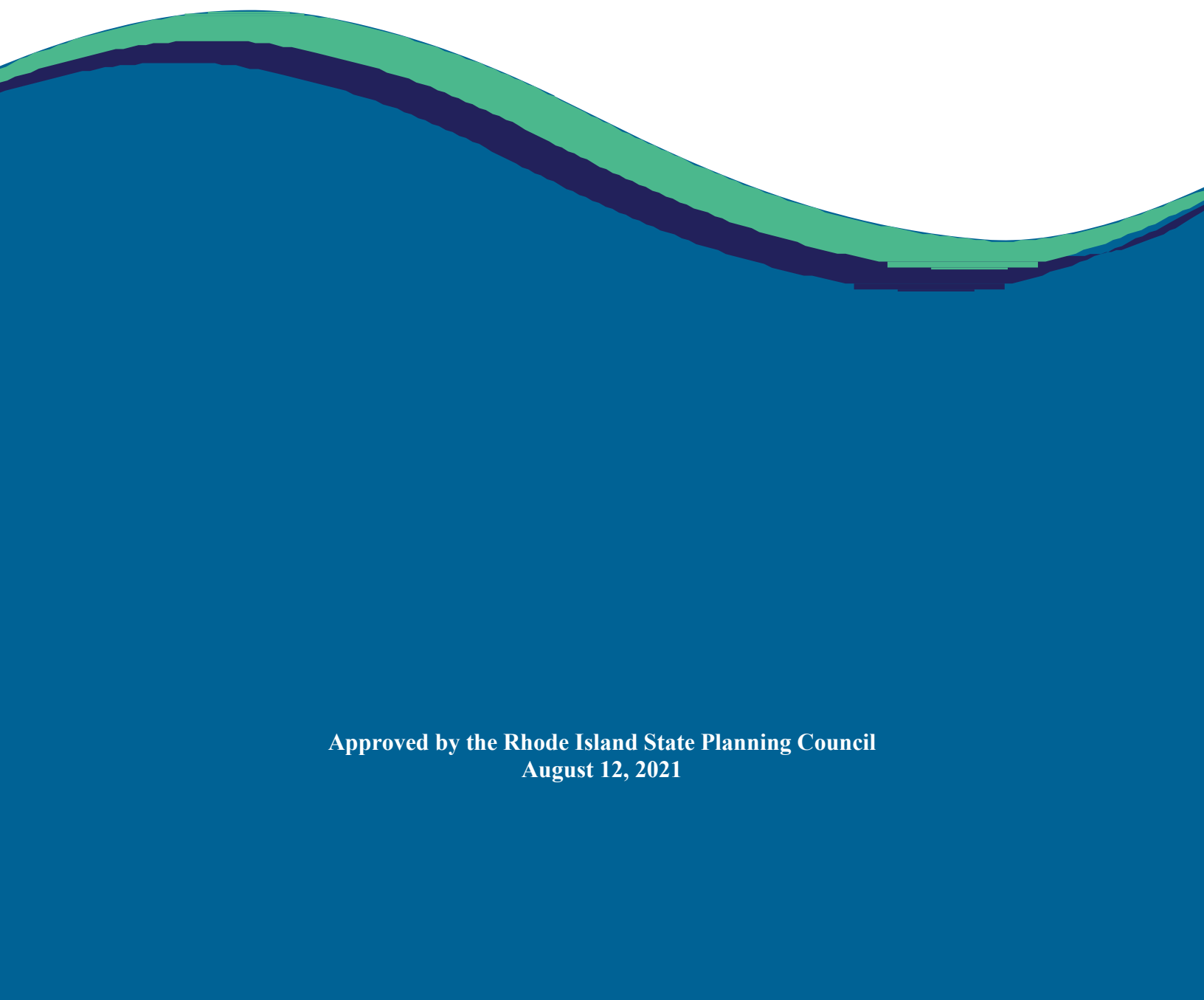


Comprehensive Planning Guidance Handbook

Revised and Abridged



Approved by the Rhode Island State Planning Council
August 12, 2021

FOREWORD

In 2014, the Division of Statewide Planning completed a sixteen volume series of comprehensive planning guidance manuals that were approved by the State Planning Council in January of 2015. The series consisted of two volumes that addressed the structure and processes of comprehensive planning in Rhode Island, one volume addressing mapping standards, and thirteen volumes addressing the required content of comprehensive plans. Although the Comprehensive Planning Act only specifies ten content areas, three topics -- agriculture, energy, and water supply -- were given their own volumes. This was due to heighten the emphasis on agriculture and energy which were part of the 2011 amendments to the Comprehensive Planning Act, and due to the extensive requirements relating to water supply.

This publication condenses the information found in the original Handbook Series. Agriculture is now included in the rest of Economic Development, and energy and water supply are now included with the rest of Services and Facilities. Aside from updates, elimination of duplications, and wording changes to enhance clarity, two requirements were deleted. One is:

- Illustrate the effects of sea level rise on saltwater marshes, including potential losses and migration areas, by including maps showing:
 - a. The marsh areas within the community that are likely to be lost in the event of 1', 3', and 5' of sea level rise; and
 - b. The areas within the community to which marsh is likely to migrate in the event of 1', 3', and 5' of sea level rise.

While the issue of marsh migration remains an important issue and should be considered in comprehensive plans, the *illustration* of these areas can be difficult on the size of maps typically found in comprehensive plans.

The other deleted requirement is:

- Indicate how the quality of service is likely to change over the 20-year planning horizon (improve, stay the same, worsen) and the reasons why such a change is expected.

This prognostication simply didn't prove useful or feasible.

ACKNOWLEDGEMENTS

This publication is based on the Rhode Island Comprehensive Planning Guidance Handbook Series which was the result of over twenty-four months of cooperation and coordination among state agencies, local planners, and other professionals interested in helping cities and towns craft better comprehensive plans. The process was overseen by the Comprehensive Planning Advisory Committee, a dedicated group of planning, land use, legal, and community professionals who worked diligently to develop content on the comprehensive planning process and to review topical content as it was developed. Additionally, the topical content for the guidance handbook series was developed in conversation with numerous experts.

The guidance handbook series was prepared by Chelsea Siefert, Principal Planner. Ms. Siefert was guided by Karen Scott, Assistant Chief of the Statewide Planning Program, and Kevin Nelson, Supervising Planner of the Local Planning Assistance and Consistency Review Unit and assisted by Caitlin Greeley, Principal Planner.

COMPREHENSIVE PLANNING ADVISORY COMMITTEE

Sheila Brush, former Director of Programs, Grow Smart RI

Bill DePasquale, Director of Planning, City of Warwick

Ann-Marie Ignasher, former Town Planner, Town of Foster

Nancy Letendre, Principal Planner, Mason & Associates, Inc.

Sue Mara, Assistant Director of Planning and Redevelopment, City of Pawtucket

Martha Matchnik, former Director of Healthy Aging, YMCA of Greater Providence

Krista Moravec, Environmental Planner, Horsley Witten Group, Inc.

Bonnie Nickerson, Director of Planning and Development, City of Providence

Fred Presley, City Manager, Town of West Warwick

Pam Sherrill, former Town Planner, Town of Johnston

TOPIC EXPERTS

Angela Ankoma, RI Department of Health

Ken Ayars, RI Department of Environmental Management

Jim Boyd, RI Coastal Resource Management Council

Meredith Brady, RI Department of Transportation

Paige Bronk, Town of North Kingstown

Michelle Burnett, RI Emergency Management Agency

Kathleen Crawley, RI Water Resources Board

Teresa Crean, URI Coastal Resources Center/RI Sea Grant

Steve Devine, RI Department of Transportation
Joe Dias, RI Department of Environmental Management
Lauren Faria, RI State Council on the Arts
John Flaherty, Coalition for Transportation Choices
Elizabeth Francis, RI Council for the Humanities
Rupert Friday, RI Land Trust Council
Grover Fugate, RI Coastal Resources Management Council
Scott Gibbs, Economic Development Foundation of RI
Julia Gold, RI Department of Health
Rick Greenwood, formerly RI Historical Preservation and Heritage Commission
June House, RI Office of Housing and Community Development
Paul Jordan, RI Department of Environmental Management
Lorraine Joubert, URI Nonpoint Education for Municipal Officials
Nate Kelly, Horsley Witten Group
Meg Kerr, Watershed Counts
Sarah Kite, RI Resource Recovery Corporation
Tom Kravitz, Town of Burrillville
Eliza Lawson, RI Department of Health
Mike McGonagle, RI Resource Recovery Corporation
Danny Musher, RI Office of Energy Resources
Bill Patenaude, RI Department of Environmental Management
Ken Payne, RI Agricultural Partnership
Amy Pettine, RI Public Transit Authority
Nicole Pollock, formerly RI Department of Environmental Management
Leo Pollock, formerly Southside Community Land Trust
Dan Porter, RI Airport Corporation
Lisa Primiano, RI Department of Environmental Management
Amy Rainone, RI Housing
Randy Rosenbaum, RI State Council on the Arts
Pam Rubinoff, URI Coastal Resources Center/RI Sea Grant
Rachel Sholly, RI Office of Energy Resources
Malcolm Spaulding, University of Rhode Island
Jan Reitsma, formerly Governor Chaffee's Office

Jonathan Stevens, former State Historic Preservation Officer
Jessica Stimson, RI Emergency Management Agency
Elizabeth Stone, RI Department of Environmental Management
Valerie Talmage, Preserve Rhode Island
Michael Tondra, RI Office of Housing and Community Development
David Tremblay, RI Department of Labor and Training
David Vallee, National Oceanic and Atmospheric Administration
Marcel Valois, RI Commerce Corporation
Bob Vanderslice, formerly RI Department of Health
Mike Walker, RI Commerce Corporation
Scott Wolf, Grow Smart RI
Art Zeman, RI Department of Environmental Management

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PART ONE: INTRODUCTION AND OVERVIEW

The Intent of Comprehensive Planning

When the state's reciprocal system of comprehensive planning was established in 1988 by the Comprehensive Planning and Land Use Regulation Act (cited throughout this handbook as "the Act"), the General Assembly laid out several findings that provide insight regarding the intent of comprehensive planning. The findings of the Act assert that local comprehensive planning is necessary to form a rational basis for the long-term development of a municipality. Also, the Act states that comprehensive planning is needed to:

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

The Act makes clear that municipalities are required to plan for their future development so that the state as a whole may benefit from the appropriate use of the land.

See the RI Comprehensive Planning and Land Use Regulation Act, [RIGL § 45-22.2-3\(a\)](#) for a complete list of findings.

The Goals of Comprehensive Planning

The Act sets forth the following goals for the comprehensive planning system and process. The goals are intended to guide both state and municipal actions in the fulfillment of the Act's requirements.¹

- (1) To promote orderly growth and development that recognizes the natural characteristics of the land, its suitability for use, the availability of existing and proposed public and/or private services and facilities, and is consistent with available resources and the need to protect public health, including drinking water supply, drinking water safety, and environmental quality.
- (2) To promote an economic climate which increases quality job opportunities and overall economic wellbeing of each municipality and the state.
- (3) To promote the production and rehabilitation of year-round housing and to preserve government subsidized housing for persons and families of low and moderate income in a

¹ RI Comprehensive Planning and Land Use Regulation Act, [RIGL § 45-22.2-3\(c\)](#)

manner that: considers local, regional, and statewide needs; that achieves a balance of housing choices for all income levels and age groups, recognizes the affordability of housing as the responsibility of each municipality and the state; takes into account growth management and the need to phase and pace development in areas of rapid growth; and facilitates economic growth in the state.

- (4) To promote the protection of the natural, historic, and cultural resources of each municipality and the state.
- (5) To promote the preservation of the open space and recreational resources of each municipality and the state.
- (6) To provide for the use of performance-based standards for development and to encourage the use of innovative development regulations and techniques that promote the development of land suitable for development while protecting our natural, cultural, historical, and recreational resources, and achieving a balanced pattern of land uses.
- (7) To promote consistency of state actions and programs with municipal comprehensive plans, and provide for review procedures to ensure that state goals and policies are reflected in municipal comprehensive plans and state guide plans.
- (8) To ensure that adequate and uniform data are available to municipal and state government as the basis for comprehensive planning and land use regulation.
- (9) To ensure that municipal land use regulations and decisions are consistent with the comprehensive plan of the municipality, and to ensure state land use regulations and decisions are consistent with state guide plans.
- (10) To encourage the involvement of all citizens in the formulation, review, and adoption or amendment of the comprehensive plan.

An Overview of the Required Content

The Act requires certain content be included in each comprehensive plan. To receive State approval, every comprehensive plan must include:

- Maps, including:
 - existing conditions, such as land use, zoning, key infrastructure, service areas for public water and sewer, historical and cultural areas and sites, and natural resources;
 - a Future Land Use Map (FLUM); and
 - a map identifying any discrepancies that exist between the FLUM and the existing zoning categories;
- Inventories and assessments related to specific content areas;
- Goals, policies, and implementation actions related to specific topic areas;
- An element specifically dealing with land use; and
- An implementation program.

The topics required to be addressed within a comprehensive plan are:

- Natural resource identification and conservation;

- Open space and outdoor recreation identification and protection;
- Historical and cultural resources identification and protection;
- Housing;
- Economic development, including agriculture;
- Services and facilities, including energy and potable water;
- Circulation/transportation;
- Natural hazards; and
- Land use.

For details on the required content of a comprehensive plan, see the Comprehensive Planning and Land Use Regulation Act, § [45-22.2-6](#).

Goals, Policies, and Implementation Actions

The Act requires that goals, policies, and implementation techniques (or actions) be included to address each of the required topics. Goals, policies, and implementation actions have different purposes and should be crafted so that they can be used by the municipality effectively. While policies and actions may both lead to achievement of the same goal, it is important to remember that they are not necessarily linked hierarchically.

GOAL: A desired outcome. Simple, broad, high-reaching, yet specific enough to be meaningful. Goals should define the community’s hopes and dreams.

POLICY: A statement that guides municipal decision-makers in support of efforts to achieve a goal. The policies of a comprehensive plan give direction to decision-makers and key community leaders, providing guidance on handling difficult issues, prioritizing the allocation of scarce resources, and working together to achieve goals. Policies set out the parameters for action; they are the procedures that must be followed for the goals to be achieved and they set the tone for community action.

ACTION: A specific, measurable act whose implementation will bring the municipality closer to achievement of a goal. Specific and attainable, implementation actions are the steps that can be taken to reach the goals.

A Note on Objectives: “Objectives” are similar to goals in that they identify something that is desired to be achieved. Typically, in planning, objectives are related to goals, but are measurable and attainable within an identified timeframe. Objectives set a time period by which a specific, measurable outcome will be achieved. The Act does not require that comprehensive plans include objectives, and therefore objectives are not required for State approval. While not required for State approval, communities may find it helpful to include objectives within their comprehensive plans as a way to measure their progress.

The following presents an example of this schema. Notice that policies and actions are placed side by side here to illustrate that policies and actions are not necessarily related; both support achievement of the goal in their own way.

Goal: Residents will significantly use non single occupancy vehicles options for mobility.	
Policy 1: Encourage employers to offer incentives for commuting via an alternative transportation mode.	Action 1: Assess the conditions of the city's rights of way for use by bicycles, annually, in order to maintain an up-to-date list of necessary improvements.
Policy 2: Promote the use of public transportation by public employees.	Action 2: Create a designated city-wide network of on-street bicycle routes that connects the city's key destinations and highest density neighborhoods.
Policy 3: Support development that includes elements designed to increase the use of public transportation.	Action 3: Adopt site and architectural design guidelines for commercial development that increase pedestrian interest and safety.
Policy 4: Allocate higher densities of residential and commercial uses in areas well served by public transportation.	
If the municipality wishes to include an objective for this goal, an example might be: Objective 1: By 2025, 5% of the population will use public transportation for commuting.	

Although policies and actions are not *necessarily* hierarchical, many times it will be necessary to have an action to implement a policy. Using the above example:

For Policy 1, "Encourage employers to offer incentives for commuting via an alternative transportation mode," the municipality might need to add an action such as, "Have the Town's Economic Development Director create and send an informational pamphlet to major employers regarding establishing alternative transportation programs for employees." For Policy 2, "Promote the use of public transportation by public employees," an action might be to, "Establish a discount bus pass program for municipal employees."

Distinguishing Between Policies and Implementation Actions

Admittedly, this can be confusing. The change of a verb can change a policy to an action or vice versa. In deciding whether to craft an intention as a policy or action, consider whether it is ongoing or time-limited. All actions are assigned a responsible party and a timeframe for implementation. Therefore, if the intent is ongoing, or if it spans many responsible parties, it is more likely to be a policy.

Another method for evaluating whether an intention should be a policy or action is to consider that municipalities are required to file a Five-Year Implementation Status Report at the midpoint of their comprehensive plan. If the intention is something that can easily be identified as having been accomplished (or not) it is an implementation action rather than a policy.

Each policy and implementation action will include a verb. Some sample verbs for each are listed below.

Policies		Actions	
Accommodate	Help	Acquire	Fund
Address	Improve	Adapt	Hire
Advance	Inform	Adjust	Identify
Affirm	Insist	Adopt	Implement
Aid	Maintain	Amend	Initiate
Assert	Make sure	Appraise	Institute
Assist	Manage	Assess	Inventory
Balance	Persuade	Begin	Investigate
Base on	Preserve	Calculate	Modify
Collaborate	Prioritize	Create	Prepare
Conserve	Promote	Contact	Provide
Consider	Protect	Dedicate	Pursue
Coordinate	Recognize	Designate	Regulate
Consult	Recommend	Determine	Review
Declare	Require	Develop	Revise
Discourage	Retain	Devise	Schedule
Encourage	Seek	Disseminate	Study
Ensure	Support	Enact	Undertake
Explore	Urge	Establish	Update
Foster	Work to	Evaluate	Use
Further	Work with		

The rest of this handbook includes standards for complying with the requirements of the Comprehensive Planning Act. A standard may: 1) reiterate a requirement found in the Act; 2) provide specifics to clarify a requirement of the Act; 3) describe processes that if followed will help ensure State approval; or 4) identify information that while not specifically required by the Act, has been identified as vital to supporting the intents of the Act. Those standards that describe processes or information not *required* by the Act are identified as recommendations.

General Standards for Comprehensive Planning

The Comprehensive Planning and Land Use Regulation Act and the Comprehensive Planning Standards adopted by the State Planning Council require certain content for a comprehensive plan. To receive State approval, every comprehensive plan must comply with the following:

Standard 1.1 There may only be a single version of the comprehensive plan, including all amendments, appendices, and supplements, which is updated and re-adopted at least once every 10 years.

Standard 1.2 A minimum 20-year planning timeframe must be used in considering forecasts, goals, and policies.

Standard 1.3 The comprehensive plan must be internally consistent in its policies, forecasts, and standards.

Standard 1.4 (*Recommendation*) Include a demographic profile of the municipality, including breakdowns of population race, education, income, and age.

Standard 1.5 A 20-year population projection must be included.

Standard 1.6 Data must be:

- a. From a reliable data source;
- b. Sufficiently recent to still be valid;
- c. Consistent throughout the document; and
- d. Calculated correctly based on a methodology that is sound.

Standard 1.7 For any and all plans or documents that are to be “incorporated by reference” into the comprehensive plan, the following requirements must be met:

- a. The entire plan or document must be submitted to the Division of Statewide Planning for review; and
- b. The entire plan or document must be included in the comprehensive plan, either as an appendix or as a separate chapter, or the text must include all of the following:
 - i. The phrase “incorporation by reference”;
 - ii. Identification of the material to be incorporated, by title, date, edition, author, publisher, and identification number of the publication;
 - iii. A statement of availability that includes the name(s) and address(es) of the municipal agency or agencies where the document can be viewed by the public, contact information (phone number and/or email address) for questions from the public regarding the material, and how copies can be obtained or purchased; and
 - iv. The document publisher’s address, phone number, email, and internet address, if applicable.

PART TWO: PLANNING FOR NATURAL RESOURCES

Rhode Island's natural resources are the state's premier asset and include soil, water, plants, and animals. Natural resources are used for recreation, provide economic value, scenic beauty, enhance quality of life, help to minimize the impacts of natural hazards, and establish rural character.

A Note on Freshwater Resources: In addition to providing habitat, recreational opportunities, and other environmental functions, fresh water is used both for drinking water and as process water by industries. As such, planning for fresh water includes several considerations specific to ensuring adequate supply, delivering water to consumers, and maintaining potable water quality. Guidance and standards related to water supply infrastructure are presented in chapter 7 - Planning for Services and Facilities.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state's goals and policies for natural resources as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

A statewide network of greenspaces and greenways that protects and preserves the environment, wildlife habitats, natural resources, scenic landscapes, provides recreation, and shapes urban growth.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Goal 2, page 5-8](#)

Permanently protect critical natural resources.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Objective 2A, page 5-8](#)

Protect and enhance those values of the coastal region, including scenic values, which contribute to the State's quality of life. Examine proposals for changes in the coastal region in terms of their importance to the State as a whole.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUP 15, page 2-10](#)

Preserve and enhance wildlife, fish, and plant species diversity and stability through habitat protection, restoration, enhancement, and prevention or mitigation of adverse impacts due to human activities.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUP 17, page 2-10](#)

Utilize infrastructure to avoid or mitigate significant negative environmental impacts from development.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Objective 4C, page 5-15](#)

Direct new growth and development to areas and locations that minimize the potential for negative impacts upon the greenspace system.

[A Greener Path: Greenspace and Greenways for Rhode Island's Future, Policy G-8, page 7.2](#)

In recognition of the ever-increasing environmental problems resulting from demands on the land and renewable resources of the state and of the need to preserve, protect and develop these resources of the state at a rate and level of quality to meet the needs of the people of the state, and the need for environmental balance, it is hereby declared to be the policy of the state to provide for the conservation of the land and renewable natural resources using those measures that best meet these objectives, including, but not limited to, the control and prevention of erosion, control of floods, the conservation and development of water resources and the improvement of water quality; assistance in the conservation of coastal land and water resources, the prevention of impairment of dams and reservoirs by sediment, the protection of wildlife, and preservation of natural beauty, and to protect and promote the health, safety and general welfare of the people of this state.[..]

[Soil Conservation, RIGL section 2-4-1](#)

For more on goals and policies contained in state law, see the Natural Heritage Preservation Program, RIGL chapter [42-17.5](#); Taxation of Farm, Forest and Open Space Land, RIGL section [44-27-1](#); and the Coastal Resources Management Council RIGL subsection [46-23-1\(a\)](#).

Other Relevant Documents

Before beginning an assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans, and other documents that are relevant to planning for natural resources, including:

- Local open space preservation plans;
- Strategic plans or other planning documents of local land conservation organizations;
- The RI Department of Environmental Management’s natural resource management plans, brochures, and fact sheets, available at <http://www.dem.ri.gov/documents/publications/index.php>;
- The RI Coastal Resources Management Commission’s Special Area Management Plans, available at <http://www.crmc.ri.gov/samps.html>;
- The RI Coastal Resources Management Commission’s Water Type Classification maps, available at http://www.crmc.ri.gov/maps/maps_wateruse.html;
- The RI Coastal Resources Management Commission’s “Rhode Island Coastal and Estuarine Land Conservation Plan,” available at <http://www.crmc.ri.gov/regulations/CELCP.pdf>;
- The RI Coastal Resources Management Commission’s “Marine Resources Development Plan,” available at http://www.crmc.ri.gov/strategicplanning/MRDP_Final_Jan10.pdf;
- The RI Coastal Resources Management Commission’s reports on coastal erosion, available at <http://www.crmc.ri.gov/coastalerosion.html>;
- The RI Coastal Resources Management Commission’s guides and reports, available at <http://www.crmc.ri.gov>; and
- The RI Coastal Resources Management Commission’s “Guide to Public Access to the RI Coast,” available at http://www.crmc.ri.gov/publicaccess/ri_access_guide.pdf.

Stakeholders to Include

In addition to the general public, when discussing how best to plan for natural resources, municipalities may benefit from involving:

- The local conservation commission;
- The local land trust;
- State designated Watershed Councils/Associations that cover the municipality;
- Local environmental and conservation groups;
- Statewide environmental and conservation advocacy groups, such as the Audubon Society, the Nature Conservancy, etc.; and
- The RI Department of Environmental Management.

Making Connections Throughout the Plan

Relationship to land use

The permanent protection of natural resources requires that existing conservation areas remain conserved, i.e. protected from development, into perpetuity. Therefore, close coordination is necessary between the natural resource goals and the discussion of land use within a comprehensive plan. As the Future Land Use Map (FLUM) sets the policy direction for the future use of land within the municipality, it is imperative that existing conservation areas are shown on the FLUM as not appropriate for development. Where development will be permissible, the land use section of the plan, and specifically the Future Land Use Map, must identify the types and intensities of the development that would be most appropriate given the context of the surrounding natural resources.

Relationship to recreation

In many cases, the natural resources of a municipality are also used for outdoor recreation such as boating or swimming in lakes, rivers, and along the coast, and hiking or cross-country skiing in undeveloped, natural areas. When considering which natural resources are priorities for conservation, municipalities should consider the recreational value of the resources and how use of the resources for recreation could enhance residents' quality of life.

Relationship to economic development

Many municipalities, especially more rural ones, may identify natural resources as a source of economic development opportunity. In Rhode Island, the primary natural resource based economic activities are agriculture and fisheries, with additional opportunities in tourism, forestry, and, to a limited extent, extraction of sand and gravel. Comprehensive plans should consider areas where natural resource based economic activity is feasible and desired, and reflect these considerations on the Future Land Use Map.

Relationship to water supply

Water is a natural resource, so it is no surprise that planning for water availability and planning for natural resources are integrally connected. Any steps that are made to preserve the

community's natural resources are also steps that protect potable water quality. When planning for natural resource preservation, communities should consider conserving areas that will also support water quality and water supply goals.

Standards and Guidance for Natural Resources Planning

Standard 2.1 Identify the following natural resources and natural resource areas on one or more maps:

- a. Surface water, including ponds, rivers, streams, and watersheds;²**
- b. Aquifers;**
- c. Wetlands and saltwater marshes;**
- d. Floodplains;**
- e. Forested areas;**
- f. Any existing large, intact, or connected blocks of habitat area;**
- g. Any known critical, uncommon, or fragile wildlife habitat areas, and;**
- h. Valuable agricultural soils.**

Municipalities may map the natural resources and natural resource areas to best suit their needs, but the map must clearly identify the various types of natural resources. It may be beneficial to show these items on more than one map for clarity and depending on how the community intends to use the information in the planning process.

Standard 2.2 Identify existing permanently protected conservation areas (both public and private) on a map.³

“Permanently protected” is defined as having legal protection from development such as a conservation easement or similar instrumentality.

Standard 2.3 Identify and discuss any prominent issues facing the municipality's significant natural resources.

The comprehensive plan must identify the municipality's “significant” natural resources. “Significance” may be based on the quality, quantity, (or both) of the natural resources found within the municipality. The table on the following page highlights some of the natural resources and natural resource areas that might be considered significant.

² Surface water and aquifers are also required to be mapped as part of the standards for planning for water supply, as outlined under Standard 7.2. Although required for both natural resource and water supply planning, this data only needs to be mapped once.

³ Municipalities may also wish to map conservation land that does not have permanent, legal protection but where the owners have expressed a “conservation intent” to preserve the land from development. Additionally, municipalities may wish to map lands enrolled in the Farm, Forest, and Open Space Program that are only temporarily protected. However, if land that is not permanently protected is included on a map, it should be clearly identified as such.

The following guiding questions may assist in determining which of the community's natural resources and resource areas should be considered significant:

- Which natural resources and resource areas contribute to the economic vitality of the municipality (e.g. for tourism, agriculture, fisheries, increased land values, etc.)?
- Which resources and resource areas are important for drinking water quality protection?
- Which resources and resource areas are used recreationally? In what ways are resources used recreationally?
- Which of the community's natural resources and resource areas help to protect against or mitigate the impacts of natural hazards such as flooding?
- Which resource areas are likely to contain or known to contain important plant and animal habitats?

Some natural resources and natural resource areas that may be considered significant include:

<u>Natural resource or resource area</u>	<u>Characteristics of a "significant" resource</u>
Surface water and watersheds	Serves public water supplies
Aquifers and groundwater reservoirs, recharge areas, and wellhead protection zones	Serves public water supplies Classified as "GAA" and therefore suitable for drinking water
Wetlands and saltwater marshes	All wetland types of any appreciable size, particularly those with flood storage capacity
Floodplains	All floodplains of any appreciable size
Forested areas	Large, contiguous forested tracts of land Forests known to be important habitats or movement corridors for wildlife
Any existing large, intact, or connected blocks of habitat area	
Any known critical, uncommon, or fragile wildlife habitat areas	Habitats of species listed as endangered, threatened, or of special concern Habitats supporting economic functions such as fisheries or shellfish beds Coastal beaches and other coastal features
Agricultural soils	Classified as "Prime Agricultural" or "Soils of Statewide Significance" by the USDA Natural Resources Conservation Service

Once the significant natural resources and natural resource areas have been identified, the comprehensive plan must discuss any issues that might affect each resource. When assessing the issues, consider the following guiding questions:

- How does current zoning align with natural resource areas?
- What issues will new development present for significant natural resources? What actions are needed to avoid or reduce impacts to protect or restore these resources?
- What types of pollution are currently affecting significant natural resources? Are the causes of pollution projected to worsen, get better, or stay the same over the 20-year planning timeframe?
- How is the quality of the natural resources expected to change over time given current and projected conditions?
- How are natural hazards and climate change anticipated to affect coastal areas, surface water, wetlands, habitat areas, and other types of natural resources? Are there other specific issues that are or might impact these areas?

Standard 2.4 Identify and discuss the municipality's priorities for land conservation.

Municipalities should be proactive in thinking about the of natural resources that are most in need of protection, and the locations where conservation efforts would have the greatest benefit. To successfully achieve this, municipalities must determine their local priorities for land conservation and describe these priorities in the comprehensive plan. Providing a set of municipal priorities for land conservation can assist with acquisition decisions, improve coordination with local land trusts, and make a stronger case in grant applications.

The following guiding questions may assist in determining the municipality's priorities for land conservation measures:

- Are there any specific natural resources or natural resource areas whose development would be particularly detrimental to the natural resource system, the community, the region, or the state?
- What types of lands are the most significant for preservation?
- In which areas should the municipality focus its land conservation efforts?
- Are there areas of the municipality in which multiple significant resources exist?
- Are there any specific natural resources or natural resource areas whose preservation would serve multiple purposes or values?
- Are there areas of the municipality in which the issues facing natural resources are particularly significant?
- How can land conservation assist in protecting the community's saltwater marshes given the anticipated effects of sea-level rise?
- Is it important for the municipality to permanently protect lands that are currently only temporarily protected?

Standard 2.5 (*Recommendation*) Discuss the techniques that are in place for minimizing the negative impacts of development on significant natural resources.

Many municipalities already have regulations, programs, or other techniques in place for minimizing the negative impacts of development on significant natural resources. Discussion of any such techniques should include a general assessment of their effectiveness. Depending on the assessment, actions to improve or add to the existing techniques should be included implementation program. Such techniques could include:

- Low-impact development requirements;
- Conservation or water protection overlay districts;
- Compact development incentives;
- Conservation and/or acquisition programs;
- Conservation subdivision requirements or incentives;
- Community forest or tree management programs;
- On-site wastewater management programs.
- Stormwater management or treatment requirements;
- Green building requirements or incentives.

Standard 2.6 Include goals that embody the state's goals for natural resources and policies to support each goal.

The state's goals for natural resources focus on protection of natural resources through conservation and conscientious development practices. Comprehensive plans must include one or more goals that further the state's goals for natural resource conservation and policies to support each goal. Each municipality should develop natural resource goals and policies that are appropriate to its context, significant natural resources, and development expectations. Some municipalities may choose to have a single, over-arching goal for natural resource protection, while others may choose to provide a goal for each type of natural resource. Either option is acceptable, and the community should determine which method will best serve the community's natural resource protection priorities.

To determine the natural resource goals and policies that may be appropriate for your municipality, consider the following guiding questions:

- How do the natural resources that exist within the municipality contribute to quality of life? Economic activity? Recreation? Other important community values?
- Which natural resource areas are most in need of protection?
- How do municipal decisions affect the natural resources that exist both within and outside of the municipality?
- Are there organizations within the municipality that could become partners in conservation efforts? What policies could facilitate coordination with these organizations?
- How can the municipality support the efforts of the local land trust?

SAMPLE GOALS

- Our natural resource systems, water resources, and natural habitats are preserved and protected for future generations.
- Important natural resource areas, including wetlands, wildlife habitats, groundwater aquifers, and saltmarshes, will be protected.
- Protect and restore coastal and freshwater wetlands and improve water quality.

