

DRAFT Capital Facilities and Infrastructure Technical Bulletin

This guidance is intended to clarify how the Capital Facilities and Infrastructure Goal and Objectives of the Regional Policy Plan (RPP) are to be applied and interpreted in Cape Cod Commission Development of Regional Impact (DRI) project review. This technical bulletin presents specific methods by which a project can meet these goals and objectives.

Capital Facilities and Infrastructure Goal: To guide the development of capital facilities and infrastructure necessary to meet the region’s needs while protecting regional resources

- **Objective CAP1** – Ensure capital facilities and infrastructure promote long-term sustainability and resiliency
- **Objective CAP2** – Coordinate the siting of capital facilities and infrastructure to enhance the efficient provision of services and facilities that respond to the needs of the region

The applicability and materiality of these goals and objectives to a project will be determined on a case-by-case basis considering a number of factors including the location, context (as defined by the Placetype of the location), scale, use, and other characteristics of a project.

The Role of Cape Cod Placetypes

The RPP incorporates a *framework for regional land use policies and regulations based on local form and context* as identified through categories of Placetypes found and desired on Cape Cod.

The Placetypes are determined in two ways: some are depicted on a map adopted by the Commission as part of the Technical Guidance for review of DRIs, which may be amended from time to time as land use patterns and regional land use priorities change, and the remainder are determined using the character descriptions set forth in Section 8 of the RPP and the Technical Guidance.

The project context, as defined by the Placetype of the location, provides the lens through which the Commission will review the project under the RPP. Additional detail can be found in the Cape Cod Placetypes section of the Technical Guidance.



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INTRODUCTION

The Cape Cod Commission Act requires the Commission to “*anticipate, guide and coordinate the rate and location of development with the capital facilities necessary to support such development, in order to protect the region’s natural and historic resources and advance a more balanced economy, housing mix, and social diversity.*” In order to meet this charge, the Commission seeks to ensure that capital facilities and infrastructure projects are consistent with the regional Growth Policy and the goals and objectives of the Regional Policy Plan.

This Capital Facilities and Infrastructure goal and related objectives apply to projects focused primarily on constructing or modifying capital facilities and infrastructure to support other types of development within the region.

Capital Facilities, a type of infrastructure, is defined by the Cape Cod Commission Act as “public facilities and services necessary to support development, including but not limited to roads, distributed energy resources, water, sewers, waste disposal, affordable housing, schools, police and fire protection facilities.”

For the purposes of this guidance document, Infrastructure is further defined as: “*components of the human built system necessary to support communities, protect regional resources, and encourage sustainable economic development including, but not limited to, roads and non-auto transportation structures, drinking water and wastewater distribution and treatment systems, waste disposal and management facilities, telecommunications lines and equipment, energy distribution and generation facilities, and coastal infrastructure.*”

At such time a Regional Capital Infrastructure Plan (when is this to start?) is developed by the Commission, it is the intent for that plan to be implemented in tandem with the goals and objectives of the RPP.

SUMMARY OF METHODS

Goal: To guide the development of capital facilities and infrastructure necessary to meet the region’s needs.

Objective CAP1 – Ensure capital facilities and infrastructure promote long-term sustainability and resiliency

Methods

- Collocate infrastructure or locate infrastructure underground where it will not be subject to wind, ice, tree falls or other above ground hazard
- Locate infrastructure outside of flood-prone or high hazard areas
- Support compact land use patterns
- Project is consistent with the Regional Capital Infrastructure Plan

Objective CAP1 – Areas of Emphasis by Placetype

<i>Natural Areas</i>	Avoid siting in these areas unless the project can demonstrate <u>overriding public purpose</u> [LA1]
<i>Rural Development Areas</i>	Avoid impacts to scenic or cultural resources through siting and design
<i>Suburban Development Areas</i>	Design infrastructure to support improved design and function of these areas and provide appropriate connections to other Placetypes
<i>Historic Areas</i>	Design infrastructure to protect historic character
<i>Maritime Areas</i>	Design infrastructure that supports traditional maritime activities
<i>Community Activity Centers</i>	Design infrastructure to support greater density and compact land use patterns
<i>Industrial Activity Centers and Green Communities As-of-Right designated sites</i>	Infrastructure supports industrial development and other industries appropriate to the diversification of the regional economy <u>MAYBE ADD Distributed Energy Resources HERE</u>
<i>Military and Transportation Areas</i>	Shared infrastructure encouraged; infrastructure development should support economic vitality of these areas

Objective CAP2 – Coordinate the siting of capital facilities and infrastructure to enhance the efficient provision of services and facilities that respond to the needs of the region

