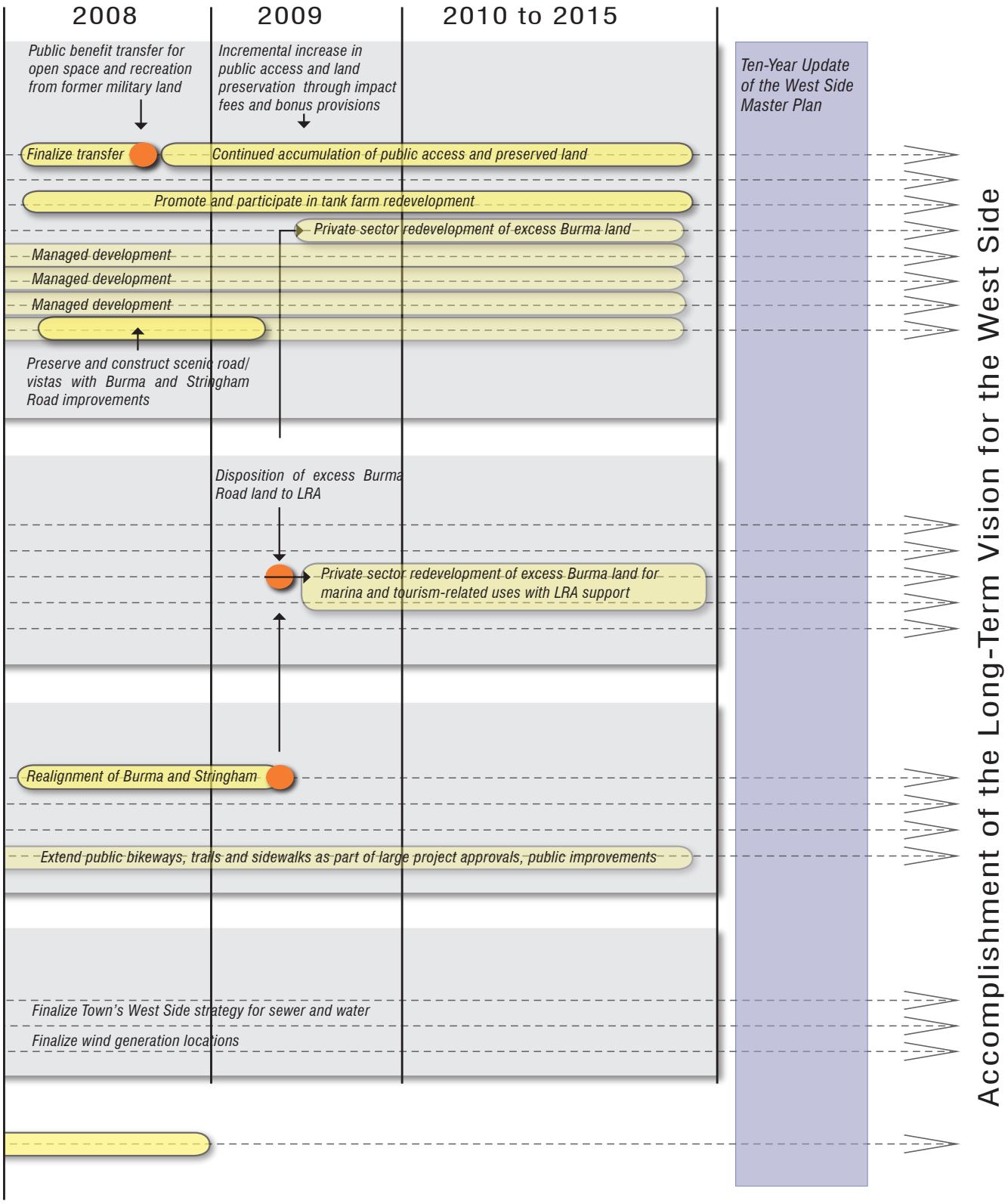



2008
2009
2010 to 2015
Public benefit transfer for open space and recreation from former military land
Public access and land preservation through North End development requirements
Ten-Year Update of the West Side Master Plan
Finalize transfer
former Naval Hospital, other excess Navy Land
Incremental addition of mixed uses to commercial areas
Incremental enhancement of retail areas
final alignment decisions
Refine performance standards: North End redevelopment
North End mixed use redevelopment, parking and transit enhancements
Provide for transfer of excess RIDOT land to City for redevelopment
of Naval Hospital
Conduct Pell Bridge area land disposition/ developer selection
final alignment decisions
Mixed use redevelopment
Connection complete, Burma and Coddington
Construction complete, Pell Bridge area
Pell Bridge area parking and transit enhancements available
Extend public bikeways, trails and sidewalks as part of large project approvals, public improvements
Finalize agreements to best meet local and regional needs
Accomplishment of the Long-Term Vision for the West Side

Implementation Timeline for Portsmouth

Figure 6-5




2008
2009
2010 to 2015
Public benefit transfer for open space and recreation from former military land
Incremental increase in public access and land preservation through impact fees and bonus provisions
Ten-Year Update of the West Side Master Plan
Finalize transfer
Continued accumulation of public access and preserved land
Promote and participate in tank farm redevelopment
Private sector redevelopment of excess Burma land
Managed development
Managed development
Managed development
Preserve and construct scenic road/ vistas with Burma and Stringham Road improvements
Disposition of excess Burma Road land to LRA
Private sector redevelopment of excess Burma land for marina and tourism-related uses with LRA support
Realignment of Burma and Stringham
Extend public bikeways, trails and sidewalks as part of large project approvals, public improvements
Finalize Town's West Side strategy for sewer and water
Finalize wind generation locations
Accomplishment of the Long-Term Vision for the West Side

A APPENDIX A: PERFORMANCE STANDARDS

This appendix provides planning and design guidelines and performance standards that have been successfully applied in towns and cities around New England, and could serve as models for the preparation of guidelines specific to areas on the West Side.

Performance standards are generally intended as organizing principles aimed at the achievement of high quality environmental and aesthetic design qualities. They can be further tailored to the particular character and conditions of particular localities by means of prescriptive regulations or assigned values that can be quantifiable and measured. For example, "trees should be provided along the perimeter of a parking lot to shield parking" is a performance standard; "trees should be provided at an average 40-foot separation" is a prescriptive regulation. Regulatory standards constitute an important way in which performance standards can be tailored to the needs of a particular community. Some commonly used regulatory standards are indicated in brackets when applicable for informational purposes.

The model guidelines and standards presented here span the broadest objectives down to detailed standards. They are divided into the following sections:

- **Objectives** – The content starts with the general objectives that would be appropriate for all projects, including municipal projects. These are the goals for improvement of the project and design process to ensure the best quality results.
- **Agreements and Compliance** – There may be legal agreements to bind the parties to certain continuing actions outside of zoning compliance. Their completion is noted in this section.
- **Process for Review** – Procedures of review, although most appropriate for larger projects, could be applied for careful review of any project. The procedures are presented as a two step process with greater detail developed as the project proceeds through the design and approval process.
- **Baseline Performance Standards** – General site planning and design guidelines are centered on the relationship of buildings and landscaping to public ways, and the visual quality of edges and views.
- **Specific Land Use Performance Standards** – Performance standards tailored for specific land use types relate to the unique aspects of each use and the desired qualities for improvement.
- **Sustainability Site Planning and Design Performance Standards** – The standards that provide an opportunity to advance 'green' projects to reduce energy consumption and environmental impact. Although these types of standards are not as common yet in local regulations, these standards have been applied elsewhere with success.

Objectives

Purpose and Intent – The project proposal proponents will provide information in written and illustrative form as necessary to show the manner in which the proposal meets the objectives established by the community.

Design and Process Objectives:

- All design elements, including site, building form, organization, program, and materials, complement existing elements of the neighborhood and the area's topography, vegetation, contextual buildings, land uses, and road layout;
- The new development does not conflict with or cause loss of public and private open spaces, or significant vistas;
- Adjoining premises will be protected against seriously detrimental uses by provision for surface water drainage, sound and light buffers, prevention of undue solar reflection and glare and preservation of views, light and air;
- The appearance of the project is attractive from the pedestrian walkways, roadways, and other public land vantage points.
- Site and building designs make the project inviting, safe, and sustainable.
- All buildings and structures found eligible for or listed on the National Register of Historic Places, or identified by the Rhode Island Historic Preservation and Heritage Commission as historic resources are preserved or adaptively reused according to standards and principles of historic preservation.

Comment: Amended and additional goals and objectives may be included in this section to reflect local preferences as determined from the public hearing process to adopt the changes.

Agreements and Compliance

Purpose and Intent - A number of agreements may be necessary for easements, mitigation and long-term management that may be outside the normal zoning process, but still part of the community's police powers. These standards ensure that the zoning and building permits can consider these additional legal instruments.

Agreements and Compliance Standards:

The following standards will be collaborated with evidentiary submittals:

- A traffic monitoring and mitigation program agreement has been entered into with the Town;
- Escrow funds are deposited as required by the traffic monitoring and mitigation program agreement entered into with the Town;
- Deed restrictions and any easements area prepared and filed on the land records;
- Where applicable, compliance with all regulatory and licensing requirements are proven with respect to the handling of potentially hazardous materials;
- Adequate measures have been taken for the private maintenance and management of the development, including roadway maintenance and repair, maintenance of landscape elements and natural open space, maintenance and repair of stormwater management facilities and utilities, snow removal, trash removal and recycling, where those facilities remain in private ownership or would impact public systems if not maintained;

- Compliance of the proposal with the applicable requirements of local codes and regulations is shown; and,
- Appropriate evidence of compliance of the proposal with any non-zoning agreement entered into with the Town is shown.

Comment: The items for code compliance are not typically necessary but are added for clarification. The hazardous materials disposal standards are considered important when dealing with former industrial and military lands.

Process for Review

Purpose and Intent - Approval of a complex project shall be by special permit with the Planning Board acting as the special permit granting authority [SPGA] for the purposes of these regulations. A special permit shall be granted if the planning board finds that the application complies with these regulations. The special permit process shall be in accordance with Section [the applicable special permit section in the regulations].

Comment: For infill projects, the existing development review procedures found in local regulations may be sufficient to ensure proper review. The optional procedural requirements below are more appropriate for new, large development projects.

Comment: The "Procedures" outlined below provide one approach to development review of large and complex projects, and is more applicable to greenfield development projects. In particular, submittal requirements should conform to those required by local subdivision regulations as well.

Procedures:

- **Initial conference** – Before submitting an application for a project, the applicant shall schedule an appointment and meet with the [planner, municipal staff] to discuss the procedure for approval of the project, including submittal requirements and design standards. At the conclusion of the meeting(s), the city/town planning staff will prepare summary notes of the meeting results for distribution.
- **Integrated Design Process** – Initiate an integrated design process involving all stakeholders, including owners, project managers, financial officers, planners, architects, engineers, estimators, contractors (or construction managers), facilities managers, and end users. Retain a Project Sustainability Coordinator(s) with direct managerial and responsibility for achieving agreed upon project goals.
- **General Implementation Plan Submittal Requirements** – Following the initial conference, the applicant shall submit a general implementation plan application for [Special Permit]. The purpose of the general implementation plan is to establish the intent, density, and intensity for a proposed development. The General Implementation Plan shall include the following:

  1. A location map of suitable scale, but no less than one inch = [200] feet, which shows the location of the property within the community and adjacent parcels

including locations of any public streets, railroads, major streams or rivers, and other major features within [1000] feet of the site.

2. A site inventory and analysis to identify site assets or resources, and constraints, including but not limited to floodplains, wetlands and soils classified as "poorly drained" or "very poorly drained," soils with bedrock at or within 42 inches of the surface, utility easements for high-tension electrical transmission lines (>69KV), steep slopes greater than [15%], and brownfields.