SAMPLE POLICIES

- Promote environmental sustainability and the stewardship of natural resources.
- Acquire land and conservation easements to preserve critical wildlife habitat and protect water quality.
- Provide resources for the acquisition of priority conservation areas.
- Properly manage areas designated as significant habitats.
- Support integrated strategies to protect and restore natural systems with desirable land use practices and management programs.
- Ensure that new facilities, infrastructure, and development are sited to accommodate the migration of coastal wetlands as a result of sea-level rise.
- Incorporate sea-level rise projections and saltmarsh migration data into criteria for acquisition, easements, protection, and restoration.
- Encourage use of native species and the control of invasive species in and around wetland complexes.
- Protect migration corridors for wildlife.
- Provide for conservation subdivisions on larger development sites, open space acquisition, and sensitive siting of competing land uses.
- Evaluate the effects of proposed development on the water quality and natural functions of rivers, ponds, streams, other water bodies, and the natural integrity of adjacent land areas.
- Coordinate with neighboring municipalities on watershed issues.
- Evaluate and manage natural areas within a watershed framework.
- Ensure that all conservation easements are legally adequate, monitored, and enforced to maintain the resource value.
- Ensure that areas designated for stormwater management are adequately designated and protected to limit future degradation.
- Work with state and NGO partners to identify restoration opportunities to ensure long term viable habitats.

Standard 2.7 Include implementation actions within the Implementation Program that address the protection and management of natural resources.

There are many actions that can be used to protect and manage natural resources, including acquiring conservation easements, dedicating funding for land acquisition, and working with a local land trust. The community should decide which actions best suit their needs, based on the

assessments completed. Some guiding questions that could be considered when determining the actions that are appropriate include:

- Are any of the issues facing significant natural resources either directly or indirectly related to development practices?
- Given the assessments performed for natural resource planning, are changes needed in zoning ordinance or subdivision and land development regulations to minimize developmental impacts?
- How can existing techniques for minimizing the negative impacts of development on significant natural resources be improved?
- What programs are currently in place to conserve significant natural resources? How can these programs be better utilized? What additional programs could be helpful?
- Are the proposed actions sufficiently specific and detailed to be meaningful?
- Are there sufficient actions to make progress toward achieving the goal(s)?

SAMPLE ACTIONS

- Adopt an Open Space zoning classification.
- Adopt Low Impact Development Standards for new development, substantial renovations, and undersized properties seeking dimensional variances.
- Identify and prioritize specific parcels of land for acquisition, development rights, foreclosing right of redemption (tax sale properties), farmland preservation, and open space purposes.
- Using the Sea Level Affecting Marshes Model (SLAMM) maps, incorporate maps and goals of SLAMM project into local policies, regulations, and municipal operations.
- Develop appropriate management plans for conservation areas to preserve the ecological integrity and functionality of the natural systems.
- Develop an educational program for municipal residents on the values and importance of protection and restoration of water quality and natural areas in order to generate support for the protection of these resources.
- Adopt a Wastewater Management Overlay District.
- Implement an outreach effort to enroll farmlands into the Farm, Forest, and Open Space Program.
- Adopt regulations regarding the use of native species and the control of invasive species in and around wetland complexes.
- Revise the zoning code to promote conservation subdivisions on larger development sites, open space protection, and sensitive siting.
- Establish a fund for land acquisition and conservation easements.

PART THREE: PLANNING FOR OUTDOOR RECREATION AND OPEN SPACE

One of the goals of the Act is, “To promote the preservation of the open space and recreational resources of each municipality and the state.” “Open space” may have different meanings depending on the context for which it is used. The Act contains a technical definition of open space (§ 45-22.2-4 (19)) but for most purposes of this requirement, it may be understood to be any area of land that has been set aside for recreational purposes and contains no significant buildings or other built structures. Recreation can broadly be categorized as “active” or “passive”. Active recreation is generally sports related, and may be defined as activities that combine one or more of the following features: 1) formally organized teams and leagues, 2) require specialized sports equipment, or 3) are held at developed recreation sites, facilities, or fields. Examples include recreation associated with soccer fields, ball fields, swimming at pools, downhill skiing, tennis, and golf. Passive recreation is characterized by activities that are usually unstructured, require little use of physical facilities, and frequently involve interaction with natural resources. Examples include hiking, horseback riding, cross-country skiing, fishing, canoeing, picnicking, nature viewing, or bicycling.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state’s goals and policies for recreation and open space as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

Provide a diverse, well-balanced system of public outdoor recreation facilities.

[Land Use 2025: Rhode Island’s State Land Use Policies and Plan, Objective 2C, page 5-9](#)

Invest in new and improved opportunities for outdoor recreation to meet the public’s needs.

[Ocean State Outdoors: Rhode Island’s Comprehensive Outdoor Recreation Plan \(2019\), Goal 1](#)

Strengthen, expand and promote the statewide recreation network while protecting natural and cultural resources as well as adapting to a changing environment.

[Ocean State Outdoors: Rhode Island’s Comprehensive Outdoor Recreation Plan \(2019\), Goal 2](#)

Ensure sustainable operation, maintenance and management of the statewide outdoor recreation network.

[Ocean State Outdoors: Rhode Island’s Comprehensive Outdoor Recreation Plan \(2019\), Goal 3](#)

Improve access by removing barriers and enhancing information and communication systems.

[Ocean State Outdoors: Rhode Island’s Comprehensive Outdoor Recreation Plan \(2019\), Goal 4](#)

To provide statewide recreational activities and promote tourism in forested recreation areas.

Forest Resources Management Plan (2005), Forest Recreation and Tourism FRT Goal, page 39

Promote active and sustainable management to conserve trees and forests where people live, work, and play.

[Rhode Island 2020 Forest Action Plan, Urban and Community Forests Goal 1, page 90](#)

The general assembly hereby finds and declares that:

- 1) Providing land for public recreation and the conservation of natural resources promotes the public health, prosperity, and general welfare, and is a proper responsibility of government;*
- (2) The lands now provided for those purposes will not be adequate to meet the needs of the expanding population in years to come;*
- (3) The expansion of population, while increasing the need for those lands, will continually diminish the supply thereof and will tend to increase the cost to the public of acquiring lands suitable and appropriate for those purposes; and*
- (4) The state should act now to acquire and to assist local governments to acquire substantial quantities of those lands now available so that they may be used and preserved for future use for those purposes.*

[Green Acres Land Acquisition, RIGL section 32-4-2](#)

The general assembly recognizes that open land with scenic, natural, and ecological value is important to the character of Rhode Island and provides opportunities for passive recreation.

[Natural Heritage Preservation Program, RIGL section 42-17.5-2](#)

For more information on the goals and policies contained in State law, see Freedom to Fish and Marine Conservation Act, RIGL section [20-3.2-2](#); Metropolitan Park District, RIGL section [32-2-2](#); Towns Parks and Recreation Systems, RIGL section [32-3-2](#); Preservation of Open Space, RIGL chapter [42-17.9](#); and Rhode Island Greenways Act of 1995, RIGL subsection [42-125-2\(b\)](#).

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for recreation. This could include:

- Local park and recreation plans.

Stakeholders to Include

In addition to the general public, when discussing how best to plan for recreation, municipalities may benefit from involving:

- The municipal parks and recreation department;
- Local sports leagues or teams;
- Local physical activity organizations and businesses, such as the YMCA;
- The RI Department of Environmental Management's Division of Parks; and
- The RI Department of Health's Physical Activity and Nutrition Program.

Making Connections Throughout the Plan

Relationship to land use

The analyses conducted for recreation and open spaces should be reflected on the Future Land Use Map, both in terms of the amount of land that the community desires to set aside for recreation and the most appropriate locations for these areas. The location of these areas should take into account convenience to residents, especially disadvantaged areas where transportation may be an issue.

Relationship to economic development

Outdoor recreation may relate to economic development through tourism, the provision of private facilities, and by enhancing quality of life. Visitors may be attracted to the community for the opportunity to hike, bike, fish, sightsee, or otherwise engage in enjoying outdoor activity. They may also patronize local shops, eat at local restaurants, and stay at local bed and breakfasts. Additionally, some outdoor recreational facilities, such as golf courses, are economic generators in themselves. Areas where commercial outdoor recreation, such as golf courses, are feasible and desired should be displayed as such on the future land use map and supported by appropriate zoning.

Standards and Guidance for Outdoor Recreation and Open Space

Standard 3.1 Identify existing recreational areas and sites.

(Recommend a. through c. to fulfill this standard)

- a. Include one or more maps showing:**
 - i. Publicly-owned outdoor recreational areas; and**
 - ii. Privately-owned outdoor recreational areas that have been deemed significant in meeting the community's recreational needs;**
- b. Identify which of the mapped properties are municipally-owned or managed; and**
- c. Include on the map, or in an associated table, clear identification of the name and type of each area or site.**

Municipalities may map the recreational areas and sites to best suit their needs, but the map must clearly identify the various types of recreational areas that exist within the community. It may be beneficial to show these items on more than one map. Though not required, municipalities may wish to map designated public access points to natural and conservation areas intended for recreation, such as off-street parking areas, trailheads, access easements, and community boat ramps.

Standard 3.2 Analyze existing and future recreational needs.

(Recommend a. through c. to fulfill this standard)

- a. Assess whether there are any neighborhoods or districts within the municipality that do not have enough recreational resources in general or enough of a specific type of recreational resource;**

- b. Discuss whether the existing recreational options within a municipality seem to suit the needs of current and anticipated future residents; and**
- c. Determine and discuss whether any existing recreational facilities and areas are in need of upgrades, renovations, repurposing, improved public access, etc.**

It is strongly recommended that this analysis of existing needs be based in part on needs identified by residents, either through a community survey, during public workshops, or through other types of community engagement. Determination of future needs should relate to the level of need currently experienced by the community, the projected availability of resources to alleviate those needs, and the anticipated changes to the size and demographic make-up of the population.

For Standard 3.2.a. (assessing geographic distribution of recreational resources): Using a map of recreational resources, the community can see if there are neighborhoods or districts of the municipality that are lacking places for recreation. Additionally, overlaying a map of recreational areas onto maps of other community characteristics can help the municipality come to other conclusions about the geographic distribution of recreational options. For example, mapping playgrounds against school-aged or under-5 population percentages can assist in determining areas where more playgrounds might be warranted. Mapping passive recreational areas against elderly population percentages may show needs for more low-intensity recreational options.

The comprehensive plan should assess whether there are, or will be, any neighborhoods or districts within the municipality that do not have enough recreational resources in general or enough of a specific type of recreational resource. The following guiding questions may assist:

- What resources are available to serve the surrounding neighborhood?
- Are any residential neighborhoods are lacking playgrounds, ball fields, etc.?
- What resources are available to serve the entire municipality?
- Are there areas of the community that are underserved by passive recreational options, such as walking paths and community parks?
- Are there commercial or mixed-use areas are lacking parks and/or plazas?
- Are there any areas of the community for which greater levels of development are being targeted? If so, will additional recreational resources be needed for those areas.
- Are any recreational areas likely to be impacted by natural hazards over the 20-year planning horizon?

For Standard 3.2.b. (suitability of recreational options): The suitability of recreational options refers to how well recreational resources, particularly active recreational facilities, match the needs of the population. Comprehensive plans should discuss whether the existing recreational options within a municipality suit the needs of current and anticipated future residents. The suitability of recreational options should be discussed during the public engagement process or within a public survey, and discussions should be had with the parks and recreation department and local sports leagues. In these conversations, consider the following guiding questions:

- Have there been any repeated requests for a certain type of recreational area or facility?
- Does any type of recreational facility have a long waiting list for access?
- Have there been any changes to the recreational options that have limited the availability of certain types of recreation?
- Are there opportunities to better link or coordinate existing recreational areas?
- Are the demographics of the municipality changing in a way that would place more of an emphasis on certain types of recreational resources? For example, an aging population may require more passive recreational opportunities, whereas an increasing family population may require more playgrounds and sports fields.

For Standard 3.2.c. (condition of facilities and access to recreation): Depending on the type of the resource, its usefulness to the community will depend on issues such as its accessibility, the types of equipment and amenities provided, and the general level of maintenance. To determine usability concerns, it is best to assess each recreational area individually and discuss any specific identified concerns. Consider the following guiding questions:

- For each active recreational site, when were the facilities last renovated or updated?
- Does the condition of each facility limit its use or present dangerous conditions?
- Is the recreational equipment run-down or in need of repair or replacement?
- Is the area designed in a way to allow multiple users or types of recreation to occur simultaneously?
- If the area is designed for use by children, are there areas for parents to sit and monitor their children's activities?
- Are there shaded areas?
- Are there other public amenities, such as benches, trash cans, water fountains, and restrooms?
- Is the area well-lit for nighttime activities?
- Are there any natural resource areas intended for recreation that have no or very few public access points?
- Are there any recreational areas with low usage rates that would otherwise seem suitable for use? If so, why?
- Are there any recreational areas where parking shortages are causing overflow parking on local streets?
- Is access to any recreational areas limited due to poor sidewalk conditions or lack of sidewalks?
- Are any recreational areas in need of bicycle racks?
- Are trails well marked?
- Are there issues of erosion, overuse, or inappropriate use?

Standard 3.3 Identify areas for the potential expansion of recreational facilities if appropriate.

The expansion and strengthening of the recreational system is a primary goal of the state. The identification of appropriate areas for expansion will depend heavily on the context of the municipality, as each municipality will present different opportunities depending on geographic location, level of development, etc. Depending on the municipality, the areas identified could include:

- Neighborhoods in which expansion of playgrounds, playing fields, or the park system would be possible and beneficial;
- Specific parcels or areas that will be targeted for acquisition or access easements;
- Areas or parcels that would help to better link existing recreational areas;
- Areas in which conservation of open space is desired; and
- Areas in which additional access to natural areas could be obtained.

Standard 3.4 Include goals that embody the state's goals for recreation and policies to support each goal.

While each municipality should develop recreation goals and policies that are appropriate to its context, geographic location, level of existing development, and future population forecasts, they must embody the state's goals of a diverse, well-balanced recreational system that is easily accessible and meets the public's needs, and policies to support the identified goals.

To determine the recreation goals and policies that may be appropriate for your municipality, consider the following guiding questions:

- What types of recreational facilities and areas are most appropriate for the municipal context?
- What level of recreational access is needed for your municipality?
- What policies might be needed for the municipality to achieve a variety of recreational options in every neighborhood and district?
- What policies might be needed for the municipality to better support the continued protection of recreational areas and open spaces?
- What is needed to improve the condition of recreational areas?
- Would design standards help to improve the usability of recreational areas?
- Is there a program in place to maintain recreational areas? If so, how can the program be made more effective? If not, how could a program be implemented?
- Can any existing recreational areas be retrofitted to accommodate resources in high demand or to allow use by multiple types of recreation?
- How can existing barriers to access be overcome? What policies can be put in place to support better access to recreational areas?
- Are there natural areas that are not currently being utilized for recreation that would be suitable for recreation uses?
- How can the community better support landowners who may want to make their open space areas accessible by the public?

SAMPLE GOALS

- Our community will have recreation facilities that are state-of-the art and meet the needs of all residents.
- Maintain a sustainable, high-quality parks and recreation system that reflects the unique identity of our community.
- Maintain and enhance a broad range of community-wide and neighborhood recreational facilities to meet the needs and desires of residents.
- Build and maintain a park and recreation system that offers a diversity of recreational opportunities for all residents
- Increase access to park and recreation facilities so that no resident is more than 15 minutes from a recreational site.

SAMPLE POLICIES

- Provide the necessary resources to maintain the recreational system.
- Connect neighborhoods and open spaces through a network of bicycle and pedestrian friendly streets and trails.
- Involve the community in planning and maintenance efforts.
- Strategically acquire parcels to link existing recreational areas.
- Encourage community ownership of neighborhood parks and other civic and public spaces through “friends of...”, “park watch dogs”, and similar programs.
- Maintain a database of open space parcels, public parks, boat launches, and other recreational facilities that are within Special Flood Hazard Areas and projected sea-level rise areas. Monitor impacts to these areas from storm events and incremental sea-level rise, and develop strategies to preserve these areas for continued public use.
- Incorporate sea level rise projections and data into criteria for acquisition, easements, protection and restoration of open space, recreation, and public access areas.

Standard 3.5 Include implementation actions within the Implementation Program that address:

- a. The protection and management of existing recreational resources;**
- b. The acquisition of additional recreational resources if appropriate; and**
- c. Meeting identified recreational needs.**

Comprehensive plans must include implementation actions that address protecting and managing recreational resources, as well as expending recreational resources as appropriate. Municipalities may decide which implementation actions best suit their context. The following guiding questions may be helpful:

- What is the protection status of municipally-owned recreational areas? How can the municipality preserve into perpetuity areas that are not currently preserved?
- What programs are currently in place to assist with open space conservation? How can these programs be better utilized to protect recreational resources?

- How are recreational areas currently managed? Can improvements be made in the management process?
- Is the local recreation department funded to a level that ensures protection and proper management of recreational resources?
- Has acquisition of recreational resources been included in the municipal Capital Improvement Program?
- How can the municipality begin to better geographically distribute recreational opportunities throughout the community?
- What regulations could be implemented to require new development to set aside recreational areas?
- Are there any ordinances or regulations that could be strengthened to increase public access to natural areas?
- Are any existing access points currently being overwhelmed by visitors? Is there a need to increase access to any particular natural areas?
- Are the proposed actions sufficiently specific and detailed to be meaningful?
- Are there sufficient actions to make progress toward achieving the goal(s)?

SAMPLE ACTIONS

- Conduct an annual assessment of existing recreational programs and facilities.
- Acquire new open space along [insert name of local waterway].
- Establish a priority list for park and recreation facility renovation efforts.
- Amend local ordinances to permit enclosed off-leash dog parks.
- Install parking areas at [insert name of local resource area].
- Contact owners of conservation lands to discuss opening the lands to the public for recreational purposes.

PART FOUR: PLANNING FOR HISTORIC & CULTURAL RESOURCES

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state's goals and policies for historic and cultural resources as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

The State's Historic Preservation Plan, *Protecting Our Legacy of Buildings, Places, and Culture: An Historic Preservation Plan for Rhode Island*, is the primary source of goals, objectives, and policies related to historic and cultural preservation issues. Due to the nature of this plan, it is impractical to replicate its extensive list of goals, objectives, and policies here. Please refer to *Protecting Our Legacy of Buildings, Places, and Culture: An Historic Preservation Plan for Rhode Island*, Section Five: Goals, Objectives, Strategies, and Policies, at the Division's website <http://www.planning.ri.gov>.

Preserve historic buildings, districts, and archaeological sites.

Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUP 24, page 2-10

Excellence in community design: communities that are high quality, energy efficient, safe, healthful, distinct, diverse, and aesthetically pleasing; communities that are rich in natural, historical, cultural, & recreational resources; communities that provide abundant economic opportunities.

Land Use 2025: Rhode Island's State Land Use Policies and Plan, Goal 3, page 5-10

Preserve and enhance special districts and special places, supporting particular uses and resources.

Land Use 2025: Rhode Island's State Land Use Policies and Plan, Goal 3, Objective 3B, page 5-10

Invest in arts and culture to build on Rhode Island's identity as a cultural destination.

Rhode Island Rising: A Plan for People, Places and Prosperity, Goal 3, Policy 3, page 76

Enhance and preserve historic and other aspects of neighborhoods and communities which add identity and character.

State Housing Plan (2000), 1-2-3 Stabilizing and Protecting Existing Areas, Policy B, page 1.2

The general assembly finds that the historical, architectural, and cultural heritage of the state of Rhode Island should be preserved as a part of our life to enrich the experience of present and future generations, and that the continued expansion of urban development threatens the existence of our historical sites and structures.

Rhode Island Historical Preservation and Heritage Commission, RIGL section 42-45-1

The preservation of structures of historic and architectural value and historic cemeteries, wherever located within a city or town, are declared to be a public purpose, and any city or town

council has the power by ordinance to regulate the construction, alteration, repair, moving, and demolition of these structures within the limits of the city or town.

Historical Area Zoning, RIGL section 45-24.1-1

It is declared to be the policy of the state to join with the federal government, private patrons, and institutions and professional organizations concerned with the arts to insure that the role of the arts in the life of Rhode Island communities will continue to grow and will play an ever more significant part in the welfare and educational experience of our citizens.

Rhode Island Council on the Arts, RIGL section 42-75-1

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies and actions, communities should review other state and local plans and other documents that are relevant to planning for historic and cultural resources, including:

- Local historic and cultural preservation plans that may be available;
- State historic resource surveys for each city and town, available at <http://www.preservation.ri.gov/survey/publications.php>; and
- Other historic and cultural preservation resources available through the [Rhode Island Historical Preservation and Heritage Commission](#)

Stakeholders to Include

In addition to the general public, when discussing how best to plan for historic and cultural resources, municipalities may benefit from involving:

- The Rhode Island Historic Preservation and Heritage Commission.
- Local historical society and preservation groups;
- Representatives from local museums, cultural institutions, and sites;
- Members of the local arts community;
- Preserve Rhode Island; and
- Owners of historic buildings and homes.

Making Connections Throughout the Plan

Relationship to land use

A community's historic and cultural resources contribute to the character of a community. It is important to be sensitive to the setting of these resources and how new development, especially in areas that directly abut historic districts, archaeological sites, scenic view corridors, etc., may impact the character that these resources provide to the community.

Relationship to natural resources

Some aspects of historic and cultural resources may be closely linked with natural resources, especially as they relate to scenic areas and view corridors. Communities should consider

opportunities for combining efforts to protect and preserve natural resource areas with historic and cultural resources. Areas with high natural resource value and historic or cultural value should be considered of particularly high value in protection and preservation efforts.

Relationship to economic development

Rhode Island's rich cultural and historic resources contribute significantly to its economy in a wide variety of ways. Places with a rich sense of history and culture directly draw tourists and contribute to the local economy. Adaptive reuse of older buildings for new purposes, such as mill buildings for residential lofts and artist live-work space is another example of the ways in which preserving historic resources can ignite economic development.

Standards and Guidance for Historic and Cultural Resources

Standard 4.1 Identify historic and cultural resource areas and sites (such as, but not limited to, historical buildings, landmarks, and scenic views).

- a. Include one or more maps showing:**
 - i. Properties or districts listed on the State or National Register of Historic Places; and**
 - ii. Locally designated historic districts established through the zoning ordinance.**
- b. Include clear identification of the name of each mapped resource area or site.**
- c. (*Recommendation*) Include other resources that the community has identified as significant such as known properties that meet the eligibility criteria for listing on the State Register of Historic Places but have not yet been listed and cultural assets, such as theaters, museums, and galleries.**

Municipalities may map the historic and cultural resource areas and sites to best suit their needs, but the map must clearly identify the resources. One method many municipalities have found useful is to number each feature on the map, and include a separate list keyed to each number.

The following sources should be considered as resources for information:

- The RI Historical Preservation and Heritage Commission, including State Survey Overviews for each city and town in Rhode Island available at <http://www.preservation.ri.gov/survey/publications.php>.
- Discussions with local historic preservation groups or stakeholders.

Standard 4.2 (*Recommendation*) Include a description of the significant historical and cultural resource areas and sites that exist within the community.

While not required, it could be useful to include descriptions of the community's significant historic and cultural resources both individual properties and historic districts or areas. The descriptions should highlight the significance of the resource to the community, including any special or unique characteristics. It is important to remember that officially designated resources and resource areas may not encompass all of the community's significant historic and cultural

assets. When determining what is significant to the community, it may be helpful to review the following list:

- Residential dwellings, neighborhoods, etc. that include examples of locally significant or distinctive building traditions and styles;
- Commercial districts, marketplaces, and individual buildings;
- Mills, factories, industrial complexes, etc., as well as locally significant industries and traditional occupations and skills;
- Institutional districts and individual buildings (e.g., schools, churches, etc.), especially those that may be architecturally significant;
- Roadways, bridges, pedestrian footpaths and trails, railroad tracks, canals, waterways and landing areas, and airports and airfields;
- Landscapes, farm complexes, barns, etc.; and
- Community landmarks (natural or human-made), battlegrounds, gardens, parks, scenic views, cemeteries, burial grounds, etc.

Standard 4.3 (*Recommendation*) Assess issues related to historical and cultural resources such as discussing any current or potential future threats to the community's significant historical and cultural resources.

The following guiding questions may assist in this assessment:

- Are any historic or cultural resources threatened due to encroachment of human activities, unintended land use conflicts or physical disturbance, or rapid physical deterioration?
- What is the likelihood that the identified historical/cultural properties are currently, or will be in the future, affected by inappropriate land uses or other human activities?
- Are there any policies or activities currently in effect that adversely impact the community's historic or cultural resources?
- Are any inconsistencies, competing priorities, or conflicts evident between the protection of historic and cultural resources and the other elements of the comprehensive plan?
- Are there opportunities for coordination with other elements of the comprehensive plan?

Standard 4.4 (*Recommendation*) Identify any existing local programs related to the preservation of historical and cultural resources such as a local historic district ordinance.

Consider the following guiding questions:

- Does the community have any historic districts? If so, how well are the districts preserving the community's historic and cultural resources?
- Is the community currently carrying out any measures to manage or protect the resources that it has identified as significant?

Standard 4.5 Include goals that embody the state's goals for historical and cultural resources and policies to support each goal.

To determine the goals and policies that will best protect significant historical and cultural resources, municipalities should consider the following guiding questions:

- What are the community's priorities for the preservation of its significant resources?
- What is the current level of protection for resources that the community has deemed significant?
- Are there any significant buildings, sites, view corridors, archaeological sites, etc. that may experience a threat over the next twenty years?

SAMPLE GOALS

- Our community will protect and promote all of its significant historic and cultural resources.
- The historic buildings, districts, scenic views and corridors, and other areas that contribute positively to our community's character will be preserved for future generations.
- Our community will be characterized by historic neighborhoods that meet the needs for families of varied income levels.

SAMPLE POLICIES

- Discourage the demolition of historic buildings and structures and encourage their adaptive use and renovation.
- Enhance access to resources for arts and cultural organizations.
- Promote and encourage understanding of the community's unique history through its cultural and historic sites.
- Build and foster neighborhood vitality through increased access and diversified cultural participation.
- Protect and preserve historic and cultural resources through using of design standards, zoning controls, easements, and other tools.
- Encourage the use of state and federal historic tax credits for adaptive reuse of historic structures by private developers.
- Maintain a database of parcels within local historic districts and Special Flood Hazard Areas on projected sea level rise and coordinate with property owners on strategies to protect historic assets in town.
- Coordinate with the RIHPHC to identify options and resources to assist owners of historic buildings to flood-proof or elevate their property while preserving the historic integrity of the property and district.

Standard 4.6 Include implementation actions within the Implementation Program that address the protection of historical and cultural resources.

When determining the best implementation actions for preserving historic and cultural resources, communities should consider the following guiding questions:

- Have historic and cultural resources been identified and documented adequately for use by decision-makers and the public?

- What can be done to strengthen the role that historic and cultural resources play in our community?
- What tools and techniques for preserving our community's cultural heritage are available and how can the community use and promote the use of the appropriate tools and techniques?
- What measures are currently being used to manage or protect resources? How can these measures be better supported?
- How do the municipality's regulatory policies benefit or hinder adaptive reuse of historic structures?
- What mechanisms could be introduced for the protection of scenic views and vistas, archaeological sites, cultural resources, etc.?
- Do existing municipal regulations, such as zoning and land development regulations, need improvement so that our resources will be better protected?
- Are the proposed actions sufficiently specific and detailed to be meaningful?
- Are there sufficient actions to make progress toward achieving the goal(s)?

SAMPLE ACTIONS

- Appoint a committee to study the possibility of designating additional historic districts that will be protected by zoning regulations.
- Establish historic districts for [identify areas].
- Evaluate local historic districts for possible expansion, consider the designation of additional districts and consider different levels of historic district controls for individual districts.
- Create, fund, and staff a Historic District Commission to advocate and oversee resource protection as an integral part of the planning process.
- Create incentives for property owners to renovate and preserve their historic properties.
- Develop a program to encourage local merchants to preserve and protect historic features of Main Streets buildings.
- Adopt a demolition delay ordinance.
- Obtain a Rhode Island Historic Preservation and Heritage Commission designation as a Certified Local Government (CLG) and apply for CLG grant funding.
- Establish local incentives and guidelines for historic property owners who voluntarily propose to elevate an historic structure above base flood elevation or otherwise flood-proof their property.

PART FIVE: PLANNING FOR HOUSING

One of the goals of the Act is, “To promote the production and rehabilitation of year-round housing and to preserve government subsidized housing for persons and families of low and moderate income in a manner that: considers local, regional, and statewide needs; that achieves a balance of housing choices for all income levels and age groups, recognizes the affordability of housing as the responsibility of each municipality and the state; takes into account growth management and the need to phase and pace development in areas of rapid growth; and facilitates economic growth in the state.”

Throughout this section, the term “affordable housing” is used to describe housing that is *generally* affordable, meaning that households would pay no more than 30% of their income on housing. The term “low- and moderate-income housing” or “LMI housing” is used to describe housing that has been subsidized and deed- or otherwise-restricted for a term not less than 30 years to ensure long-term accessibility to those of low- and moderate-incomes, as defined by the Low and Moderate-Income Housing Act, RIGL § 45-53-3. Comprehensive plans must address “affordable housing” and, if not yet achieved or exempt, include specific strategies to reach 10% of the housing stock as “low- and moderate-income housing”.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state’s goals and policies for housing as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

Ensure the provision of enough housing units to meet population needs.

State Housing Plan (2000), Goal 1-1-1 B, page 1.1

Provide an adequate number of affordable housing units for low-income citizens, those with severe cost burdens and those with special needs.

State Housing Plan (2000), Goal 1-1-5 A, page 1.1

Encourage and support stabilization of local neighborhoods and the aggressive renewal of deteriorating areas while attempting to preserve essential indigenous characteristics and preventing unwarranted displacement of low-income citizens.

State Housing Plan (2000), Policy 1-2-3 A, page 1.2

Encourage and support the optimum use and maintenance of the existing housing stock.

State Housing Plan (2000), Policy 1-2-4 A, page 1.2

Support the location of new housing relative to existing or planned:

- (1) *transportation, water and sewer services, education, and other public services;*
- (2) *employment opportunities, commercial areas, and community services;*
- (3) *site compatibility with land uses as specified in current local comprehensive plans, and those of bordering communities.*

State Housing Plan (2000), Policy 1-2-5 B, page 1.3

A minimum of 10 percent of housing in each community is affordable.

Rhode Island Five-Year Strategic Housing Plan: 2006-2010, Goal, page 21

Give a majority of the State's residents the opportunity to live in traditional neighborhoods, near growth centers.

Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUO 3A, page 2-7

Promote low overall densities where public services are unavailable and are not planned.

Promote conservation development in areas that lack supporting infrastructure.

Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUP 8, page 2-9

Comprehensive planning is needed to provide a basis for municipal and State initiatives to ensure all citizens have access to a range of housing choices, including the availability of affordable housing for all income levels and age groups.

Rhode Island Comprehensive Planning and Land Use Regulation Act,
RIGL subsection 45-22.2-3(a)(6)

The general assembly finds and declares that there exists an acute shortage of affordable, accessible, safe, and sanitary housing for its citizens of low and moderate income, both individuals and families; that it is imperative that action is taken immediately to assure the availability of affordable, accessible, safe, and sanitary housing for these persons; that it is necessary that each city and town provide opportunities for the establishment of low and moderate income housing; and that the provisions of this chapter are necessary to assure the health, safety, and welfare of all citizens of this State, and that each citizen enjoys the right to affordable, accessible, safe, and sanitary housing.

Rhode Island Low and Moderate-Income Housing Act, RIGL section 45-53-2

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for recreation. This could include:

- Previous local affordable housing plans;
- RIHousing research and reports available at <https://www.rihousing.com/research-reporting/>

Stakeholders to Include

In addition to the general public, when discussing how best to plan for housing, municipalities may benefit from involving:

- Current residents of low- and moderate-income housing;
- Local community development corporations;
- Providers of rental housing or low- and moderate-income housing within the community;

- Community-based organizations or advocacy groups related to housing and/or homelessness;
- Realtors, architects, home builders, contractors, and/or other real estate professionals;
- RIHousing;
- The Department of Health's Healthy Homes and Environments Team; and
- The Rhode Island Office of Housing and Community Development.

Making Connections Throughout the Plan

Relationship to land use

The single most common use for land is for residences. The locations and densities of these residences will influence the population level of the community and its character. Where and how a community chooses to locate its housing will have direct impacts on public safety, transportation, energy use, service delivery, and economic development. It is this interrelationship of where people live, and at what densities, with the other topics covered in a comprehensive plan that culminate in the allocation of land on the Future Land Use Map.

The land use chapter of a comprehensive plan sets the course for future development and redevelopment, including residential. It is critical that housing needs be reflected in the land use chapter and that the community carefully considers where residential development or redevelopment is desired before crafting the Future Land Use Map. During this process, the community should also consider what forms new residential development should take (e.g. single-family, apartment-style multi-family, estate-style multi-family, flat-over-flat multi-family, townhouses, residential above commercial, mill rehabilitation, etc.)