Methods

- Coordinate project construction with other planned or needed infrastructure projects
- Improve the quality or availability of service
- Use existing utility easements and/or rights of way
- Provide site sharing or space for other providers or types of infrastructure
- Encourages growth of industries appropriate to the furthering of sustainability and the diversification of the regional economy[LA2]

DETAILED METHODS FOR MEETING OBJECTIVE CAP1

Objective CAP1: Ensure capital facilities and infrastructure promote long-term sustainability and resiliency

The intent of Objective CAP1 is that capital facilities and infrastructure projects should promote long-term sustainability of the region by supporting compact land use patterns to the greatest extent possible ~~and~~, by supporting transition to carbon-free infrastructure and by being be- located and designed to avoid impacts to natural, historic and cultural resources. Capital facilities and infrastructure should also be designed to be resilient to extreme weather events and the effects of climate change or other natural or man-made threats and be responsive to the context in which they are located.

The following methods may be implemented to meet Objective CAP1:

Collocate Infrastructure or Locate Infrastructure Underground

As described in more detail in the Community Design technical bulletin^[LA3], infrastructure should be collocated with other infrastructure where feasible or located underground to reduce vulnerability to severe storms or other natural or man-made disasters^[LA4].

Locate Infrastructure Outside of Flood-Prone or High-Hazard Areas

The location of capital facilities and infrastructure could have a significant impact on a community's resilience to natural disasters. Infrastructure located outside of the floodplain is a preferred method to meeting this objective. Locating infrastructure outside of high-hazard areas can ensure that services and access to facilities are available in the event of a natural disaster and protected from damage or loss due to severe storms.

Support Compact Development Patterns

The location of capital facilities and infrastructure could have a major impact on future development patterns in the region. Capital facilities and infrastructure that support compact land use patterns, including development and redevelopment in Community and Industrial Activity Centers, are strongly encouraged to reduce the cost of providing infrastructure to support residential development and/or mixed-use commercial development.

Project is consistent with the Regional Capital Infrastructure Plan^[LA5]

A priority action item in the 2018 Regional Policy Plan is the development of a regional capital infrastructure plan. The expectation is that Developments of Regional Impact to which CAP1 applies should also take the regional capital infrastructure plan into account when proposing and designing their project.

DETAILED METHODS FOR MEETING OBJECTIVE CAP2

Objective CAP2: Coordinate the siting of capital facilities and infrastructure to enhance the efficient provision of services and facilities that respond to the needs of the region

Coordinate Project Construction with Other Planned or Needed Infrastructure Projects

Capital facilities and infrastructure should be coordinated with other existing or planned capital facilities and infrastructure to reduce the cost of providing infrastructure, limit land clearing and impacts to natural and other resources, to encourage fossil-free energy development, and to protect the region's historic and community character.

Improve the Quality or Availability of Service

Capital facilities and infrastructure should provide safe, reliable, environmentally sound, accessible, high-quality services and facilities to meet the needs of all users in the region. Reliable, high-quality facilities and infrastructure are vital to a competitive economy, a sustainable environment, and a connected community. Capital facilities and infrastructure can help to open new markets, encourage the growth of industries that help diversify the regional economy, encourage fossil-free energy, and enhance educational opportunities. Therefore, infrastructure should be built and managed to provide high-quality, efficient services.

Use Existing Utility Easements and/or Rights of Way

The costs of infrastructure can be reduced by using existing structures and rights-of-way, eliminating waste, and coordinating construction with other planned or needed infrastructure projects. Using land, facilities, and infrastructure efficiently also limits the impact of development on the natural environment.

Provide Site Sharing or Space for Other Providers or Types of Infrastructure

Where appropriate, capital facilities and infrastructure that provides space on-site for other planned or future infrastructure or through collocation is strongly encouraged to reduce the cost of providing infrastructure and minimizing impacts on the region's character and environment.

Encourages Growth of Industries Appropriate to the Diversification of the Regional Economy

Infrastructure development to support industries appropriate to the diversification of the regional economy such as marine science, information technology, and light manufacturing are encouraged, particularly if located in centers of activity and consistent with resources protected under the Act.

Development in support of the legislative initiative, Green Communities, is encouraged.

APPLICATION REQUIREMENTS

Applicants should provide the following materials to address consistency with the Capital Facilities and Infrastructure Goal and Objectives.

- 1) Project plans detailing the location(s) of the proposed project
- 2) Narrative discussing the alternatives considered, as appropriate.
- 3) Statement of Need that provides the information necessary to determine whether:
 - The project addresses existing needs of Cape Cod without unnecessarily duplicating existing services or facilities; and/or,
 - The project addresses new demand to support growth in centers of activity.
- 4) Resiliency Statement with information necessary to determine whether the location and services provided by the project will be resilient (and advance overall resiliency) in the event of a human or natural disaster.

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