3. A conceptual site plan, at a scale of no less than one inch = [100] feet, which indicates topography in [two] foot contours for sites with 15 feet or more of local relief, or one foot contours for local sites with less than 15 feet of local relief, consisting of a map with proposed features and existing site features and uses that will remain. These features should include building outlines, location of streets, transit stops, drives and parking areas, pedestrian and bicycle paths, service access areas for receiving material and trash removal, and other impervious surfaces. The location of proposed and existing trees and shrubs should also be included, along with any other significant features.

4. A conceptual storm water management plan identifying the proposed patterns of major stormwater runoff, locations of stormwater infiltration areas, and other significant stormwater best management practices.

5. Identification of the architectural style(s) of the project and the accompanying site design style(s). The design style of the project shall be conveyed with drawings or computer simulations of typical proposed building elevations (including dimensions of building height and width, and facade treatment).

6. A written report that provides general information about the covenants, conservation easements, or agreements, which will influence the use and maintenance of the proposed development. The report shall also describe the site conditions and the development objectives.

7. Any other information deemed necessary by the [city/town] in order to evaluate plans.

8. Five copies of the above information shall be submitted plus [one] reduced set no larger than 8-1/2 inches by 11 inches.

- **Specific Implementation Plan Submittal Requirements.** Following the [zoning map amendment, approval, or approval with conditions] of the General Implementation Plan, a Specific Implementation Plan shall be submitted to the SPGA. The purpose of the Specific Implementation Plan is to establish a detailed development proposal. The Specific

Implementation Plan can be proposed, reviewed, and acted upon as a whole, in part, or in phases. The applicant shall submit a series of plans, maps, and written materials, which include the following information:

1. A general location map of suitable scale, which shows the boundaries and dimensions of the property and adjacent parcels, including locations of any public streets, railroads, major streams or rivers, and other major features within 1000 feet of the site, along with a legal description of the property.

2. A site inventory and analysis to identify site assets or resources, and constraints, including but not limited to floodplains, wetlands and soils classified as "poorly drained" or "very poorly drained," soils with bedrock at or within 42 inches of the surface, utility easements for high-tension electrical transmission lines (>69KV), slopes greater than [15%], and brownfields.

3. A site plan, including proposed topographic contours at one-foot intervals, with the following information:

    i. the location of proposed structures and existing structures that will remain, with height and gross floor area noted;

    ii. the location of street and pedestrian lighting, including lamp intensity and height;

    iii. the location of proposed open space;

    iv. the circulation system indicating pedestrian, bicycle, and motor vehicle movement systems, including existing and proposed public streets or right-of-ways; transit stops; easements or other reservations of land on the site; the location and dimensions of existing and proposed curb cuts, off-street parking and loading spaces, include service access for receiving and trash removal; sidewalks and other walkways;

    v. location of all trees, shrubs, and ground cover (proposed or existing) to remain on the site.

4. A stormwater management plan for the site. The grading plan shall show existing and proposed ground elevations with contours (one-foot contour interval) and spot elevations at significant high points, low points, and transition points. The grading plan shall also note the finished ground floor elevations of all buildings. The plan shall also show the locations of all storm drainage sewers and structures, and infiltration or detention/retention structures; and all wetlands on the site, and copies of documents completed in making the wetlands identification.

5. Detailed elevations of all proposed commercial buildings and typical elevations of residential buildings. Scaled elevations should identify

all signs, building materials and percentage of ground floor commercial facade in windows; the location, height and material for screening walls and fences, including outdoor trash storage areas, electrical, mechanical and gas metering equipment, storage areas for trash and recyclable materials, and rooftop equipment.

6. A utilities plan showing underground and above ground lines and structures for sanitary sewers, electricity, gas, telecommunications, and all other utilities.

7. A written report, which completely describes the proposal and indicates covenants or agreements that will influence the use and maintenance of the proposed development. The report also shall describe the analysis of site conditions and the development objectives.

8. Phasing plans, where applicable.

9. Any other information deemed necessary by the SPGA in order to evaluate plans.

Comment: Additional Recommendations for Design Reviews - There are several procedural items that could enhance the design review process. These are the regional approaches that could be implemented after each of the communities reaches consensus on their own, internal procedures. After establishing local preferences, the communities and the AIPC could proceed in the development of regional review procedures for those projects that have project impacts extending across jurisdictional boundaries.

- *Continue implementing Design Review as part of the zoning approval process as established in the Portsmouth Design Review Guidelines.*
- *Finalize preparation and adoption of design review guidelines in Middletown and Newport (local applicability "thresholds" as the one considered in Middletown may be adopted as a means to facilitate the review and approval process).*
- *Conduct joint review and evaluation of guidelines specifically aimed at enhancing the visual aesthetics of transportation corridors that run through more than one community.*
- *Continue periodically reviewing and updating design review guidelines for the three communities in order to maintain overall state-of-the-art quality.*
- *Continue and enhance AIPC advisory role to the three municipalities as a steward and repository of good design principles.*

Baseline Performance Standards

Land Clearing

Purpose and Intent – Development of land can create on-site and off-site impacts to other properties and resources unless properly managed. These standards will ease the management and common construction activities associated with any development.

Comment: These performance standards will preserve features and reduce the typical construction impacts that can lead to frequent complaints and potential damages.

Performance Standards:

- Site/building design shall preserve natural topography outside of the development footprint to reduce unnecessary land disturbance and

to preserve natural drainage channels on the site.

- Clearing of vegetation and alteration of topography shall be limited to less that 50% of the site depending on use with native vegetation planted in disturbed areas as needed to enhance or restore wildlife habitat.

- Clearing for utility trenching shall be limited to the minimum area necessary to maneuver a backhoe or other construction equipment. Roots should be cut cleanly rather than pulled or ripped out during utility trenching. Tunneling for utilities installation should be utilized wherever feasible to protect root systems of trees.

- Protect hilltops and/or scenic views. Placement of buildings, structures, or parking facilities shall not detract from the site's scenic qualities and shall blend with the natural landscape. Building sites shall be directed away from the crest of hills, and foundations shall be constructed to reflect the natural terrain.

- Protect wildlife habitat. Sites shall be designed in such a way as to avoid impacts to rare and endangered species and wildlife habitat on a site, and to maintain contiguous forested areas.

- Avoid impacts to archaeological resources: Applicants shall submit a response from the appropriate Historical Commission regarding the potential for archaeological or historical resources on the site.

- Preserve open space and specimen trees on the site. In the design of a development, priority shall be given to retention of existing stands of trees, trees at site perimeter, contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions), and specimen trees.

- Understory vegetation beneath the drip line of preserved trees shall also be retained in an undisturbed state. During clearing and/or construction activities, all vegetation to be retained shall be surrounded by temporary protective fencing or other measures before any clearing or grading occurs and maintained until all construction work is completed and the site is cleaned up. Barriers shall be large enough to encompass the essential root zone of all vegetation to be protected. All vegetation within the protective fencing shall be retained in an undisturbed state.

- Forested areas shall be preserved if they are associated with:

  1. significant forest communities;
  2. wetlands, water bodies and their buffers;
  3. critical wildlife habitat areas;
  4. slopes over 25 percent.

- Minimize cut and fill in site development. Development envelopes for structures, driveways, wastewater disposal, lawn areas, and utility work shall be designated to limit clearing and grading.

  1. Other efforts to minimize the clearing and grading on a site associated with construction activities shall be employed, such as parking of construction vehicles, offices/trailers,

stockpiling of equipment/ materials, etc. in areas already planned for permanent structures. Topsoil shall not be stockpiled in areas of protected trees, wetlands, and/or their vegetated buffers;

2. Finished grades should be limited to no greater than a 2:1 slope, while preserving, matching, or blending with the natural contours and undulations of the land to the greatest extent possible.

- Employ proper site management techniques during construction:

  1. BMPs shall be employed to avoid detrimental impacts to existing vegetation, soil compaction, and damage to root systems;

  2. The extent of a site exposed at any one time shall be limited through phasing of construction operations. Effective sequencing shall occur within the boundaries of natural drainage areas.

- Protect the site during construction through adequate erosion and sedimentation controls:

  1. Temporary or permanent diversions, berms, grassed waterways, special culverts, shoulder dikes, or other such mechanical measures as are necessary, may be required to intercept and divert surface water runoff. Runoff flow shall not be routed through areas of protected vegetation or revegetated slopes and other areas. Temporary runoff from erosion and sedimentation controls shall be directed to BMPs such as vegetated swales. Retaining walls may be required where side slopes are steeper than a ratio of 2:1;

  2. Erosion control measures shall include the use of erosion control matting, mulches, and/or temporary or permanent cover crops. Mulch areas damaged from heavy rainfalls, severe storms, and construction activity shall be repaired immediately;

  3. Erosion control matting or mulch shall be anchored where plantings are on areas subject to mulch removal by wind or water flows or where side slopes are steeper than 2: 1 or exceed 10 feet in height;

  4. Runoff from impervious surfaces shall be recharged on the site by stormwater infiltration basins, vegetated swales, constructed wetlands or similar systems covered with natural vegetation. Runoff shall not be discharged directly to rivers, streams, or other surface water bodies. Dry wells shall be used only where other methods are not feasible. All such basins and wells shall be preceded by oil, grease, and sediment traps. The mouths of all catch basins shall be fitted with filter fabric during the entire construction process to minimize siltation or such basins shall be designed as temporary siltation basins with provisions made for final cleaning;

5. The applicant shall be required to conduct weekly inspections of all erosion and sedimentation control measures on the site to ensure that they are properly functioning as well as to conduct inspections after severe storm events.

- Revegetate the site immediately after grading:

  1. Proper revegetation techniques shall be employed using native plant species, proper seed bed preparation, fertilizer and mulching to protect germinating plants. Revegetation shall occur on cleared sites within 7 (seven) calendar days of final grading and shall occur during the planting season appropriate to the selected plant species;

  2. A minimum of 4" of topsoil shall be placed on all disturbed surfaces, which are proposed to be planted;

  3. Finished grade shall be no higher than the trunk flare(s) of trees to be retained. If a grade change of 6" or more at the base of the tree is proposed, a retaining wall or tree well may be required.

Streets

Purpose and Intent – Public and private streets and roads not only provide access and connectivity, but serve as major conveyors of high volumes of pollutants through stormwater runoff and airborne particulates. Sustainable street design involves practical design solutions that incorporate basic stormwater management techniques to improve water quality, habitat, and air quality, as well as address issues of aesthetics and good connectivity at a local and regional level.

Performance Standards:

- Build a street network that avoids cul-de-sacs and promotes connectivity. This enables local traffic to use smaller streets rather than be funneled into the main arterial. Such a system is also ideal for alternate modes such as biking and walking.

- In locations where streets cannot extend to connect to the grid, make the connection through pedestrian walkways, bike routes, or greenways.

- Identify streets that are in critical watersheds, close to drinking water sources, in steep areas, and close to streams and natural habitats. Apply special design principles to these streets to minimize polluted runoff.

- Consider innovative right-of-way design that uses features such as wide canopy street trees to shade impervious areas, pervious surface treatments especially for parking lanes, filter strips and vegetated swales at the sides or as a median to capture runoff, no curbs in less busy streets to prevent channeling into stormwater drains, infiltration trenches in areas with low runoff soils, and street tree wells as detention options.

- Refer to *Green Streets: Innovative Solutions for Stormwater and Stream Crossings* developed for the Portland Metro Region as examples.