Communities may also wish to discuss the particular parcels, buildings, or areas that will be suitable, or targeted, for residential redevelopment or rehabilitation. When considering areas in which future housing development or rehabilitation may be appropriate, communities should assess a number of factors, including:

- The location of the Urban Services Boundary designated in Land Use 2025 and municipally-designated Growth Centers;
- Presence and capacity of supporting infrastructure and services, such as water, sewer, natural gas, electricity, fire, police and emergency response facilities, educational facilities, etc.;
- Access to public transit, such as bus service and commuter rail;
- Locations of existing parks, open spaces, and recreational facilities;
- Proximity to employment opportunities and places to access goods and services, such as medical care, groceries, etc.;
- Vulnerability to natural hazards and climate change impacts; and
- Existing residential densities.

Relationship to services and facilities

The location and density of housing can affect the level and types of services needed to serve its residents. Targeting new residential development in areas that are already served by infrastructure, facilities, and municipal services can reduce municipal and resident expenses. Infrastructure extensions - new roads, sewers, water mains, electricity lines, gas mains, etc. - can be expensive, even without taking into account the cost of maintaining the infrastructure over time. While these costs are often not borne by the municipality, they are spread across all rate payers, increasing user fees and the overall cost of living in a community. From an overall cost perspective, the best place to target new residential development is within existing developed areas.

Standards and Guidance for Housing

Standard 5.1 (*Recommendation*) Provide an overview of the existing housing context by including the following data points:

- a. Existing housing units, both the number and the relative trend in housing development over the past 10 or more years;
- b. Occupied and vacant housing units, both the number and as a percentage of total housing units;
- c. Year-round and seasonal, single-family and multi-family housing units, both the number and as a percentage of total housing units;
- d. Owner-occupied and rental units, both the number and as a percentage of occupied housing units;
- e. The median age of housing units;
- f. The number of single-family and multi-family units constructed each year for the past 10 or more years;
- g. The current median home sale price, and the general trend in home sales prices over the past 10 or more years; and
- h. The median monthly rental price for one-bedroom, two-bedroom and three-bedroom rental units, and the general trend in rental prices over the past 10 or more years.

If included, these data provide a quantitative summary of the community's housing stock, including its general characteristics, and some important associated demographic data. The data can then be the basis from which many of the other required assessments will stem.

Recommended data sources include:

- Rhode Island Community Profiles;
- U.S. Census;
- Local Assessor's Office;
- Town or City Clerk
- HousingWorks RI Factbook;
- Rhode Island Association of Realtors (riliving.com)

Municipalities are free to include the data in tables, lists, graphs, narratives, or any format that best suits their planning needs. Also, the information need not be provided in a stand-alone section of the plan; municipalities should organize the data in the way that works best for their plan.

Standard 5.2 Identify existing housing patterns and conditions.

(Recommend including a. and b. to fulfill this standard)

- a. Discuss areas of the community or neighborhoods in which housing is located and, for each area, the average density, the prevalent housing types, the general condition of housing, and the general age of housing; and**
- b. Discuss any condition-related issues that may be occurring within the municipality such as high rates of foreclosure or abandonment, general neglect or deterioration of the housing stock, overcrowding of housing units, etc.**

The term “housing patterns” refers to the location, form, and density of housing as it occurs throughout the community. “Housing conditions” includes the quality, safety, and general state of the housing units. Housing location and conditions play a critical role in the health and safety of residents. The presence of lead or asbestos, inadequate bathroom and kitchen facilities, overcrowding, proximity of units to idling or heavy traffic, general deterioration of building materials, and the ability of second-hand smoke to infiltrate multi-family units can all negatively affect health. Therefore, though not required for State approval, communities may also choose to discuss the following, additional housing characteristics as part of this assessment:

- Concentration of lead poisoning incidents or other environmental hazard-related medical issues;
- Concentrations of building code violations; and
- Concentrations of residential zoning code violations.

It may be easiest for a comprehensive plan to organize the discussion of housing patterns and conditions by neighborhood or district, but this information can be presented in the format that best suits the needs of the community.

To fulfill this standard, communities may want to use the following data sources:

- Conversations with community members and other key stakeholders.
- Local building official data on code violations.
- Health data from the Rhode Island Department of Health.

Standard 5.3 (Recommendation) Include the following data points related to housing affordability:

- a. The number and percentage of households within the community that are housing cost-burdened, meaning that they are paying more than 30% of their income on housing;**

- b. The number and percentage of households within the community that are severely housing cost- burdened, meaning that they are paying more than 50% of their income on housing;**
- c. The number and percentage of low- and moderate-income (LMI) households that are housing cost-burdened;**
- d. The number and percentage of LMI households that are severely housing cost-burdened;**
- e. The number and percentage of cost-burdened LMI households that are currently renting; and**
- f. The number and percentage of cost-burdened LMI households that own their home.**

Standard 5.4 Assess existing and future housing needs, including the need for affordable housing.

(Recommend including a. through g. to fulfill this standard)

- a. State how many units will house the future population, either at build-out or at the end of the 20-year planning horizon;**
- b. Discuss the ways in which the population is changing in terms of age, ethnicity, income, and household size;**
- c. Discuss the adequacy of the available range of housing unit sizes and/or types (studio, 1-, 2-, and 3-bedroom; rental and ownership; condominium; etc.) in accommodating a range of future population needs;**
- d. Discuss the current housing options available within the community for the homeless population, including the number of shelter beds that currently exist;**
- e. Discuss the relationship of housing price (both sales and rental) to household income over the past 10 or more years;**
- f. Discuss any needs related to the risk of homelessness for severely cost-burdened low- and moderate-income (LMI) households;**
- g. Discuss the types of affordable housing (for LMI populations, families, the elderly, special needs populations, rental, etc.) that are in most need within the community.**

The housing inventories and assessments are the basis for determining and meeting the community's existing and future housing needs. The information under Standard 5.4 is intended to assist the community in identifying how many housing units will be needed to house the future population, determining whether current housing options are suitable for the future population, and considering the general affordability of housing in the municipality. The municipality may also choose to discuss housing needs other than those outlined here, or that have been identified through the public participation process. The results of these assessments should take the form that best suits the municipality's planning process, be it as tables, narratives, graphs, or lists.

The most basic assessment of future needs that must be completed is to determine how many units will be needed to house the future population, either at build-out or at the end of the 20-year planning horizon. The result of this assessment should be a single number and it can be rounded to the nearest hundred for simplicity. To calculate this number, the municipality can:

- Divide the projected population for the 20-year planning horizon by the current average household size;
- Divide the projected population for the 20-year planning horizon by the expected average household size; or
- Use the residential unit number calculated as part of the development capacity, or build-out, analysis.

Recommendations 5.4.b. and 5.4.c. assess housing option suitability. That are intended to assess whether the available housing types match the needs of the existing population, determined by comparing the characteristics of current residents, the existing housing patterns, and the characteristics of the existing housing stock. The goal of this assessment is to identify housing needs over the 20-year planning horizon and to plan to accommodate those needs appropriately.

The municipality may use the data points asked for in Standard 5.3 to assist in identifying its needs for additional affordable housing. This data will also assist in assessing the types of affordable housing that are needed within the community. If a community has a high number or high percentage of households that are housing cost-burdened or severely housing cost-burdened, it could indicate that there is a need for more housing that is affordable to the general population, as well as more low-and moderate-income housing. If a community has a high elderly population that is cost-burdened, or severely- cost burdened, it may indicate a need for more affordable elderly housing options. In most cases, it is safe to assume that occupants of subsidized low- and moderate-income housing are not spending more than 30% of their income on housing and therefore are not housing-cost burdened. Given this, the number of low- and moderate-income households that are identified as spending more than 30% of their income on housing indicates a need for more housing that is affordable to this population, in addition to the low-and moderate-income housing units that are already available within the municipality.

To assess the risk of homelessness in the municipality, the community needs to consider housing-cost burden and income. High numbers and/or percentages of LMI households with severe housing cost-burdens may indicate a population that is at risk of homelessness.

Communities may also wish to assess:

- Whether there seems to be an overabundance or lack of a certain size and/or type of housing unit;
- Whether units seem to be located in areas of the community that suit population needs (for example, whether a high percentage of the population has limited access to a private vehicle and whether enough housing units are located along transit routes); and
- The ways in which the population is changing in terms of age, ethnicity, income, and household size and whether future changes in population characteristics are likely to present any new needs (e.g. an aging population looking to downsize, more families in need of larger units, etc.).

Communities may also wish to assess the condition of the current housing stock, to determine if any needs related to condition are present. This assessment should look at the likely future conditions of housing units, taking into account the effects of time, natural hazards, and potential

redevelopment. To assess housing conditions, the comprehensive plan could discuss the following:

- The ways in which the condition of the housing stock likely to change due to age, deterioration, or attrition;
- Any municipal programs that may be in place to assist with rehabilitation of housing units;
- The general condition of existing low- and moderate-income housing units;
- Do the characteristics of the existing housing stock match the needs of the population?
- Whether there is likely to be any redevelopment of the housing stock, in which neighborhoods or districts redevelopment is likely to occur and whether, without intervention, redevelopment will likely cause the displacement of low- and moderate-income residents; and
- The potential impacts of natural hazards and climate change on the municipality's housing stock, including where vulnerable units are located or concentrated.

To fulfill this standard, communities may want to use the following data sources:

- Municipal and statewide population projections, available from the Division of Statewide Planning at <http://www.planning.ri.gov/planning-areas/Census/census-2020.php>
- Local tax assessor data.
- Local population projections broken out by demographic characteristics.
- Data from HousingWorks RI Factbook.
- Data from the Multiple Listing Service (MLS).
- Conversations with residents and key stakeholders.
- Code enforcement records.

Standard 5.5 Demonstrate how one of the mandated low- and moderate-income thresholds will be met.

(Recommend including either a. or b. to fulfill this standard)

- a. **For municipalities that have already met one of the mandated low- and moderate-income housing thresholds:**
 - i. **Provide a statement as to which threshold has been met; and**
 - ii. **Provide the data necessary to show how the threshold has been met, including the current number of LMI housing units in the municipality and the percentage serving each population type (family, elderly, and special needs); or**
- b. **For municipalities that have not already met one of the mandated low- and moderate-income thresholds:**
 - i. **Provide the number and percentage of low- and moderate- income housing units that currently exist within the municipality. The percentage should be calculated based on the total number of *year-round* housing units;**

- ii. **Provide the existing number of LMI housing units by population served i.e. the families, the elderly, and those with special needs. The percentage should be calculated based on the total number of *year-round* housing units;**
- iii. **Identify the 10% threshold i.e. the number representing 10% of the existing year-round housing stock;**
- iv. **Identify the existing deficit i.e. the gap between the 10% threshold and the current number of LMI housing units;**
- v. **Provide the forecasted 10% threshold i.e. 10% of the housing units forecasted either at the end of the 20-year planning horizon or at build-out);**
- vi. **Identify the estimated future deficit i.e. the gap between the existing LMI housing units and the forecasted threshold);**
- vii. **Discuss the general success rate of each previous strategy for providing low- and moderate-income housing units, (if a numeric estimate was given as to how many units would be produced using the strategy, the actual number produced should be compared to the estimate or, if a numeric estimate was not given, state whether the strategy was highly successful, moderately successful, or not successful);**
- viii. **Discuss the factors that affected the success rate of each previously proposed low- and moderate-income housing strategy;**
- ix. **Describe of all of the strategies that the municipality will implement moving forward to meet or exceed the 10% threshold for low- and moderate- income housing;**
- x. **Discuss the reasons why each proposed strategy is likely to be effective given past experiences, current economic conditions, building trends, etc.;**
- xi. **Provide an estimate as to how many low- and moderate-income housing units will likely be produced through the implementation of each proposed strategy that demonstrates numerically that the 10% threshold will be achieved;**
- xii. **Include associated implementation actions within the Implementation Program that present the path by which each proposed strategy will be implemented;**
- xiii. **Provide a realistic estimate of when the stock of low- and moderate-income housing will equal 10% of the total year-round housing stock; and**
- xiv. **Include interim, time-based benchmarks by which the municipality can measure its progress toward the goal, and describe the process by which the municipality will assess whether benchmarks have been met and adjustments will be made.**

The Rhode Island Low and Moderate Income Housing Act, RIGL subsection 45-53-3(4), defines the provision of low- and moderate-income housing as being “consistent with local needs” when either of the following thresholds are met:

- For urban cities and towns that have at least 5,000 occupied year-round rental units, which comprise at least 25% of the year-round units, low- and moderate-income housing units must exceed 15% of the total occupied year-round rental housing units.
- For all other cities and towns, low- and moderate-income housing units must exceed 10% of the year-round housing units.

The Low and Moderate Income Housing Act requires that communities not currently meeting the above listed thresholds provide strategies within their comprehensive plans for achieving the applicable threshold.

The following guidance focuses on the municipalities that must meet the second threshold - achieving 10% of their total year- round housing stock as low- and moderate-income housing.

The 10% low- and moderate-income housing threshold within each municipality is a minimum standard. It is likely that some communities have a need for low- and moderate-income housing that is much greater than 10%. By mandating a minimum of 10% in every community, the State is attempting to ensure statewide affordability for low- and moderate-income populations, recognizing that development conditions vary from place to place, that people migrate for a variety of reasons, and that it is the responsibility of each community to contribute to the overall State goal. Also, by providing a minimum of 10% low- and moderate-income housing within a municipality, communities are preparing for future market and economic fluctuations that could affect affordability.

All municipalities can learn from the success and/or failure of their previously proposed strategies for achieving the 10% threshold. Therefore, it is essential for the community to assess the success and effectiveness of previous strategies so that the strategies can be strengthened and, if necessary, new strategies can be developed.

The comprehensive plan should describe all of the strategies that the municipality will implement moving forward to meet or exceed the 10% threshold for low- and moderate-income housing. The strategies identified by the municipality should seek to increase the production of low- and moderate- income units; it may also be appropriate to include strategies that preserve the existing low- and moderate-income units as such.

The estimates as to how many low- and moderate-income housing units will be produced by each strategy can be a single number or a range that considers uncertainties in the calculation. However, ideally, municipalities will demonstrate numerically that the most likely scenario will achieve the 10% threshold.

To determine which strategies are appropriate for your municipality, consider the following guiding questions:

- Which previously proposed low- and moderate-income housing strategies have had the most success?
- How have economic and building conditions changed since the adoption of the previous strategies?

- What type of growth is the municipality likely to experience in the future? Will the municipality likely experience single-family, scattered site development, or multiple subdivisions or residential buildings with greater than 5 units?
- What incentives does the municipality currently offer for the development of low- and moderate- income housing? Are they well utilized? How could they be strengthened?
- Are the strategies proposed likely to produce the kinds of housing needed e.g. rental or homeownership, elderly, family, etc.?

Taking the strategies collectively, the comprehensive plan should discuss when and how the 10% threshold will be met. The point in the future at which the 10% threshold will be met should be realistic, defensible, and align with the community context. The time period for reaching the 10% threshold should fall before the build-out date. Whatever time period is chosen, the comprehensive plan should show, with sound methodology, that a minimum of 10% of the total anticipated future housing stock at that point in time will be low- and moderate-income housing.

Interim benchmarks can be determined at the discretion of the municipality, though 5-, 10-, and 20-year benchmarks are recommended. Policies and implementation actions should be included within the Implementation Program for assessing progress towards benchmarks and adjusting the low- and moderate- income housing strategies if necessary.

Standard 5.6 (*Recommendation*) Include a statement as to whether the municipality has an inclusionary zoning ordinance. If the municipality does have an inclusionary zoning ordinance:

- Identify the types of development incentives are currently offered; and**
- Describe how the municipality currently complies with or will comply with the requirements of RIGL subsection [45-24-46.1\(b\)](#).**

In 2014, the RI General Assembly made two important changes to the inclusionary zoning law (RIGL section 45-24-46.1) that are pertinent to comprehensive planning. First, zoning ordinances that require inclusionary zoning are now also required to include density bonuses or other incentives that shall offset differential costs of below market-rate units. Second, zoning ordinances may now provide that the low- and moderate-income housing that is required under an inclusionary zoning clause may be provided on-site or that an alternative method of production can be utilized, such as off-site construction or rehabilitation, donation of land, or the payment of a fee in-lieu of the construction of the units.

To comply with the law, municipalities that have an inclusionary zoning ordinance must include within that ordinance development incentives (such as density bonuses). For those communities that do have such an ordinance, the comprehensive plan should also discuss what types of development incentives are currently offered, as well as how the municipality complies with or will comply with RIGL section 45-24-46.1(b). If no development incentives are currently offered, there are two acceptable options for compliance. Municipalities may choose to amend the inclusionary zoning ordinance to include development incentives, or municipalities may choose to repeal the ordinance.

Standard 5.7 Include goals that embody the state’s goals for housing and policies to support each goal.

Goals and policies need to address issues of:

- **Quantity** – providing an adequate number of housing units, including affordable and low- and moderate-income units, for the current and future population;
- **Affordability** – ensuring affordability, both for low- and moderate-income populations and the community’s workforce;
- **Equity** – preventing displacement of low-income residents and ensuring the equitable distribution of affordable and low- and moderate-income housing units throughout the community;
- **Quality** – Maintaining a housing stock that is safe, healthy, and sanitary;
- **Location** – Promoting the use and rehabilitation of the existing housing stock and ensuring that new housing is built in appropriate locations; and
- **Density** – aligning future densities with the characteristics of the land, availability of infrastructure and services, and the densities of surrounding neighborhoods.

The goals and policies that may be appropriate for a community’s comprehensive plan will depend on the context of the municipality, including the locations of existing development, the availability of public services and facilities, the desired form of new growth, and the current and future housing needs.

To determine the goals and policies that may be appropriate for your municipality, consider the following guiding questions:

- What is the appropriate amount of residential development for the community?
- Is it important to the community that the character of existing neighborhoods be preserved?
- Are there areas of the community in need of rehabilitation or redevelopment?
- Are there opportunities for infill residential development?
- What is the appropriate mix of residential uses within the community?
- How can the goals of the community demonstrate commitment to the ideal that every resident have an affordable, safe, and secure place to live?
- How can the community help to prevent displacement of existing residents?

SAMPLE GOALS

- All residents of our community will have good, affordable housing options.
- At least 10% of all housing units will be affordable to residents earning less than or equal to 80% of area median income.
- Our community will provide a mix of housing types with opportunities for multi-family housing in proximity to job centers and public transit within designated growth areas.

- Provide a diversity of housing types at varying cost levels, to meet the needs of all households.

SAMPLE POLICIES

- Locate housing near existing services and facilities.
- Prioritize affordable housing for the elderly and single parent families.
- Promote congregate elderly housing and accessory (in-law) apartments.
- Ensure equal access to housing for all members of the classes protected under the federal Fair Housing Act and other applicable anti-discrimination legislation.
- Identify concentrations of substandard housing within the community and promote rehabilitation or redevelopment in those neighborhoods.
- Promote new housing development within designated growth areas, and provide a mix of uses wherever feasible.

Standard 5.8 Include implementation actions within the Implementation Program that will:

- Provide for the development of housing units in adequate numbers to meet future population needs, including the development of a minimum of 10% of the year-round housing within the community as low- and moderate-income housing;**
- Promote the use and rehabilitation of the existing housing stock and maintain a housing stock that is safe, healthy, and sanitary;**
- Locate new housing in appropriate areas of the community at densities that are appropriate to the characteristics of the land, the availability of infrastructure and community services, and the densities of surrounding neighborhoods;**
- Comply with the requirements of RIGL subsection [45-24-46.1\(b\)](#), (Inclusionary Zoning) if applicable; and**
- (Recommendation)* Preserve the stability and character of existing residential neighborhoods and prevent the displacement of low-income residents.**

SAMPLE IMPLEMENTATION ACTIONS FOR 5.8a

- Coordinate housing, planning and implementation under the auspices of a housing advocate within the Planning Department.
- Review ordinances and amend as needed to support opportunities for congregate living situations for people with special needs.
- Revise the zoning ordinance to allow attached and detached accessory apartments on single- family lots.
- Acquire foreclosed properties for rehabilitation and use as scattered site affordable housing.
- Permit and promote quality multi-family housing development that meets low-to moderate- income affordability standards and incorporates long-term energy efficiency features.

- Explore opportunities to partner with a local non-profit developer and service provider to create new or redeveloped units of affordable, accessible, and supportive housing for the elderly.
- Fund a revolving fund to support a Housing Trust program to acquire and rehabilitate existing houses in order for the homes to qualify as low- and moderate-income housing.
- Formally adopt incentives, such as property tax abatements and funding from a home repair program, to capture existing houses that are affordable to low- and moderate-income households as low- and moderate-income housing units.
- Enable a rent-subsidy program to increase the low- and moderate-income housing count.
- Hold workshops and conduct other public outreach on affordable housing options available in the zoning ordinance and subdivision regulations.
- Revise the zoning ordinance to establish density increases for comprehensive permit applications.

SAMPLE IMPLEMENTATION ACTIONS FOR 5.8b

- Inform homeowners about available resources to assist with home repair and maintenance needs.
- Create and fund a home repair program designed to assist homeowners with completing necessary home improvements.

For other implementation actions, consider the following guiding questions:

- What programs does the municipality currently offer to homeowners for housing rehabilitation? Are the programs effective? Could they be improved? Should new programs could be enacted?
- Are there any community organizations that could assist in developing and/or delivering new programs?
- Does the municipality need to strengthen its building code enforcement efforts? How could the municipality be proactive in preventing building code violations?

SAMPLE IMPLEMENTATION ACTIONS FOR 5.8c

- Amend the zoning ordinance to allow compact, higher-density housing options in and adjacent to high density areas.
- Adopt ordinance provisions that permit appropriate residential densities and more diverse housing choices in designated growth areas.
- Establish an option for multifamily, townhouses, or similar housing options along major corridors through mixed use zoning.
- Inventory vacant or underutilized buildings or properties (brownfields and grayfields) that have potential for redevelopment as multi-family housing, and offer incentives for their redevelopment.
- Revise the zoning ordinance to create a conservation subdivision with a limited density bonus to promote use.
- Amend the zoning ordinance to allow multi-family development within existing commercial areas of the community.

For other implementation actions, consider the following guiding questions:

- Where within the municipality does infrastructure (water, wastewater, energy, transportation, etc.) exist with the capacity to support the development of new residential units? Would a zone change for greater density be appropriate for these areas?
- Should the municipality identify a growth center in which to target new development?
- Does the municipality need to implement any regulations or guidelines to offset resident concerns about density (e.g. design guidelines, open space set asides, etc.)?

SAMPLE IMPLEMENTATION ACTIONS FOR 5.8d

- Amend the municipal inclusionary zoning ordinance to offer density bonuses for inclusionary zoning projects.
- Repeal the inclusionary zoning ordinance until appropriate development incentives can be formulated.

SAMPLE IMPLEMENTATION ACTIONS FOR 5.8e

- Adopt flexible zoning standards to allow architectural encroachments into front yard setbacks, such as porches, stoops, and bay windows, where these features already exist within the neighborhood.
- Create an illustrated guide to designing cottage-style housing, duplexes, triplexes, quadplexes, multi-family housing, and accessory apartments that fit with the existing character of the neighborhoods.

For other implementation actions, consider the following guiding questions:

- How can the municipality best support each existing residential neighborhood?
- Are there areas of the community in which infill development should be targeted to increase the stability of the neighborhood?
- Are there areas of the community in which development and/or design decisions have contributed negatively to the existing character?
- How can the municipality reduce the negative impacts of redevelopment on low-income populations?

FOR ALL SECTIONS

- Are the proposed actions sufficiently specific and detailed to be meaningful?
- Are there sufficient actions to make progress toward achieving the goal(s)?

PART SIX: PLANNING FOR ECONOMIC DEVELOPMENT

Planning for economic development on the local scale can be quite challenging. Economic development is the sustained, concerted action of policymakers and communities to create the conditions for economic growth and improved quality of life. Economic development involves expanding the capacity of individuals, firms, and communities to maximize the use of their talents and skills to support innovation, lower transaction costs, and responsibly produce and trade valuable goods and services. It also involves expanding businesses to create greater economic opportunity for residents and ensuring that these opportunities are accessible. Economic development requires effective, collaborative institutions focused on advancing mutual gain for the public and private sectors. Economic development is also about communities building on the assets and strengths that make them unique and that complement, rather than compete with, the assets for their neighbors. Planning for economic development is important for increasing local business activity, which in turn augments local tax revenues and provides residents with places to work, shop, and obtain services. The comprehensive planning process can help to identify the community's needs and to determine the appropriate mix and distribution of economic activities in order to achieve the community's vision.

While it will differ from municipality to municipality, the economic activities considered within a comprehensive plan should include commercial and industrial development and redevelopment for uses such as offices, retail businesses, restaurants, entertainment, personal services, warehousing and distribution, factories, and agriculture. Municipal economic development includes developing the supporting infrastructure that businesses depend on, ranging from transportation to education, creating a high quality of life for employees, and maintaining an efficient and predictable regulatory environment.

While responsibility for promoting economic development is shared among several sectors, including State government, educational institutions, and private enterprise, local governments play a unique role. It is critical for municipalities to determine how much remaining land, if any, should be reserved for economic growth, and the most appropriate location for such uses so that there continues to be enough businesses to maintain the community's fiscal health. It is also important for communities to consider the ways in which existing retail, office, industrial, and agricultural areas are changing, so that the municipality can determine and meet business needs. Municipalities must also consider whether the current mix of economic activities suits the community's needs, desires, and fiscal situation, so that actions can be taken to diversify the economic base if necessary.

A Note about Agriculture: The Rhode Island Agricultural Partnership has defined agriculture as: “the propagation, care, cultivation, raising, and harvesting of the products of truck farming, horticulture, turf, viticulture, viniculture, floriculture, forestry/tree farming, sugar bush, stabling of five or more horses, dairy farming, aquaculture, or the raising of livestock, including for the production of fiber, furbearing animals, poultry, or bees.” In addition to the preceding, farms increasingly offer “agritourism”, such as a corn maze, cooking classes, a petting zoo, or on-farm bed and breakfasts or farm stays to supplement their income. While agriculture overlaps other topics e.g. natural resources, its continued existence depends on its ability to generate income for the landowner; hence, the importance of its consideration in economic development planning.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state's goals and policies for economic development as found in the State Guide Plan and the laws of the State. The goals and policies listed below illustrate the main themes of the State's goals and policies for economic development and are intended to provide focus as to which aspects of the state's goals and policies are most important for local comprehensive planning.⁴

Provide educational and training opportunities to activate a 21st century workforce.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, ED Goal 1 page 46](#)

Foster an inclusive economy that targets opportunity to typically underserved populations.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, ED Goal 2 page 57](#)

Support industries and investments that play to Rhode Island's economic strengths.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, ED Goal 3 page 66](#)

Create great places by coordinating economic, housing and transportation investments.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, ED Goal 4 page 81](#)

Create a stronger and more resilient Rhode Island.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, ED Goal 5 page 94](#)

Create a climate where our companies, our workers, and the state as a whole can develop a competitive advantage.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, ED Goal 6 page 111](#)

Conserve and enhance desirable existing industrial areas, regional shopping areas, office complexes, and concentrations of service activities to maximize the investment and utilization of existing infrastructure.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUP 29, page 2-9](#)

[...] It is the policy of the state to retain existing industries and to induce, encourage, and attract new industries through the acquisition, construction, reconstruction, and rehabilitation of industrial, manufacturing, recreational, and commercial facilities, as well as transportation, residential, environmental, utility, public service, institutional, and civic and community facilities, and to develop sites for those facilities.

It is declared to be the policy of the state to promote a vigorous and growing economy, to prevent economic stagnation, and to encourage the creation of new job opportunities in order to ameliorate the hazards of unemployment and underemployment, reduce the level of public assistance, increase revenues to the state and its municipalities, and to achieve a stable diversified economy.

⁴ In addition to the list below, see the Rhode Island Right to Farm Act, RIGL sections [2-23-2](#); the Rhode Island Agricultural and Seafood Act, RIGL subsections [2-25-2\(1\)](#), [2-25-2\(4\)](#) and [2-25-2\(7\)](#) and section [2-25-3](#); the Farmland Preservation Act, section [42-82-1](#); and Taxation of Farm, Forests and Open Space, subsections [44-27-1\(1\)](#) and [44-27-1\(2\)](#).

[The Rhode Island Commerce Corporation Act, RIGL subsections 42-64-2\(h\) and 42-64-2\(i\)](#)

Preserve the best farmland and active farms in the State for active agricultural use.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Policy LUP19, page 2-10](#)

Strengthen and support Rhode Island's burgeoning food system businesses, which span agriculture, aquaculture and fishing, food processing/manufacturing, and sales.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, Goal 3, Policy 2, page 75](#)

The preservation and expansion of agriculture are goals of the state.

[Notification to Farmers, RIGL section 2-23.1-1](#)

The general assembly intends: (2) That policies and programs of the state will support and promote the Rhode Island agriculture and seafood industries as a vital component of the state's economy and essential steward of our land and coastal waters;

[The Rhode Island Local Agriculture and Seafood Act, RIGL section 2-25-3](#)

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for recreation. This could include:

- Any local or regional economic development plans that may be available;
- The RI Department of Environmental Management's "Rules and Regulations for Implementation of the Farm, Forest and Open Space Act," available at <http://www.dem.ri.gov/pubs/regs/regs/agric/ffosimp.pdf>;
- The RI Department of Environmental Management's "Rhode Island Green Industry" report, available at <http://www.dem.ri.gov/programs/bnatres/agricult/pdf/greenemp.pdf>; and
- The Rhode Island Department of Environmental Management's "Community Guidance to Maintain Working Farms and Forests," available at <http://www.dem.ri.gov/programs/bpoladm/suswshed/pdfs/farmfor.pdf>

Stakeholders to Include

In addition to the general public, when discussing how best to plan for economic development municipalities may benefit from involving:

- Local commercial, industrial, and agricultural business owners;
- The local Chamber of Commerce;
- Local real estate developers;
- Local service providers of workforce training;
- Local human services agencies;
- The Zoning Enforcement Officer;

- The Building Official;
- The Fire Marshal;
- Local economic development staff;
- Economic development counterparts in neighboring municipalities;
- Commerce Rhode Island;
- The Rhode Island Department of Labor and Training.
- The RI Department of Environmental Management's Division of Agriculture.
- Statewide organizations with an interest in agriculture, such as the RI Agricultural Partnership, the RI Food Policy Council, or the RI Farm Bureau; and
- Community-based organizations with an interest in food access or agriculture;

Making Connections Throughout the Plan

Relationship to land use

Types of economic activity, ranging from agricultural to heavy industry, and the locations for these activities, will go a long way in determining the character of the community. The Land Use section of a comprehensive plan, as displayed on the Future Land Use Map (FLUM), will determine in broad terms whether the economic activity of that community will be characterized by growth centers, Main Streets, industrial parks, highway retail strips, farms, and other forms of business. The land use categories on the FLUM sets the course for future zoning amendments, providing direction as to what types of business development will be allowed in the future.

For various types of businesses such as agriculture and industry, determining the suitable types of land use for areas adjoining or near agricultural activities is crucial. For example, while farms add to the character and economy of a community, they are business operations that can have aspects that could be objectionable to nearby residences. Accordingly, the proximity and density of housing in relation to various economic activities should be taken into account.

Relationship to natural resources

Many municipalities, especially more rural ones, may identify natural resources as a source of economic development opportunity. In Rhode Island, primary natural resource based economic activities are agriculture, and fisheries, with additional opportunities in forestry and, to a limited extent, extraction of sand and gravel. Your comprehensive plan should consider areas where natural resource based economic activity is feasible and desired, and reflect these considerations on the Future Land Use Map.

Relationship to recreation

Open space and outdoor recreation may relate to economic development through tourism, the provision of private facilities, and by enhancing quality of life. Visitors may be attracted to the community for the opportunity to hike, bike, fish, sightsee, or otherwise engage in enjoying outdoor activity. They may also patronize local shops, eat at local restaurants, and stay at local bed and breakfasts. Additionally, some outdoor recreational facilities, such as golf courses, are economic generators in themselves. Areas where commercial outdoor recreation, such as golf

courses, are feasible and desired should be displayed as such on the future land use map and supported by appropriate zoning. It should also be noted that the amenities provided by open space and outdoor recreation can attract both businesses and workers to locate in a community by enhancing the overall quality of life.

Relationship to housing

The availability, quality, and affordability of housing are key factors in determining potential opportunities for economic development. Without a sufficient supply of affordable housing that meet the needs and preferences of residents, employers may be at a competitive disadvantage due to difficulty attracting and retaining workers. The construction of new housing, when appropriate, can create jobs and opportunities for business in the community and nearby, creating the potential to stimulate the local economy.

Relationship to transportation

Transportation and transit play a critical role in economic development as they connect people with jobs and customers with goods and service providers. Access to markets and workers are vital components to the success of a business. In this respect, businesses need to be located in areas that allow easy flow of goods, employees, and customers. For example, retail establishments depend on roadways and parking for customer access while warehousing operations may depend on access to rail lines and interstate highways. The adequacy of existing transportation systems and the impact of future development on the existing systems should be taken into consideration when planning for economic development.

