

Scenario Planning Across Disciplines and Towns

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Cape Cod Commission







The Cape Cod Commission

...is the regional land use planning, economic development, and regulatory agency created in 1990 to serve the citizens and 15 towns of Barnstable County, Massachusetts.

The Cape Cod Commission coordinates transportation planning activities under the guidance of the Cape Cod Metropolitan Planning Organization.

Key Role of the Cape Cod Commission

Prepare and oversee Regional Plans















Scenario Planning in Regional Plans

Strategic Approach



Listen, understand needs



Thinking regionally and across sectors



Investigate and qualify possible outcomes



Communicate outcomes in a relatable way



Use insights to prioritize effort and funding



Key Outcome

Ability to identify and understand potential future outcomes of a range of actions in order to prioritize investments towards a desirable future.

CAPECOD REGIONAL POLICY PLAN

FRAMING THE FUTURE

CAPE COD COMMISSION | 2018



86% of the region's land is already developed or protected



FOCUS TRANSPORTATION INVESTMENTS

COMMUNITY ACTIVITY CENTER VISION:
To accommodate mixed-use and
multifamily residential development in a
walkable, vibrant area, preserve historic
buildings, and to provide diverse services,
shopping, recreation, civic spaces,
housing, and job opportunities, with
adequate infrastructure and pedestrian

amenities to support development.





NATURAL

AREAS









MARITIME AREAS











REGIONAL POLICY PLAN

Identifies outcomes if infrastructure investment is coordinated with land use priorities

TRANSPORTATION PLANS

Specific objectives and evaluation criteria tied projects consistency with land use vision







Economic and Fiscal Impacts Analysis

Objective: To put climate risks—and options to address those risks—into a monetary context to inform policy decisions.

ASSESSMENT COMPONENTS



Costs of not adapting to climate change



Emissions scenarios analysis



Economic analyses of adaptation and mitigation strategies



There is a cost of doing nothing

Damage and losses due to sea level rise and storm surge could exceed \$50 billion through 2100

\$50

BILLION

\$1.5B ROAD

DAMAGED







TOURISM REDUCED



LAND VALUE **DECREASED**



DAMAGE



There are options to reach regional goals

The analysis establishes a sustained policy baseline for energy use and emissions baseline given current state and regional policies. It also assessed four primary scenarios for meeting the regional GHG reduction goals.

FIVE MITIGATION SCENARIOS



Sustained Policy (SP)



Carbon Neutral (CEN)



Aggressive Electrification Scenario (SER1)



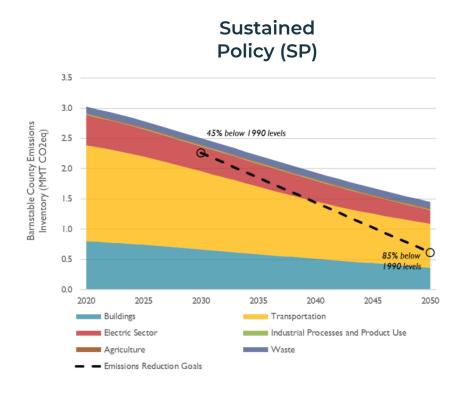
Aggressive Efficiency Scenario (SER2)

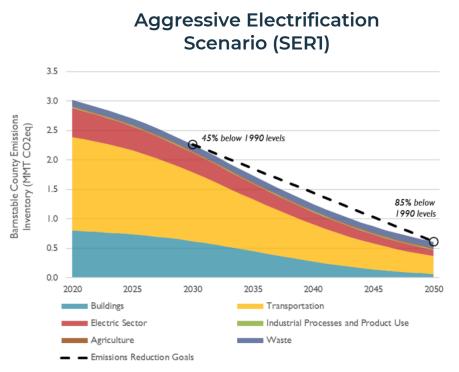


Increased Year-round Population Scenario (SER3)



Examining mitigation scenarios

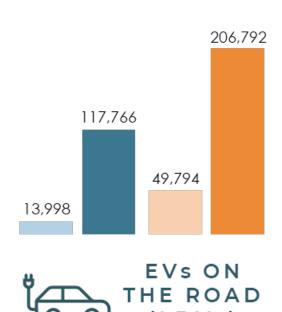


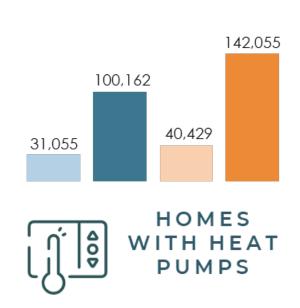




Examining mitigation scenarios







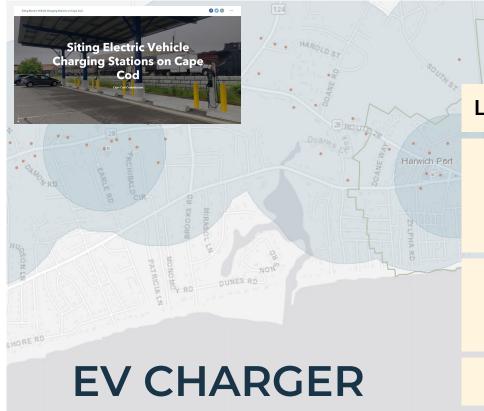


Analysis/implementation of mitigation strategies





Analysis/implementation of mitigation strategies



SITING ANALYSIS

KEY DATA INPUTS

Locations of current EV charging stations

Activity Centers

(areas with a concentration of business activity, community activity, and a compact built environment)

Community Activity Sites

(e.g., municipal buildings, schools, and libraries)

Dense Business Areas

Parking Lots With at Least 100 Spaces



Analysis/implementation of adaptation strategies

Low-Lying Roads Project



15 TOWNS



Flooding vulnerability assessment of low-lying roads and transportation infrastructure



Support municipal road segment prioritization



Identify range of potential design solutions, costs



CLIMATE ACTION PLAN

Identifies outcomes of various investment scenarios



TRANSPORTATION PLANS

Development of targets and prioritization approaches to support climate goals



Thank you

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