Specific Land Use Performance Standards

The following section presents some options for performance standards that could be applied to the West Side to specific types of land uses. They may also be appropriate to other areas after modification.

Large Project Performance Standards

Comment: It is anticipated that some of the large property holdings, including military properties will be subject to redevelopment in the near term. In the event of these projects moving forward, the expectation is that they will be large enough to accommodate a mix of buildings and land uses that could be designed to create a character of development that is sustainable within the West Side. These standards will create a mix of uses and organize them into development blocks that meet smart growth and traditional neighborhood goals.

Purpose and Intent - Large development projects are distinct in that their impacts are more significant and their time for execution and completion is longer. However, they are also expected to provide a broader range of opportunities and higher quality results that can support more public benefits. Large project proponents must show how the project meets the following performance standards:

Performance Standards:

- **Master Planned** – The project must be presented as a Master Plan that includes all components and concepts for improvement. The Master Plan may be presented as a Special Area Reuse Plan, a Marina Village Master Plan, or other commercial, residential, or mixed use project proposal.
- **Sustainability** – The project must be shown to be based on a sustainable development plan that includes environmental, land use, and market support for the long-term viability of the plan. Part of the determination of sustainability will be to determine off-site infrastructure needs including schools, water, sewer and transportation. On-site support to regional infrastructure needs must also be proven.
- **Compact Development** – The project must be dense and, at the same time, at a scale that makes a pedestrian feel comfortable. The process of reviewing alternative plans and options for clustering of development that protects the landscape heritage, includes provisions for public access, improved accessibility, and protection of views shall be presented so that the Town may be shown that the best quality design has been proposed. If not, this presentation can show what mitigation is proposed to offset adverse conditions created by the preferred plan. However, density bonuses are only available after a determination that the Town will obtain more public benefits than anticipated from similar projects.
- **Mix of Residential Uses** – In order to achieve the proximity necessary to make neighborhoods walkable, it is important to provide a mix of residential uses, a project center, and open space. The mix of residential uses may be satisfied by existing residential uses adjacent to the project if the neighborhoods are integrated but will include the following, of which [20] percent will be affordable:

1. Single-family detached dwellings, including manufactured homes;

2. Single-family attached dwellings, including duplexes, townhouses, row houses;

3. Multifamily dwellings, including senior housing;

4. Accessory dwelling units within a single-family unit;

5. "Special needs" housing, such as community living arrangements and assisted living facilities.

- **Project Center** – There should be a project center of activity and commerce, composed of a mix of commercial, residential, civic or institutional, and open space uses organized to create a walkable center. The commercial uses may include:

  1. Food services (neighborhood grocery stores; butcher shops; bakeries; restaurants, not including drive-throughs; cafes; coffee shops; neighborhood bars or pubs);

  2. Retail uses (florists or nurseries; hardware stores; stationery stores; book stores; studios and shops of artists and artisans); services (day care centers; music, dance or exercise studios; offices, including professional and medical offices; barber; hair salon; dry cleaning);

  3. Accommodations (bed and breakfast establishments, small hotels or inns);

  4. Civic or institutional uses should also be included in the project center and should include municipal offices, fire stations, libraries, museums, community meeting facilities, and post offices; transit shelters; places of worship; or educational facilities.

- **Accessibility and Transportation** – Within the project, easy pedestrian movement is very important. However, the project must also be connected to adjoining areas by accommodations for public transit and safe road systems. The circulation system shall provide adequate traffic capacity, provide connected pedestrian and bicycle routes (especially off street bicycle or multi-use paths or bicycle lanes on the streets), limit access onto streets of lower traffic volume classification, and promote safe and efficient mobility through the traditional neighborhood development. Streets should be classified and designed for the following:

  1. Collector: Provides access to commercial or mixed-use buildings, but is also part of the project's major street network. On-street parking, whether diagonal or parallel, helps to slow traffic. Additional parking is provided in lots to the side or rear of buildings.

  2. Sub-collector: Provides primary access to individual residential properties and connects streets of lower and higher function. Design speed is 25 mph.

  3. Local Street: Provides primary access to individual residential properties. Traffic volumes are relatively low, with a design speed of 20 mph.

4. Alley. These streets provide secondary access to residential properties where street frontages are narrow, where the street is designed with a narrow width to provide limited on-street parking, or where alley access development is desired to increase residential densities. Alleys may also provide delivery access or alternate parking access to commercial properties.

The following types of sidewalks shall be provided:

1. Residential Sidewalks. Clear and well-lighted sidewalks, [3-5] feet in width, depending on projected pedestrian traffic, shall connect all dwelling entrances to the adjacent public sidewalk.

2. Project Center Sidewalks. Clear and well-lit walkways shall connect building entrances to the adjacent public sidewalk and to associated parking areas. Such walkways shall be a minimum of [5] feet in width.

3. Disabled Accessibility. Sidewalks shall comply with the applicable requirements of the Americans with Disabilities Act.

4. Crosswalks. Intersections of sidewalks with streets shall be designed with clearly defined edges. Crosswalks shall be well lit and clearly marked with contrasting paving materials at the edges or with striping.

The following parking standards shall apply:

1. Residential Parking. Mixed residential areas may include on site and on street parking dependent on the width of the street.

2. Project Center Parking. With the exception of on street parallel parking spaces, parking in the project center shall be behind buildings, and the buildings shall front on all streets.

3. Off Site Parking. Off-site parking shall be appropriate to improve active public use and preservation of views in waterfront areas, agricultural areas, and commercial areas. Using off-site parking will require options for transporting people from the parking areas to the activity centers.

- **Trip Allocation** - To maintain accessibility along the public road system and to ensure reasonable management of the costs of infrastructure improvements in regard to the transportation system, the total number of vehicle trips and the peak hour trips will be allocated to land uses and areas and implemented as a restriction according to an agreement with the Town (see General Performance Standards for agreements).

  More on trip allocation can be found in the Oregon program which can be viewed at http://www.rvcog.org/pdf/planning_CLH_App_E.pdf

- **Cultural and Environmental Context** - The local and regional cultural and environmental issues that define the character of the

area will also be required in the design of new development. All projects are to be held to a higher accountability for the quality of the architectural and site design. Proponents will need to prove how the design meets the best standards of the Town and of the region. At a minimum the project:

1. Is designed for the human scale;
2. Provides a mix of housing styles, types, and sizes to accommodate households of all ages, sizes, and incomes;
3. Incorporates a system of relatively narrow, interconnected streets with sidewalks, bikeways, and transit that offer multiple routes for motorists, pedestrians, and bicyclists and provides for the connections of those streets to existing and future developments;
4. Retains existing buildings with historical features or architectural features that enhance the visual character of the community;
5. Incorporates significant environmental features into the design;
6. Is consistent with the community, regional, and state master plans.

- **Project Phasing** – A Project Phasing Plan shall be a requirement of the permit submittals and approval by the town. However, a Large Project is anticipated to be completed over the course of several years, in which time certain market and program changes may be required that could alter elements of the project. Because of the complexities of public decision-making, project management, and the need to have consistency and expedience in the project completion, the following standards shall apply:

1. No significant changes to any project element shall be proposed by the town or the proponent after issuance of the municipal permits, without prior consultation between a previously identified town agent and the project proponent. After this consultation, those changes appropriate to move forward shall be committed to a formal process of review and approval. Changes shall be those that alter public benefits and mitigation, and changes of more than twenty percent in the building program either by increase or reduction, or by shift between land use types;
2. In addition to other criteria within the local regulations, the basis for the town accepting a change will include a finding that the public benefits and mitigation improves or remains equal to the prior condition, and that the change in building program is sustainable and fits the character of the original concept.

Commercial Area/Mixed Use Performance Standards:

Comment: Many of these standards may already be in place in other forms within the local regulations as prescriptive standards. Some of the standards

recommended here may conflict with the dimensional standards of a district, such as having buildings located close to the road when minimum setbacks usually apply. Review of the zoning and consideration for a modification of those dimensional requirements or adoption of a form-based zoning regulation could resolve the potential conflicts.

Purpose and Intent – The commercial areas are important centers for commerce and socialization, an important part of the local tax base, and help identify the community. For this reason, the Town expects the highest quality of design and operation of the commercial projects to be gained through application of these standards.

Performance Standards:

- **Site Improvements** - Site improvements will be designed and sited with respect to other site features and adjacent public properties to accomplish the following:

    1. Buildings should be located close to the road and have entrances from public pedestrian areas.

    2. Buildings should be located to help shape and protect public and private open space.

    3. Buildings at roadway intersections shall not have parking, loading or service areas at the corner. The street corner should either be a focal point for the building or treated as public space.

    4. Property edges that face the public right-of-way shall have treatments that blend the public and private property design.

    5. Sidewalks, signs and lighting that improve the edge areas and encourage walking into the site are encouraged.

    6. Sidewalks shall be required if a transit stop is available within walking distance.

    7. Street trees, furniture and other public right-of-way improvements shall be designed to relate to the building and site design and not hide the businesses or store entrances.

    8. Ideally, the use of bituminous pavement for sidewalks and walkways should be avoided in favor of better quality materials.

    9. Pedestrian passages to rear parking areas and entrances may be relatively narrow, but must be inviting and open air. Building side windows, lighting, and landscaping shall be used to make the passageways pleasant.

    10. Planting of trees along sidewalks and front property lines is recommended. In general, small deciduous trees should be considered for most locations. Trees could be clustered in groups or equally spaced in rows, according to desired effect.

    11. Plantings of different types and sizes should be provided to create a variety of New England landscapes with an informal character. A list of recommended species should be provided as part of detailed design guidelines, in which indigenous varieties appro-

priate to the site conditions prevalent at each location should be encouraged.

12. Trees should be interspersed with shrubs and bushes. Evergreens are recommended for buffering and screening. Flowering trees should be used as design accents. Low planting materials and shrubs, preferably of flowering varieties, can be used to soften building edges and enhance pedestrian areas. Seasonal planters and flowering window boxes are encouraged, particularly for public sidewalks and sitting areas.

13. Site lighting fixtures should consist of cutoff-style fixtures set at low heights (bottom of fixture not higher than 17 feet).

14. Site utilities should be placed underground whenever feasible.

15. Electrical transformers, underground utility feeds, site mechanical equipment, and outdoor storage areas should be screened from public view by landscaping.

- **Building Design Standards** - The application of these standards will be accomplished in accordance with the proper professional design standards and the traditions of the community.

  1. Building types shall relate to local and traditional New England building types for coastal communities.

  2. To the extent practical, buildings should be located close to the road and have architectural features, entrances, and windows that create transparency between the interior of the building and the pedestrian.

  3. Building façades should generally extend parallel to the public right-of-way, or follow an alignment that closely relates to the front line of the lot.

  4. Building entrances should be clearly recognized. Main entrances must be located on the façade facing the road and on multiple façades when fronting more than one road.

  5. The architectural elements of the building should be articulated to create a sense of scale and proportion through changes in materials, variation in the façade plane through bays, articulation of structure, ornament, or roof forms.

  6. Long, unbroken expanses of wall and, conversely, random changes in proportion, materials or design must be avoided. Exterior walls longer than [60] feet visible from public areas should be articulated with glazed openings, projections, recesses, and setbacks.

  7. Elements within the building façades shall be proportioned on a human scale for pedestrian comfort.

  8. The first floors shall be taller than the upper floors, and shall have storefronts or other pedestrian-oriented design elements.

9. Building color patterns may vary within any building façade, but strong or bright colors should be limited to decorative elements.

10. Building finish materials shall be of high quality, preferably natural wood and stone, or integrated and textured masonry. Exposed roofing materials may be asphalt shingles, clay tile, slate, concrete tile, or ribbed metal. The use of certain materials, such as concrete blocks, modular concrete panels, metal exterior panels, and vinyl siding should be avoided unless specifically approved or required.