Relationship to natural hazards and climate change

Climate change is projected to increase the severity and frequency of many natural hazards that could affect communities throughout Rhode Island. These impacts have the potential both to severely harm Rhode Island's economy but also represent opportunities for economic development and expansion. Communities should consider reducing risk and losses of infrastructure and economic assets when drafting the economic development section of its comprehensive plan. Municipalities should also consider opportunities for economic innovation as it relates to preparedness and climate adaptation.

A Note on Keeping Statistical Data Relevant

It is not uncommon to see comprehensive plans that feature a multitude of tables, charts, and graphs presenting economic data produced by State or Federal agencies, ranging from unemployment rates to output by Industrial Code. While some of this information may present useful background information, it is not necessary to reproduce it in the comprehensive plan unless there is a meaningful connection between the data and the assessment of your community's economic profile. Additionally, even if there is a connection, presenting "snapshot" data is not particularly valuable as it only gives a picture of a moment in time rather than identifying economic trends over a long period of time. Meaningful trends can only be observed over the long-term, which, in the case of most economic trends, should be a period of at least ten years.

Standards and Guidance for Economic Development

Standard 6.1 Describe the types and patterns of economic activities that exist within the municipality.

- a. **Identify the business and industry sectors within the municipality that are significant employers, large revenue generators, or substantial contributors to the tax base;**
- b. **(Recommendation) Include an inventory of significant agricultural operations by identifying:**
 - i. **The scale of the agricultural sector in the community, including supporting uses such as processing centers, distribution centers, etc.;**
 - ii. **The locations and types of active agricultural operations; and**
 - iii. **Farmlands that have been protected from development, even if currently idle.**
- c. **Identify the business, industry, and agricultural sectors within the municipality that are expanding or shrinking; and**
- d. **Discuss any areas of the community where the economic activity, including agriculture, is changing, whether in terms of size, form, or nature of activity.**

When identifying economic activities, communities must consider all sectors of business, including various types of commercial and industrial uses, tourism-related industry, and food-based businesses, such as agricultural operations, fishing, and aquaculture. To identify the business and industry sectors within the municipality, it may be helpful to review the North American Industry Classification System (NAICS) data, available through the U. S. Census at <https://www.census.gov/eos/www/naics/>.

A good place to start in describing the existing types and patterns of economic activity will be to look at the existing land use map, which is described in Part Ten: Planning for Land Use. The existing land use map will provide a general picture of what types (commercial, industrial, agricultural, etc.) of economic activity exist within the municipality and where those activities currently occur but it may not provide all of the detail necessary for the community to understand its economic situation.

When discussing areas of economic activity that are changing, it may be helpful to consider trends in vacancy rates, mix of businesses, etc. Also, though not required, it may be informative to consider whether the trends within the municipality are proceeding at a faster or slower pace than in the rest of the state.

When assessing the types and patterns of economic activity, communities should consider the following guiding questions:

- What comprises the economic base of this community?
- What role do home occupations play in the community, if any?
- Are natural resource-based industries (including fishing, farming, or forestry) important in the community and, if so, are they growing or declining?

- Is tourism, including agritourism, nature tourism, and heritage tourism, an important part of the local economy?
- What types of change is the local economy experiencing?
- Is there is a traditional downtown in the community and, if so, is it deteriorating or thriving? How is this affecting the community?

To fulfill this standard, communities may want to use the following data sources:

- Rhode Island Department of Labor and Training Labor Market Information Center, available at <http://www.dlt.ri.gov/lmi/data.htm>.
- Local Chamber of Commerce, local business owners, and other economic development stakeholders.
- FarmFresh Rhode Island.
- RI Department of Environmental Management's Division of Agriculture.

Standard 6.2 Assess and discuss the ways in which the local government can improve the local business climate.

- Discuss the significant opportunities that exist to further support the businesses within the community's major or expanding business sectors;**
- Discuss any issues that may exist related to the services and infrastructure provided for local businesses;**
- Discuss any local economic or regulatory issues affecting the business and industry sectors within the municipality;**
- Describe any local economic development plans, programs, or other incentives currently in effect or offered by the municipality; and**
- (Recommendation)* Discuss the opportunities to further support agriculture relative to capacity, access, and partnerships.**

In order to develop appropriate policies and actions that will 1) create a climate in which business activity will grow and businesses will thrive, and 2) conserve and enhance areas suitable for economic expansion and/or redevelopment, communities must assess those forces that are within its control and determine how best it can support local businesses and improve the local business climate. Local regulations, including zoning standards and permitting procedures, can affect business activity in a variety of ways. While public safety and welfare must never be compromised, to create a conducive business climate, local regulations and permitting procedures should be designed to be as clear, predictable, coordinated, and expeditious as possible. Also, municipal governments can support local business by providing adequate infrastructure and services, including transportation infrastructure, sewers, public water, and access to broadband telecommunications.

When assessing the ways in which the local government can improve the local business climate, communities should consider the following guiding questions:

- To what extent is the community leveraging its existing assets, including natural resources, infrastructure, services, and facilities to support economic development?

- How does the existing regulatory structure and permitting processes support or hinder economic development?
- What steps has the community taken to support local businesses and industries?
- What additional infrastructure would be needed to support the community's goals for economic development?
- What changes to the zoning ordinances might improve economic development opportunities?
- How are local taxation policies affecting local businesses? Do the community's Farm, Forest, and Open Space land valuation practices and programs support local farms?
- What are the employment and commerce strengths of neighboring municipalities? How can the community build on the strengths of neighboring municipalities?

In order to support agriculture, comprehensive plans should assess the following.

Local zoning and other regulations can significantly affect the extent to which land suitable for agriculture can be utilized. To determine the opportunities to support agriculture, communities should consider the following guiding questions:

- What are the municipality's strengths and weaknesses related to agriculture?
- Where are the various components of the agricultural system (farms, farm stands, processing, etc.) currently allowed?
- Are there any local regulations currently impacting the viability of agricultural operations, such as requirements related to parking, loading, composting, retail sales, signage, etc.?
- Could zoning or other regulations be revised to improve the viability of agricultural operations?
- Is workforce housing allowed on farmlands?
- To what extent does my community allow permanent or temporary on-farm and off-farm retail outlets?

In addition to zoning and other regulations, supporting local agriculture can come in the form of strengthened partnerships. The municipality should have a basic understanding of who in the community is working in the agricultural system and how the city or town can partner with these organizations to further support the work. To determine the opportunities for increased partnerships, communities should consider the following guiding questions:

- Who is doing agricultural work in the community?
- Who is advocating for agriculture in the community?
- Are municipal purchasing policies supportive of local farm products?

Standard 6.3 Include goals that embody the state's goals for economic development and policies to support each goal. Include goals that embody the state's goals for agriculture and policies to support each goal.

To determine the goals and policies that may be appropriate for the community, consider the following guiding questions:

- What scale of economic activity does the community wish to achieve?
- Does the community wish to be a “bedroom” community, where the majority of resident’s commute to work in other cities and towns, or does it wish to be a hub, where businesses and employees cluster in dense areas?
- Are there any specific segments of the economy that the community wishes to promote and support?
- To what extent are commercial and industrial tax revenues needed for a healthy municipal budget?
- What community needs might be met by the types of economic activity being considered?
- What should be the future role of agriculture in the community? Would the community like to expand its agricultural sector?
- What direction can be given to local decisionmakers when considering matters related to farmlands?

SAMPLE GOALS

- Build and maintain a sustainable economy.
- The community experiences sustained economic vitality.
- Our municipality will host sufficient businesses so as to provide job opportunities and overall economic well-being to our residents.
- Our community will have a vibrant agricultural sector that includes both farms and other agricultural-support uses.
- Agriculture will be a vital and vibrant component of the municipality’s economic activity.
- Agriculture will remain an important use in historically farmed areas.

SAMPLE POLICIES

- Work to retain and expand businesses that have a positive economic impact on city residents, including industries that are historically important to the city.
- Expand economic opportunity and the municipality’s economic base by focusing efforts on retaining existing businesses and attracting new businesses.
- Create a business-friendly environment to stimulate the growth of business and the creation of good jobs that improves the quality of life for residents.
- Establish public-private partnerships with private enterprise to increase capital available for local investments.
- Cooperate with regional nonprofit industrial development corporations.
- Direct public investment toward designated redevelopment or growth areas.
- Support, develop, and retain locally-owned businesses.
- Promote infrastructure and service improvements that support business and job growth.
- Support and encourage partnerships with business improvement districts and main streets groups to enhance the attractiveness of these districts for employers, workforce, and

visitors.

- Use incentives to stimulate business development and job creation, particularly for those businesses that provide locally needed products and services.
- Support the purchase of development rights on prime agricultural lands.
- Support and promote the Farm, Forest, and Open Space program.
- Support urban agricultural initiatives.
- Work with community partners to promote local agricultural products.
- Partner with existing community organizations to increase access to local agricultural products.
- Work with the local community land trust and the RI Agricultural Lands Preservation Commission to target prime agricultural lands for preservation.

Standard 6.4 Include implementation actions within the Implementation Program that address the expansion and stabilization of the economic base, including agriculture where feasible, and the promotion of quality employment opportunities and job growth.

(Recommend including a. through e. to fulfill this standard)

- a. Create a climate in which business activity will grow and businesses will thrive;**
- b. Conserve and enhance areas suitable for economic expansion or redevelopment;**
- c. Preserve the best farmland for agricultural use; and**
- d. Keep active farms in agricultural use and promote the active use of idle agricultural land**

To determine the implementation actions that may be appropriate for the municipality, consider the following guiding questions:

- In addition to allowing for efficient private markets, to what extent can the municipality actively promote or incentivize certain economic development actions?
- How could the community continue to leverage, and expand its assets to support and promote economic development?
- How can the community's economic development strategies complement assets that exist within the community and in neighboring communities?
- How can the municipality enhance economic opportunities?
- Who can the municipality partner with to create a competitive economic climate?
- What can the municipality implement to spur economic growth in targeted areas?
- What types of redevelopment, and in what locations, will be necessary to achieve the economic vision for the community? How can the municipality assist in making redevelopment happen?
- Does the existing zoning ordinance and map need to be amended to accommodate the desired types and patterns of economic activity?

- Do any new ordinances or regulations need to be enacted in order to ensure that new growth happens in a manner desired by the community? Do any existing ordinances or regulations need to be updated?
- Are the current permitting processes (building permits, fire safety, etc.) timely, predictable, and coordinated?

If the community wishes to offer incentives for economic development, some detailed analysis may be required to determine which incentives are appropriate. Communities may wish to consider the following guidance when determining the manner in which incentives should be pursued:

- Determine the purpose of offering the incentive, or what the incentive is intended to accomplish;
- Determine the information and data needed to track progress towards accomplishing the intended purpose;
- Track progress and make adjustments if the incentive is not producing the desired results;
- Actively hold recipients accountable for any stipulations required of the incentive;
- Avoid “zero-sum” incentives designed to attract business from another municipality to the community; and
- Use incentives that help grow existing businesses.

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 6.4a

- Hire an Economic Development Coordinator to facilitate business development activities.
- Develop a state-of-the-art, streamlined, one-stop, integrated predictable system for building, fire, and development permits that allow permits to be issued in a timely manner.
- Evaluate all existing and proposed city ordinances for their impact on the municipality’s economic development competitive advantage.
- Establish a Main Street Advisory Committee to assess the vitality of the area’s businesses and how the municipality can support and enhance the climate for local businesses.
- Form a task force consisting of residents, local business owners, and municipal officials to develop strategies to better support local businesses.
- Amend the zoning ordinance to reduce barriers to home-based businesses.

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 6.4b

- Designate a local growth center where new development activity can concentrate.
- Conduct a parking study for downtown areas to determine whether additional public parking is necessary.
- Evaluate zoning strategies to promote a more cohesive retail environment in the downtown and village areas.
- Install wayfinding signage in the downtown and village areas to help visitors find businesses.

- Amend land development regulations to include design guidelines for commercial areas within the municipality.

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 6.4c

- Establish a program for purchasing or transferring the development rights of prime agricultural lands.
- Amend the zoning ordinance to include an agricultural zoning district.

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 6.4d

- Review the regulations of zoning districts in which agriculture is a permitted use for restrictions on related agricultural uses, such as allowance of farm stands, processing and distribution, signage requirements, parking standards, loading and unloading requirements, and determine whether any changes can be made to better support agricultural operations.
- Review and revise zoning requirements to allow processing where it is likely to happen, such as on a farm that lies within a residential zone or at a butcher shop in a commercial zone.
- Adopt a system of performance standards for agricultural zones, such as those recommended in RIDEM's Community Guidance for Working Farms.
- Revise land development and subdivision regulations to allow agriculture as a permitted use within the dedicated open space of conservation subdivisions.
- Revise the zoning ordinance to allow residential buildings on farmlands to house farm workers.
- Establish a program by which vacant, publicly-owned lands can be converted to active agricultural uses.

FOR ALL SECTIONS

- Are the proposed actions sufficiently specific and detailed to be meaningful?
- Are there sufficient actions to make progress toward achieving the goal(s)?

PART SEVEN: PLANNING FOR SERVICES AND FACILITIES

The Act requires comprehensive plans to provide an inventory of “existing physical infrastructure” and descriptions of “services provided to the community.” Services and facilities refer to a range of local government services and public facilities for which a municipality is responsible. These can include, but are not limited to, educational facilities, public safety facilities, libraries, indoor recreation facilities, community centers, water supply, and the management of wastewater, stormwater, and solid waste. The Act also requires comprehensive plans to “consider energy production and consumption.” The list of infrastructure, facilities, and services found in this section are not meant to be exclusive. Any infrastructure, facility, or service not listed here, but considered to be significant to the community should be included.

There are two primary reasons for including services and facilities within a comprehensive plan. First, community services and facilities directly impact the ability of a community’s residents to live in a safe, adequate, and healthy environment. Anticipating and preparing for the needs and safety of the residents is essential to ensuring a high quality of life in your community.

Second, the Act states, “Comprehensive planning is needed to provide for the coordination of growth and the intensity of development with provisions for services and facilities.” In other words, for the state to grow in a sustainable way, future growth, development, and redevelopment must align with the provision of services and facilities to the community. It is essential that growth patterns reflect existing and future levels of services and facilities, with most development occurring where investments in infrastructure have already been made.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state’s goals and policies for services and facilities as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

In general, the goals and policies of the state call for public services and facilities that are fully functional, sufficient to meet local needs, environmentally friendly, and located appropriately. Additionally, the State Guide Plan calls for focused growth and development so that community investments in services and facilities can be maximized.

The following list of state goals and policies are organized topically.

GENERAL

First class supporting infrastructure that protects the public’s health, safety, and welfare, fosters economic well-being, preserves and enhances environmental quality, and reinforces the distinction between urban and rural areas.

[Land Use 2025: Rhode Island’s State Land Use Policies and Plan, Goal 4, page 5-14](#)

Ensure that public facilities and properties exemplify best practices of community design.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Objective 3F, page 5-12](#)

Evaluate the capacity of the existing systems and natural resources to serve the planned build-out of the State.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Strategy 4A1, page 5-14](#)

Locate new infrastructure in appropriate areas.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Objective 4D, page 5-16](#)

Whereas, it is the intent of the general assembly by enactment of this act to: Ensure that adequate public facilities are available to serve new growth and development;

[Rhode Island Development Impact Fee Act, RIGL subsection 45-22.4-2\(c\)\(1\)](#)

WATER SUPPLY

Protect drinking water supply resources.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Objective 4B, page 5-15](#)

Integrate water resources and supply planning for water systems across intergovernmental and regional jurisdictions.

[Rhode Island Water 2030, Goal IPP-2, page 3-81](#)

Manage and plan for water systems that support sustainable, compact land use and concentrate development within the urban service boundary and or growth centers.

[Rhode Island Water 2030, Goal IPP-3, page 3-81](#)

Manage and plan for the sustainable water use & development of the water resources of the State.

[Rhode Island Water 2030, Goal WRM-1, page 3-81](#)

Protect and preserve the health and ecological functions of the water resources of the State.

[Rhode Island Water 2030, Goal WRM-2, page 3-81](#)

Ensure a reasonable supply of quality drinking water for the State.

[Rhode Island Water 2030, Goal WRM-3, page 3-81](#)

Ensure the protection of public health, safety, and welfare and essential drinking water resources during water supply emergencies.

[Rhode Island Water 2030, Goal WRM-4, page 3-81](#)

To promote orderly growth and development that recognizes the natural characteristics of the land, its suitability for use, the availability of existing and proposed public and/or private services and facilities, and is consistent with available resources and the need to protect public health, including drinking water supply, drinking water safety, and environmental quality.

[RI Comprehensive Planning and Land Use Regulation Act, RIGL subsection 45-22.2-3\(c\)\(1\)](#)

It is a paramount policy of the state to protect the purity of present and future drinking water supplies by protecting aquifers, recharge areas, and watersheds;

[Public Drinking Water Supply System Protection Act of 1997, RIGL 46-15.3-1.1\(a\)\(5\)](#)

All municipalities subject to chapter 22.2 of title 45, the Comprehensive Planning and Land Use Regulation Act. The executive summary of the water supply system management plan including the demand management goals and plans for water conservation and efficient use of water, of any water supplier providing service in any municipality, shall be incorporated in the services and facilities element of the plan for that municipality required by subdivision 45-22.2-6(8);

[Public Drinking Water Supply System Protection Act of 1997, RIGL 46-15.3-5.1\(a\)\(1\)](#)

The decay of infrastructure and related construction due to deterioration or functional obsolescence can threaten the quality of supplies and, therefore, can endanger public health; thus it is necessary to take immediate and continuing steps to repair and replace the infrastructure used to deliver water supplies in order to restore water system facilities.

[Comprehensive Clean Water Infrastructure Act of 1993, RIGL 46-15.6-2\(a\)\(5\)](#)

More efficient use of our shared water supply, especially by residential users, makes more water available for economic activity and for replenishment of stream flow, and is usually the most cost- effective and quickest way to maximize available water supply. Conservation must be a priority for successful water management.

[Water Use and Efficiency Act, RIGL subsection 46-15.8-2\(a\)\(6\)](#)

WASTEWATER MANAGEMENT

Maintain fully functional water and sewer systems; focus development to maximize the investment and capacity of these community assets.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Objective 4A, page 5-14](#)

Ensure that wastewater collection and treatment systems and facilities are properly maintained, operated, and upgraded or expanded in accordance with community plans in order to reduce water quality impacts and accommodate desired focused growth within urban areas.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Strategy 4C1, page 5-15](#)

In areas without public wastewater treatment systems, ensure that wastewater is properly managed to protect and enhance water resources.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, Strategy 4C5, page 5-15](#)

Appropriate treatment of sewage disposed into the ground is essential to the protection of public health and the environment, particularly in relation to Narragansett Bay and the rest of the state's coastal region, and public drinking water resources.

[Rhode Island Cesspool Act of 2007, RIGL subsection 23-19.15-2\(8\)](#)

STORMWATER MANAGEMENT

The general assembly finds that stormwater, when not properly controlled and treated, causes pollution of the waters of the state, threatens public health, and damages property. [...] Therefore, to help alleviate existing and future degradation of the state's waters and the

associated risks to public health and safety, and to comply with state and federal stormwater management requirements, stormwater conveyance systems must be maintained and improved.

[Rhode Island Stormwater Management and Utility District Act of 2002, RIGL section 45-61-2](#)

SOLID WASTE MANAGEMENT

Each city and town is required to make provision for the safe and sanitary disposal of all refuse which is generated within its boundaries, including refuse from commercial and industrial sources, but excluding refuse from sources owned or operated by the state or federal governments, hazardous waste as defined in chapter 19.1 of this title and any refuse which is not acceptable at a facility provided by the Rhode Island resource recovery corporation under chapter 19 of this title.

[Refuse Disposal, RIGL subsection 23-18.9-1\(a\)\(1\)](#)

Beginning July 1, 2012 every city or town that enters into a contract with the Rhode Island resource recovery corporation to dispose of solid waste shall be required to recycle a minimum of thirty-five percent (35%) of its solid waste and to divert a minimum of fifty percent (50%) of its solid waste.

[Refuse Disposal, RIGL subsection 23-18.9-1\(a\)\(3\)](#)

PUBLIC EDUCATION

[...] every city or town shall establish and maintain [...] a sufficient number of schools in convenient places under the control and management of the school committee and under the supervision of the board of regents for elementary and secondary education.

[RIGL Title 16, Education, subsection 16-2-2\(a\)](#)

ENERGY PRODUCTION AND CONSUMPTION

Energy Security

- *Adequacy: Plan to meet overall energy supply needs.*
- *Safety: Increase the safety of energy conversion and use.*
- *Reliability: Increase the system's ability to withstand disturbances.*
- *Resiliency: Increase the system's ability to rebound from disturbances.*

Cost-Effectiveness

- *Affordability: Lower overall energy bills.*
- *Stability: Reduce the impacts of energy price volatility on consumers.*
- *Economic Growth: Grow and maintain a healthy state economy.*
- *Employment: Increase employment.*

Sustainability

- *Climate: Reduce greenhouse gas emissions from energy consumption.*
- *Air Quality: Reduce criteria pollution from energy consumption.*
- *Water Use & Quality: Reduce the water impacts of energy consumption.*
- *Land & Habitat: Reduce the impacts of energy projects on ecosystems.*

[Energy 2035: Rhode Island State Energy Plan, Goals, page 34](#)

It is in the interest of the people, in order to protect public health and the environment and to promote the general welfare, to establish a renewable energy standard program to increase levels of electric energy supplied in the state from renewable resources.

[Renewable Energy Standard, RIGL subsection 39-26-1\(e\)](#)

[...] support and encourage development of distributed renewable energy generation systems; reduce environmental impacts; reduce carbon emissions that contribute to climate change by encouraging the local siting of renewable energy projects; diversify the state's energy generation sources; stimulate economic development; improve distribution system resilience and reliability; and reduce distribution system costs.

[Distributed Generation Standard Contracts RIGL subsection 39-26.2-2](#)

A Note on Solid Waste Recycling and Diversion: The Rhode Island General Laws require each municipality that contracts with the Rhode Island Resource Recovery Corporation to plan for increased solid waste recycling and diversion. Specifically, municipalities are required to create a plan by which a minimum 35% of their solid waste will be recycled and a minimum of 50% will be diverted:

All municipalities that contract with the corporation for the disposal of solid waste shall prepare as an addendum to its fiscal year 2010 contract with the corporation and any contracts with the corporation for the subsequent years a plan that includes a description of the process by which thirty-five percent (35%) of its solid waste will be recycled and fifty percent (50%) of its solid waste will be diverted beginning July 1, 2012. This addendum shall include a residential and municipal waste stream evaluation, a plan for the reduction of solid waste and recyclables generated, and the process by which recyclable materials are to be segregated.

[The Rhode Island Resource Recovery Corporation Act, RIGL subsection 23-19-13\(e\)\(3\)](#)

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for recreation. This could include:

- The Water Supply System Management Plans (WSSMP) for all major public water suppliers that serve the municipality;
- Local wastewater management plans;
- Local stormwater management plans;
- Local school district plans;
- Other local services and facilities plans that may be available;
- Any local reports or studies on energy use or energy audits;
- The RI Department of Health's "[SafeWater RI: Ensuring Safe Water for Rhode Island's Future](#);
- The RI Department of Health's Source Water Assessments, available at <http://www.health.ri.gov/water/about/yourwater/>;

- The New England Water Interstate Pollution Control Commission’s “Protecting Drinking Water Sources in Your Community: Tools for Municipal Officials;” available at www.nelwpss.org.
- The “Rhode Island Comprehensive Solid Waste Management Plan,” available at http://www.planning.ri.gov/documents/guide_plan/swmp07.pdf;
- The RI Department of Environmental Management’s “Rhode Island Stormwater Design and Installation Manual,” available at <http://www.dem.ri.gov/programs/water/permits/ripdes/stormwater/stormwater-manual.php>;
- The RI Department of Environmental Management’s rules and regulations for solid waste management and municipal recycling, available at <http://www.dem.ri.gov/pubs/regs/index.htm>; and
- The RI Department of Environmental Management’s “Rules Establishing Minimum Standards Relating to Location, Design, Construction, and Maintenance of Onsite Wastewater Treatment Systems,” available at <http://www.dem.ri.gov/pubs/regs/regs/water/owts12.pdf>.

Stakeholders to Include

In addition to the general public, when discussing how best to plan for services and facilities municipalities may benefit from involving:

- Water suppliers serving the municipality;
- The Rhode Island Department of Health, Office of Drinking Water Quality;
- The Rhode Island Department of Environmental Management, Office of Water Resources;
- RI Water Resources Board;
- The Rhode Island Resource and Recovery Corporation;
- The Public Works Department;
- Superintendent of schools;
- Local library officials;
- The Police Department;
- The Fire Department; and
- Emergency Services officials.

Making Connections Throughout the Plan

Relationship to land use

The designation of land for future use on the Future Land Use Map (FLUM) should reflect the quantity, quality, and location of a community’s existing and proposed services, facilities, and infrastructure. To this end, when crafting the FLUM, the community should be mindful of which

areas of the municipality currently have access to services and facilities and which areas do not. Increasing development in areas that are not served by facilities and infrastructure will increase the cost of service, which could impact other aspects of the community's fiscal health.

Additionally, the patterns of uses on the FLUM has implications for energy usage. Having a range of uses in close proximity to each other may reduce the vehicle miles traveled by residents, employees, and visitors, therefore reducing overall energy usage for transportation. Also, the consideration of energy production should contemplate the future siting of energy facilities when determining appropriate future land uses.

Relationship to natural hazards and climate change

When assessing existing and future needs related to the provision of services, consideration should be given to the potential impact of natural hazards and climate change. Additionally, communities should consider whether to enact policies for locating future facilities and infrastructure outside of vulnerable areas and for including resiliency measures in facility and infrastructure retrofits and repairs. Planning for natural hazards and climate change can save the community money in the long-term by allowing new development, facilities, and infrastructure to be located and designed in a resilient way, instead of needing replacement or repair after hazard events.

Standards and Guidance for Services and Facilities

Note: The standards and guidance for services and facilities are organized by specific topics e.g. water supply, solid waste management, etc. In setting goals and policies, some municipalities may choose to have an over-arching goal(s) for services and facilities, while others may choose to provide a goal statement and policies for each type of service. Either option is acceptable, and the community should determine which method will best serve the community's priorities. Following the standards in the topical sections is guidance on assessing needs for services and facilities in a general sense, and some sample policy and implementation action statements that apply to services and facilities generally.

Standard 7.1 Identify existing significant public infrastructure and facilities on a map, by showing and clearly labeling the following if present within the municipality:

- a. All municipally-owned and/or operated buildings, including but not limited to city/town hall, administration buildings, schools, community or senior centers, libraries, fire stations, police stations, etc.;**
- b. Solid waste transfer stations and municipal compost or refuse disposal sites; and**
- c. Wastewater pump stations and wastewater treatment plants.**

Though not required, communities may wish to map other types of infrastructure and facilities, such as:

- State- and federally-owned infrastructure and facilities;
- Electrical transmission lines;
- Natural gas transmission lines;

- Correctional institutions;
- Dams; and
- Hospitals.

WATER SUPPLY

Standard 7.2 Identify water-supply related natural features and sensitive water supply areas on one or more maps.

- Surface reservoirs used for potable water;
- Aquifers;
- (Recommendation)* Sub-surface reservoirs used for potable water;
- (Recommendation)* Groundwater recharge areas;
- (Recommendation)* Community and non-community wellhead areas.

Standard 7.3 Identify existing and proposed water service areas on a map, if applicable (*inclusion of “proposed” areas is recommended*).

Standard 7.4 Describe the ways in which water is provided to the community and any proposed future modifications (*inclusion of “proposed” modifications is recommended*). (*Recommend including a. through c. to fulfill this standard*)

- Discuss the different types of water supply systems (major public water suppliers, minor public water suppliers, self-supply, etc.) that are in use within the municipality;
- Discuss all of the water sources supplying water to the municipality (i.e. specific surface or ground water resources); and
- Include, if one or more public water suppliers serve the municipality:
 - Identification of the major public water suppliers, if any, that serve the community;
 - Identification of the type of each major supplier (regional, municipal, private, etc.);
 - Identification of the percentage of persons within the community that are served by each major public water supplier;
 - Identification of the average monthly and peak monthly amounts of water currently being supplied by each major public water supplier;
 - Identification of the projected average monthly and peak monthly amounts of water that will be supplied by each major water supplier at the end of the 20-year planning horizon;
 - Discussion of the existing capacity of each major supplier’s water infrastructure, as confirmed by the Rhode Island Water Resources Board in the most recently approved Water Supply System Management Plan (WSSMP), including the amount of water flow that the infrastructure can currently accommodate;

- vii. Discussion of any major projects or plans that have been proposed by each major public water supplier; and**
- viii. Discussion of the municipality's coordination with the supplier(s), especially as it pertains to the municipal role in implementation of the WSSMP(s) with regard to water supply source protection, water availability, demand management, drought mitigation and response, and water emergencies.**

Standard 7.5 Assess and discuss existing and anticipated future issues and needs, including the general adequacy of water sources to meet current demands, concerning the supply of potable water to the municipality.

(Recommend including a. through c. to fulfill this standard)

- a. The quality of potable water sources;**
- b. The potential impacts of natural hazards and climate change; and**
- c. If served by one or more public water supplier, the capacity of public water infrastructure.**

If the community is served by a major water supplier, the Executive Summary of the Water Supply System Management Plan should be consulted. Data may also be available from the Water Resources Board and the RI Department of Environmental Management that may assist in determining whether issues related to water availability exist. Where quantitative data is not available, or is insufficient, a qualitative assessment of adequacy may be appropriate. It is crucial to remember that many municipalities experience issues related to the availability of water during the summer or in drought conditions; therefore, the assessment of the adequacy of water sources to meet current demands must consider periods of high demand and low water supply availability.

In considering water quality issues that may affect the community's supply of potable water, the following guiding questions may prove helpful:

- What is the general quality of waters within the watershed, both potable and non-potable?
- What are the primary factors negatively affecting water quality?
- How is stormwater runoff from impervious surfaces impacting water quality?
- Are there any potable water sources within the municipality that are currently impaired?
- What is currently being done to improve water quality within the watershed?
- Are there areas of the community where sewers would be appropriate as a means of improving water quality?
- How will future land use decisions affect water quality, for example by increasing stormwater runoff?
- Is the quality of the potable water supply likely to change over the 20-year planning horizon?

Natural hazards and climate change have impacts on the quality and availability of potable water which should be considered and discussed within the comprehensive plan. For example, it is projected that periods of drought will become longer which will have a direct impact on the

availability of potable water. Coastal municipalities may also be subject to inundation of coastal, private wells by saltwater due to both storm surge and sea-level rise, and wells may also be contaminated by inundation of on-site septic systems. Additionally, higher daily temperatures may lead to worsening water quality due to greater bacteria growth.

To determine the potential impacts of natural hazards and climate change on the community's ability to obtain potable water, consider the following guiding questions:

- Are the community's groundwater supplies vulnerable to saltwater inundation? How many people and businesses are served by vulnerable groundwater supplies?
- How have drought conditions historically impacted the availability of potable water in the community? What programs are in place to ensure water availability in the event of a drought?
- What programs are in place to mitigate the impacts of peak seasonal use and summer dry spells on water sources?

For communities with public water service, it is strongly recommended that comprehensive plans evaluate whether increases in water demand may require more water flow than the current water infrastructure was designed to handle. To determine whether the capacity of public water infrastructure may be an issue for the desired land use in the community, consider the following guiding questions:

- Have the WSSMPs that serve the community identified any major issues with the capacity of water supply infrastructure?
- Given anticipated future water needs, is it likely that current water infrastructure will be able to handle the future water demand?
- If necessary, how will the community fund an upgrade of under-sized infrastructure?

Standard 7.6 Include goals that embody the state's goals for water quality and supply and policies to support each goal.

The goals and policies of the state call for integrated planning and sustainable management of the state's potable water resources, protection of water quality, maintenance of water infrastructure and the efficient use of the state's shared water supply. To further these goals at the local level, comprehensive plans must include one or more goals that ensure the provision of safe and reliable water supplies while protecting the public health, safety, and welfare of their citizens, and policies to support each identified goal. To determine the goals and policies that would best serve the municipality, communities may want to consider the following guiding questions:

- Which aspects of planning for water quality and supply are most critical to the municipality?
- What are the municipalities' priorities related to achieving sustainable usage of the state's shared water resource?

SAMPLE GOALS

- Per capita use of water will not exceed the state average.

- Our community will efficiently and effectively use its share of the state’s shared water resource.
- Water quality within the municipality will be meet recommend standards and be protected from deterioration.

SAMPLE POLICIES

- Reduce overall demand for potable water.
- Ensure adequate water supply for any new planned areas of growth.
- Protect water sources within the community.
- Manage and conserve essential potable water resources in times of emergencies and/or shortages.
- Support major public water supplier demand management initiatives.
- Encourage coordination between the municipal water department, RIDEM, and the RI Department of Health to establish procedures for well monitoring for sodium and other pollutants that might contaminate water supplies on individual properties within Special Flood Hazard Areas and areas projected to be inundated by sea level rise.
- Consider water availability in planning for build-out.