11. All side and rear walls visible to the public right-of-way or adjacent properties shall have the same or comparable quality exterior materials applied to them as the front façade.

12. At least two-thirds of the ground-level frontage shall be fenestration. Reflective or darkly tinted glazing shall not be permitted.

13. In general, roofs shall be simple forms and avoid excessive articulation. However, the use of turrets, dormers or skylights as design accents is encouraged.

14. Rooflines shall be distinguishable as the top of the building line and shall have cornice treatments or caps, roof overhangs, stepped parapets, or similar design elements.

15. Rooftops should be designed in such a way that their shape and size would allow for the location of any large equipment that needs to be on top of the building. No penthouses or rooftop mechanical units shall be visible from the exterior.

- **Parking and Loading Standards** – Parking areas are only for the storage of vehicles and should not create the image of the project. To achieve this standard the following will apply:

  1. Analyze parking requirements at a area-wide level and incorporate these requirements into the comprehensive planning process. The provision of maximum parking capacity is discouraged.

  2. Show the maximum use of shared parking in mixed use and commercial areas to avoid the provision of excess parking.

  3. In locations where parking lots are necessary, incorporate trees; porous pavements such as grass pavers, porous asphalt, and pervious concrete; and stormwater bio-retention areas integrated into traffic islands and landscaped areas.

  4. Ensure that infiltration at parking lots does not result in groundwater contamination due to seepage of petroleum by-products.

  5. Parking areas should be landscaped and graded to create broken vistas, so there is no panoramic view of asphalt and cars.

6. Parking lots and paved areas should be screened from the road with vegetation, fences, walls, and/or landscape berms.

7. Screening should be accomplished by employing good quality construction materials, such as steel, cast iron fencing, brick, or stone. No chain link fencing visible from the street shall be allowed.

8. When a fence is built along the front line of the lot, a 6-foot setback landscaped with bushes and low plantings should be provided along the fence.

9. Parking lot design should require a maximum number of spaces that may be provided between landscaped islands, and should specify the minimum acceptable size for islands and minimum size of trees.

10. Sizes of parking spaces should be minimized for a 16-foot average car length, and the total numbers of spaces should be defined.

11. Driveway cuts should be restricted in number (one preferred) and width, dependent on truck and emergency access.

12. Loading and dumpster areas should be located towards the rear of the lot, and adequate space and clearance should be provided for the maneuvering of trucks as needed.

13. The visibility of loading areas, trash receptacles, dumpsters, and associated equipment shall be restricted from public view by buildings or screening.

- **Signage Standards** – Signs are necessary for the identification of the businesses but should be subservient to the architecture of the buildings and natural site features:

1. Signage should advertise the name and the type of business at its location. Off-premises signs shall not be allowed.

2. Signs displaying product names and logos should not be permitted unless directly associated with the principal service or products of the establishment.

3. Signage should not be designed for the passing vehicles except at low speeds. Design for the pedestrian scale. Multiple store sites may have a single sign with limits on ladder signs.

4. Color schemes that are generic and associated with the logo or standard building designs of chain operations should be modified to provide a unique design more suited to the creation of a smaller scale, village-oriented environment.

5. Flat wall signs are encouraged for commercial and retail uses. Freestanding ground signs are recommended for office, hotel, recreational, and multifamily residential uses. Only

one freestanding ground sign should be allowed per lot. Pole signs and rooftop signs should be avoided.

6. In a multiple storefront building, signage should be of a consistent location, size and material, and of harmonious color.

7. In new buildings with multiple storefronts, a strong signage band should be designed just above the storefront level if flat wall signs are to be employed. Signs should be designed to extend across the entire sign band, yet within the vertical elements that define individual storefront bays.

8. Projecting signs: signs mounted on a building perpendicular to the road—may be allowed only for retail uses. They should convey information in a unique way, utilizing images that visually represent the goods or services provided at the premises. A minimum clearance of 8 feet under the projecting sign should be maintained.

9. Signs located above the sill of second story windows shall not be allowed, except by special flat wall signs identifying a hotel or the principal user of a large commercial building. In this case, the location and size of the sign should be integrated with the building architecture subject to design review and approval.

10. Signs should be made of durable materials compatible with those of the building served. Wood, metal and stone piers for ground signs are encouraged. Plastic in general is not recommended, except if used in combination with other materials, or as part of individual internally lit letters or symbols.

11. Signs utilizing light-colored letters against a dark background and signs on canopy fabrics advertising the name of the business or organization are encouraged. Neon signs advertising only a business name, illuminating at a steady, even light level, are appropriate if located behind the façade glass.

12. Directly illuminated signage should be from a series of gooseneck or similar extended arm fixtures, which direct light to the façade and are compatible with the design of the building. Internally lit signs should only be allowed if they consist of independently lit letters or symbols attached to the building façade. Flashing signs should not be allowed.

13. Exterior lighting of freestanding signs with ground or sign-mounted fixtures is encouraged.

14. Every sign intended for public view shall be subject to design review and approval by local authority.

Military Land Reuse Performance Standards

Comment: The military parcels are likely to be subject to significant building, open space, and public facility programs. As noted above, these are likely to fall under the large project standards. However, creating these plans will require the establishment of a Special Area Reuse Plan as described elsewhere in these appendices. Along with the Special Area Reuse Plan elements and procedures to accomplish the Plan, these standards will ensure that any redevelopment authority or entity that takes on the task will be made aware of local preferences as established by these performance standards.

Purpose and Intent - Because of the nature and size of the military land parcels on the West Side, the Large Project Performance Standards will often apply to redevelopment of these properties. However, additional standards are added to focus on the public benefits that must be considered for use of public land, and the environmental restoration that must take place to allow the Reuse Plan created by the local redevelopment authority to proceed. The following performance standards shall be goals of the Reuse Plan that must be met by the local redevelopment authority and the eventual developer and user:

Performance Standards:

- **Compatibility with Remaining Military Uses** – The reuse of former military lands should not jeopardize the security or operation of continued military uses, or the related civilian uses that support the military on Aquidneck Island. This will be determined through consultation with the military at the Naval Station and at the Department of Defense. Additional consultation should be taken with any private military contractors who may operate adjacent to the reuse area;

- **Public Benefits** – Uses beneficial to the public will take equal priority to proposed uses that provide high level jobs and tax benefits. The Reuse Plan should include:

  1. Roads – The Reuse Plan must consider the regional transportation needs and options for connecting roads and accessways across the properties. This will include access to adjoining private lands where potential job creation on that land will result from the improved accessibility. This will include secondary north-south accessibility and bike paths.

  2. Utilities – The Reuse Plan must consider the regional utility infrastructure and allocations. New demands for services within the project will be considered together with cumulative demands for improved service within other parts of the community and present allocations to the Newport WWTF. This will include on-site wastewater treatment and community treatment systems within areas, such as the former tank farms that provide space for large systems and lay over land restricted by environmental remediation requirements. On-site water supply systems will also be considered together with cumulative demands for improved

service within other parts of the community and present allocations.

3. Open Space and Recreation – The Reuse Plan must consider the community inventory of recreational facilities and the options for additional facilities within the project area. This will include athletic fields, passive recreation areas, supporting facilities, and indoor recreation facilities.

4. Job Creation and Tax Enhancements – The Fiscal element of the Reuse Plan should clarify the benefits that accrue to the community through new jobs and taxes. Payments in lieu of taxes, known as PILOT programs, or Tax Increment Financing, or TIF programs, will be acceptable depending on whether the uses provide the other public benefits that conform to local needs and objectives.

- **Public Access** – All reuse projects must maintain and improve public access to these formerly restricted lands. This will include:

  1. Access to and along the waterfront with spaces for active public uses and accommodations. This will include easements with at least [30 feet] of width, and locations for facilities of up to [10,000] sq.ft. of area for building and launching access into the water with additional on- and off-site parking;

  2. Access to areas preserved in their natural state for educational and interpretive programs. This will include the construction of boardwalks when the resources require special protection and interpretive signs;

  3. Access to areas used for public utility facilities. These will be granted as full rights of access for all future uses of the parcel under which the facility is sited;

  4. Access across lands turned over to private interests, when that access can provide improved mobility for residents and workers. These accessways may be vehicular, and/or pedestrian and bicycle.

- **Environmental Restoration** – Restoration of past environmental degradation must meet the standards for public access and future public use:

  1. Restoration shall be to residential use (the highest) standards when the land is programmed for residential use.

  2. Restoration may be to commercial standards when the land is programmed for commercial uses or is being programmed for future planning.

  3. Restoration may be to industrial standards when the land is committed to sustainable industrial uses, or when the land is committed to public or private utility uses that are compatible with this lowest standard.

Marina and Marine-Related Use Performance Standards

Comment: It is expected that most waterfront projects will fall under the Large Project standards for greenfields, or be urban redevelopment projects. However, because the waterfront is a unique and valuable public resource, additional performance standards are necessary to protect water-dependent uses and protect and encourage public access. Public access would be accomplished by the 'activation' of the waterfront with commercial and recreational uses that attract people to the site.

Purpose and Intent – If marina and marine-related uses are to thrive as businesses, the developments around them must support and sustain them. In addition, the waterfront as a resource within the public trust must be enlivened with new development so that people can enjoy the waterfront in many different ways. The economic value of waterfront development should be able to accomplish these goals if properly designed. Projects in the waterfront areas must show how the project meets the following performance standards in addition to all other coastal development standards:

Performance Standards:

- **Preservation of Uses** – Preservation of a working waterfront and its character is necessary while at the same time inviting public access and use:

    1. Existing marina and marine-related facilities that support waterfront access, activity, and local heritage shall be preserved to the maximum extent possible;

    2. Existing marina and marine-related facilities that must be relocated or displaced shall be matched to the maximum extent possible within new construction.

    3. The heritage character of the Island shall be included in the design of all projects. This will include analysis of the neighborhood architecture and landscape and a report on how the project meets those standards.

- **Reservation of Land** – Land should be reserved for marine-related uses that support the working waterfront. When reserving land for marine related uses, interim uses may be permitted;

- **Public Accessibility** – Avoid privatizing any of the shoreline and ensure that the public rights to all the shorefront and water resources are protected and encouraged. In the Commercial Core/Marina Village areas, all of the waterfront should be accessible to the public except where safety is a concern. Outside the Commercial Core/Marina Village areas, 50 percent of the waterfront shall be publicly accessible, and additional density shall be provided where the public access is increased or improved;

- **Financially Supportive Uses** – The non-water-dependent uses must be able to support the long-term viability of the water-dependent uses either through direct subsidy or preferably by creating the level of activity and market demand that maintains the business enterprise:

    1. Tourist accommodations and other types of living units

may be included according to the other site planning and design standards;

2. Residential development shall be integrated into the design of the projects according to the Large Project standards, where possible, to ensure an active area and strong support from the market sector. The inclusion of vacation or second homes will be considered beneficial to the finances of the project and the town.

- **Residential Uses –** When residential uses are included within the project, those units will be clustered in groupings that provide common and private open space, are set into the hillsides, and do not exceed the height of [42] feet or four stories.

  1. No housing or other mixed use may be permitted further than 1/4 mile from the water's edge, measured by a line parallel to the mean high water line.

  2. All housing must be either attached or within multi-family buildings.

  3. The provision of publicly-accessible mixed uses such as restaurants transient docks or other amenities will provide a bonus of a five percent increase in total density.

  4. Multi-family construction should be no less than 50 percent of the land use.

  5. Base development density should be no greater than one unit per 40,000 square feet for all of the land (including wetlands and preserved lands). Increases in density shall be provided where public access and public facilities are added above the base standards.