Standard 7.7 Include implementation actions within the Implementation Program that address meeting future demands for water quality and supply.

(Recommend including a. through e. to fulfill this standard)

- Promote water conservation and the efficient use of water in both the public and private sectors;**
- Improve or preserve water quality;**
- Plan and prepare for drought conditions;**
- Respond to water emergencies; and**
- Where applicable, include implementation actions that support or align with those found within any Water Supply System Management Plans that cover the municipality.**

To determine which implementation actions may be appropriate for the community, consider the following guiding questions:

- What programs are currently in place within the municipality to promote water conservation?
- For communities with major public water suppliers, how can the municipality assist in implementing the suppliers’ WSSMPs, particularly in relationship to conservation?
- What role can the municipality play in enforcing restrictions on water usage?
- How can the municipality increase water conservation in municipally-owned buildings? Are there specific pieces of equipment, infrastructure, or other municipally-owned water-users that could be replaced or retrofitted to increase water efficiency?
- How can municipal land use decisions better reflect the water quality issues of the

watershed?

- What programs are currently in place to improve or preserve water quality? How effective are these programs? Is there a need for additional programs and/or resources?
- With whom should the municipality partner to improve water quality?
- Given the likely impacts of drought as assessed, how can the municipality plan to minimize the effects of drought?
- For communities with public water suppliers, what responsibility does the municipality have in implementing the suppliers' WSSMPs, particularly in relationship to drought management?
- What drought mitigation actions can the municipality directly implement?
- What has been the historic response to water emergencies? Has it been effective? What could have been done better?
- What role does the municipality have in responding to water emergencies versus any public water suppliers serving the community?
- What communication channels does the municipality have available to it that may assist in effectively responding to water emergencies?

SAMPLE IMPLEMENTATION ACTIONS

- Implement water reduction strategies that deal with dry summers and droughts in coordination with major public water suppliers and the RI Water Resources Board.
- Implement water efficient municipal practices (e.g. building maintenance), particularly in the summer.
- Adopt outdoor watering ordinances that are more effective than odd/even watering days, such as twice a week watering, watering prohibitions during summer months and limiting the number of automatic sprinklers for new developments.
- Work with land trusts and others holding conservation easements to encourage agricultural producers leasing these lands to develop and implement water use conservation plans for their operations.
- Require that all expansions of water supply infrastructure meet municipal design requirements.
- Require that expansions of water supply infrastructure be planned in a way that accommodates future growth of adjacent parcels.
- Amend municipal regulations to allow the use of wastewater treatment facility discharge for non-potable uses, such as irrigation of municipal lands.
- Implement standards and strategies aimed at recharging groundwater and reducing runoff, such as reductions in impervious cover, better soil erosion protection, and low-impact development stormwater management.
- Compile data from local on-site wastewater treatment system permits for properties within projected sea level rise areas to understand groundwater systems in that area, and maintain a record of damage or impacts after coastal flood events or other tidal inundation.
- Maintain record of properties within Special Flood Hazard Areas and areas projected to be

inundated by sea level rise that report groundwater seepage into their basements.

- Coordinate with State and federal entities, as well as academic institutions to encourage study and research into the groundwater dynamics in coastal neighborhoods.
- Adopt a wastewater management district.
- Establish a stormwater management program.
- Adopt a “zero-runoff” ordinance.
- Conduct outreach and education for citizens on the actions they can take to protect their own private well and the watershed/wellhead protection area.
- Review current drought management procedures, identify problem areas and develop recommendations for more effective drought mitigation.
- Quantify demand associated with growth centers, local economic initiatives and develop strategies to provide adequate water for growth, even in drought conditions.
- Evaluate the water needs of new development and explore options to require and/or demonstrate net zero impact on summer demand.
- Incorporate resource availability and supply and demand estimating, particularly peak estimating into local planning and land development regulations.
- Implement water reduction strategies that deal with dry summers and droughts in coordination with major public water suppliers and the RI Water Resources Board.
- Review current water emergency response procedures, identify problem areas and develop recommendations for more effective water emergency response.
- Begin periodic communication with major public water suppliers to be sure of individual agency roles in water emergencies.
- Develop a water emergency response plan, including roles and responsibilities of the various entities involved and communication with the public.

WASTEWATER MANAGEMENT

Standard 7.8 Identify existing and proposed sewer service areas on a map by showing areas that currently have access to a sewer line, regardless of whether the buildings within the area are in fact connected to the sewer system.

- a. *(Recommend including the following as appropriate)* Areas to which sewer access is planned within the 20-year planning horizon of the comprehensive plan.**

If applicable, the community should consider also show the relative location of the State’s Urban Services Boundary as set forth in *Land Use 2025*. If the entire community is within the Urban Services Boundary, would not be necessary to depict the boundary visually on the map, but simply to make a statement to that effect in the plan.

Standard 7.9 Describe the wastewater management system, including wastewater infrastructure for which the municipality is responsible, if any.

(Recommend including b. through d. to fulfill the standard)

- a. The current usage and capacity of any municipally-operated wastewater**

management systems;

- b. The ways in which any municipally collected wastewater is treated and dispensed;
- c. Any plans for improvements in the management of wastewater; and
- d. Any current municipal regulations regarding on-site wastewater management, including wastewater management districts.

Standard 7.10 Assess and discuss the current and anticipated future issues and needs regarding wastewater management facilities, infrastructure, and services including any issues related to condition or capacity.

(Recommend including a. through c. to fulfill this standard)

- a. Discuss whether residents are able to adequately access the service;
- b. Discuss the effectiveness of the service at achieving desired outcomes; and
- c. Identify any existing and future major issues related to administration of the service.

Standard 7.11 Include goals that embody the state's goals for wastewater management and policies to support each goal.

SAMPLE GOALS

- Provide an efficient and sanitary wastewater treatment system that adequately serves the entire community and operates in full compliance with all state and federal standards.
- Maintain existing levels of wastewater services and recommend upgrades, above the minimum standard, to enhance public health and the environment.

SAMPLE POLICIES

- Support sustainable systems and programs for the safe, efficient, and effective collection and treatment of sewerage and recovery of water.
- Utilize best management practices for wastewater treatment systems to improve water quality.
- Discourage sewer extensions to areas where development can be adequately served by onsite wastewater treatment.
- Coordinate the policies of area water suppliers with wastewater management needs.
- Expand sewer service areas to those neighborhoods where small house lots, shallow depth to groundwater, and soil conditions have resulted in significant failure of old cesspools and individual sewage disposal drain fields
- Encourage new development to implement alternative wastewater disposal methods.

Standard 7.12 Include implementation actions within the Implementation Program that address meeting future demands for wastewater management.

SAMPLE IMPLEMENTATION ACTIONS

- Adopt a Wastewater Management Plan for areas not serviced by sewers and investigate

other methods to prevent groundwater and surface water contamination.

- Establish a Wastewater Management District to ensure that Onsite Wastewater Treatment Systems are inspected and properly maintained, repaired, and replaced.
- Provide educational information to the public about the risks associated with exposure to untreated wastewater and the value of treated effluents for the different end uses.
- Develop a homeowner education program to discourage the disposal of environmentally harmful chemicals such as cleaners, solvents, paint, acid, and the like in on-site sewage disposal systems and the municipal sewer system.
- Amend the community's Wastewater Management Ordinance to require the immediate retrofitting of cesspools.
- Conduct a sewage pump station infiltration and inflow analysis to determine whether infiltration is an issue.
- Identify and eliminate sources of infiltration and inflow to free up additional capacity for treatment plants.
- Flood-proof selected sewage pump stations to mitigate damage due to sewage backups.
- Revise building codes to spur wastewater reuse systems, roof catchments, rain barrels, and other methods to minimizing groundwater use.
- For areas that are susceptible to future sea-level change and storm surge, evaluate the long-term viability of maintaining residences in these areas and if installing sewers are a feasible option over the long-term.
- Maintain a record or database of damage and/or improvements of on-site wastewater treatment systems (OWTS) in Special Flood Hazard Areas and consider long-term viability of OWTS systems on properties that are projected to be inundated by sea-level rise scenarios over the design life of the system.
- Implement a periodic review of permits for OWTS systems on repetitive loss properties and/or on parcels that are within the projected sea level rise scenario areas.
- In coordination with RIDEM, evaluate any Total Maximum Daily Load (TMDL) issues in Narragansett Bay related to OWTS systems within Special Flood Hazard Areas.
- Investigate new technologies for toilets (e.g., low-flow, composting toilets, or "eco-toilets") that could be installed in public facilities or in private residences that reduce the volume of water required and waste output.

STORMWATER MANAGEMENT

Standard 7.13 Describe the municipal approach to stormwater management.

(Recommend including a. and b. to fulfill the standard)

- a. Describe the municipality's maintenance program for stormwater infrastructure; and**
- b. Describe any current municipal regulations or standards regarding stormwater management including any Low Impact Development (LID) approaches to stormwater management.**

Standard 7.14 Assess and discuss the current and anticipated future issues and needs

regarding stormwater management infrastructure and services including any issues related to condition or capacity.

(Recommend including a. through d. to fulfill the standard)

- a. Discuss the effectiveness of the service at achieving desired outcomes;
- b. Assess the adequacy of funding for the maintenance program;
- c. Discuss any plans for improvements in the funding for or management of stormwater; and
- d. Identify any areas regularly subjected to flash flooding during storm events due to overwhelmed or unmaintained infrastructure.

Standard 7.15 Include goals that embody the state’s goals for stormwater management and policies to support each goal.

SAMPLE GOALS

- Manage stormwater runoff and mitigate adverse impacts on receiving waters, including water quality, flooding, and erosion, and sedimentation in a manner that is adequate, efficient, and environmentally sensitive.

SAMPLE POLICIES

- Utilize best management practices for stormwater treatment systems to improve water quality.
- Consider stormwater runoff impacts when determining the amount of pavement to install at public buildings and other public parking areas.
- Consider the use of pervious pavement at public buildings and other public parking areas.
- Promote innovative standards for drainage design by encouraging the use of Low Impact Design/Development techniques, flexible paving surface requirements to reduce impervious surfaces (e.g. roads, walkways, parking areas, etc.), and incentives that promote on-site infiltration and treatment.
- Explore “Green Solutions” to prevent groundwater pollution as a result of stormwater runoff and sewage overflow.
- Consider stormwater reuse through the installation of rain barrels, cisterns, or other water storage and reuse infrastructure at public buildings.
- Work with upstream communities to improve the control and treatment of stormwater runoff to minimize downstream flooding.
- Include programs for the maintenance of and capital improvements to existing system infrastructure (collection, pumping, and treatment facilities) and the prioritized expansion of the collection system to areas not presently served.

Standard 7.16 Include implementation actions within the Implementation Program that address meeting future demands for stormwater management.

- a. *(Recommendation)* Include an action to implement low-impact development standards for stormwater management.

SAMPLE IMPLEMENTATION ACTIONS

- Adopt low-impact development standards for all new development.
- Amend the local land development and subdivision regulations to include low-impact development standards based on performance metrics.
- Amend the local land development and subdivision regulations to provide density bonuses or other incentives when low-impact development techniques are used.
- Create a database of storm drains in the municipality that are located within the projected sea level rise scenarios and monitor during flood events and/or extreme high tides.
- Pursue funding for a comprehensive stormwater management study for areas exposed to flooding or sea-level rise.
- Revise land development regulations to include low impact design/development and other measures to reduce the impact of stormwater on receiving waters.
- Inventory, map, and monitor community-owned stormwater infrastructure to detect and eliminate illicit discharges on receiving waters and report compliance to the Rhode Island Pollutant Discharge Systems program.
- Conduct a program to educate the public on the problems associated with impaired stormwater quality, the conditions which contribute to impaired water quality, and the actions which can be taken by the community both individually and as a whole to improve the quality of stormwater runoff.

SOLID WASTE MANAGEMENT

Standard 7.17 Describe the municipal solid waste management system.

(Recommend including a. through g. to fulfill this standard)

- a. Describe the method(s) by which municipal solid waste is collected (e.g. picked-up curbside, dropped-off by residents at a transfer station, private hauler, some combination of methods, etc.);**
- b. Identify the types of municipal solid waste that are collected by each identified method (e.g. mixed refuse; mixed recyclables; yard waste; hard to dispose of items, such as mattresses, furniture, e-waste, Styrofoam, textiles; and construction and demolition debris);**
- c. Identify the permitted capacity of local transfer stations, the current estimates of transfer station usage, and whether the transfer station is municipally-owned or private;**
- d. Identify the types of municipal solid waste (mixed refuse, recyclables, etc.) that are currently being brought to the Rhode Island Resource Recovery Corporation facility;**
- e. Identify the types of municipal solid waste that are being sent somewhere other than the Rhode Island Resource Recovery Corporation facility;**
- f. Identify the current rates of solid waste recycling and diversion, the process by which recyclables are segregated from the waste stream, and the municipal plan for achieving a minimum 35% recycling and minimum 50% diversion rate; and**

- g. Describe the current ways in which the solid waste management system is being funded.

Standard 7.18 Provide an assessment of the current and anticipated future issues and needs regarding solid waste management facilities and services including any issues related to the condition or capacity of solid waste facilities.

(Recommend including a. through c. to fulfill this standard)

- a. Discuss whether residents are able to adequately access the service;
- b. Discuss the effectiveness of the service at achieving desired outcomes; and
- c. Identify any existing and future major issues related to administration of the service.

Standard 7.19 Include goals that embody the state's goals for solid waste management and policies to support each goal.

SAMPLE GOALS

- The municipality will achieve or exceed a 35% recycling rate.
- The municipality will achieve or exceed a 50% diversion rate.

SAMPLE POLICIES

- Properly manage closed landfills to prevent negative impacts on the surrounding population and ecosystems.
- Promote recycling of recyclable materials within all municipal buildings.
- Site, design, build, maintain, and operate public facilities to be compatible, as far as possible, with the character of the neighborhood in which they are located.
- Work with local retailers to enact programs for the collection of household hazard waste.
- Maintain an up-to-date website with information about the recycling and diversion programs available to residents.
- Coordinate with state and federal agencies to monitor the stability of closed landfills and work with state and non-governmental organization partners to assess short-term risk from storm events and long-term risk from incremental sea-level change.

Standard 7.20 Include implementation actions within the Implementation Program that address meeting future demands for solid waste management and achieving a minimum 35% solid waste recycling rate and a minimum 50% solid waste diversion rate.

The following guiding questions should be considered:

- What programs can be enacted to increase recycling or diversion of materials?
- How can the municipality encourage greater recycling of commercial waste? Plastic bags? Clothing?
- How can the municipality promote recycling to all segments of the population?
- Is the community utilizing the resources and assistance of the Rhode Island Resource

Recovery Corporation in managing solid waste?

- Are there any materials not currently being brought to the Rhode Island Resource Recovery Corporation that should be?

SAMPLE IMPLEMENTATION ACTIONS

- Hire a recycling coordinator to assist with municipal recycling and diversion programs.
- Identify a site that would be appropriate for a municipal compost facility.
- Educate the public about the RI RRC recycling program by setting up informational tables at public events.
- Educate school-aged children about recycling and diversion through a school educational program.
- Perform a waste composition study to identify the types of solid waste that could be but are not currently being recycled and/or diverted.
- Implement and fully fund programs to increase recycling rates at municipal and school facilities.
- Develop a pilot program to encourage residential composting.
- Adopt a pay-as-you-throw policy for residential solid waste collection.

PUBLIC SAFETY AND EMERGENCY SERVICES

Standard 7.21 Describe the public safety and emergency services (*inclusion of “emergency services” is recommended*) provided to the community, as well as the facilities and infrastructure associated with these services.

(Recommend including a. through d. to fulfill the standard)

- a. Include the ways in which public safety and emergency services are provided to the community;
- b. Include the respective numbers of police stations, fire stations, and public ambulatory service facilities located within the municipality;
- c. Identify the general disbursement of public safety facilities throughout the municipality; and
- d. Describe any plans for improvements in the provision of public safety and emergency services.

Standard 7.22 Provide an assessment of the current and anticipated future issues and needs regarding public safety facilities and services, including any issues related to condition or capacity.

(Recommend including b. through d. to fulfill this standard)

- a. Discuss whether residents are able to adequately access the service;
- b. Discuss the effectiveness of the service at achieving desired outcomes; and
- c. Identify any existing and future major issues related to administration of the service.

Standard 7.23 Include implementation actions within the Implementation Program that address meeting future demands for public safety services.

SAMPLE IMPLEMENTATION ACTIONS

- Implement a Community Interaction Safety Program, maintained and operated by local residents and businesses, to expand efforts related to fire safety, neighborhood crime watch, elderly awareness, and drug abuse prevention.
- Conduct an assessment of the barriers that exist within the municipality to accessing medical, behavioral, and specialty health care services, and identify potential solutions.
- Review the code enforcement program and property standards system to identify any existing issues and provide recommendations that will facilitate the resolution to code issues that threaten the use and enjoyment of neighboring properties and the general quality of life of the surrounding community.
- Establish an incentive-based recruitment program to attract and retain volunteer firefighters.

PUBLIC EDUCATIONAL SYSTEM

Standard 7.24 Describe all aspects of the public educational system.

(Recommend including a. and b. to fulfill this standard)

- a. Provide a description of the overall public educational system; and
- b. Include overall school system enrollment figures per grade and capacity per grade.

Standard 7.25 Provide an assessment of public school needs.

(Recommend including a. through d. to fulfill this standard)

- a. Provide enrollment projections by grade level forecasted over a 10-year period;
- b. Compare enrollment projections and existing school capacity by grade level;
- c. Discuss any existing or anticipated future issues with school capacity, whether the issues are related to over or under enrollment; and
- d. Discuss any existing or anticipated future issues with the condition of existing school facilities.

PUBLIC LIBRARY SERVICES

Standard 7.26 For municipalities that provide library services, describe the public library system.

(Recommend including a. and b. to fulfill this standard)

- a. Identify the number of public library facilities within the municipality; and
- b. Identify the general disbursement and accessibility of public library facilities throughout the municipality.

Standard 7.27 Provide an assessment of the current and anticipated future issues and needs regarding public library facilities and services, including any issues related to

condition or capacity.

(Recommend including a. through c. to fulfill this standard)

- a. Discuss whether residents are able to adequately access the service;
- b. Discuss the effectiveness of the service at achieving desired outcomes; and
- c. Identify any existing and future major issues related to administration of the service.

Standard 7.28 Include implementation actions within the Implementation Program that address meeting future demands for public library facilities and services.

SAMPLE IMPLEMENTATION ACTIONS

- Annually assess library needs according to internal standards of performance based on usage.
- Develop and implement an asset protection schedule for capital improvement projects at the library.
- Expand and renovate library facilities and parking areas to meet the community's needs for library services at the following locations: [list].
- Study options to increase collection space and remove limitations that constrain the location of shelving and limit the total number of books that can be shelved on each floor.
- Develop an educational outreach program that offers local schools/teachers curriculum support.

COMMUNITY OR SENIOR CENTERS

Standard 7.29 For municipalities that provide community or senior centers, describe the services provided and associated facilities.

(Recommend including a. and b. to fulfill this standard)

- a. Identify the number of community or senior centers within the municipality; and
- b. Identify the general disbursement and accessibility of the centers throughout the municipality.

Standard 7.30 Provide an assessment of the current and anticipated future issues and needs regarding public community or senior center facilities and services, including any issues related to condition or capacity.

(Recommend including a. through c. to fulfill this standard)

- a. Discuss whether residents are able to adequately access the service;
- b. Discuss the effectiveness of the service at achieving desired outcomes; and
- c. Identify any existing and future major issues related to administration of the service.

Standard 7.31 Include implementation actions within the Implementation Program that address meeting future demands for public community or senior center facilities and services.

SAMPLE IMPLEMENTATION ACTIONS

- Conduct a community survey to determine needs and preferences in community center services.
- Review the impact of potential future growth on community and senior centers and, make sure appropriate service levels will be met.
- Develop a plan for senior services that includes a grassroots “village” program to help seniors age in place.

ENERGY PRODUCTION AND CONSUMPTION

Standard 7.32 (*Recommendation*) Describe the municipal approach to energy production and consumption.

- a. Assess the adequacy of zoning and siting standards for energy production facilities and describe any municipal regulations pertaining to renewable energy production such as solar and wind; and**
- b. Describe any municipal initiatives regarding a baseline assessment of the amount of energy being used by municipal buildings, vehicles, and equipment or, if a baseline assessment has already been completed, conserving and efficiently using energy in public buildings, transportation, and equipment.**

Municipalities are encouraged to be energy innovators by implementing public energy conservation measures, creating municipal energy production facilities, and setting up policies and standards that encourage the use and production of renewable energy. To determine the goals that may be appropriate for your municipality, consider the following guiding questions:

- Is it important to the community that locally generated energy options be available for use by citizens, neighborhoods, and businesses?
- What should be the future role of renewable energy in powering and heating the community, both in the public and private sectors?
- How can land use decisions support energy conservation and efficiency?
- What benefits could the community realize by implementing greater energy efficiency and conservation measures?

Standard 7.33 Include goals that embody the state’s goals for energy production and consumption, and policies to support each goal.

SAMPLE GOALS

- Municipal buildings, vehicles, and equipment will conserve and efficiently use energy.
- The municipality will contain multiple renewable energy production facilities.

SAMPLE POLICIES

- The municipality will allow renewable energy production facilities in appropriate areas.
- Purchase only Energy Star certified equipment.

- Replace end-of-life municipal-owned vehicles with high fuel efficiency and/or electric vehicles.
- Consider energy efficiency in all capital projects and purchases.
- Encourage the installation of on-site renewable energy production facilities for new developments.
- Encourage the installation of on-site renewable energy production facilities in industrial areas.
- Coordinate with the Rhode Island Office of Energy Resources to explore alternative energy solutions, including solar, wind, and hydropower, and energy efficiency techniques for all municipal operations.

Standard 7.34 (*Recommendation*) Include implementation actions within the Implementation Program that address energy production and consumption.

While the Act does not require implementation actions specific to energy production and consumption, municipalities are encouraged to include such actions.

To address energy production and consumption, communities should consider the following guiding questions:

- Are there any no- or low-cost conservation measures that could be enacted to reduce energy consumption?
- What equipment or vehicles may be in need of upgrading in order to improve energy efficiency?
- What building improvements could be made to improve energy efficiency?
- How could savings resulting from energy efficiency and conservation measures be used elsewhere in the budget?
- What types of renewable energy production facilities have been developed in the municipality? In adjacent municipalities?
- What types of resources are available within the community from which renewable energy can be generated?
- What are the general lot sizes for the municipality's zoning districts and what types of renewable energy production facilities may be appropriate for lots of that size?
- What siting standards should the municipality place on renewable energy production facilities to minimize impacts to surrounding properties?
- What incentives could the municipality offer to encourage the production of renewable energy?
- Could the process for permitting renewable energy production facilities be improved to expedite the development of such facilities?
- Would the municipality benefit from the development of renewable energy facilities on municipally-owned property? Are there any publicly-owned parcels that are not currently being used to their full capacity? Are there any buildings on which rooftop renewable energy facilities may be appropriate?

SAMPLE IMPLEMENTATION ACTIONS

- Conduct a baseline assessment of the amount energy being used by municipal buildings, equipment, and vehicles to determine where improvements can be made to conserve and efficiently use energy.
- Establish a program by which savings that result from energy efficiency and conservation measures are used to fund additional energy saving programs and upgrades.
- Create a municipal energy conservation and efficiency program and hire a staff member to oversee the program, using the savings generated by the program to fund their work.
- Develop and maintain an up-to-date energy management plan for attaining ongoing energy savings.
- Monitor monthly energy consumption and costs using a specialized tool such as EPA's Portfolio Manager (www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager).
- Hold community discussions on the types of renewable energy production facilities that may be appropriate for the municipality.
- Conduct an assessment of which types of energy production facilities, especially renewable, may be appropriate for the municipality and compare against existing zoning.
- Amend the zoning ordinance to allow specific renewable energy production facilities within appropriate zoning districts.
- Establish as-of-right or special use zoning for renewable energy production facilities in appropriate areas.
- Establish an expedited application and permit process for renewable energy facilities.
- Adopt performance standards for the use of renewable energy production facilities in private developments.
- Seek Property Assessed Clean Energy (PACE) designation the municipality.
- Adopt a program of exempting renewable energy systems from municipal property taxes, or from permitting fees.
- Undertake a comprehensive assessment of municipally-owned properties to determine if any are suitable for the development of renewable energy facilities.
- Form a municipal advisory committee tasked with providing recommendations toward the development of renewable energy production facilities on municipal property.
- Apply to the Rhode Island Office of Energy Resources for funding for alternative energy solutions, including solar, wind, and hydropower for all municipal operations.

General Guidance on Assessing Existing and Future Needs for Services and Facilities

There are two areas of existing and future need that must be assessed within a comprehensive plan:

- 1) The quality of service; and
- 2) The condition and capacity of facilities and infrastructure.

For all service and facility categories, the assessment of future needs should span the 20-year planning horizon of the comprehensive plan, with the exception of schools which use a 10-year planning horizon.

When assessing quality of service, it may be helpful for communities to consider the following guiding questions:

- Which services and facilities are intended to serve the entire municipality? Which resource-types are intended to serve certain sectors of the population?
- Will the current level of service meet the needs of the projected population over the next twenty years?
- Are any areas or proportions of the population underserved by existing services and facilities?
- Will changes in demographics over the 20-year planning horizon make it necessary to adjust the distribution of services?
- Are there any areas of the community for which greater levels of development are being targeted?

It is imperative that communities assess existing and anticipated future issues related to the condition and capacity of facilities and infrastructure so that the municipality can adequately meet resident needs over the 20-year planning horizon. Changing population and land use patterns may call for changes in the provision of services or changes to facilities and infrastructure. When assessing condition and adequacy of facilities, communities should consider the following guiding questions:

- Will changing needs require a redistribution of facilities in the community?
- Will new areas of the community be targeted for increased services and therefore require new or upgraded facilities and infrastructure?
- Will any existing facilities and infrastructure require expansion or will additional facilities be required over the 20-year planning horizon?
- Is there a program in place to fund maintenance to existing facilities and infrastructure?
- Are any facilities or infrastructure likely to be impacted by natural hazards over the 20-year planning horizon?

SAMPLE POLICIES (GENERAL)

- Encourage cooperation among municipal departments to utilize staff and resources efficiently in the provision of services.
- Discourage or prohibit future construction of municipally-owned facilities within projected flood and sea-level rise areas.
- Coordinate with abutting communities to determine if shared facilities and/or services may increase effectiveness.
- Continually evaluate facilities and services to determine if needs exist related to the quality of service and the condition of facilities.

- Utilize Health Impact Assessments to help make community decisions about services and facilities.
- Restrict development of public lands within Special Flood Hazard Areas.
- Integrate green building strategies into existing municipal facilities, and require green building standards as defined by the U.S. Green Building Council for future construction and/or building retrofits.

SAMPLE IMPLEMENTATION ACTIONS (GENERAL)

- Maintain a database with record of flood impacts on municipal properties and structures.
- Prepare long-range plans for all municipal properties and related structures that are identified as potentially inundated under future sea-level rise scenarios or coastal flood conditions.

PART EIGHT: PLANNING FOR TRANSPORTATION

The Act requires that comprehensive plans “be based on an inventory and analysis of existing and proposed major circulation systems, including transit and bikeways; street patterns; and any other modes of transportation, including pedestrian, in coordination with the land use element. Goals, policies, and implementation techniques for the provision of fast, safe, efficient, and convenient transportation that promotes conservation and environmental stewardship must be identified.” Additionally, planning for transportation in a comprehensive plan provides an opportunity to consider the transportation needs of all community members, including those without access to vehicles and those with physical disabilities, and to consider the health impacts of the transportation options available in the community.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state’s goals and policies for transportation as found in the State Guide Plan and the laws of the state. The goals and policies listed provide guidance as to which goals and policies are most important for local comprehensive planning.

The State’s Long-Range Transportation Plan, [*Moving Forward Rhode Island 2040*](#), is the primary source of goals and policies related to transportation issues. It is a unified plan that also encompasses the State’s *Transit Master Plan*, *Bicycle Mobility Plan*, and *Congestion Management Plan*. Due to the nature of this plan, it is impractical to replicate its extensive list of goals and policies here. Please refer to *Moving Forward Rhode Island 2040* directly, pages 6,7, and 32-39 for goals, objectives, and strategies pertaining to transportation at <http://www.planning.ri.gov/documents/trans/2020/Final-LRTP-December-2020.pdf>

Promote intermodal centers and greater reliance on transit.

[Land Use 2025: Rhode Island’s State Land Use Policies and Plan, LUO 4E, page 2-8](#)

Promote alternative transportation that connects people to housing, jobs, and services.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, Goal 4, Policy 3](#)

Maintain the functional integrity of existing and planned roadways.

[Land Use 2025: Rhode Island’s State Land Use Policies and Plan, LUO 4G, page 2-8](#)

Rhode Island’s airports will exist compatibly within their communities while providing air services appropriate to their roles.

[State Airport System Plan, Goal 5, page 06 .5](#)

Transportation plays a critical role in enabling economic activity in the state of Rhode Island;

[Municipal Road and Bridge Revolving Fund, RIGL subsection 24-18-2 \(1\)](#)

To achieve a cleaner, greener transportation system the transportation plans of Rhode Island should consider the needs of all users of our roadways including pedestrians, bicyclists, public transportation riders, motorists, and citizens of all ages and abilities, including children, the

elderly, and the disabled. By encouraging good planning, more citizens will achieve the health benefits associated with active forms of transportation while traffic congestion and automobile related air pollution will be reduced. Therefore, it shall be the policy of the state to consider people of all ages and abilities and all appropriate forms of transportation when planning roadway projects.

[Safe Access to Public Roads, RIGL subsection 24-16-1 \(1\)](#)

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for recreation. This could include:

- Local or regional corridor or traffic studies;
- The “State Airport Systems Plan,” available at http://www.planning.ri.gov/documents/guide_plan/ASP_report_114.pdf;
- The “Rhode Island State Rail Plan,” available at http://www.planning.ri.gov/documents/trans/Rail/RI_State_Rail_Plan_2014.pdf; and
- The “State of Rhode Island Transportation Improvement Program,” available at <http://www.planning.ri.gov/statewideplanning/transportation/>.

Stakeholders to Include

In addition to the general public, when discussing how best to plan for transportation, municipalities may benefit from involving:

- Owners or operators of businesses or facilities within the community that generate significant amounts of traffic or that ship or receive large quantities of freight;
- Local business owners in heavy trafficked areas;
- The Public Works Director or other public works staff;
- The Police Chief;
- Local organizations or advocates for alternative transportation;
- The RI Department of Transportation;
- The Rhode Island Public Transit Authority;
- The Rhode Island Airport Corporation, if appropriate;
- The Division of Statewide Planning Transportation Unit; and
- Owners or operators of major transportation facilities or services within the community, such as ferries or regional bus lines;

Making Connections Throughout the Plan

Relationship to land use

Transportation and land use have a reciprocal relationship. Communities must plan for the interconnected nature of the transportation network and the existing and future land uses in order

to achieve the goals of both areas. The transportation network must be able to accommodate the future land uses that are desired within the community, and the designated future land uses must reflect the transportation modes that are desired within the community, as well as existing and planned capacity. Also, transportation improvements may impact land use. For example, a new highway interchange or significant roadway improvements may attract new commercial or residential development.

If a community has a strong desire for additional public transportation options, such as new RIPTA bus routes or a commuter rail station, or if such options already exist, the comprehensive plan should plan to allocate new growth at appropriate densities in the areas where such service is desired or exists.

When planning for new or expanded commercial or industrial areas, transportation options and the classifications of surrounding roadways should be a consideration. If more biking and walking options are desired, communities should implement design guidelines and building siting requirements that encourage pedestrian and bicycle activity.

When coordinating the designation of future land uses with the community's goals for the transportation network, communities should consider the following guiding questions:

- What improvements must be made in order for the transportation network to serve land use, economic development, and housing goals?
- What local and highway road infrastructure investments should be made to better support or enhance the local or state economy?
- What types of alternative transportation are appropriate for the community?
- In what locations would it be appropriate to allocate the density necessary to support public transportation?
- Would additional public transportation be appropriately located within a designated growth center?
- What areas would be best served by additional bicycle and pedestrian facilities?
- In what ways can additional design requirements support the use of alternative transportation modes?
- Do existing roadway classifications support future land use designations?

Standards and Guidance for Transportation

Standard 8.1 Illustrate the existing transportation network on a map, including the following components where they exist:

- a. **Major streets, highways, and interstates, (*recommend identification of roadways according to the Highway Functional Classification System*);**
- b. **Bus routes and major bus hubs;**
- c. **Separated bicycle paths;**
- d. **Rail stations and railway lines;**

- e. **Ports and harbors;**
- f. **Airports and airport overlay zones (*illustration of airport overlay zones is recommended*); and**
- g. **Any other major transportation facilities that may exist within the municipality.**

Additionally, while not required, it may also be helpful for the municipality to map:

- Intersections with a large number of crashes;
- Roadway bottleneck locations;
- On-street bike routes and lanes;
- Major pedestrian areas or corridors;
- Transit stops and park-and-ride lots;
- Areas designated for transit-oriented development;
- Freight facilities, such as distribution or transfer centers; and
- Major marine and land shipping routes.