  6. The proportion of housing units to boat slips may not exceed the ratio of one unit to each slip.

- **Activation of the Waterfront** – The waterfront should be an area for active public use and the supporting uses that make the waterfront an attractive and inviting area are to be included within specific design standards:

  1. There shall be provisions for recreation, entertainment, tourist, retail and other complementary facilities, and the creation of public places along the waterfront to activate the waterfront;

  2. There shall be provisions for public boating and parking facilities;

  3. Compatible mixed-use development such as housing, hospitality or entertainment uses would be allowed under the condition that at least 90 percent of the waterfront is publicly accessible along a sidewalk or boardwalk at least 10 feet wide along the water's edge.

  4. Such mixed use development can only occur if waterside parking (parking within 100 feet of the water's edge) consumes less than 30 percent of the total waterfront edge within the planned area.

5. Parking and boat storage may occur off-site as long as adequate land and control are demonstrated.

- **Parking –** Special provisions will be made for parking to obtain the maximum project and public benefits:

  1. On-site parking will be provided to allow reasonable use of the public, commercial, and recreational attractions and facilities. However, the estimated peak parking demand will not be the criteria for design of on-site parking if this demand utilizes land area greater than the footprint of the facilities.

  2. Off-site and peak parking demand will be accommodated with facilities removed from the waterfront.

  3. Parking requirements should be established through the Marina Village Master Plan and be based on evaluations of other large scale, seasonally-impacted facilities.

- **Views –** Waterfront and waterside views require special attention to ensure they are preserved in ways that maintain the character of the area, but still allow the building program needed to activate the waterfront. The following standards will apply:

  1. Buildings along the waterfront will conform to a formula of height and lineal distance parallel to the waterfront that blocks no more than 50 percent of the views of the water from the nearest public right of way, or more than 50 percent of the buildings on the upland side of the nearest public right of way.

  2. Mixed use and commercial building heights may not exceed four stories as measured from the down-hill side of a building.

  3. Waterside views of the land form will require an analysis that shows that the character of the upland slopes is maintained without visible regrading of more than 25 percent of the hillside as seen from the harbor lines.

Agricultural Land Performance Standards

Comment: Typical agricultural preservation programs seek to purchase the land, reduce the tax burden, or, where the law allows, increase the lot size to parcels on which a farm could be sustainable (e.g. a minimum of 25 to 50 acres). However, other approaches seek to preserve the ongoing agricultural lands as long as possible by requiring new development to support the farming operations either through design or actual subsidy. These standards are based on the latter approach.

Purpose and Intent – The purposes of these performance standards are to conserve the present agricultural resources, concentrate development away from the resource areas, and transfer development to other locations to allow the productive land to continue as an agricultural use. Land within a development project that is used for agricultural purposes as defined by state law, or includes land

that has been mapped by the Natural Resources Conservation Service (U.S. Department of Agriculture) as Prime soils for agriculture must show how the project meets the following performance standards:

Performance Standards:

- **Conservation of Soils –** Conserve the existing or potential agricultural operations and the existing soils by setting aside sufficient land area to continue the agricultural enterprise or allow a future enterprise in a sustainable manner. Sustainability may be assured with subsidies provided to the agricultural use;
- **Farm Sales –** Provide an option for sales of produce on or adjacent to agricultural lands;
- **Runoff and Erosion Controls –** Include controls on runoff and potential erosion from farmland to improve water quality before discharge into waterways and prevent erosion of the prime soils;
- **Cluster –** Locate new development on smaller footprints to preserve agricultural resources where the resulting higher densities do not conflict with views and view corridors that create the image of the area as agricultural;
- **Views –** Maintain new development at a height that does not conflict with the views and view corridors that create the image of the area as agricultural;
- **Landscape Views –** Otherwise preserve the views and view corridors that maintain the image of the area as agricultural from public ways;
- **Compatible Land Uses –** Do not place new land uses that may be incompatible with typical agricultural operations close to those operations. This includes maintaining a significant separation distance between residences and fields or processing operations;
- **Easements and Ownerships –** Transfers of ownership, easements, or development rights over the agricultural lands to an organization that supports agriculture.

Open Space Performance Standards

Comment: There are three aspects to open space designations of importance. First is the choice of the land that should be set aside and what qualities that land possesses, and second the links between the open space parcels that allow greenways through out the area and improve the value of the land and mobility for residents. The third is the design of the designated areas that will ensure their long-term value.

Purpose and Intent – These standards will help ensure the highest value land is preserved. The preserved land could be within large development projects or separate parcels. These performance standards are also intended to promote the links and connections between open space parcels.

Performance Standards:

- **Open Space Preservation –** Land within a development that is proposed to be set aside as open space must exhibit most of the following criteria, or be shown to be significantly important for more than one of the criteria:

1. Property that contains endangered, threatened, or ecologically significant species, or natural systems, and that is large enough to sustain the habitat for the species either by itself or combined with other protected property;

2. Property that is valuable to the community as open space due to its proximity to developing areas, or its impact on a view corridor;

3. Property that is valuable to a community because of its historical or cultural value or its proximity to an historically significant area;

4. Property that includes or contributes to important wildlife habitat or wildlife corridors;

5. Property with significant agricultural or forestry resources;

6. Property with wetlands or flood plains and others necessary for the protection of water quality and water resources, including erosion control;

7. Property that contains significant or unique ecosystems or natural features (geological hazards and formations could apply);

8. Property which is adjacent to or in close proximity of land already preserved by federal, state, local, or other conservation agencies; and,

9. Quality of the coastal beaches and adjacent estuarine habitat (or other unique ecosystem or natural feature).

- **Open Space Connections –** These standards are proposed to be used as a strategy for creating a network of usable open spaces across the West Side, which are also integrated with existing open spaces throughout the Island. Land within a development that is proposed to be set aside for open space connections must exhibit most of the following criteria, or be shown to be significantly important for several of the criteria. The open space connections will:

1. Be secure, natural ways with appropriate views and vistas;

2. Create a network of biking and walking trails connecting the shoreline to open space reservations in the interior of the Island;

3. Conserve the existing public access and rights of way and promote appropriate use of the shoreline while limiting access in sensitive habitat areas;

4. Increase public access to the shoreline with permanent dedication of an easement and parking, as appropriate;

5. Improve the quantity as well as quality of public access;

6. Create a shoreline trail that will link all shoreline parks;

7. Conform to local and state public access design guidelines for siting development along the shore and maximizing visual and physical public access;

8. Allow for future capital improvement projects for enhancing the public realm; and,

9. Include provisions for signage, educational, and interpretive material for the area.

- **Open Space Design and Management** – The design and management of the open space areas should ensure the long-term value of the areas:

  1. Select locally adapted, pest resistant, and native plant species wherever feasible for landscape plantings. Minimize pesticide use.

  2. Implement landscape designs and measures that exclude weeds, such as weed cloth, mulches, dense plantings, and mowing strips.

  3. Implement landscape designs and measures that maintain vigorous plant growth to minimize landscape pest problems. Examples include the installation of easily maintained, computerized irrigation systems, ensuring proper drainage, and using compost to build soil fertility.

  4. Use gray water for irrigation.

Scenic Roadways and Vistas Performance Standards

Comment: Scenic roadway programs and regulations are usually designed to ensure that public investment in the rights of way maintain the historic landscape and road configuration. To ensure that the roadway and associated landscape remain, the municipalities will need to determine the desired classification and ensure that other transportation project capital investments support the distribution of travel demand. Similar standards have been accepted and proven within the Critical Area review criteria in Newport.

Purpose and Intent - The purpose of scenic roads and vistas performance standards are to protect the unique and historic landscape character of a district along the designated public rights of way. The standards will preserve established street layout and construction, and ensure adjacent construction maintains the topography, vegetation and scenic vistas from the roadway. The following goals are established for the application of these standards:

- Acknowledge local history and historical significance of a corridor;

- Establish a link between open space areas;

- Ensure public notification of the visual qualities of an area as viewed from the road;

- Support economic development initiatives that take advantage of this public designation with its views and vistas; and,

- Provide an alternative to suburban development landforms by ensuring adjacent development conforms to the scenic qualities.

Performance Standards:

- Street trees, shoulders, road layouts and road geometry within the designated public rights of way are to be preserved to the maximum extent possible. All development projects proposed along a designated right of way are

to identify and map those features for submittal with any request for a town permit.

- Scenic vistas [as defined by the mapped areas and including historic buildings and natural features] are to remain open for public view, unless mitigation is provided. Mitigation can include public access to alternative sites for the vistas.
- Methods to handle the increase in runoff from any proposed development must be designed to maintain the landscape, including trees, grades, and structures within the public right of way.
- The existing grades and significant trees within the site shall be maintained to the maximum extent possible.
- All front yard building setback areas shall remain in their natural state to the maximum extent possible.
- Where the proposed development requires removal of trees and vegetation, the mitigation will include replacement of that vegetation except where the replanting may impact views and vistas.

Performance Standards for Sustainability

Sustainability guidelines are not separate from or secondary to good planning and site design. To be effective, sustainability must be considered and implemented as part of the primary and initial design and planning processes. There are many different models of sustainable best practices that have been successful in other areas and can provide valuable lessons and guidance for Aquidneck Island. The guidelines outlined below have been selected for their relevance and applicability to the specific set of conditions likely to be encountered on the West Side but could also apply to the whole of Aquidneck Island.

This section is organized into three parts:

- Low Impact Development – Site Planning Process
- Green Building Design (LEED Standards)
- LEED Standards for Sustainable Site Planning

Sustainable Site Development Principles Applicable to the West Side

The guidelines in this section are developed as models; they are not intended for adoption without specific tailoring for each community. They are intended, however, to serve as appropriate starting points for groups seeking to adopt regulations on the specific topics noted below. Some of the topic areas discussed below may already be covered by existing local, state, and federal regulations. It is important to note, however, that the main purpose of these design principles is to encourage towns to review and perhaps update their current regulations to comply with state-of-the-art planning practice.

Each topic area describes the purpose and intent of the guidelines and describes some basic design principles and techniques for application. They are generally based on a set of organizing principles for sustainable development that include:

- Integrated planning and design processes to ensure coordination, synergy, and cost savings across disciplines.
- Enhancement of existing natural features, habitats, and resources through open space conservation, stormwater management, and wildlife protection.
- Creation of a network of sustainable open spaces, including natural, agricultural, and landscaped areas.
- Circulation that emphasizes alternate modes of transportation, parking management, and innovative design practices applied to streets and parking lots.
- Compact development that increases density in developed areas, encourages energy and water conservation, and promotes green building design and construction practices.

Low Impact Development

Purpose and Intent - The Low-Impact Development (LID) approach combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. LID site planning strategies and techniques provide the means to achieve stormwater management goals and objectives; facilitate the development of site plans that are adapted to natural topographic constraints; maintain lot yield; maintain site hydrologic functions; and provide for aesthetically pleasing, and often less expensive stormwater management controls. Fundamental LID Site Planning concepts include:

- Using hydrology as the integrating framework;
- Management of stormwater in the smallest units possible;
- Controlling stormwater at the sources;
- Using simple, nonstructural methods wherever possible;
- Creating a multifunctional landscape.

Performance Standards:

Specific LID controls called Integrated Management Practices (IMP's) can reduce run-off by integrating stormwater controls throughout the site in many small, discrete units. IMP's are distributed in a small portion of each lot, near the source of impacts, virtually eliminating the need for a centralized best management practice (BMP) facility such as a stormwater management pond. A developed site can be designed as an integral part of the environment maintaining predevelopment hydrologic functions through the careful use of LID control measures. LID can achieve stormwater control through the creation of a hydrologically functional landscape that mimics the natural hydrologic regime by:

- Minimizing stormwater impacts to the extent practicable. Techniques include reducing imperviousness, conserving natural resources and ecosystems, maintaining natural drainage courses, reducing use of pipes, and minimizing clearing and grading.
- Providing runoff storage measures dispersed uniformly throughout a site's landscape with the use of a variety of detention, retention, and runoff practices.

- Maintaining pre-development time of concentration by strategically routing flows to maintain travel time and control the discharge.
- Implementing effective public education programs to encourage property owners to use pollution prevention measures and maintain the on-lot hydrologically functional landscape management practices.

Low Impact Development Site Planning Process:

The LID Site Planning process involves the following steps:

Step 1 – Identify applicable zoning, land use, subdivision and other local regulations.

The LID approach employs a number of flexible zoning options to meet the environmental objectives of a site without impeding urban growth. The use of these options provides added environmental sensitivity to the zoning and subdivision process over and above what conventional zoning can achieve.

Step 2 - Define development envelopes.

The development envelope can be established by identifying protected areas, setbacks, easements, topographic features and existing sub drainage divides, and other site features. The features that need to be protected include riparian areas such as floodplains, stream buffers, and wetlands; woodlands; woodland conservation zones and important existing trees; steep slopes; and highly permeable and erosive soils.

To minimize hydrologic impacts on existing site land cover, the area of development should be located in areas that are less sensitive to disturbance or have lower value in terms hydrologic function. Site fingerprinting (minimal site disturbance techniques) can be used to further reduce the limits of clearing and grading, thereby minimizing the hydrologic impacts.

These techniques include:

- Reducing paving and compaction of highly permeable soils;
- Minimizing the size of construction easements and material storage areas, and siting stockpiles within the development envelope during the construction phase of a project;
- Siting building layout and clearing and grading to avoid removal of existing trees where possible;
- Minimizing imperviousness by reducing the total area of paved surfaces;
- Delineating and flagging the smallest site disturbance area possible to minimize soil compaction on the site and restricting temporary storage of construction equipment in these areas;
- Disconnecting as much impervious area as possible to increase opportunities for infiltration and reduce water runoff flow;
- Maintaining existing topography and associated drainage divides to encourage dispersed flow paths.

Step 3 – Use drainage/hydrology as a design element.

Hydrologic evaluation procedures can be used to minimize the LID runoff potential and to maintain the predevelopment time of concentration. These

procedures are incorporated into the LID site planning process early on to understand and take advantage of the site conditions. Spatial organization of the site layout is also important. Unlike pipe conveyance systems that hide water beneath the surface and work independently of surface topography, an open drainage system for LID can work with natural landforms and land uses to become a major design element of a site plan. The LID stormwater management drainage system can suggest pathway alignment, optimum locations for park and play areas, and potential building sites. The drainage system helps to integrate urban forms, giving the development an integral, more aesthetically pleasing relationship to the natural features of the site. Not only does the integrated site plan complement the land, but it can also save on development costs by minimizing earthwork and construction of expensive drainage structures.

Step 4 – Reduce/minimize total site impervious areas.

Various methods can be used to achieve a reduction in the total runoff volume from impervious surfaces:

- Alternative roadway layout;
- Narrow road sections;
- Reduced application of sidewalks to one side of primary roads;
- Reduced on-street parking;
- Reduce rooftop area;
- Reduce driveway area by using shared driveways, limiting their widths to 9 feet, minimizing building setbacks to reduce their length and using pervious pavers.

Step 5 – Integrate preliminary site layout plan.

Low-impact, environmentally sensitive development incorporates a combination of all natural resources protection options into a comprehensive, integrated site design. The preliminary integrated site plan provides a base for conducting the hydrologic analysis to compare the pre- and post-development site hydrology, and to confirm that the overall objective of creating a hydrologically functional site is being met.

Step 6 – Minimize directly connected impervious areas.

Additional environmental benefits can be achieved and hydrologic impacts reduced by disconnecting the unavoidable impervious areas as much as possible by:

- Disconnecting roof drains and directing flows to vegetated areas;
- Directing flows from paved areas such as driveways to stabilized vegetated areas;
- Breaking up flow directions from large paved surfaces;
- Encouraging sheet flow through vegetated areas;
- Carefully locating impervious areas so that they drain to natural systems, vegetated buffers, natural resource areas, or infiltratable zones/ soils.

Step 7 – Modify/increase drainage flow paths.

Techniques that can affect and control time of concentration by managing flow and conveyance systems within the development site include:

- Maximize overland sheet flow;
- Increase and lengthen flow paths;
- Lengthen and flatten site and lot slopes;
- Maximize use of open swale systems;
- Increase and augment site and lot vegetation.

Step 8 – Compare pre and post development hydrology.

The hydrologic analysis quantifies both the level of control that has been provided by the site planning process and the additional level of control required through the use of the integrated management practices (IMPs).

Step 9 – Complete LID site plan.

Completion of the LID site plan usually involves a number of iterative design steps. Based on the results of the hydrologic evaluation, additional stormwater control requirements of the LID site are identified. These requirements will be met using IMP's (bioretention, dry wells, filter/buffer strips, grassed swales, rain barrels, cisterns, infiltration trenches, etc.) distributed throughout the site. A trial-and-error iterative process is then used until all the stormwater management requirements are met.

Green Building Design (LEED Standards)

The U.S. Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED®) rating system for evaluating the environmental performance of a building based on existing proven technology. The LEED® system evaluates performance from a "whole building" perspective over a building's life cycle, providing a concrete standard for what constitutes a "green" building. As a result, it has garnered national and international acceptance as a common measurement for green buildings. The five LEED® categories of evaluation are: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials, and Indoor Environmental Quality. Buildings are rated on a 4-step scale from lowest to highest: LEED® Certified, LEED® Silver, LEED® Gold, and LEED® Platinum.

LEED for New Construction and Major Renovations (LEED-NC®) is a green building rating system that was designed to guide and distinguish high-performance commercial and institutional projects. For more information see:

http://www.usgbc.org/LEED/publications.asp

LEED for Commercial Interiors (LEED-CI®) addresses the specifics of tenant spaces in office, retail, and institutional buildings. LEED-CI is part of a comprehensive suite of LEED green building rating tools developed by USGBC to promote green design, construction, and operations practices in buildings nationwide. For more information see:

http://www.usgbc.org/LEED/leed_interiors.asp

The LEED Green Building Rating System for Existing Buildings (LEED-EB®) is a set of performance standards for the sustainable operation of existing buildings. The LEED-EB criteria cover building operations and systems upgrades in existing buildings where the majority of interior or exterior

surfaces remain unchanged. For more information see: (DOE provide link).

LEED green building principles include the following:

Stormwater Management

- Erosion caused by poor drainage and careless construction practices should be avoided. Meeting the LEED-NC® Sustainable Sites Prerequisite for Erosion and Sedimentation Control can prevent loss of soil during construction by storm water runoff, construction activities, and/or wind erosion, including protecting topsoil by stockpiling for reuse.

- Construct wetlands for storm water treatment. Treatment wetlands can remove a variety of contaminants (including fertilizers, pet waste, crankcase oil, pulverized brake linings) prior to discharge into the Bay. Bodies of water, plants and microbes naturally remove water contaminants. Constructed wetlands closely mimic natural systems in their operation, harboring diverse, complex ecosystems.

- Carefully planned infiltration swales and basins and measures to reduce impermeable surfaces are generally less costly than the conventional practice of installing storm sewers and building large detention ponds.

- Maximize treatment level of polluted runoff. While mechanical liquid/solid separators are considerably better then nothing, they do not remove all pollutants.

- Other techniques include: maximizing planted open space, avoiding contiguous impermeable surfaces, minimizing roadway width, incorporating living roofs on buildings, storing roof runoff for later use, and using porous paving materials. Specific techniques must be developed tailored to Aquidneck Island based on soil condition, water table, and potential contaminants (tailored to residential, industrial, and natural areas).

- Harvest rainwater for gray water irrigation and toilet flush applications.

- Separate pipes for gray water from sinks and showers.

- Reduce spray head flow and use drip heads for irrigation; use moisture sensors.

- Install low flow toilets etc. (building related).

- Conserve potable water.

Wastewater Treatment

- Use the best available technology for the reuse of sewage and residual stormwater, using these flows as resources rather than waste products.

- Consider a system of decentralized, on-site, state-of-the-art, small-footprint, odor-free sewage treatment plants integrated into the landscaping that can recycle water for irrigation purposes, treat sewage for disposal without unnecessary costs, and treat storm water to levels appropriate for tertiary uses while minimizing electrical loads that would otherwise be required of off-site treatment.

- Identify uses for recycled water, including enhancement of the storm-

water treatment wetlands, landscaping, etc., and create an appropriate storage and distribution system.

- Utilize constructed wetlands for as much as possible of the sewage treatment process. As with stormwater treatment wetlands, bodies of water, plants, and microbes naturally remove water contaminants. Constructed wetlands are a proven alternative to conventional engineered treatment plants. For more information see:

  http://www.buildinggreen.com/auth/article.cfm?filename=030402a.xml

- Deconstruct all buildings with substantially recoverable materials. Adopt a goal to divert at least 75% of construction, demolition, and land clearing debris from landfill disposal. Require that projects implement a construction waste management plan.

- Create recycling programs in all public, commercial, and residential spaces.

- Establish a composting program for public, commercial, and residential uses.

- Adopt a solid waste diversion goal.

- Limit or eliminate potable water use for landscaping.

Energy Conservation

- Use appropriate street alignment or width and development patterns to reduce shading and maximize solar energy potential for all buildings.

- Minimize the Island's electricity demand by reducing energy consumption and explore generating power on-site. Develop the electrical distribution system as a distributed energy system to enable all of the power need being met with local distributed generation systems.

- Use high efficiency lighting strategies for walkways, streets, signage, and other outdoor lighting. Design all outdoor lighting to protect the darkness of the night sky.

- Perform a feasibility study of a district heating and/or cooling system that may utilize cogeneration and or a ground or water source heat exchanger.

- Use active and passive solar energy systems to minimize demand for electricity and natural gas as well as generate electricity to the maximum amount feasible.

- Refer to LEED guidelines for energy conservation in buildings.

Alternate Modes of Transportation

- Reduce automobile use for intra-island transportation to the greatest extent possible by the establishment of pedestrian- and bicycle-friendly land uses.

- Develop a bike and pedestrian network in conjunction with the development of the greenways.

- Provide a bike amenities such as lockers and racks at convenient locations and shower facilities at commercial establishments.

- Promote electric and alternate fuel vehicles. Require charging stations and parking spaces.

- Provide lighting that is appropriate for pedestrian and bike paths

and directional signage. Make biking and walking safe, pleasant, convenient, interconnected, and a real option.

- Implement shuttle service where appropriate.
- Offer employees incentives to use public transit and develop programs such as the Commuter Benefits Program and an Emergency Ride Home Program to reduce traffic congestion and improve air quality.
- Support neighborhood development patterns that promotes walking for short trips.
- Require the use of zero emission fleet vehicles by government agencies; encourage businesses and non-profits on the island that utilize fleet vehicles to use zero emission vehicles and provide preferred parking for AFV's.
- Develop alternative fuel infrastructure on the Island to support the use of clean air vehicles, including electric vehicles.
- Limit parking by implementing standards that are below current minimum planning code requirements, providing preferred parking for carpools and vanpools, implementing a Car Share program with the necessary car share pod on site and unbundling some parking from housing units. Consider bundling transit passes with condo fees and with hotel room fees.