Standard 8.2 Assess the community's transportation system by:

- a. **Describing the transportation modes currently serving the community;**
- b. **Describing the existing and proposed major facilities and routes that serve transit riders, bicyclists, and pedestrians;**
- c. **Describing the existing and proposed major facilities and routes that facilitate the movement of freight, including air, marine, rail, highway, and pipelines;**
- d. **Describing the large-scale transportation facilities that exist within the community if any, such as airports, ports and harbors, bus depots, etc.;**

(Recommend including e. through j. to fulfill this standard)

- e. **Identify the major traffic generators, for example schools, hospitals, military facilities, stadiums, major parks, regional shopping centers, business parks, etc.;**
- f. **Identify the areas of the community that could benefit from the addition of bus or rail transit, and specifically areas where the existing or proposed density or the demographic characteristics of the area's population show a need for transit;**
- g. **Identify the areas of the municipality that are perceived to be unsafe for bicyclists or pedestrians in which the community has stated a desire for the use of such transportation modes;**
- h. **Describe any areas in which linkages exist between transportation modes and identification of the areas that would be better served by improved linkages;**
- i. **Identify and discuss any prevalent transportation issues that exist within the community such as congestion, intersection safety, parking shortages, lack of public transportation in high density areas, barriers to transit access, etc., and the areas of the community in which these issues exist; and**
- j. **Include the following data points:**
 - i. **The percentage of the population that lives in a household without a private vehicle;**

- ii. **The percentage of the working population that uses public transit for commuting purposes; and**
- iii. **The percentage of the working population that bike or walk for commuting purposes.**

Standard 8.3 Include goals that embody the state’s goals for transportation and policies to support each goal.

To determine the goals and policies that may be appropriate for your municipality, consider the following guiding questions:

- How can the transportation network be designed and supported to serve the community’s goals related to land use, housing, economic development, and natural resources?
- In what ways can the community provide greater access for all residents to employment, goods and services, and other daily needs?
- What transportation modes would best support the community’s needs?
- In what areas is there a need for greater compatibility between major transportation facilities and surrounding neighborhoods?
- How can the non-motorized transportation modes be implemented within the community to improve the health of residents?

SAMPLE GOALS

- A fast, safe, efficient, and convenient transportation system that promotes conservation and environmental stewardship.
- A multi-modal transportation network that serves the needs of residents and businesses.
- All modes of transportation will be well-designed, safe, and accessible.

SAMPLE POLICIES

- Support the movement of freight throughout the municipality.
- Consider roadway capacity and the availability of alternative transportation options when making land use decisions.
- Work cooperatively with all major transportation facilities within the municipality when revising plans or making land use decisions in adjacent areas.
- Improve the operating characteristics of the transportation system through safety improvements to the right of way including pavement, signage, signalization, lighting, sight distances, sidewalks, traffic calming, access management, etc.
- Maintain continuing and cooperative planning processes with the airport and encourage responsible land use practices in and around the airport.
- Consider ways to better fund pedestrian and bicycle improvements on local roadways.
- Restrict development of new roads in the areas projected to be inundated from sea-level rise by 2100.

- Actively assist the Rhode Island Airport Corporation in airport planning related activities and projects related to internal land uses, airport expansion, and other issues of community concern.

Standard 8.4 Include implementation actions within the Implementation Program that addresses fast, safe, efficient, and convenient transportation that promotes conservation and environmental stewardship.

(Recommend including a. through c. to fulfill this standard)

- Develop and support a multi-modal transportation network that includes accommodations for bicyclists, pedestrians, and automobiles, and, where appropriate, freight and transit;**
- Improve community livability, environmental stewardship, and user safety through transportation infrastructure design and maintenance; and**
- Improve the compatibility of major transportation facilities with surrounding land uses.**

To determine the implementation actions that would best suit the community in developing and supporting a multi-modal transportation network, consider the following guiding questions:

- How can the community better support the use of alternative transportation?
- Are there areas in which alternative transportation is currently lacking that would benefit from improved or additional transit facilities?
- How do density, the presence of multiple community destinations, or demographic factors impact transit usage?
- Where could expansion of bicycle and pedestrian facilities be incorporated into existing rights-of-way? In which areas would expansion require land acquisition?
- What design, safety, or other standards could create better environments for drivers, bicyclists, pedestrians, and transit riders?
- What immediate transportation needs exist that could be reduced through an improved multi-modal transportation system?
- Are there designated freight routes within the community? Are they appropriately located? How can freight access be improved?
- What infrastructure upgrades are needed to assure or improve safe and efficient movement of freight in the community?
- What programs could be instated to make residents aware of the transportation options currently available to them?
- What actions are needed to support the addition of transit or transit-oriented development in appropriate areas?
- Who can the community partner with to achieve its multi-modal transportation goals?

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 8.4a

- Identify specific areas in which alternative transportation options are desired and revise regulations to support development higher densities and design standards to support those options.

- Adopt site and building design standards that would improve the pedestrian, bicyclist, and transit rider experience on the street.
- Establish a policy or ordinance for the removal of snow from sidewalks and transit stops to increase pedestrian safety.

Communities should consider the effects that their transportation, site, and other design standards have on community livability, environmental stewardship, and user safety. To determine appropriate implementation actions for these, consider the following guiding questions:

- What issues currently exist within the community related to the safety of the transportation network? How can design and maintenance considerations be used to create a safer environment for drivers, bicyclists, pedestrians, and transit riders?
- How do current design standards affect the transportation network? What standards could be improved to lessen negative impacts?
- How can design standards better support the community's goals for circulation, land use, economic development, and general livability?

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 8.4b

- Review local land development and subdivision regulations for appropriateness of design standards and amend the regulations, if necessary, to better balance the use of roadways by both automobiles and people.
- Assess major thoroughfares throughout the community to determine if “road-diets” may be appropriate to lessen the impacts of the transportation corridors on surrounding uses.
- Evaluate each road currently or potentially impacted by sea-level rise, coastal, or riverine flooding to determine appropriate actions to limit impacts to the community.
- Undertake a comprehensive bicycle and pedestrian plan to address user safety and overall mobility within the municipality.

For communities that host major transportation facilities, such as airports, train stations, intermodal facilities, freight transfer facilities, etc., compatibility with surrounding neighborhoods and land uses is important. When considering how to plan for compatibility with major transportation facilities, communities should consider the following guiding questions:

- What major transportation facilities exist within the municipality?
- What are the current concerns within surrounding neighborhoods regarding major transportation facilities?
- If the municipality hosts an airport, in which areas would airport hazard zoning be appropriate?

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 8.4c

- Revise zoning and other regulations to minimize the effects to noise sensitive areas near airports.
- Create a plan for reducing noise impacts on surrounding properties along rail lines.

PART NINE: PLANNING FOR NATURAL HAZARDS AND CLIMATE CHANGE

A Note on the Relationship to the Local Hazard Mitigation Plan

All communities that wish to avail themselves of Federal Emergency Management Agency money after a disaster must adopt a local hazard mitigation plan. The hazard mitigation plan is a different and distinct document from the comprehensive plan. The purpose of a local hazard mitigation plan is to “identify policies and actions that can be implemented over the long-term to reduce risk and future losses.” While this is also one of the purposes of including natural hazards within a comprehensive plan, the local comprehensive plan is used to guide development and infrastructure decisions at the municipal level. Therefore, consideration of natural hazards and climate change impacts within a comprehensive plan must take a holistic view that aligns goals, policies, and actions with land use, transportation, infrastructure, conservation, and other topics with planning for natural hazards.

The comprehensive plan should consider different aspects of natural hazards and climate change than what is typically found in a local hazard mitigation plan. **Therefore, simply inserting the local hazard mitigation plan into the comprehensive plan may not address all the requirements for State approval.** However, comprehensive plans and hazard mitigation plans can benefit each other. If your municipality has a hazard mitigation plan, the information contained within it can serve as the basis for addressing natural hazards in the comprehensive plan. Conversely, the goals, policies, and implementation actions of the comprehensive plan can reinforce the strategies detailed within the hazard mitigation plan.

The American Planning Association has stated:

Mitigation approaches can involve changes in zoning and subdivision codes to steer development to safer locations, applying stricter design standards in hazardous areas, providing economic incentives to owners for building retrofits, and undertaking improvements to public and critical facilities to make them safer and more resilient. [There has been] a long-standing tendency by local officials to assign the responsibility for such plans to emergency managers without realizing the degree to which local planning is integral to effective implementation. Many of the regulatory requirements for adequate local hazard mitigation plans entail skills for which planners are ideally suited, such as marshaling public input and involvement. Many of the most effective long-term solutions involve changes in land- use regulations such as zoning and subdivision codes.⁵

A Note on Assessing Impacts and Vulnerability

It is not expected that comprehensive plans include or be based on full, community-wide vulnerability assessments, or vulnerability assessments for the individual buildings, systems, etc. that exist within the community. A full vulnerability assessment is a complex endeavor which would require a large amount of time and resources to complete.

⁵ APA Planning Advisory Service Memo, July/August 2009

The purpose of including natural hazards and climate change within a comprehensive plan, as defined by the Act, is to “help to avoid or minimize the effects that natural hazards pose to lives, infrastructure, and property.” Understanding this, while not required, it is strongly recommended that the community determine the high-priority issues it would face in the event of future natural hazards and climate change trends and to propose goals, policies, and actions to address the identified issues.

A recommended process for completing a preliminary community vulnerability assessment that will assist in identifying potentially significant issues is provided in Appendix A. Guidance has been given to make this process as straightforward as possible, providing clear direction on each step in the preliminary vulnerability assessment process. It also attempts to identify the relevant data and expertise that will be needed to complete the assessment.

A Note on the Appropriate Planning Horizon

The Act requires “a minimum 20-year planning timeframe in considering forecasts, goals, and policies. When planning for natural hazards and climate change, it would be appropriate for municipalities to use a longer planning horizon. It is critical that communities be aware of, and prepared for, the long-term effects. While the community will determine the time period with which it is most comfortable, the Division of Statewide Planning recommends assessing climate change impacts over the entire design life of structures and infrastructure which may be 50- or 100-years.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state’s goals and policies for natural hazards and climate change as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

Guide development in a manner that will prevent encroachment on floodways, dunes, barrier beaches, coastal and freshwater wetlands, and other natural features that provide protection from storms, flooding, and sea-level rise.

[Land Use 2025: Rhode Island’s State Land Use Policies and Plan, LUP 10, page 2-9](#)

Strengthen regional economic resilience and harness opportunities for innovation.

[Rhode Island Rising: A Plan for People, Places and Prosperity, Goal 5, Policy 5, page 114](#)

Minimize the effects of drought on public health and safety, economic activity, and environmental resources.

[Rhode Island Water 2030, Policy WRM-1-6](#)

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for recreation. This could include:

- The local Hazard Mitigation Plan;
- Any local Harbor Management Plans;
- The “[State Hazard Mitigation Plan](#)”;
- Brown University’s “Preliminary Assessment of Rhode Island’s Vulnerability to Climate Change and its Options for Adaptation,” available at <http://envstudies.brown.edu/Summary-RIClimateChangeAdaptation.pdf>;
- Resources at <http://climatechange.ri.gov/>;
- Any of the RI Coastal Resources Management Agency’s “Special Area Management Plans” that are applicable to the municipality, available at www.crmc.ri.gov/samps; and
- The RI Coastal Resources Management Agency’s “Shoreline Change Maps,” available at www.crmc.ri.gov/maps/maps_shorechange.html.

Stakeholders to Include

In addition to the general public, when discussing how best to plan for natural hazards and climate change, municipalities may benefit from involving:

- Local emergency management officials;
- Local building official;
- Local police, fire, and emergency medical services personnel;
- Public Works Director;
- Residents and business owners who live within high-risk areas;
- The Rhode Island Emergency Management Agency;
- The Coastal Resources Management Council;
- The Department of Environmental Management;
- The Department of Health;
- The Division of Statewide Planning; and
- Federal agencies, such as the Federal Emergency Management Agency, the United States Geological Survey, and the National Oceanographic and Atmospheric Administration.

Making Connections Throughout the Plan

Relationship to land use

One of the primary reasons for including this topic in a local comprehensive plan is to provide an opportunity for the community to make decisions about future land uses in light of the projected impacts of natural hazards and climate change. There are implications to allocating additional density or development, or intending that development continue, in vulnerable areas.

Relationship to all other topic areas

Natural hazard and climate change considerations should be seen as a lens through which all of the plan’s goals, policies, and implementation actions should be viewed. Therefore, there should

be consistency between all of the plan’s goals, policies, and implementation actions and the community’s goals for natural hazards, even more so than with the other topical areas. Communities should review all of the plan’s goals, policies, and implementation actions to ensure that the entire plan is moving the community toward a more resilient future.

Standards and Guidance for Natural Hazards and Climate Change

Standard 9.1 (*Recommendation*) Identify the high-priority natural hazards and climate change trends that are likely to impact the municipality.

When determining the high-priority hazards and trends that are likely to impact the municipality, municipalities should review the list of potential natural hazards outlined in the table below and then consider the following guiding questions:

- What natural hazards has the municipality been historically subject to?
- How frequently have these hazards affected the municipality and surrounding areas?
- What types of natural hazards have had the most devastating or costly impacts?
- How are the impacts of natural hazards likely to change given the changing climate?
- How is/could the municipality’s development pattern, especially the presence of impervious surfaces, amplify the effects of natural hazards and long-term climate change?

The natural hazards described within each community’s comprehensive plan will depend on the history and context of the municipality, but could include:

Flood-Related Hazards

- Riverine flooding
- Coastal flooding
- Flash, urban, and stormwater-based flooding
- Storm surge
- Coastal erosion (with landslide) and shoreline change
- Sea-level rise

Wind-Related Hazards

- Hurricanes
- Tornadoes
- Thunderstorms/windstorms
- Hail
- Lightening

Winter-Related Hazards

- Heavy snow
- Blizzards
- Ice storms
- Extreme cold

Heat-Related Hazards

- Drought
- Wildfire
- High heat days
- Extreme heat waves

Earthquakes

In considering which natural hazards present the greatest concern, municipalities must recognize that climate change is likely to amplify some effects of the natural hazards with which the community is already dealing, that climate change may increase the frequency of certain natural hazards, and that climatic changes may pose new threats to lives, infrastructure, and property.

Standard 9.2 Identify the areas of the community that could be exposed to flooding, including riverine and coastal flooding, sea-level rise, and coastal storm surge by including:

- a. One or more maps that illustrate the areas that would currently be inundated in the event of a 1% and 0.2% storm as they appear on the most recent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs);**
- b. One or more maps that illustrate the areas that would be inundated in the event of Category 1 through 4 hurricanes; and**
- c. One or more maps that illustrate the areas that are projected to be inundated due to 1', 3', and 5' of sea-level rise.**

Standard 9.3 (*Recommendation*) Discuss the high-priority impacts that the municipality would face in the event of future natural hazards and long-term climate change, as identified through a preliminary community vulnerability assessment, by:

- a. Stating the high-priority impacts that the municipality must address, as derived through a preliminary vulnerability assessment; and**
- b. Discussing the ways in which the municipality will address each high-priority impact, which may include undertaking more detailed vulnerability assessments for specific assets, populations, resources, etc.**

Comprehensive plans should focus on those impacts which have been deemed a high-priority, meaning that they are likely to cause loss of life or threats to public health and safety, significant damage, or disruption to important community functions. To determine which impacts are high-priority for the community, municipalities should perform a preliminary vulnerability assessment, that is, a comprehensive assessment of all of the important resources, assets, infrastructure, and populations within the municipality. A sample methodology for conducting a preliminary vulnerability assessment, along with helpful tools and matrices for completing the assessment, is included in a Natural Hazard and Climate Change appendix. It is not required that municipalities follow the outlined process in order to receive State approval, however, it is recommended in order to get a full picture of the potential impacts that the community is facing.

Once the priority impacts have been established, the comprehensive plan should also discuss the ways in which the municipality will address each impact, and then include such measures as implementation actions within the Implementation Program. When discussing high-priority impacts, be specific. Each identified impact should 1) be related to a specific resource, asset, piece of infrastructure, or population, and 2) be linked to a specific natural hazard or climate change trend. See the example impact statements, below:

Wickford Village will be impacted by sea level rise.

The wastewater treatment plant on Service Road will be impacted by riverine flooding.

The community's elderly population will be impacted by high heat days.

This level of specificity will prove useful in determining policies and implementation actions.

Standard 9.4 Include goals that embody the state's goals regarding natural hazards and climate change and policies to support each goal.

Comprehensive plans must include goals that further the state's goals of protecting lives, infrastructure, and property and guiding development away from especially vulnerable areas, and policies to support each goal. Municipalities should consider the following guiding questions:

- How can the community become more resilient to the impacts of natural hazards?
- How quickly will the municipality need to adapt to the impacts of natural hazards and climate change?
- What adaptations would be realistic for our community?
- Are there areas of the community where the only option is protection? Are there areas where relocation might be necessary?
- Given the likely impacts, what policies should guide local development regulations and decisions?
- Given the likely impacts, what policies should guide investment in public infrastructure and facilities?

SAMPLE GOALS

- Our community will be resilient to natural hazards and climate change.
- Systems will be in place to minimize impacts from natural hazards in our vulnerable areas.
- Our community will achieve and maintain a high National Flood Insurance Program Community Rating System score.

SAMPLE POLICIES

- Plan to accommodate a base rate of 3 to 5 feet rise in sea level by 2100 in the siting, design, and implementation of public and private coastal activities.
- Require municipal departments to incorporate climate change in all long-range planning and critical public infrastructure projects.
- Ensure that the local Hazard Mitigation Plan is up-to-date and utilizes the most recent available technical data for natural hazards and climate change.
- Ensure consistency between the Hazard Mitigation Plan, the Comprehensive Plan, SAMP plans, municipal land use regulations and the local Harbor Management Plan.
- Ensure that existing critical facilities are protected or otherwise improved to function in hazard and disaster situations.
- Ensure that new facilities are sited in areas that are not prone to flooding or other hazards.
- Design all new public buildings to include stormwater management best practices including the use of pervious materials, green roofs, and natural drainage systems.
- Improve the municipality's stormwater management system to enhance infiltration and expand stormwater retention areas.
- Ensure that there is adequate funding and administrative support to implement the recommendations in the local Hazard Mitigation Plan.
- Educate the public to better understand the concept of community resilience and the meaning of probabilities and risk, especially for stream and coastal flooding.

- When constructing or renovating parks, playgrounds, and other open spaces, include improvements so that these areas can function as stormwater retention areas.
- Encourage stormwater drainage improvements that reduce runoff and increase the permeability of the built environment.
- Identify tree species that will be most resilient to climate change and use these species in public landscaping projects.
- Expand the tree canopy in urbanized areas of the community to reduce heat impacts.
- Qualify for the Community Rating System or improve or maintain the municipality's current Community Rating System score.
- Ensure that public facility improvements necessary for increasing resiliency have priority placement on the municipal Capital Improvement Program.
- Ensure vulnerable coastal populations receive proper communications before, during, and after storms and are aware of evacuation procedures, location of shelters, and transportation options.
- Ensure all high and significant hazard dams are maintained and in a safe condition.

Standard 9.5 Include implementation actions within the Implementation Program that would help avoid or minimize the effects that natural hazards pose to life, infrastructure, and property.

When determining the implementation actions, communities should consider the following guiding questions:

- What adaptation actions would be beneficial regardless of the occurrence of natural hazards?
- In exposed areas, what infrastructure and community facilities would cause the most community disruption if lost? How can these disruptions be mitigated?
- In exposed areas, are there currently undeveloped lands that could or should be permanently protected from development?
- How can the zoning ordinance or subdivision and land development regulations be revised to better adapt to natural hazards and the changing climate?
- How can the community help to minimize the impacts to special populations?

SAMPLE IMPLEMENTATION ACTIONS

- Define areas of the municipality that fall within these categories: **Protection Zones** that may be hardened to prevent or minimize floodwater intrusion; **Accommodation Zones** that are designed to be temporarily flooded with a high tide or storm event; **Retreat Zones** that have a master plan for managed retreat of structures and residents permanently out of the area; and **Preservation Zones** that have an established management plan for natural or cultural resource preservation.
- Complete vulnerability assessments of all municipal infrastructure to determine priorities for adaptation.
- Complete an assessment to identify the vulnerability of all critical public facilities such as

police and fire stations, hospitals, schools, and other services.

- Develop a priority list of facilities that need to be hardened or otherwise improved and seek funding for improvements.
- Develop an acquisition strategy for properties in the municipality's most vulnerable areas, including determination of an appropriate funding source.
- Revise local subdivision and land development regulations to require the incorporation of natural drainage systems, such as rain gardens and other small water management infrastructure, in private development.
- Undertake a study to identify high priority water-adjacent land that could be designated as permanently protected open space.
- Review land uses in exposed areas to determine whether restrictions are necessary to prevent or lessen potential losses during large storm events.
- Develop design guidelines with examples of attractive design solutions for elevating existing buildings and for development of new elevated buildings.
- Develop and implement a street tree program in the municipality's most urbanized areas.
- Develop and disseminate an educational campaign for the public on reducing risks to private property.
- Create an Emergency and Disaster Preparedness section on the municipal website with information on minimizing risk to private property and on general preparedness.
- Work with the state and FEMA to make brochures and other information available on the municipal website, in the library, and at other destinations, such as community centers.
- Hire a Community Rating System (CRS) coordinator to gain entrance into or to assist in implementing measures to increase the community's rating for the CRS program.
- Implement use restrictions within Special Flood Hazard Areas, as well as in all areas projected to be inundated by future sea level rise scenarios.
- Create a Sea Level Rise Overlay Zone in a defined area along the coast that restricts or prohibits development of new structures and outlines plans for managing parcels and properties after storm events (debris management, removal requirements of damaged/abandoned structures, etc.)
- Establish a process to reexamine the sea-level rise projections and estimated timeframes for rise to maximize protection of assets and public safety within impacted areas.
- Establish clear and consistent setback requirements from boundaries of projected sea-level rise scenarios or salt marsh migration areas.
- Explore the feasibility of structuring a Purchase of Development Rights and Transfer of Development Rights program specific to the Special Flood Hazard Areas to reduce density in the flood-prone areas of the community and the potential to offer qualified property owners a "buyout option".
- Require developers to present preliminary design plans illustrating they have accounted for sea-level rise projections and required setbacks from the boundaries of these areas for any parcels proposed for development or redevelopment.
- Define a clear municipal review process for all developments proposed within the areas projected to be exposed to sea-level rise.

- Evaluate options and conduct a feasibility assessment/cost-benefit analysis to phase out or downzone coastal properties most exposed or vulnerable to future sea-level rise scenarios.
- Provide property owners within the Special Flood Hazard Areas options and incentives for establishing voluntary recorded easements on their properties to dedicate the land on their property as “coastal migration areas.”
- For areas of the municipality with municipal services that are vulnerable to sea-level rise enact a program of impact fees to cover cost of emergency response, future armoring, or otherwise flood-proofing these areas over the long term.
- Provide tax incentives for property owners who voluntarily implement measures for their land and structures to be more resilient to storm impacts and projected sea-level rise.
- Establish a defined “Adaptation Action Area” special planning district within the municipality to focus adaptation best practices in areas most in need of early actions, and create a long-term master plan for this area.
- Evaluate the long-term viability of properties within projected sea-level rise exposure areas and Special Flood Hazard Areas, contact the property owners and ensure they are notified of potential vulnerabilities, and establish procedures to apply long-term maintenance plans for their individual properties and related structures.
- Maintain a separate database of building permits for all properties within the Special Flood Hazard Areas and the projected sea-level rise areas, or flag these properties as part of these zones.
- Implement an emergency permit process in the municipality to expedite permit approvals for predetermined repairs or reconstruction immediately following a storm event.
- Create incentives for homeowners to elevate their homes and offer clearly defined height variances if the elevation of the structure will exceed the local height restriction.
- For new construction, create incentives for builders to design and build structures that are resilient to storm impacts both within and outside of floodzones.
- Ensure Emergency Action Plans for all high and significant hazard dams are completed and submitted to RIEMA for review and approval.
- Review land uses and development in areas potentially inundated by the failure of high or significant hazard dams to determine whether restrictions are necessary to prevent or lessen potential losses.
- Require the building official or other municipal staff become a Certified Floodplain Manager by the Association of State Floodplain Managers.
- Require that municipal board and commission members participate in some form of annual training for hazard mitigation and coastal resilience.
- Evaluate the municipal development plan review procedures, site plan review process and zoning variance parameters related to properties within Special Flood Hazard and sea-level rise areas to formalize adaptation strategies and implementation actions into local regulations.

For information on actions that could be included in the comprehensive plan that would help to achieve a high Community Rating System score, visit <http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-rating-system> or speak to the Floodplain Manager at the Rhode Island Emergency Management Agency by calling 946-9996.

PART TEN: PLANNING FOR LAND USE

For comprehensive plans, planning for land use implies creating a balance of land uses that is appropriate for achieving the community's goals and is reflective of the natural characteristics of the land, its suitability for use, and the availability of existing and proposed public and private services and facilities. Land use planning must also be consistent with available resources and the need to protect public health, safety, and welfare.

Relevant State Goals and Policies

Every comprehensive plan must be consistent with and embody the state's goals and policies for land use as found in the State Guide Plan and the laws of the state. The goals and policies listed below are intended to provide guidance as to goals and policies important for local comprehensive planning.

A sustainable Rhode Island that is beautiful, diverse, connected and compact with a distinct quality of place in our urban and rural centers, and abundance of natural resources, and a vibrant sustainable economy.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUG 1, page 2-6](#)

A statewide network of greenspaces and greenways that protects and preserves the environment, wildlife habitats, natural resources, scenic landscapes, provides recreation, and shapes urban growth.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUG 2, page 2-6](#)

Excellence in community design: communities that are of high quality, energy efficient, safe and healthful, distinct, diverse and aesthetically pleasing; communities that are rich in natural, historical, cultural, and recreational resources; communities that provide abundant economic opportunities.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUG 3, page 2-7](#)

First class supporting infrastructure that protects the public's health, safety and welfare, fosters economic well-being, preserves and enhances environmental quality, and reinforces the distinction between urban and rural areas.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUG 4, page 2-7](#)

Implement and maintain the vision. Continue to support public stewardship for land use through strategic public investments in growth centers, land conservation, development, and enhanced planning capacity at the local and regional levels.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUG 5, page 2-8](#)

Focus growth within the urban services boundary and in centers of different sizes and types; support traditional centers instead of new development.

[Land Use 2025: Rhode Island's State Land Use Policies and Plan, LUO 1A, page 2-6](#)

Create great places by coordinating economic, housing, and transportation investments.

[Rhode Island Rising: A Plan for People, Places, and Prosperity, Goal 4, page 81](#)

Locate housing units in reasonable proximity to employment opportunities, commercial enterprises, leisure time activities and public transportation.

[State Housing Plan, Goal 1-1-4A, page 1.1](#)

Manage and plan for water systems that support sustainable, compact land use and concentrate development within the urban service boundary and or growth centers.

[Rhode Island Water 2030, Goal IMP-3, page 3-81](#)

Other Relevant Documents

Before beginning assessment of existing conditions, needs, and trends, and before developing new goals, policies, and actions, communities should review other state and local plans and other documents that are relevant to planning for land use. This could include:

- Applicable “Special Area Management Plans” of the RI Coastal Resources Management Council, available at <http://www.crmc.ri.gov/samps.html>;
- The Land Use sections of contiguous municipalities comprehensive plans;
- Any neighborhood or corridor plans that may be available; and
- The municipal zoning ordinance.

Stakeholders to Include

More so than with any other topic, discussions of land use should include broad representation from as many people, businesses, and other stakeholders as possible. Additionally, contiguous municipalities should be consulted so that every effort can be made to bring consistency between adjoining land uses.

Making Connections Throughout the Plan

It is imperative that all of the preceding topical areas be reflected in the Land Use element of the comprehensive plan, especially the Future Land Use Map (FLUM).

Relationship to natural resources

As the Future Land Use Map sets the policy direction for the future use of land within the municipality, it is imperative that existing and proposed conservation areas are shown on the FLUM as not appropriate for development. Where development will be permissible, the land use section of the plan, and specifically the Future Land Use Map, must also identify the types and intensities of the development that would be most appropriate given the context of the surrounding natural resources.

Relationship to recreation

The Land Use section of the comprehensive plan must consider the needs for additional recreational areas as identified in the recreation element and the most appropriate locations for these areas. These areas, along with existing recreational areas are to be included on the FLUM.

Relationship to historic and cultural resources

In areas that directly abut historic districts, archaeological sites, scenic view corridors, etc., it is especially important to be sensitive to the context and to site new or infill development appropriately so as not to interfere with the character that these resources confer on a particular area. In particular, infill development should respect the existing character of the area in both design and scale.

Relationship to housing

The single most common use for land is for residences. The locations and densities of these residences will influence the population level of the community and its character. Furthermore, the location, diversity, and density of housing can affect the level and types of services needed to serve its residents. Where and how a community chooses to locate its housing will have direct impacts on public safety, transportation, energy use, service delivery, and economic development. It is this interrelationship of where people live, and at what densities, with the other topics covered in a comprehensive plan that culminate in the allocation of land on the Future Land Use Map.

Relationship to economic development

The Land Use section of a comprehensive plan will determine in broad terms whether the economic activity of that community will be characterized by growth centers, Main Streets, industrial parks, highway retail strips, farms, and all other forms of business. Of particular note is agriculture. Agriculture, more than other land uses, has a special connection to the land and is dependent on site specific conditions, notably soil. In addition to the suitability of the land for agriculture, the Land Use section should also consider the most suitable types of land use for areas adjoining or near agricultural activities. While farms add to the character and economy of a community, they are business operations that can have aspects that could be objectionable to nearby residences. Accordingly, the proximity and density of housing in relation to agricultural activities should be taken into account.

Relationship to services and facilities

The designation of land for future use on the Future Land Use Map should reflect the quantity, quality, and location of a community's existing and proposed services, facilities, and infrastructure. To this end, when crafting the FLUM, the community should be mindful of which areas of the municipality currently have access to services and facilities and which areas do not.

Additionally, water availability must be considered when planning for future land uses, as water availability varies throughout the state. Municipalities should manage and encourage land uses with low potential for impacting the quantity and quality of their potable water supply, and make decisions about future land use based on the availability and capacity of water infrastructure.

Relationship to transportation

It is important to remember, in both the transportation section and the land use chapter of the comprehensive plan, that transportation and land use have a reciprocal relationship. The transportation network must be able to accommodate the future land uses that are desired within

the community. Also, the designated future land uses must reflect the assortment of transportation modes that are desired within the community, including transit and other alternative modes.

Relationship to natural hazards and climate change

One of the primary reasons for including this topic in a local comprehensive plan is to provide an opportunity for the community to make decisions about future land uses, infrastructure and the provision of services and facilities in light of the projected impacts of natural hazards and climate change. Communities should recognize and discuss the implications of allocating development or additional density vulnerable areas.

A Note on the Urban Services Boundary and Local Growth Centers

Land Use 2025 calls for an “urban-rural” approach to development to preserve the different development patterns of our urban and rural areas by focusing growth within urban areas, through the use of an Urban Services Boundary, and within locally-designated growth centers, which can be located in either urban or rural areas. Focusing growth in this way allows better capitalization on existing and future investments and, when coupled with other land conservation measures such as transfer or purchase of development rights, preservation of the state’s valuable undeveloped lands.

Given this framework, it is important for comprehensive plans to identify the location of the Urban Services Boundary relative to the designation of future land uses. It is also important for municipalities to consider where growth should be focused which could translate into the designation of a local growth center, explained in more detail under Recommendations 10A.1, 10A.2, and 10A.3. The formal process for locally designating a growth center, and then having that growth center approved by the State, is to include it within the local comprehensive plan.

Standards and Guidance for Land Use

Standard 10.1 Identify existing land uses on a map.

The easiest way to present the existing land uses within the municipality is to use the land use datasets available on the Rhode Island Geographic Information System (RIGIS) website. When mapping existing land uses, it may be helpful to keep the categorizations as simple as possible. To assist in this, the Division of Statewide Planning recommends starting with the following land use categories as a base and defining the appropriate mix of categories for the community:

- High Density Residential
- Medium High Density Residential
- Medium Density Residential
- Medium Low Density Residential
- Low Density Residential
- Commercial
- Industrial/Manufacturing
- Transportation & Utilities
- Mixed Use Commercial / Industrial
- Mixed Use Commercial / Residential
- Developed Recreation
- Institutional
- Agricultural
- Conservation / Open Space
- Undeveloped (unprotected)
- Wetland
- Water

If using the recommended data set, the residential units per acre and the characteristics of the other categories will match the standard data collected for the state as a whole. If the municipality chooses to use another data set, it would be helpful to provide an explanation of the category characteristics.

Standard 10.2 Identify existing zoning districts on a map and provide a description of each.