Habitat Protection

- Protect and enhance biological diversity and natural habitats.
- Use wildlife-friendly plants.

LEED Standards for Sustainable Site Planning

Erosion and Sedimentation Control

- Identify the soil composition on the project site, uncover potential site problems, and devise possible mitigation efforts. Erosion prone areas should be protected from construction activities and a plan should be adopted to stabilize these areas. An Erosion Control Plan should include:

  1. A statement of erosion control and storm water control objectives.
  2. A comparison of post-development stormwater run-off conditions with pre-development conditions.
  3. A description of all temporary and permanent erosion control and stormwater control measures implemented on the project site.
  4. A description of all type and frequency of maintenance activities required for erosion control facilities utilized.

Site Selection for Building

- Avoid development of inappropriate sites and reduce the environmental impacts from the location of a building on a site. Do not develop buildings on portions of sites that meet any one of the following criteria:

  1. Prime farmland as defined by the American Farmland Trust.
  2. Land whose elevation is lower than 5 feet above the eleva-

tion of the 100- year flood as defined by FEMA.

3. Land that provides habitat for any species on the Federal or State threatened or endangered list.

4. Land within 100 feet of any wetland as defined by 40 CFR, Parts 230-233 and Part 22, or as defined by the local or state rule or law, whichever is more stringent.

5. Land that prior to acquisition for the project was public parkland, unless land of equal or greater value as parkland is accepted in trade by the public landowner (Park Authority projects are exempt).

- Once the site is selected, perform a site survey to inventory all of the important environmental characteristics, including wetlands, sloped areas, specific habitat areas, and forested areas.

- Follow the zoning requirements of the local municipality and the community master plan and coordinate with the community and allow for public comment on site decisions.

- When designing the building, consider a smaller footprint and set aside large contiguous areas for natural space on the project site.

- Instead of parceling out the site, build in dense blocks and limit the development footprint to the smallest area possible.

- Incorporate site features into the design such as natural shelters from trees or terrain, natural areas for outdoor activities, and water features for thermal, acoustic, and aesthetic benefit.

- Channel development to areas with existing infrastructures, protecting greenfields and preserving habitat and natural resources. Promote Brownfield redevelopment by rehabilitating damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land.

Reduced Site Disturbance

- Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

- Document existing water elements, soil conditions, ecosystems, trees and other vegetation and map all potential natural hazards. Consider the impacts of the proposed development on existing natural and built systems and propose mitigation to negative impacts.

- Choose a building footprint that minimizes disturbance to the existing ecosystem. Consider issues such as building orientation, daylighting, heat island effects, storm water generation and other sustainable building issues.

- Once the site and building location has been determined, design and construct a compact building massing to preserve open land. Reduce footprints by tightening program needs and stacking floor plans.

- Encourage preservation, conservation, and restoration of existing,

natural site amenities. If appropriate, build on parts of the site that already degraded so as not to degrade undisturbed areas.

- Restore the native landscape of the site by preserving and planting native species to re-establish pre-development site conditions. Restoration efforts will vary depending on the particular project site.

- During the construction process, establish clearly marked construction and disturbance boundaries. Delineate lay down, recycling, and disposal areas and use paved areas for staging activities.

- Establish contractual penalties if destruction of protected areas outside of the construction boundaries are impacted, Coordinate infrastructure construction to minimize the disruption of the site and work with existing topography to limit cut and fill efforts for the project.

Stormwater Management

- Limit disruption of natural water flows by minimizing stormwater runoff, increasing on-site infiltration and reducing contaminants.

- Storm water volumes can be minimized by reducing impervious surfaces to encourage natural process of evaporation and infiltration, designing a smaller building footprint, and installing garden roofs and pervious paving.

- Stormwater could also be harvested from roofs and hardscapes and can be used for non-potable uses such as sewage conveyance, fire suppression, and industrial applications.

- For stormwater volumes that must be conveyed from the site to a receiving water body, design treatment ponds to match the needs of the location and specific drainage areas. Design detention ponds to remove contaminants and release the volumes to local water bodies.

- Utilize biologically-based and innovative stormwater management features for pollutant load reduction such as constructed wetlands, stormwater filtering, systems, bioswales, bio-retention basins, and vegetated filter strips.

- Use vegetation buffers around parking lots to remove runoff pollutants such as oil and grit by installing water quality ponds or oil grit separators for pretreatment.

- Do not disturb existing wetlands or riparian buffers when constructing ponds at the lowest elevations of a site. Design stormwater runoff to travel into vegetated swales rather than into structured pipes for conveyance to water quality ponds. Swales provide filtration for stormwater volumes and require less maintenance than constructed stormwater features.

- In heavily wooded sites where larger ponds are not feasible, smaller bio-retention areas that use sub-surface compost and plantings to accelerate the filtering of contaminants can be distributed around the site instead of using one large pool. To moderate water runoff along drainage paths, construct water ponds to temporarily store storm water flows and they improve water quality through settling and bio-generation of pollutants.

Bibliography

Actual Costs -- Is Building Green Too Expensive? - Building Green in a Black and White World. Section 2; Chapter 3; Part 3.

Building Green on a Budget - Environmental Building News (EBN) Volume 8, No. 5 -- May 1999.

Buildings and Life-Cycle Costing - Canadian Building Digest.

Costing Green: A Comprehensive Cost Database and Budgeting Methodology - (Adobe PDF, 268kb) Lisa Fay Matthiessen and Peter Morris of Davis Langdon Adamson.

Economic Benefits of Green Building Design - (Powerpoint Presentation)

General Services Agency LEED Cost Study - Provides a review of both hard and soft cost implications of achieving Certified, Silver, and Gold LEED ratings for two GSA building types, using GSA's established design standards as the point of comparison.

Green Building Saves Money - Wisconsin Green Building Alliance (WGBA).

Managing the Cost of Green Buildings - (Adobe PDF, 371kb) Abstract.

Sustainable Practices, Public Buildings, and Jobs - Portland State University Publication.

What Every State Executive Should Know About Sustainable Buildings - (Power Point presentation).

LEED Reference Package Version 2.0 - U.S. Green Building Council June 2001.

Low-Impact Development Design Strategies -- An Integrated Design Approach. Prince Georges County, Maryland. Department of Environmental Resources, Program and Planning Division June 1999.

http://www.capecodcommission.org/bylaws/ The Regional Policy Plan by the Cape Cod Development Commission.

B APPENDIX B: INTERIM PLANNING OVERLAY DISTRICTS

Interim Planning Overlay District Principles

The Island communities consistently try to integrate good public policy into development decisions. However, a fast moving real estate market may place many properties—ones that hold multiple potentials and are highly susceptible to change—out of reach before the highest and best use is determined from a community-wide perspective. Public decision-making requires a longer timeframe to complete than construction schedules demand. As a result, many public policy options that could meet multiple objectives, and thus improve overall property values, are left behind. Stopping real estate development while the towns create new regulations for better development has sometimes been deemed by the courts as a "taking" of property rights.

There is a reasonable option that does not fully prevent a property owner's development opportunities, yet allows the community to revise its public policy so that the development can coincide with improved regulation. This is accomplished with the formation of an Interim Planning Overlay District (IPOD), coincident with a planning agenda.

An IPOD is a temporary district with defined parameters and tailored regulations. This district co-exists with the zoning already established for that area and allows the town to enact additional public policy over the use of the district. Common overlay regulations address water supply protection, flood zones, viewsheds, and other environmental features that deviate from property lines, cross land ownerships and cover residential, commercial, industrial and open space uses. The development may otherwise conform to the underlying, or pre-existing, zoning designations. The overlay standards attend to any particular hazards or potential conflicts with the development that are not included in the current zoning. For example, a designated flood IPOD could specify that buildings in the flood zone must be raised above the flood elevation or built outside the flood hazard line.

The newer forms of overlay districts that have been applied cover land use districts such as residential neighborhoods, village or commercial centers, and waterfronts and harbors, where new development could benefit both the landowners and the community if it is properly integrated. For instance, an IPOD could specify design standards for nonwater-dependent uses along the waterfront that render the development compatible with adjacent uses that are water-dependent. Another IPOD example could be the creation of mixed-use development regulations that span established residential and commercial neighborhoods.

Although some communities may enact a moratorium on development during the term of the planning project, this is not recommended. Moratoriums have been construed by certain courts as 'taking' property rights. Instead, a development review procedure can allow the town to control impacts potentially adverse to their planning goals.

Zoning Ordinance Outline

The outline of the IPOD ordinance is recommended as follows:

- **Purpose** – The purpose of the Interim Planning Overlay District (IPOD) is to ensure the planned

and orderly future development of areas by controlling real estate speculation during a specified and limited period to allow completion of comprehensive planning and zoning revisions. The IPOD will identify the planning goals and specify the development options during the term of the IPOD.

- **Applicability** – The IPOD specifies the area, zoning districts, and uses that are regulated during its term. The IPOD should be designated for a specific area to be shown on the official zoning map. The proposed district boundaries should include enough land area to avoid any suggestion of singling out one parcel. These land areas are typically characterized by special land use, environmental and access considerations that warrant careful control of development under a planned development procedure using the appropriate standards.

  Areas in which an IPOD could be implemented on the West Side are:

  1. Commercial districts near the airport in Middletown, the Pell Bridge in Newport, and underutilized commercial land throughout the island, where mixed use development could be constructed with tailored design and performance standards;

  2. Military land that is susceptible to change into other public or private ownership, and where uses with significant public benefit could be sited, provided that market demands are balanced with public needs.

- **Allowed Development** – The minimum development allowed within the IPOD by this section should not create a conflict with the planning goals. The existing trigger for local site plan review may be appropriate.

  For the land owners within the IPOD building may proceed. However, proposals for development of projects exceeding the allowed development standards established by the ordinance must be submitted for review and approval. Approval indicates that the project is a master planned or special permit development project that meets all the applicable requirements of the town ordinances. This includes the review procedures found in the local zoning ordinance and subdivision regulations.

- **Development Review Procedures** – These procedures should allow the community to properly review the development proposal. Using the performance standards in Appendix A, reviewing agencies could significantly alter or deny projects that conflict with the purpose and planning goals of the IPOD. A two-step master plan and detailed development plan submittal process is appropriate for large projects.

- **Standards** – These standards can include the basis for review and acceptance of a development project prior to the establishment of the new regulations. These could be proscriptive and performance standards. They could include specification of design and environmental standards, and dimensional and use restrictions could

be included in the standards. The performance standards within Appendix A could also be incorporated.

- **Sunset Provision** – This section will specify the planning process and date of completion, at which time all, or parts, of the IPOD are to be rescinded.

  During the term of the ordinance, the town will be able to properly plan for the future of the area and ensure that any development proposed will be compatible with the highest standards of the community. To ensure that the regulation is fairly adopted for the stated purpose, each ordinance has a 'sunset' provision that rescinds the regulation after a specific period of time in which the planning must occur.

Work Plan: Comprehensive Plan and Zoning Revisions

Concurrent with the adoption of the IPOD, the town should have the planning program ready to proceed with funding, organization, products and schedules accepted by the parties responsible for completing the study. It is important that the planning program result in the creation of the plans and regulations that address the issue for which the IPOD was created. Otherwise, real estate market speculation may again circumvent the planning goals.

The comprehensive planning process procedures used within the community will be appropriate for the work plan for the IPOD; the revisions to the local Comprehensive Plan and subsequent implementation by zoning must otherwise follow State laws and regulations.

The elements of the work plan will vary depending on the project. However, for large projects and project areas, many of the Special Area Reuse Plan elements listed in *Appendix C* may be appropriate.

C APPENDIX C: SPECIAL AREA REUSE PLAN

Special Area Reuse Plans and Conversion of Military Land

The recommendation of this *Master Plan* is to parallel the procedures and work plan of the BRAC Reuse Plan planning process. This process will determine the best alternatives for reuse of military lands. Conducted outside the BRAC process, this plan would instead be a Special Area Reuse Plan (SARP). The process is thus distinguished from BRAC, but follows its historically successful course of action. The Special Area Reuse Plan process will execute similar decision-making procedures when determining the future of the transferred land or of any significant military parcel that falls under regional interests and control.

The BRAC planning process has always included several concurrent planning efforts. These will form the Special Area Reuse Plan process. One component is to follow the environmental procedures required of the present and future owners. This ensures they are aware of, can remediate, and can use the land for the intended purposes after considering past uses and potential pollution. The other planning effort is to develop the reuse plan that defines the future use of the land. The two planning efforts thus run concurrently, with the present owners responsible for remediation and the future owners responsible for the reuse, and both sharing information as the plan progresses.

Special Area Reuse Plan: Work Plan

Communities become involved in the completion of a complex reuse plan through a Local Redevelopment Authority (LRA). With the proper authorization and organization, the LRAs can effectively direct the reuse planning and its implementation. A key responsibility is to first complete the Special Area Reuse Plan. The following summary describes the basic form and content of the plan.

Goals of the Special Are Reuse Plan - The Special Area Reuse Plan must be a consensus-driven document that creates enough specificity to allow investment in the redevelopment. Typically the goals of the plan are the major points of consensus, while the regulatory approvals define the parameters for actual redevelopment. The goals may include:

- **Consensus on Reuse** – The plan will achieve the consensus necessary to further the community's best interests, including the Navy's interests when military land is transferred;
- **Healthy Environment** – The reuse of the land will protect and improve public health and safety and enhance natural resources;
- **Smart Growth** - The plan will utilize the best ideas of smart growth and sustainable development as tailored to the Island's character; and,
- **Public Benefit** – The plan will maximize the public benefits that may be obtained from the preservation and utilization of the land.

Elements of the Special Area Reuse Plan – The Special Area Reuse Plan should include elements found in the typical BRAC Reuse Plan in order to be comprehensive. These elements can be organized as needed to present the plan and obtain regulatory approval and consensus. However, they are typically similar to a well-designed, comprehensive rezoning package and development proposal. The elements necessary to create this plan include:

- **Fiscal Element** – A real estate market study and an analysis of the potential impacts of new development options begins the analysis. These studies review the potential real estate development market and also the fiscal impacts on the community. A series of program iterations is then compared with market potential. A determination is made of the best building program that meets the needs of the project when burdened with the public benefit costs. This financing plan is developed throughout the master planning process until final zoning is approved to ensure the constructability and marketability of the plan. One of the typical aspects of the Fiscal Plan is also to determine the potential return to the community through the taxes or fees. In this way the community can judge the value of the project on the tax base.

- **Land Use Element** – A program of development envisioned for the property at a level of detail needed to move the project ahead. These plans progress through a series of iterations that create an increasing level of detail. There are usually two levels. What is often presented to the public is only the detail required for zoning. However, the building program, financial analysis, and remediation plans require a higher level of sophistication that allow integrated decisions on the relationships between these elements. When fully developed, these in turn feed the zoning decisions. As noted, the Land Use Plan must be packaged with a zoning proposal for local approval. In the event that the project is a large redevelopment project, the developer(s) may become involved to determine the value and phasing of the project to ensure its success. This may include clean-up and remediation. In the case of Special Legislation, the Land Use Plan may be solely the province of the identified receivers. However, the designation of land for certain uses will have to be sustainable from the environmental and market perspective to be wholly viable.

- **Environmental Remediation Element** – The plan for clean-up and remediation should be integral to the Special Area Reuse Plan. It is necessary and advisable to clearly define what is feasible to put the property back into productive use. This work is typically directed by the property owner, as the responsible party, but in public land disposal processes it is also overseen by a review board made up of local and state parties. The remediation is based on the costs and land use program. The owners, as the responsible party for clean-up, will be required to clean-up the property to reasonable standards that are based on the future land use. However, the owners have the option to limit the potential reuse of the property and thus complete clean-up to a lesser standard. The future owners then have the responsibility to complete the remediation to the needs of the desired land use. As the costs become apparent for clean-up, this second option may not prevail. This iterative process helps create the Land Use Plan while determining the proper protection of human and environmental safety.

- **Infrastructure Element** – A review of the utility services is completed, potentially including government facilities and schools. This includes engineering, facility design and planning reviews. On military bases and within older communities, the infrastructure commonly includes old systems with a series of updates needed to function efficiently. Many times the infrastructure does not fulfill current local or state standards. This requires an analysis of the utility systems that includes more intensive testing. It may also require a study of the regional utility systems as they relate to the on site system and may determine recommendations for regional improvements made through the site improvements. For example, stormwater drainage systems may not be able to control watershed runoff, which could be mitigated with some smaller on-site improvements.

- **Transportation Element** – The transportation system is defined in accordance with improvements needed to accommodate the reuse plans and mitigate new demands. This is typically separate from the other infrastructure pieces due to of its rigorous mitigation and review requirements. The transportation plan for the military properties on the West Side is particularly important because of the *Master Plan* goals for trails, bikeways and shoreline access improvements. The transportation plan is also of highest regional importance in any location, because of the potential congestion that could be caused by any local improvements. For large projects on substantial pieces of military land, the traffic impacts could be significant for the whole Island. In these cases, the same iterative process will be needed to analyze the preferred Land Use Plan against the traffic impacts and mitigation costs.

- **Open Space and Recreation Element** – The open space and recreation requirements for the development must be determined and then programmed for the development area. This can typically take place after the communities complete an internal inventory and demand analysis of recreational needs. Because most recreational facilities are quite local, the local preferences may dominate regional concerns. However, given the large potential projects of the military properties, regional recreational facilities may be feasible. This will in turn drive the financial planning for the project.

- **Natural Resource Element** – The protection and conservation of natural resources is determined after the resources are delineated and described. This can include areas for preservation and habitat protection and those areas for passive or more active use. On-site resources in underutilized areas are not typically well defined, especially to the level needed to know what land is really available. This in turn impacts the program yield for the site, the consequent value, the potential resource impacts and mitigation costs. Long term management of the resources may be an issue depending on whether the resource areas are placed within public land holdings or included in private sales.

- **Implementation Element** – This plan can include the regulatory and capital requirements to complete the plan and its elements. In the case of military land reuse, the disposition of federal land could also be conveyed through one of the public benefit conveyances that seeks participation from the related federal agency for the purpose of the conveyance. For instance, the transfer of land to open space and recreation land could be accomplished through the National Park Service and the use of land for wastewater treatment could be completed by Health and Human Services. In the case of Special Legislation, which may bypass certain ownership transition rules, these additional processes may not be necessary. However, the designation of land for certain uses will also require a series of local decisions from zoning to financing.

Some of the above elements have been analyzed from a regional perspective and developed into concepts included in this *Master Plan*. These ideas could now be taken to a more definitive, local or project level as the land to be reused is better defined, and as the concurrent project selection and environmental remediation processes proceed.

Subsequent Implementation

Upon completion of the Special Area Reuse Plan, the LRA must then ensure the completion of each plan element. This can entail working through the Implementation Element schedule and completing the following:

- **Zoning Revisions** – The town councils must complete the normal process of comprehensive plan revisions and rezoning to allow the development to proceed. The LRA can provide the necessary background information and reasoning for the plan.

- **Developer RFPs** – Compile and distribute developer Request For Proposals (RFPs) or a similar instrument to obtain proposals and contract a developer(s) to construct the elements of the plan. Alternatively, this may be an item that is taken on by the RIEDC or Governor's office.

- **Public Improvements** – The projects will require public improvements such as roads and utility connections. It may even include public facilities such as a wastewater treatment facility, or special open space and recreation facilities. The LRA, or a capital project agency such as the public works department, may need to be coordinated with to manage these projects so that they are phased into the overall redevelopment effort.

- **Development Agreements** – Certain agreements may be necessary to ensure that the projects are phased and sustainable. See also the Large Project Performance Standards in *Appendix A* for additional detail on the possible agreements.

- **Transfer of Ownership** – Upon completion of the project, or even certain components such as the roads and other infrastructure improvements, the property ownership may have to be transferred for the purpose of financing the private projects.

- **Empowerment** – A new agency or implementing body may also be required in certain circumstances, such as a regional solid waste management board. In this case, the appropriate local and state authority must be sought to establish the entity.

D APPENDIX D: OUTLINE AGREEMENT FOR SPECIAL AREA REUSE PLANS

Agreement for Special Area Reuse Plan

As described in the *West Side Master Plan*, portions of the Navy's land on the West Side are anticipated to be placed in a disposition process. To be most effective in reuse planning, the community, regional, and state authorities should act in concerted and proactive ways. This *Master Plan* recommends a series of steps to make the necessary choices efficiently and with the broadest representation of interests in these important decisions. The most successful decision-making in these instances is through programs that put the key stakeholders together with common goals for action. The following is an outline of content for the agreement that could bring together the entities to complete a process similar to the BRAC Reuse Plan process. For the purposes of the *Master Plan*, this is called a Special Area Reuse Plan.

Key Content of Agreement

The Special Area Reuse Plan Agreement would be based upon the following findings:

- The interest in the ultimate disposition of large land holdings extends across all levels of government and across jurisdictional boundaries;
- The integration of the needs and goals of these different perspectives into a comprehensive solution and successful transition;
- The land in question may be federal property in a disposition process;
- Where the tract may be large, underutilized and undergoing remediation of past pollution, these factors render the property highly susceptible to change in the near future;
- The best approach to determining the future of the property from the public's perspective is to complete a Special Area Reuse Plan;
- A Special Area Reuse Plan will elicit active participation by the public agencies and community groups that clearly have a stake in the future of Aquidneck;
- The participants see the balance between the protection of their interests and the need to find the common ground from which to proceed in a disposition and reuse process.

Agreements and Procedures

The signatories agree to take the following actions:

- Define the goals and objectives for the Special Area Reuse Plan;
- Participate in the joint planning process;
- Provide reports, data and information that are available within the participant's ownership that are classified for public dissemination;
- Recommend steps in the creation of a Special Area Reuse Plan;
- Define specific contributions that will be provided from each participant towards the completion of the Special Area Reuse Plan;
- Set the milestones and schedule that will advance the process of creating the Special Area Reuse Plan within a reasonable timeframe;

- Agree that any recommendations or decisions coming from this process will be considered guidance that may be used by those entities with jurisdiction over the project approvals and subsequent redevelopment;
- Agree to be ready to convene and initiate action as soon as authorized by the Governor's office;
- Agree to complete the planning process outlined in this proposal before taking any unilateral action, based on the jurisdiction of the entity, except for those actions necessary to secure property or complete other agreements and instruments of service that serve to preserve the options for future use and redevelopment.

Signatories and Participants

For any disposition that initiates this process, the invitation to participate will be extended to the relevant jurisdictions. Participation may be changed during the term of the Agreement to allow expansion or contraction, with agreement of the participants. In general, the participants, as signatories to this Agreement, may include any of the following.:

- Any of the three island communities;
- The AIPC;
- Local and regional business and planning entities;
- The State as represented through one or more offices such as the Governor's office, RIEDC, CRMC, RIDOT, Housing and other agencies;
- Members of the state legislative delegation;
- The Navy or representative of the Department of Defense;
- Members of the U.S. Congressional delegation.

AQUIDNECK ISLAND

WEST SIDE MASTER PLAN

Aquidneck Island Planning Commission,
West Side Task Force

November 2005