All of the municipality's zoning districts and designated overlay zones must be shown on the map. Additionally, the narrative of the land use section must include a description of each zoning district that includes identification of the allowed uses. Providing descriptions of each zoning district is essential to determining whether there are any inconsistencies between the Future Land Use Map and existing zoning, as described under Standard 10.7.

Standard 10.3 Include a Land Use section that contains all the information pertaining to Standards 10.4 through 10.9.

The Act requires that comprehensive plans include a separate section (or chapter) dedicated to discussing land use. The maps required to satisfy Standards 10.1 and 10.2 and the goals and policies required by Standard 10.10 are encouraged to be located in the Land Use section, but may be located elsewhere within the plan, such as a section that includes all of the plan's maps. The implementation actions related to land use, which are required to satisfy Standard 10.11 must be in the Implementation Program, but may also be duplicated in the Land Use section if desired.

Standard 10.4 (*Recommendation*) Include a development capacity (build-out) analysis that is based on the regulations of the existing zoning districts, including estimates of:

- a. Total future population at anticipated build-out; and**
- b. The year by which residential build-out is anticipated, based on historic trends.**

The build-out analysis allows a community to see how much development it can expect based on its current regulations and context. While much of the Land Use section is based on the assessments and findings related to the other topical areas, the build-out analysis is used both to inform some of the required topical assessments, such as the assessment of future water needs and the assessment of housing needs, and to determine whether any changes need to be made in terms of future land use.

Many communities choose to hire a consultant to perform their analysis. Understanding that not all municipalities will have the funds available to hire a consultant, Appendix C provides two basic methodologies to assist in this process, as well as a listing of additional build-out methodology resources.

Standard 10.5 Illustrate future land use and residential density categories on a Future Land Use Map (FLUM) according to the following:

- a. All land areas within the municipality's boundaries must be designated with a future land use category;**

- b. Each future land use category depicted on the FLUM must be labeled within the map's legend;
- c. *(Recommendation)* Include the State's Urban Services Boundary on the FLUM, where applicable;
- d. *(Recommendation)* Identify locally-designated growth centers on the FLUM, if applicable;
- e. The following items must be depicted on the FLUM:
 - i. Existing permanently protected conservation areas;
 - ii. Significant existing, permanently protected outdoor recreational areas; and
 - iii. Areas of the municipality in which residential, commercial, industrial, and agricultural uses are desired as a future land use.
- f. The FLUM must be consistent with Figure 21-02(1) of Land Use 2025: *Rhode Island's State Land Use Policies and Plan* by applying the following minimum and/or maximum residential densities, or, where the municipality feels that consistency may not be appropriate, giving a narrative that describes why the minimum and/or maximum residential density is not warranted:
 - i. Areas shown as "Sewered Urban Development" on Figure 21-02(1) must have a minimum residential density of 5 dwelling units per acre.
 - ii. Areas shown as "Urban Development" on Figure 21-02(1) must have a minimum residential density of 1 dwelling unit per acre.
 - iii. Areas shown as "Conservation/Limited," "Reserve," "Non-urban Developed," "Prime Farmland," or "Major Parks and Open Space" on Figure 21-02(1) must have a maximum residential density of 1 dwelling unit per acre.
- g. For coastal communities, the FLUM must be consistent with the policies and regulations of the RI Coastal Resources Management Council (CRMC), including:
 - i. Aligning the future use designations shown on the FLUM with CRMC's water type classifications (Types 1-6, as applicable);
 - ii. Aligning future use designations shown on the FLUM with CRMC's rules for designated coastal barriers; and
 - iii. Aligning the residential densities shown on the FLUM with any requirements for residential density contained within Special Area Management Plans that are applicable to the municipality.

The FLUM is a policy statement in and of itself, directing municipal decision-makers as to what types of uses are desired in each area and setting a vision for the municipality's future growth over the next 20-years. The FLUM is the visual depiction of the community's desires for types, patterns, and intensities of development and for identifying those areas of the community that are to be dedicated to conservation. It is the underpinning for the regulations found within the zoning ordinance that legally regulate development in the community. A well-constructed FLUM should give the viewer instant recognition of the land uses to be allowed in the community, where they are to be allowed, and what areas of the community will be protected from development.

All of the maps, inventories, and assessments presented in the other topical chapters should be used to inform the Future Land Use Map.

For Standard 10.5e.i Existing permanently protected conservation areas: In order to avoid confusion and potential conflicts, existing permanently protected conservation areas must be shown on the FLUM as intended for conservation or otherwise not available for development. The municipality can determine the best way to categorize conservation areas (e.g. protected open space, conservation lands, etc.), but the categories must reflect the intention of permanent conservation. Municipalities may wish to show anticipated or proposed conservation areas on the FLUM as well.

For Standard 10.5e.ii Significant existing, permanently protected outdoor recreational areas: In some instances, existing permanently protected passive outdoor recreational areas will coincide with existing permanently protected conservation land. Permanently protected outdoor recreation areas not otherwise identified as protected and unavailable for development must be displayed on the Future Land Use Map using an appropriate land use category such as “Protected Open Space” or “Recreation (Protected)”. Additionally, though not required for State approval, communities may wish to map other significant recreational areas without permanent protection.

For Standard 10.5f consistency with Figure 21-02(1) of Land Use 2025: Future Land Use Maps must be consistent with the minimum and maximum residential densities outlined in Figure 21-02(1) of Land Use 2025. However, if the municipality believes that consistency may not be appropriate in specific areas, a narrative must be given describing why the minimum or maximum residential density is not appropriate. In most instances, this will be because the area is already developed. However, Figure 21-02(1) of Land Use 2025 provides general standards, and there may be undeveloped areas with site conditions where a density different from the standard would be appropriate. See Appendix B for additional guidance and recommendations.

For Standard 13.5g.i CRMC’s water type classifications: The CRMC has assigned the state’s tidal waters, coastal ponds, and adjacent upland areas to one of six use categories, commonly referred to as “water type classifications.” Each of these six categories have findings, goals, and policies pertaining to the category (see CRMC’s Red Book (650-RICR-20-00-1)). The six categories are:

- Type 1 - Conservation Areas
- Type 2 - Low-Intensity Uses
- Type 3 - High Intensity Boating
- Type 4 - Multipurpose Waters
- Type 5 - Commercial and Recreation Harbors
- Type 6 - Industrial Waterfronts and Commercial Navigation Channels

The CRMC’s water type classifications are the state’s designated priority use for all coastal waters and adjacent upland areas within the Council’s jurisdiction. The land uses designated on the FLUM for lands abutting coastal waters must allow, and not detract from or interfere with, the priority uses. For example, if a coastal area has the water type classification of “Type 6 -

Industrial Waterfronts and Commercial Navigation Channels,” the comprehensive plan must allow industrial uses within the land use categories that are adjacent to these waters. Additionally, in this example, the comprehensive plan must not identify the local priority for the area as anything other than industrial. See http://www.crmc.ri.gov/maps/maps_wateruse.html for CRMC’s maps of Water Use Categories.

If a municipality wishes to designate a future land use that is not compatible with the designated water type classification, it may request the CRMC to amend the water type classification for the subject area to allow for the preferred adjacent land use. While comprehensive plans may contain a discussion of, and implementation actions to pursue a change in a water type classification, the FLUM must reflect the water type classification currently in effect.

For Standard 13.5gii CRMC’s rules for designated coastal barriers: CRMC defines coastal barriers “are islands or spits comprised of sand and/or gravel, extending parallel to the coast and separated from the mainland by a coastal pond, tidal water body, or coastal wetland.” There are three primary types of barriers designated by CRMC:

- Undeveloped Barriers: essentially free of commercial/industrial buildings, (excluding public utility lines) houses, surfaced roads, and structural shoreline protection facilities;
- Moderately Developed Barriers: essentially free of houses, commercial/ industrial buildings and/ or facilities (excluding utility lines) that contain surfaced roads, recreational structures, and/or structural shoreline protection facilities; and
- Developed Barriers: contain houses and/or commercial/industrial structures; they may also contain surfaced roads and structural shoreline protection facilities.

The FLUMs of coastal communities must demonstrate consistency with the policies and prohibitions for the designated barriers as outlined in CRMC’s Red Book (650-RICR-20-00-1). Some of the policies and prohibitions found in CRMC’s Red Book that are of particular importance to comprehensive plans include:

- The prohibition of new development on moderately developed barriers, except where the primary purpose of the project is restoration, protection or improvement of the feature as a natural habitat for plants and wildlife; and
- The prohibition of new construction of infrastructure or utilities or expansion of existing infrastructure or utilities on all barriers, except for infrastructure that is intended to serve the needs of the state.

For Standard 13.5g.iii Aligning the residential densities shown on the FLUM with any requirements for residential density contained within Special Area Management Plans:

The CRMC has created seven Special Area Management Plans (SAMPs) that affect coastal lands within the state. These plans address specific regional issues and present ecosystem-based management strategies that are consistent with the Council’s legislative mandate to preserve and restore ecological systems. See <http://www.crmc.ri.gov/samps.html> for the SAMPs and the municipalities that intersect with each SAMPs jurisdiction.

The goals, policies, and implementation actions of comprehensive plans of communities within the jurisdiction of a SAMP must not be in conflict with the policies of the applicable SAMP.

The Narrow River and the Salt Ponds Region SAMPs contain residential density requirements for new developments, as well as prohibitions of sewer and water line extensions in areas designated as “Lands of Critical Concern” and “Self-sustaining Lands” (as defined within the SAMP), except when certain criteria are met. For communities affected by the Narrow River and the Salt Ponds Region SAMPs to receive State approval, the residential densities depicted on the FLUM must be consistent with the density requirements outlined in the applicable SAMP. If any future Special Area Management Plans are developed that include land use requirements, municipalities will need to review their comprehensive plans, and especially their FLUMs, to ensure consistency with the new requirements.

Standard 10.6 Include descriptions of each of the future land uses and densities shown on the Future Land Use Map that discuss, at a minimum:

- a. The general uses that are desired within the future land use category (residential, commercial, industrial, agricultural, civic, institutional, open space, recreation, etc.); and**
- b. The average residential density or the range of residential densities that are desired within the future land use category if residential uses are to be permitted.**

The inventories and analyses of the various topical areas as well as consistency with State goals and policies need to be considered in the development of a Future Land Use Map, including:

- The results of a future development capacity analysis;
- The locations and sensitivities of the community’s natural resources;
- The potential exposure of the land to natural hazards and climate change trends;
- The availability of facilities and services;
- The characteristics of the transportation network, including where there is access to transit or where freight lines may exist;
- The impacts of future land use designations on the transportation system;
- The contents of the state’s land use plan, *Land Use 2025*;
- The policies and regulations of the RI Coastal Resources Management Council;
- The comprehensive plans and FLUMs of contiguous municipalities; and
- Where growth will be targeted including consideration of a growth center.

While municipalities have considerable discretion in the presentation of a future land use map, all communities should use a standard base map that is used for other maps found in the plan for consistency and comparisons. In crafting the FLUM:

- Determine the level of detail to be displayed. Some municipalities may wish to use parcel data in which the borders between adjacent land uses can be displayed in fine detail while other communities may wish to use a general approach where the border between adjacent land uses is less specifically defined.
- Determine the future land use categories to be displayed. In choosing the future land use categories, consider whether it is appropriate to use the land use categories displayed on the plan’s Existing Land Use Map, as there are positives and negatives to both

approaches. Maintaining consistency between the categories on these two maps facilitates an easy comparison of where the community is today versus where it intends to be in the future. However, existing land use categories may not depict all of the intended changes that the municipality would like to see happen regarding the land use pattern.

With respect to existing undeveloped areas, it is important to display them as either their intended future use (e.g. residential, business, etc.) or as conserved, open space areas.

A Note About Using Zoning Districts for Future Land Use Categories: Some municipalities may wish to use their zoning districts as the basis for future land use categories. While this is permissible, there is a distinct disadvantage in doing so. The Act requires that a municipality's zoning be consistent with the comprehensive plan. In instances where a change in zoning would result in creating a conflict with the future land use map, the FLUM must be amended prior to the zone change. By using zoning districts as the basis for future land use categories, a municipality would face the prospect of having to amend their comprehensive plan for all zoning changes, no matter how minor.

Standard 10.7 Analyze any inconsistencies between existing zoning districts and the desired future land uses illustrated on the Future Land Use Map:

- a. Describe the existing zoning in the areas that have been determined to be inconsistent;
- b. Describe the future land use designations of areas that have been determined to be inconsistent, and
- c. Clearly delineate on a map the areas that have been determined to be inconsistent.

To determine areas where inconsistencies exist, the future land use designations and their descriptions must be compared to the existing zoning districts, both in terms of allowable uses and residential densities. Any instances where the uses or residential densities do not align are to be considered inconsistent. Inconsistencies can take a number of forms, including instances where:

- The FLUM designates a use of the land (e.g. residential) that the existing zoning does not allow (e.g. commercial);
- The FLUM designates limited development in an area (e.g. open space) and while the existing zoning allows that use, unwanted development is likely (e.g. residential zoning that allows open space);
- The FLUM designates residential density in an area (e.g. high density) that is not allowed by the existing zoning (e.g. low density residential); or

Standard 10.8 For any inconsistencies that exist between the existing zoning districts and the Future Land Use Map and categories, propose resolutions by selecting and discussing one of the following options:

- a. Propose to change the zoning of a particular area to an existing zoning district that is consistent with the future land use designation, giving a brief description of the zoning district that includes the allowed uses; or

- b. Propose the creation of a new zoning district that would achieve consistency with the future land use designation, and the application of the new district to the inconsistent area, giving a brief description of the intended zoning district that includes the expected allowed uses.**

For each area in which an inconsistency between the current zoning and future land use designation is present, the comprehensive plan must propose a resolution. Please note that “inconsistencies” only refer to existing zoning and future land use, not with existing development (e.g. non-conforming lots of record). If the community believes that changing the zoning for a particular area or parcel is not feasible, the Future Land Use Map should be adjusted to reflect the zoning requirements during the drafting process.

For those areas determined to be inconsistent, comprehensive plans may also propose a one-time moratorium on all development within the specified area for the twelve months subsequent to the adoption of the comprehensive plan in order to limit development while the inconsistency is being resolved. If a development moratorium is desired, implementation actions must be included in the Implementation Program that would 1) enact the moratorium as an ordinance; and amend the zoning ordinance and map within twelve months of plan adoption.

The Implementation Program must also provide the schedule by which the zoning ordinance and map will be amended to bring consistency with the FLUM.

Standard 10.9 (*Recommendation*) Discuss any inconsistencies that exist between the desired future land uses illustrated on the Future Land Use Map and the comprehensive plans of contiguous municipalities.

- a. Identify the conflicting future land use designations;**
- b. Discuss the conflict that seems to exist; and**
- c. Include a brief explanation of why the future land use was selected for the area.**

When assessing consistency with the comprehensive plans of contiguous municipalities, communities should focus on comparing the Future Land Use Maps and future land use designations found within the plans, especially in areas where municipal borders meet.

Determining whether a future land use conflict exists will require an understanding of the intent or priorities of the future land use designations. It is important to remember that different, bordering land uses do not necessarily create a conflict and that a general mix of land uses within a given area can be beneficial. For example, a medium-density residential area bordering a neighborhood commercial or mixed-use area may actually be an appropriate mix of uses. Please note that it is not necessary that all future land use conflicts be resolved, simply that the conflicts are acknowledged and discussed and that, if possible, actions are taken to minimize conflicts as noted by Standard 10.11b

Ideally, communities should consider the use of resources that cross municipal boundaries, such as water and transportation corridors, and how their policies and actions may affect the other municipalities who share the resource. Also, communities could consider the ways in which their development patterns are affecting contiguous municipalities in terms of resiliency to

natural hazards and climate change. For example, the creation of impervious surfaces at the head of a river may have large consequences along the remainder of the river.

Standard 10.10 Include goals that embody the state’s goals for land use and policies to support each goal.

The goals of the state call for sustainable land use patterns that create distinct, high-quality places, orderly growth and development that respects and reflects the context in which it is happening, and a focus on developing within the Urban Services Boundary and locally-designated centers rather than in undeveloped areas. When determining the goals and policies that may be appropriate for the municipality, the following guiding questions should be considered:

- Does the municipality contain an Urban Services Boundary?
- Does the current growth pattern respect and reflect the natural resource context of the municipality?
- Does the community wish to target growth to certain areas of the municipality? Does the community wish to create one or more growth centers?
- Are there currently high-quality places within the municipality? If not, would the community like to improve the quality of its places? If so, is the community seeking to enhance these places or create more of them?

SAMPLE GOALS

- Achieve a balanced and harmonious development pattern that promotes economic growth and reinvestment while preserving neighborhood integrity, environmental and aesthetic quality, and overall livability.
- Sustain our municipality’s high quality of life and preserve its unique attributes.
- Create walkable neighborhoods and a connected transportation network for all modes and people of all ages.
- Preserve and maintain our agricultural landscape and heritage.

SAMPLE POLICIES

- Manage and direct growth in a way that minimizes damage to the environment and reduces sprawl.
- Participate in regional planning efforts with appropriate partners and neighboring communities.
- Discourage additional commercial sprawl/large-scale strip retail development.
- Encourage the redevelopment of vacant and underutilized commercial properties.
- Allow flexibility in regulations to support the needs of agricultural businesses.
- Protect and enhance the natural scenic beauty and heritage our coastal community.
- Ensure the continued strength and stability of our neighborhoods by directing growth to appropriate areas and respecting valued development patterns and attributes.
- Preserve significant buildings and view corridors.

- Encourage growth in areas best suited to provide access to jobs, housing, and transit.
- Promote a balance of uses to support sustainable patterns of development providing healthy, walkable neighborhoods, thriving business districts, and a high quality of life.
- Promote the development of a wide range of residential land uses to ensure a diversity of housing choices for all residents.
- Permit institutional growth and expansion in designated areas while limiting their encroachment and negative impacts on the neighborhoods in which they are located.
- Promote design excellence and historic preservation through appropriate land controls.
- Consider scenic resources when reviewing the type, location, and intensity of land uses.

Standard 10.11 Include implementation actions within the Implementation Program for land use that address:

- Promoting orderly growth and development;**
- (Recommended as appropriate)* Minimizing potentially conflicting land uses in contiguous municipalities and appropriately using shared resources;**
- Ensuring that municipal land use regulations are consistent with the goals and policies set forth within the comprehensive plan; and**
- Amending the zoning ordinance and map to provide consistency with the comprehensive plan, if applicable.**

This standard calls for actions needed to ensure that all growth and development within the municipality is consistent with:

- The natural characteristics of the land;
- The suitability of land for the intended use;
- The availability of necessary resources; and
- The coordination growth and the intensity of development with the provision of services and facilities.

Among other things, these considerations can take the form of actions that call for revisions to the zoning ordinance or subdivision and land development regulations, if necessary, to better coordinate project reviews, the alignment of new development proposals with the provision of services and facilities, the creation of or an increased level of service for specific community services and facilities, or the development of a growth center. Municipalities should consider where the current processes, regulations, and land use decisions are ineffective at promoting orderly growth and development and attempt to bring more coordination with these important aspects of planning.

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 10.11a

- Review and update the zoning ordinance and subdivision regulations to ensure smart growth principles are encouraged.
- Amend the zoning ordinance and land development regulations to include incentives to attract desirable development and redevelopment to areas of town with existing

infrastructure.

- Purchase development rights with land trusts and private/public land preservation organizations to agricultural parcels.
- Create incentives for property owners/developers to build mixed-use properties.
- Adopt mixed-use zoning ordinance which allows for mixed use in all commercial areas.
- Establish a Conservation Commission.
- Adopt a Conservation Design ordinance.
- Establish criteria for prioritizing the acquisition of conservation areas.
- Research how form-based zoning could complement Commercial Design Standards.

SAMPLE IMPLEMENTATION ACTIONS FOR STANDARD 10.11b

- Initiate quarterly meetings with the chief executives and/or municipal planners from contiguous municipalities to discuss issues and opportunities.
- Produce a recommendation report of potential mitigation measures for areas of the municipality in which inconsistencies of land use with contiguous communities have been identified.
- Notify contiguous municipalities of any new development projects that are proposed for lands that abut the shared borders.

In addition to those implementation actions that specifically bring consistency between the zoning ordinance and map and the FLUM, there may be other parts of the comprehensive plan that require amendments to other municipal regulations, such as the subdivision and land development regulations, historic district regulations, design guidelines, etc. When crafting the comprehensive plan, communities should take note of all of the ways in which current regulations would need to change in order to fully align with the goals and policies of the plan, and include those items as actions within the Implementation Program.

Standard 10.A Designating a Local Growth Center

Communities have the option of using their comprehensive plans to designate, and get State approval of a local growth center. If a community wishes to designate a local growth center, the following requirements must be met.

Standard 10A.1 Include a map of the growth center, illustrating:

- a. The exact boundary of the land to be included within the growth center; and**
- b. The future land use designations within the growth center.**

It is important that an exact boundary of the growth center be identified. If the community is unable to identify an exact boundary at the time of the comprehensive plan update, it is likely that the growth center is still in the conceptual stage and is not quite ready for designation. If that is the case, the municipality is free to map a rough outline of the growth center, but this will not qualify as designating the growth center.

All growth centers must include a mix of uses. The specific mix of uses desired for the growth center will depend on the purpose of the growth center, as described in the next section, but could include housing, employment opportunities, schools, commercial and industrial uses, and public spaces and buildings. If the community wishes to determine the exact mix of uses as the growth center develops, the center can be given the Future Land Use designation of “mixed-use,” or “growth center.” It is important, however, that whatever designation is given, it is the same as the designation given on the Future Land Use Map, and it is described as required under Standard 10.6

However, the growth center will be most effective if there can be some targeting of uses within the land area designated as the growth center. For example, it may be appropriate to have a residential/commercial mixed-use core, with mixed- or single-use buildings, and to surround that core with higher density residential uses so that the commercial uses in the center can be supported. Some thought should be given to the best and highest use of the land within the growth center, in order to determine the appropriate mix of uses and the way in which the targeted uses should relate to each other.

Standard 10A.2 Include a narrative that discusses:

- a. The economic purpose or reason for the establishment of the growth center, including the desired outcomes of designation, and the types of businesses, residents, and visitors that the growth center is likely to serve;**
- b. The public investment priorities that will be targeted for the growth center once adopted;**
- c. The ways in which the growth center compliments what is going on in the rest of the municipality, neighboring municipalities, and the rest of the state, in terms of services and housing choices provided to residents and visitors, and the economic purpose;**
- d. The impact that designating the growth center is expected to have on development and investment patterns in areas of the municipality outside of the growth center;**

- e. **The ways in which the municipality will incentivize growth within the center and/or limit growth outside of the center;**
- f. **The potential impacts of natural hazards and climate change on the growth center, if any, and the ways in which the municipality intends to mitigate these impacts; and**
- g. **The ways in which the growth center meets each of the following criteria:**
 - i. **Encourages growth in an area with existing infrastructure and services;**
 - ii. **New infrastructure is planned to support compact growth;**
 - iii. **Includes mixed land uses;**
 - iv. **Creates a range of housing opportunities and choices;**
 - v. **Protects and enhances critical environmental resources;**
 - vi. **Provides a variety of transportation choices;**
 - vii. **Promotes community design that contributes to a sense of place; and**
 - viii. **The center is appropriately scaled.**

In addition to the map, in order to receive State approval of the designated growth center, the Land Use section must include a discussion of all of the items listed in 10A.2.a through 10A.2.g. This narrative can include as much detail as the community thinks is appropriate. If there is a lot of support and momentum behind the growth center's designation, it may be appropriate to do some in-depth analysis on the discussion points. However, if there are limited resources, time, or support, it is acceptable for the discussion to be a high-level overview. To receive State approval, and therefore designation, the plan must simply demonstrate that the community has thought through the important issues.

To complete these discussion points, it may be helpful for municipalities to consider what "type" of growth center is desired. The type of growth center being targeted will depend on the context of the place (urban, suburban, or rural), the desired form or character of the center, the targeted economic function, the type of transit access available, and the market area that the growth center is intended to service.

In assessing how the growth center meets the criteria listed under 10A.2g, it would be helpful to consider the following.

i. Encourages growth in an area with existing infrastructure and services

While not appropriate for all growth centers, the preferred locations are those with existing infrastructure and public services (e.g. public water, sewers, transportation, wastewater management districts, etc.) The reuse of brownfields, conversion of underutilized structures, and infill projects should have priority over greenfield sites.

ii. New infrastructure is planned to support compact growth

In instances where existing infrastructure is not adequate to support the proposed growth center, the comprehensive plan should document and explain what new infrastructure will be needed, how it will be phased to coincide with the development of the new center, and how it will be designed to support compact growth over a sprawl development pattern.

iii. Includes mixed land uses

Centers must include a mix of housing, land uses that allow for significant employment opportunities (e.g. commercial, industrial, etc.), and civic/public buildings and spaces. Single-use developments, such as business or industrial parks, are appropriate within a growth center as long as they are only one component of the wider mix of land uses within the center.

iv. Creates a range of housing opportunities and choices

For this criterion, the community should consider the assessments that were conducted for the housing component of the comprehensive plan. Housing opportunities and choices should consider the appropriate mix of single-family, multi-family, rental units, and price ranges to address as wide a spectrum of housing needs and income levels as possible.

v. Protects and enhances critical environmental resources

Growth centers should be chosen so as to:

- Avoid converting prime farmland into development;
- Avoid fragmenting existing greenspace, especially forests and natural habitat areas;
- Avoid negative impacts to critical resource areas such as public water supplies, wellhead protection areas, groundwater aquifers, important habitat areas, unfragmented forests, or high value recreational waters;
- Avoid negative impacts to important cultural resource areas such as scenic vistas, scenic roads, or historic/archeological sites;
- Enhance community greenspaces such as parks, sports fields, walking/biking paths, etc. and,
- Enhance the connections of greenspace and greenways across municipal borders.

vi. Provides a variety of transportation choices

The preferred locations for growth centers are those with convenient access to mass transit (existing or planned) and centers are encouraged to include public transit hubs/stations to connect local routes. The density, layout, and design of centers should encourage public transportation, walking, and biking over automobile use for local trips. Automobile traffic should be accommodated by interconnected streets providing multiple route options to minimize congestion.

vii. Promotes community design that contributes to a sense of place

Community design within a center should encourage interactions among people, facilitate vibrant and safe street life, and maximize the sense of harmony with natural settings. Centers should seek to exhibit several or all of the characteristics of walkable communities: physical indicators of where the neighborhood begins and ends, relatively narrow streets with sidewalks, residential buildings in close proximity to commercial destinations, non-residential buildings with many windows and doors set close to the street, building entrances accessible to sidewalks, on-street parking, trees and/or architectural elements that protect pedestrians from weather, use of traffic calming devices including right-angled street corners, grid street patterns with connectivity to adjoining neighborhoods, and streetscapes that include amenities such as benches, good lighting, informative signage, and plantings. The preservation of older and historic buildings also contributes to a community's sense of place.

viii. The center is appropriately scaled

While the configuration of an identified growth center will vary from community to community, in accordance with community character and type of center desired by the municipality, growth centers should be small enough to be comfortably walked. Except in the state's five historic urban core communities, municipally-identified growth centers should be no larger than an area with an approximately $\frac{1}{4}$ to $\frac{1}{2}$ mile radius from its center to its edge in all directions (approximately $\frac{1}{2}$ square mile to maximum of 1 square mile area).

Standard 10A.3 Include implementation actions within the Implementation Program that would help to implement the designated growth center.

In order to create the growth center, comprehensive plans must include implementation actions related to catalyzing the growth center. If designating a growth center, the implementation actions related to the growth center must be included in the plan's Implementation Program. The implementation actions selected for the specific growth center will depend heavily on the context of the municipality, the economic purpose of the growth center, and the ability of the municipality to invest in or incentivize the growth center. Municipalities should consider the following guiding questions to determine what implementation actions to undertake:

- What are the best qualities of the existing neighborhoods and villages in the municipality? Are there any barriers in the zoning code or other regulations that prevent enhancing these existing places or developing places with similar qualities?
- What is the economic reason for the new growth center? What purpose will it serve in the community? Will it be a place of employment? If so, who will work there and how will they get there?
- Does the intended area of the growth center have the environmental capacity to absorb new growth? Does it have access to water, or can water be accessed at a reasonable price?
- Can the growth center accommodate housing types that might be missing in the community or housing types that may be attractive to seniors, working families, young adults, etc.?
- What civic functions might the growth center play? Will it be a gathering spot for residents? A center for municipal services?

Standard 10.B. Maintaining Local Growth Center Designation

Communities that have already designated a growth center in a State-approved comprehensive plan can choose to maintain the growth center's approval status by completing the following requirements. If the following requirements are not met, State-approval of the growth center will lapse.

Standard 10B.1 Include a map of the growth center, illustrating:

- a. The exact boundary of the land to be included within the growth center; and
- b. The future land use designations within the growth center.

The growth center map may be carried over from the previously approved comprehensive plan or the community may choose to amend the boundaries of the growth center. In either instance, it is important to remember that all growth centers must include a mix of uses. To be effective, there should be some targeting of uses within the land area designated as the growth center.

Standard 10B.2 Include a narrative that discusses:

- a. The economic purpose or reason for the establishment of the growth center, including the desired outcomes of designation, and the types of businesses, residents, and visitors that the growth center is likely to serve; and**
- b. The public investment priorities that will be targeted for the growth center.**

If the community intends the growth center's economic purpose to remain the same, the relevant portions of the growth center narrative from the previously approved comprehensive plan may be reiterated. If changes to the growth center's purpose are necessary, those changes, and the reasons for them, should be noted in the narrative. Any public investments that have already occurred within the growth center should be discussed, as well as any investments that are intended for the future.

Standard 10B.3 Include implementation actions within the Implementation Program that would help to further implement, maintain, or enhance the designated growth center.

PART ELEVEN: THE IMPLEMENTATION PROGRAM

What is the Implementation Program?

The Implementation Program is the work program for achieving the comprehensive plan's goals. The Implementation Program is a single section of the comprehensive plan containing the public actions that will be undertaken to make progress towards achieving the goals, and the process by which the zoning ordinance and map will be amended to align, if necessary, with the comprehensive plan. When crafted well, the Implementation Program provides a detailed list of the public actions that are necessary to achieve the community's goals. Elected officials, municipal staff, residents, business owners, and other stakeholders should be able to read the Implementation Program and understand specifically how the municipality anticipates achieving the goals it has set.

A note about the Five-Year Implementation Assessment Report: Per the Act, not more than five years after the adoption of a comprehensive plan, the municipality is required to prepare and submit to the Division of Statewide Planning a Five-Year Implementation Assessment Report intended to assist the municipality and the State in determining which implementation activities have been successful and which require additional assistance or resources. The Implementation Program is the basis for measuring the municipality's progress on achieving the goals. Therefore, in crafting implementation actions, keep in mind that the actions should be stated with sufficient clarity and detail to be able to assess whether or not they have been accomplished.

Standards and Guidance for the Implementation Program

Standard 11.1 Include a separate Implementation Program that meets all the requirements of this section and includes specific implementation actions as required by sections 2 through 10 of these Standards.

While it is not necessary to include the plan's goals and policies within the Implementation Program, it is strongly recommended that the goals and policies be listed along with the implementation actions that will be undertaken to achieve them. Organizing the Implementation Program in this way will help the community use the document for its intended purpose - achieving the goals.

Standard 11.2 Include the specific municipal implementation actions to be undertaken to achieve each goal of the comprehensive plan.

- a. Include sufficient, specific implementation actions to which the municipality will commit in order to achieve each of the comprehensive plan's goals;
- b. Provide a timeframe for each implementation action;
- c. *(Recommendation)* Assign a responsible party to each implementation action, including the city or town council for actions that will require the amendment of codes and ordinances by the municipal legislative body; and
- d. Include an action to implement a development moratorium post-adoption of the comprehensive plan if one is so desired.

For Standard 11.2b, the timeframe can be given in whatever terminology best suits the municipality – short-, medium- and long-term; one-year, five-years, ten- years; etc. – but the terminology must be clearly defined within the Implementation Program. If short-, medium-, and long-term are used, there must be an explanation as to what length of time is being indicated by the terms.

For Standard 11.2c, to help direct implementation, each action should be assigned to a responsible party within the municipality. For those actions requiring amendment of codes and ordinances, the city or town council would be assigned as a responsible party. Though not required, communities may also choose to indicate entities that will assist the responsible party in carrying out the action. In some instances, it may be appropriate to list State agencies as partnering with the municipality on projects or to provide direction to State agencies when implementing projects that the agency is already undertaking. The Implementation Program, however, cannot direct State agencies to undertake work on projects that are not already in their work plans, and cannot set the budgets or work priorities of State agencies.

Standard 11.3 Identify any implementation actions involving the expansion or replacement of public facilities that are reflected in the current Capital Improvement Program.

Standard 11.4 Specify the schedule by which the zoning ordinance and zoning map will be amended to provide consistency with the comprehensive plan by:

- a. **Specifying the amendments that will be undertaken within the first twelve (12) months after adoption of the comprehensive plan that are related to any desired development moratoriums;**
- b. **Specifying, in 2-year increments, (*“2-year increments” are recommended*) the amendments that will be undertaken to bring consistency with the comprehensive plan; and**
- c. **(*Recommendation*) Proposing all amendments to be completed within the 10-year period subsequent to the adoption of the comprehensive plan.**

For Standard 11.4a, the Act allows municipalities the option of implementing a one-time moratorium on development after the adoption of the comprehensive plan for the purpose of providing interim protection for a planned future use or uses. The moratorium is available only to those municipalities whose Implementation Program schedules an amendment to the zoning ordinance and map within the 12-months following adoption of the plan. The moratorium may regulate, restrict, or prohibit any use, development or subdivisions, and must comply with the following provisions:

- The moratorium must be enacted as an ordinance;
- The moratorium must only be applicable in areas identified on the map within the comprehensive plan in which the current zoning is inconsistent with the comprehensive plan; and
- The ordinance must specify the purpose of the moratorium, the date it shall take effect and the date it shall end, the area covered by the moratorium, and, the regulations, restrictions, or prohibitions established by the moratorium.

If a moratorium will be sought, the Implementation Program must also identify which areas of inconsistency will be targeted for the moratorium, based on the priorities of the comprehensive plan. It is up to the municipality how much area will be subject to the moratorium, but the comprehensive plan should provide general direction to the municipal legislative body as to the wishes of the community.

For Standard 11.4b, the Implementation Program must provide a schedule for developing and adopting amendments, indicating which portions of the identified inconsistencies will be addressed during which timeframes. The phasing of zoning ordinance and map amendments should be based on the community's priorities and the goals of the comprehensive plan. Per the Act, failure to amend the zoning ordinance within the time laid out by the comprehensive plan, or by the expiration of the moratorium period, may result in the denial or recession of State approval. Therefore, it is critical that the schedule outlined in the Implementation Program present a realistic estimate of the timing of municipal actions.

PART TWELVE: MAPPING

Standards and Guidance for Mapping

Standard 12.1 All maps must have a title that is reflective of the data shown on the map.

Standard 12.2 All maps must have a legend that provides information about all of the data presented within the map.

Standard 12.3 Information about the source(s) of all of the data being shown on the map must be clearly identified.

Standard 12.4 All map symbology, including colors or shading of features, must be clearly distinguishable.

Standard 12.5 On all maps, specific areas within the municipality should not be left without relevant information and features intended to cover the entire municipality (e.g. existing zoning districts and Future Land Use categories) must cover the entire municipality.

To make maps as user-friendly as possible, all maps should:

- Be set on a base map showing at a minimum, and where appropriate, municipal boundaries, rights-of-way, and water bodies;
- Include a north arrow;
- Include a scale bar;
- Only show items within the legend that appear on the map;
- Provide labels to identify significant pieces of data; and
- Symbolize information appearing on more than one map in a consistent manner.

When finalizing maps for inclusion in the comprehensive plan, it is always best to print them at the intended size and consider the graphic qualities of the map, such as the width of line weights, the size of labels, and the appropriateness of colors chosen.

RIGIS DATA DISCLAIMER

All maps using RIGIS data should contain a disclaimer. The RIGIS Executive Committee developed a MOU with the Board of Registration for Professional Land Surveyors that recommends the following:

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

PART THIRTEEN: THE FORMAL ADOPTION PROCESS

Standards and Guidance for the Formal Adoption Process

Standard 13.1 Comprehensive plans must be incorporated by reference into the municipal code of ordinances by the city/town council.

Standard 13.2 Prior to adoption of a comprehensive plan, the city/town council must hold a minimum of one (1) public hearing, which may be a joint meeting with the planning board/commission.

Standard 13.3 Prior to adoption of a comprehensive plan by the city/town council, the planning board/commission must:

- a. Disseminate information to the public about the plan revision;
- b. Solicit both written and oral comments during the preparation of the plan;
- c. Hold a minimum of one (1) public hearing, which may be a joint meeting with the city/town council; and
- d. Submit a recommendation to the city/town council regarding adoption of the plan.

Standard 13.4 Prior to all hearings of the city/town council and the planning board/commission at which the comprehensive plan is to be considered, the municipality must publish notice of the public hearing at least once each week for three (3) successive weeks prior to the date of the hearing in a newspaper of general circulation.

Standard 13.5 All public notice of hearings at which the comprehensive plan is to be considered must:

- a. Specify the place, date, and time of the hearing;
- b. Indicate that adoption of the comprehensive plan is under consideration;
- c. Contain a statement of the proposed amendments to the comprehensive plan or summarize and describe the matter under consideration;
- d. Advise those interested where and when a copy of the matter under consideration may be obtained, examined, or copied; and
- e. State that the plan may be altered or amended prior to the close of the public hearing without further advertising, as a result of further study or because of the views expressed at the public hearing.

Standard 13.6 Comprehensive plans must be submitted to the Division of Statewide Planning within thirty (30) days of adoption by the city/town council.

APPENDIX A

SAMPLE PROCESS FOR CONDUCTING A PRELIMINARY COMMUNITY VULNERABILITY ASSESSMENT

The process outlined here seeks to determine possible impacts within the community. It is not expected that municipalities will undertake full vulnerability assessments for each building, system, etc. However, if any major impacts are identified, the comprehensive plan should consider an action for undertaking of a full vulnerability assessment.

STEP 1: IDENTIFY THE INFRASTRUCTURE, ASSETS, RESOURCES, AND POPULATIONS THAT MAY BE VULNERABLE

The first step in identifying the high-priority issues that the community may face in the event of natural hazards and climate change is to determine the infrastructure, assets, resources, and populations that may be vulnerable, both due to exposure and due to their general characteristics.

This portion of the preliminary assessment should look at all of the important pieces that make up a community - buildings and structures, public facilities, infrastructure, environmental resources, and special populations. A listing of various types of infrastructure, assets, resources, and populations that should be assessed has been included on the following page.

To make this step of the preliminary assessment more manageable, communities should undertake it in two phases. First, communities should look at, or overlay, the maps of the areas that will be exposed to sea-level rise and flooding with maps showing various components of the community to determine what lies within those areas, or what will be exposed and therefore potentially vulnerable. Second, communities should consider the full list of infrastructure, assets, resources, and populations to determine if they are likely to be impacted by any other high-priority natural hazard and climate change trends. For example, businesses that rely on water for their economic activity may be specifically impacted by drought. Heavily forested areas may become more susceptible to forest fire with increased drought or heat waves. Populations without access to a private vehicle may be particularly impacted by any natural hazard that causes evacuation of their neighborhood.

A Preliminary Impact Evaluation Matrix has been included to assist in the second phase of this assessment. To use the matrix, list the natural hazards and climate change trends that are high-priorities for the municipality along the top (the columns) and list the pieces of the community to be assessed along the side (the rows). Then, mark off those components that seem likely to be impacted by the high-priority trends, based on previous experience, general knowledge of the community, exposure mapping, and any public input received.

STEP 2: ASSESS THE POTENTIAL EFFECTS OF PRIORITY NATURAL HAZARDS AND CLIMATE CHANGE TRENDS ON THE COMMUNITY

Once it is determined which components of the community will likely be impacted by high-priority natural hazards and climate change trends, the effects of such impacts on the community can be assessed.

INFRASTRUCTURE, ASSETS, RESOURCES, AND POPULATIONS

Buildings and Infrastructure

Residential neighborhoods and homes
Commercial areas and businesses
Industrial areas and businesses
Historic and cultural structures and sites
Public facilities and infrastructure
Police and fire stations and emergency shelters
Healthcare facilities, nursing homes, and assisted living facilities
Municipal buildings
Schools
Libraries
Major roads and evacuation routes
Public transportation routes or stops

Public transportation hubs
Rail lines and stations
Airports
Water supply infrastructure
Wastewater infrastructure
Stormwater drainage systems
Natural gas infrastructure
Electricity infrastructure
Telecommunications infrastructure
Energy production facilities
Marine facilities
Solid waste transfer stations
Dams

Natural Resources

Parks and recreation facilities
Lakes, rivers, and other water bodies
Reservoirs
Wetlands (coastal and freshwater)

Coastal barriers (dunes, marshes, coastal ponds)
Wildlife and endangered species areas
Forests
Undeveloped and conservation lands

Special Populations

Senior citizens
Young children
Low-income, unemployed, or under-employed persons and households
Renters
Homeless persons and families
Seasonal residents
Students
Tourists

Non-English speaking or limited English proficiency persons and households
Individuals with disabilities
Individuals with compromised immune systems or those who are chronically ill
Individuals with limited access to a personal automobile
Individuals uncertain about available resources because of citizenship status

Though primarily qualitative, this assessment should include a thoughtful analysis of each potentially impacted community component (identified as part of step 1) against each natural hazard and long-term climate change trend that it will likely be exposed to, or impacted by, in order to ascertain the severity of the impacts.

Assessment of the severity of impacts should be based on several considerations:

- The permanence of the impact (permanent, temporary, temporary until repaired, etc.);
- The number of people or businesses that will likely be affected by the impact;
- Whether any special populations will be unduly harmed by the impact; and
- Whether any community functions or values (e.g. public health and safety, education, tourism) will be impacted. See Community Functions and Values on the following page).

To assist in completing this assessment, an evaluation matrix, the Impact Severity Tool and an example of a completed evaluation matrix has been provided. The evaluation matrix is intended to be used to evaluate the impacts of each high-priority natural hazard or climate change impact on each potentially vulnerable piece of infrastructure, asset, resource, and population. To fill in the matrix, enter one potential impact into each row under the column heading, “impacts” as shown in the example. Then, under each subsequent column (except the last column), fill in the appropriate information. Use the last column to indicate whether overall impact severity seems to be high, medium, or low, based on the values entered for the remainder of the row.

Some aspects of community vulnerability that are not often considered, but may be of prime importance to the community are tree loss and erosion. Hurricane related winds and winter storms have the potential to cause massive losses related to tree damage, including large scale power losses, damage to structures, impassable roads, and extensive debris, which can all be added expenses for a municipality. Storms also drive erosion, which is an important consideration for both infrastructure and private development. The RI Coastal Resource Management Agency has developed Shoreline Change Maps (available at www.crmc.ri.gov/maps/maps_shorechange.html) can help municipalities evaluate risk.

STEP 3: PRIORITIZE THE IMPACTS THAT THE MUNICIPALITY WOULD FACE IN THE EVENT OF FUTURE NATURAL HAZARDS AND LONG-TERM CLIMATE CHANGE

The steps of the preliminary vulnerability assessment outlined above will help the community understand what is likely to be vulnerable to natural hazards and climate change trends and how severe the likely impacts will be. To create a plan of action for minimizing the impacts, communities should also prioritize their needs so that money and effort can be expended toward the greatest effect. Prioritization of needs also allows communities to determine which impacts require immediate action, versus those that can be addressed at a later date.

For many communities, the identification of the most severe impacts will provide sufficient information to begin to determine priority. However, depending on the level of interest and time available, the community may wish to go through the full prioritization exercise described below.

COMMUNITY FUNCTIONS AND VALUES

Government continuity	
Emergency services	Conservation
Public safety	Mobility and transportation access
Public health	Education
Business continuity	Quality of life
Housing access	Social services
Economic activity	Ecological function
Employment and job access	Tourism
Food security	Recreation

Prioritizing the impacts of natural hazards and climate change trends is a multi-step process. A sample Impact Prioritization Tool has been included to assist communities in the prioritization of natural hazard and climate change impacts. The Impact Prioritization Tool first combines the overall impact severity rating (high, medium, or low) from Step 2 with the adaptive capacity to determine the level of need (high, medium, or low). Then, the tool combines the level of need with the anticipated onset of the trends to determine priority (high, medium, or low). Each step in the process is described below.

Assessing Adaptive Capacity

Adaptive capacity refers to the current ability of a community to address a potential impact or to manage in the case of an impact. Assessment of adaptive capacity is subjective and highly variable depending on a number of factors. For example, if there is already a policy, program, institution, or organization addressing a potential impact, or if there is another resource that could supplement the impacted community functions, the priority for addressing the impact may be less than the priority for addressing a different impact. However, it may also be the case that even though work is being done to address an impact, the severity of the impact is so high that it should still be a priority concern for the municipality. While some determinations of adaptive capacity may be straightforward, others may need more in-depth evaluation.

The community should assess the current level of adaptive capacity for each identified impact (high, medium, low). High adaptive capacity indicates that measures are already in place to address projected impacts; low adaptive capacity indicates that a community is generally unprepared. To determine adaptive capacity, communities should consider the following guiding questions:

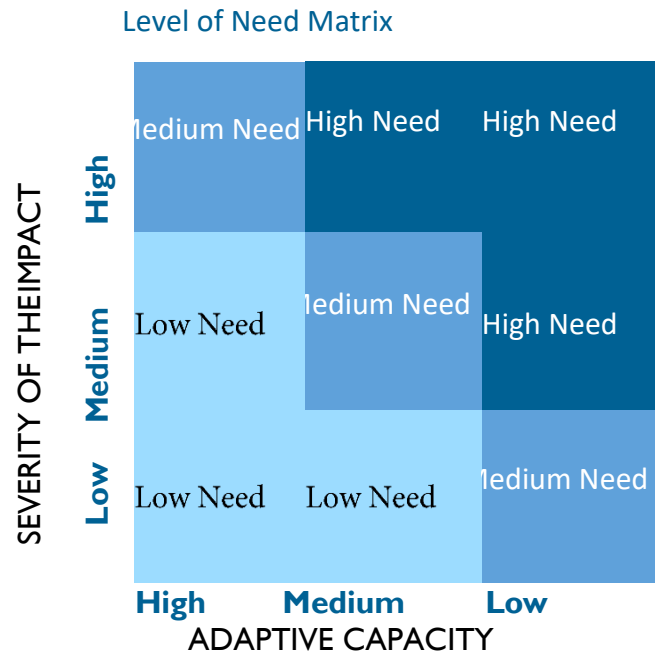
- Generally, how prepared is the community to survive, recover and/or function if the resource is impacted?
- Are there currently actions in progress, planned, ready for implementation or being implemented to address the projected impact?
- If the actions are not being implemented, how long until implementation begins? What resources will be necessary for implementation?

- To what extent are the actions addressing the potential impact? Is it enough?
- Could the policy or program be strengthened to better address the potential impact or to address additional impacts?
- Is the community prepared to handle the impacts to populations and/or community functions and values in some other way?

Determining Need

When adaptive capacity is compared to the severity of the impact, a level of need can be determined.

Generally, if something causes a high level of impact, but the capacity to adapt to the impact is also high, the need for additional action is low. Conversely, if the level of impact is high and the adaptive capacity is low, the need for additional action is high. The Level of Need Matrix to the right shows the relationship between adaptive capacity, impact severity and need. However, municipalities should feel free to put all actions to address all potential impacts, whether high or low need, within the Implementation Program of their comprehensive plans, if there is general support for undertaking them.



Assessing Onset

Onset refers to the time frame in which the community will likely feel the impacts of the natural hazard or climate change trends. Determining onset will assist in determining whether implementation actions should be near-, mid- or long-term. The following table shows the general onset timeframes typically used in assessing vulnerabilities to natural hazards and climate change.

TIME	ONSET
Current – the community is feeling the impacts now or has felt the impacts in the past	Near-term
Impacts likely between now and 2035	Near-term
Impacts likely between 2035 and 2065	Mid-term
Impacts likely between 2065 and 2100	Long-term

Determining Priority

To determine priority, the anticipated onset of the impact can be combined with the level of need. Generally, if something is near-term and high need, the priority will be high. Conversely, if something is long-term and low need, the priority will be low. The Priority Matrix on the next page shows the relationship between onset, need and priority.

Priority Matrix

ONSET OF THE IMPACT	Near-term	Medium Need	High Priority	High Priority
	Mid-term	Low Priority	Medium Priority	High Priority
	Long-term	Low Priority	Low Priority	Medium Priority
		Low	Medium	High
		LEVEL OF NEED		

STEP 4: INCLUDE DISCUSSION OF PRIORITY IMPACTS WITHIN THE COMPREHENSIVE PLAN

The steps of the preliminary vulnerability assessment outlined thus far will bring the community to understanding which potential impacts should be considered “high-priority” for the municipality. To receive State approval, comprehensive plans must include appropriate policies and implementation actions for addressing the impacts within the Implementation Program.

APPENDIX B

GUIDANCE FOR ALIGNING WITH LAND USE 2025'S FUTURE LAND USE MAP

To truly embody the State's goals for land use, communities are encouraged to align the comprehensive plan's FLUM with Land Use 2025 in a more thoughtful and comprehensive way. The following guidance is provided for those municipalities who wish to align their FLUM with the full breadth of Land Use 2025's future land use map.

Generally, Land Use 2025's Figure 121-02(1) splits the state into "Growth Areas," "Conservancy Areas," and "Committed Use Areas." According to Land Use 2025,

Growth Areas are intended to accommodate the State's anticipated growth needs through 2025. They include both (currently) developed areas that are suited for maintenance, infill, and reuse, as well as (currently) undeveloped areas that are suited for new development.

Land Use 2025's Figure 121-02(1) directs growth to two types of land: 1) areas within the Urban Services Boundary (USB); and 2) areas within locally-designated growth centers, which can be both within and outside of the USB. In addition to the locally-designated growth centers, two categories of growth have been allocated within the USB: "Urban Development" and "Sewered Urban Development."

As indicated by the name, the "Sewered Urban Development" category shows the areas within the USB where public sewer service is available. Land Use 2025 calls for these areas to be developed or redeveloped at higher intensities and densities so as to optimize the significant public infrastructure investment, unless there are significant constraints on the land. For both the "Urban Development" and "Sewered Urban Development" categories, the priority for developed lands is to maintain and enhance productive uses and to re-use underutilized areas to accommodate growth at intensities that efficiently utilize available services.

For undeveloped lands within these categories that have few resource constraints or are likely to be provided with urban-level services, the priority is development with intensities and residential densities that mirror existing urban developed lands and enable efficient provision and utilization of public services, including transit. Undeveloped areas within these categories that have some resource constraints but are likely to be provided with some urban-level services, are generally targeted for medium-level urban development, including residential uses at average densities of 1 to 5 dwelling units per acre. Other undeveloped areas that are targeted for growth, which have site or resource constraints and limited services, are targeted for lower residential densities, with some areas reserved for open space and farmland.

Land Use 2025's FLUM also shows areas where future rail stations may be established and directs municipalities that new rail stations should provide an impetus for new growth centers or other transit- oriented development.

All land outside of the USB that is not within a designated growth center has been categorized as “Committed Use Areas” – including “Non-urban Development” – or “Conservancy Areas” and are intended to remain as either conservancy or the existing committed use.

Land Use 2025 describes locally-designated growth centers as “compact, developed areas containing a defined central core that accommodate community and regional needs for residential and economic functions.” Land Use 2025 also states that, “Centers are intended to provide optimum utilization of land and services, and offer a higher density diverse housing stock, commercial, industrial, office, cultural, and governmental uses.” While some growth centers have been depicted on Land Use 2025’s FLUM, the locations are intended to be illustrative only. Municipalities are expected to determine the appropriate locations of any new growth centers within their boundaries.

APPENDIX C

SAMPLE BUILD-OUT METHODOLOGY 1: MATHEMATICAL ASSESSMENT

While this assessment is the simplest way to determine future development capacity, it is not necessarily the most accurate as it assumes that every parcel within the municipality, unless already developed to its fullest capacity, will redevelop to its highest capacity. This methodology also does not account for any constraints on the land that may be present, such as wetlands and topography, or for regulatory constraints that may be present, such as those related to the Coastal Resources Management Council's jurisdiction and flood hazard areas. If the municipality has the capacity to perform an assessment using GIS, it may result in a more accurate picture of the future conditions.

STEP 1: DETERMINE THE TOTAL LAND AREA IN EACH ZONING DISTRICT

The first step in determining the total number of dwelling units at build-out is to estimate the total land area within each zoning district in acres. The areas of each zoning district can be determined using GIS software or by using a traditional approach, such as a planimeter or grid overlay.

STEP 2: ESTIMATE THE TOTAL NUMBER OF DWELLING UNITS AT BUILD-OUT

The next step is to calculate the total number of dwelling units at build-out, given the regulatory constraints of the residential zoning districts. For land zoned residential, some of the land area should be subtracted from the total available land to account for new roads and infrastructure. Most of the build-out methodology resources suggest using a ratio for roads and infrastructure between 10% and 30%, where 10-30% of the available land is dedicated to roads and infrastructure and the remaining land (70-90%) is assumed to hold all of the development. Alternatively, the community could look at examples of developments that have occurred within the municipality, which were subject to the municipal subdivision and land development regulations, to determine how much land, on average, was dedicated to roads and infrastructure, and then apply the more customized ratio to the available land. While undertaking this assessment, the municipality could also attempt to determine how much of the land area was undevelopable due to environmental constraints (such as wetlands). Multiplying the area of the zoning district by the developable land ratio (likely somewhere between 70 and 90%) will produce the total net developable area within each residential district.

Next, for each residential zoning district, multiply the net developable area within each zoning district by the maximum density allowed within the zoning district. This calculation will produce the total number of dwelling units at build-out for each residential zoning district. For example:

$$350 \text{ (total net developable area within zoning district)} \times 4.4 \text{ (units per acre maximum allowed density)} = 3,080 \text{ (total \# of dwelling units at build-out within zoning district)}$$

Then, simply add the number of dwelling units at build-out for each zoning district together to get the total for the municipality.

STEP 3: ESTIMATE THE TOTAL POPULATION AT BUILD-OUT

Population at build-out is estimated by multiplying the current number of persons per dwelling unit by the total number of dwelling units. See below for an example calculation.

$$14,500 \text{ (total \# of dwelling units at build-out)} \times 2.3 \text{ (average \# of persons per dwelling unit)} = 33,350 \text{ (total population at build-out)}$$

STEP 4: ESTIMATE THE TOTAL NUMBER OF NEW DWELLING UNITS AT BUILD-OUT

To determine the number of new dwelling units that will be produced between now and build-out, simply subtract the current number of dwelling units from the total number of units determined in step 2. (The calculation could be done by district, but that would require knowing how many dwelling units are currently within each zoning district.)

$$14,500 \text{ (total \# of dwelling units at build-out)} - 12,250 \text{ (total \# of current dwelling units)} = 2,250 \text{ (total \# of new dwelling units at build-out)}$$

STEP 5: ESTIMATE THE YEAR BY WHICH RESIDENTIAL BUILD-OUT IS LIKELY TO OCCUR

To estimate the year by which residential build-out is likely to occur, municipalities can look at historic development figures to determine the average number of new dwelling units built per year. It is recommended that municipalities look back 20-years (or more) to get an accurate picture of development trends. Once determined, the total number of new dwelling units from step 4 is then divided by the average number of dwelling units built per year to determine how many years it will take to build all of the new units. Then, the necessary number of years is added to the current year to determine the year by which residential build-out is likely to occur.

$$2,250 \text{ (total \# of new dwelling units at build-out)} \div 45 \text{ (average \# of new dwelling units per year)} = 50 \text{ (\# of years it will take to build all new units)}$$

$$2021 \text{ (current year)} + 50 \text{ (\# of years it will take to build all new units)} = 2071 \text{ (year by which residential build-out is estimated to occur)}$$

SAMPLE BUILD-OUT METHODOLOGY 2: SPATIAL ASSESSMENT

This methodology presents a more comprehensive approach to conducting a build-out analysis, but it requires the ability to access and map some important data. Much of the data that is needed for this assessment is already required for the comprehensive plan, as described below. This assessment can be done using printed maps and overlay sheets, but may be easier performed using GIS.

STEP 1: CONSTRUCT A BASE MAP

The very first step in conducting a build-out analysis is to construct a base map of the community. Base maps are typically developed using GIS, however, if a printed map is available it can be used in place of a GIS map. In order to be useful for the assessment, the base map should show:

- The perimeter or boundary of the community;
- The scale of the map;
- Existing roads; and
- Surface water (lakes, rivers, streams, etc.)

If available, it would be helpful for the base map to also show parcel boundaries.

STEP 2: DETERMINE AVAILABLE BUILDABLE LANDS

Next, several different types of data, or data layers, are laid on top of the base map to determine areas in which there is likely to be development. If using a printed map, clear overlay sheets should be laid over the base map, one for each data set, so that the data can be drawn in by hand. If using GIS, the data layers can be applied electronically.

The first data layer to be applied should delineate all of the land area within the municipality that is known to be undevelopable due to public ownership, conservation easements, deed restrictions, utility easements, etc. The required maps of conservation land and major public infrastructure should assist in determining the constrained land areas.

The second data layer should depict all of the land area within the municipality that cannot be developed due to natural constraints such as surface water, wetlands, steep slopes, etc.

Next, within the land areas that remain (those that are not constrained by ownership, deed, or environmental factors), the undeveloped and/or underdeveloped lands must be identified. The simplest version of this assessment is to look only at those lands that are obviously undeveloped or underdeveloped, including those that are simply vacant, as well as those with agricultural uses that are zoned for residential and natural areas that have not been protected with a conservation easement or deed restriction. If a community wishes, it could also assume that portions of the municipality are likely to be redeveloped to the highest development capacity. If this type of assessment is desired, communities must delineate those areas in which redevelopment is expected and determine how many residential units currently exist within the areas.

The end result of this step will be a map depicting areas in which there is development capacity, due to being undeveloped or underdeveloped, or the expectation of redevelopment.

STEP 3: CALCULATE DEVELOPABLE AREAS WITHIN EACH ZONING DISTRICT

Once the areas that are likely to be developed (and redeveloped, if appropriate) are determined, the zoning district boundaries are overlaid on the areas and the amount of available land within each zoning district is calculated. If using a paper map, a planimeter may be necessary; if using GIS, the software is able to perform these calculations.

STEP 4: ESTIMATE NEW DWELLING UNITS EXPECTED WITHIN RESIDENTIAL ZONES

For land zoned residential, some of the developable land should be subtracted from the total land area available to account for new roads and infrastructure. Most build-out methodology resources suggest using a ratio for roads and infrastructure between 10% and 30%, where 10-30% of the available land is dedicated to roads and infrastructure and the remaining land (70-90%) is assumed to hold all of the development. Alternatively, the community could look at examples of developments that have occurred within the municipality, which were subject to the municipal subdivision and land development regulations, to determine how much land, on average, was dedicated to roads and infrastructure, and then apply the more customized ratio to the available land. Multiplying the area of the zoning district by the developable land ratio (likely somewhere between 70 and 90%) will produce the total net developable area within each residential district. For example:

80 (acres of land area in zoning district that is undeveloped and unconstrained) x 70% (developable land ratio) = 56 (net acres of undeveloped, unconstrained area in zoning district)

For each residential zoning district, multiply the net developable, unconstrained acreage within each zoning district by the maximum allowable density. This calculation will produce the total number of new dwelling units within each residential zoning district.

56 (net acres of undeveloped, unconstrained area in zoning district) x 4.4 (units per acre maximum allowed density) = 245 (total # of dwelling units at build-out within zoning district)

Then, simply add the number of dwelling units at build-out for each zoning district together to get the total for the municipality.

If the assessment includes redevelopment parcels, the number of residential units that currently exist within the redevelopment areas must be subtracted from the total dwelling unit number that is calculated based on land area. Redevelopment assumes that there is already some development on the parcel, but that the level of development will increase at build-out. Therefore, in order to not double-count the existing units, they must be subtracted from the calculation.

125 (acres unconstrained land in redevelopment area) x 70% (percentage of land typically dedicated to infrastructure) = 87.5 (net unconstrained land in redevelopment area)

87.5 (net unconstrained land in redevelopment area) x 20 (units per acre maximum allowed density) = 1,750 (total # of units within redevelopment area at build-out)

$1,750$ (total # of units within redevelopment area at build-out) - 500 (current # of units within redevelopment area) = $1,250$ (total # of new units within redevelopment area at build-out)

STEP 5: ESTIMATE THE TOTAL DWELLING UNITS AND POPULATION AT BUILD-OUT

To determine the total dwelling units expected at build-out, simply add the number of new dwelling units calculated in step 4 to the existing number of dwelling units. To determine future population, multiply the total dwelling units by the existing average household size. For example:

$12,250$ (current # of dwelling units) + $1,100$ (total # of new dwelling units at build-out) = $13,350$ (total # of units at build-out)

$13,350$ (total # of units at build-out) x 2.3 (average # of persons per dwelling unit) = $30,705$ (total population at build-out)

STEP 6: ESTIMATE THE YEAR BY WHICH RESIDENTIAL BUILD-OUT IS LIKELY TO OCCUR

To estimate the year by which residential build-out is likely to occur, municipalities can look at historic development figures to determine the average number of new dwelling units built per year. It is recommended that municipalities look back 20 years (or more) to get an accurate picture of development trends. Once determined, the total number of new dwelling units from step 4 is then divided by the average number of dwelling units built per year to determine how many years it will take to build all of the new units. Then, the necessary number of years is added to the current year to determine the year by which residential build-out is likely to occur.

$1,100$ (total # of new dwelling units at build-out) \div 45 (average # of new dwelling units per year) = 24 (# of years it will take to build all new units)

2021 (current year) + 24 (# of years it will take to build all new units) = 2045 (year by which residential build-out is estimated to occur)

Additional Build-Out Methodology Resources

The following list of additional build-out methodology resources was provided by the American Planning Association's Planners Advisory Service.

Articles Discussing Build-Out Analysis

Godschalk, David R. 2006. "Buildout Analysis: A Valuable Planning and Hazard Mitigation Tool." Zoning Practice, March. Available at <https://www.planning.org/zoningpractice/2006/pdf/mar.pdf>.

Kilpatrick, Erin and Mark A. Wyckoff. 2002. "Overzoning & Buildout Analysis." Planning & Zoning News, April. Available at <http://pzcenter.msu.edu/documents/Overzoningandbuildoutanalysis04.02.pdf>.

Knaap, Gerrit J. and Elisabeth Holler. 2008. "Monitoring Local Land Markets." Zoning Practice, January. Available at <https://www.planning.org/zoningpractice/2008/pdf/jan.pdf>.

Buildout Analysis Guidebooks and Methodologies

Maryland Department of Planning. 2005. Estimating Residential Development Capacity: A Guidebook for Analysis and Implementation in Maryland. Available at <http://dnr.maryland.gov/watersheds/pubs/planninguserguide/tools/Tool10DevelopmentCapacityAnalysis.pdf>.

Meenar, Md Mahbubur Rabb, ASM Abdul Bari, and Jesse Sherry. 2004. "Growth Management Plan for Milford Township, PA: Suitability Analysis and Buildout Scenarios." Available at <http://proceedings.esri.com/library/userconf/proc04/docs/pap1124.pdf>.

New Hampshire Office of Energy and Planning. 2004. "How to Conduct a Buildout Analysis." In Preparing a Master Plan for Your Community. Available at <https://www.nh.gov/oep/resource-library/planning/documents/preparing-master-plan-buildout.pdf>.

Pennsylvania Land Trust Association. 2013. "Build-Out Analysis." Available at <http://conservationtools.org/guides/show/42>.

Rozum, John, Chester Arnold, and Emily Wilson. 2010. About Buildouts: A Brief Guide to Buildout Analysis, and Why and How to Do Them. CT NEMO Technical Report. Available at http://nemo.uconn.edu/publications/about_buildouts.pdf.

U.S. Environmental Protection Agency. 2013. "How to Do a Build-Out Analysis." Available at http://www.epa.gov/greenkit/build_out.htm.

Examples Of Buildout Analyses

Augusta (Virginia), County of. 2007. "M. Buildout Analysis." In Augusta County Comprehensive Plan. Available at <http://www.co.augusta.va.us/Modules/ShowDocument.aspx?documentid=419>.

Bay (Michigan), County of. 2000. 2000 Build Out Analysis Report. Available at <http://www.baycounty-mi.gov/EACD/ResourceBuildoutAnalysis.aspx>.

Central Connecticut Regional Planning Agency. 2006. Regional Build-Out Analysis for the Central Connecticut Region. Available at http://www.ccrpa.org/projects/buildout_region/Final%20Full%20Report%20with%20Analysis.pdf.

Chittenden County Regional Planning Commission (Vermont). 2003. Chittenden County Regional Build- out Analysis: Project Report: Regional Build-out Results. Available at http://www.ccrpcvt.org/land_use/buildout/.

King (Washington), County of. 2007. Buildable Lands Report: Recent Growth & Land Capacity in King County & its Cities. Available at <http://your.kingcounty.gov/budget/buildland/bldlnd07.htm>.

Minneapolis (Minnesota), City of. 2010. Land Capacity Analysis. Available at www.minneapolismn.gov/www/groups/public/@cped/documents/webcontent/convert_261135.pdf.

Nashua Regional Planning Commission. 2003. Town of Brookline, New Hampshire, Buildout Analysis. Available at http://www.nashuarpc.org/files/2713/9413/9654/brookline_buildout_dec03.pdf.

Portland (Oregon), City of. 2011. "Buildable Lands Inventory Archive." Available at <http://www.portlandonline.com/portlandplan/index.cfm?c=52133>.