

# Cape Cod Climate Action Plan: Transportation Stakeholder Meeting Summary

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Virtual Meeting No. 2 | November 18, 2020 | 1-4pm ET

## MEETING IN BRIEF<sup>1</sup>

On November 18, 2020, the Cape Cod Commission (Commission) held its second meeting engaging stakeholders on the topic of Transportation on Cape Cod to contribute to the development of a Cape Cod Climate Action Plan (CAP).

This meeting was the second of three planned meetings with the Transportation stakeholder working group.

The objectives of this second Transportation meeting were to:

- Recap Meeting No. 1 and progress to date on the CAP process
- Review and confirm criteria for use in selecting potential strategies and actions
- Evaluate potential strategies and actions to include in the CAP

This working group will help the Commission develop a plan that addresses the region's contributions to and threats from climate change. After hearing presentations from Commission staff reviewing proposed CAP purpose statement, the process to date, particularly the stakeholder consultations that have happened, and the process of gathering the input towards draft CAP plan by the third meeting, working group participants were split into small groups to discuss the draft framework and draft strategies and actions relevant to Transportation.

**To view the full presentation slides, please click [here](#).**

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<sup>1</sup>For additional detail, please visit the Cape Climate Initiative website: <https://www.capecodcommission.org/our-work/climate-change/>

## MEETING NO. 1 RECAP AND REFLECTION ON PROCESS TO DATE

Commission Executive Director, Kristy Senatori, opened her presentation by providing the working group with the following DRAFT purpose statement for the Cape CAP:

*To identify, study and monitor the causes and consequences of climate change on Cape Cod as a basis to guide and develop science-based policies, strategies and actions that governments, businesses, organizations, and individuals can pursue to:*

- *improve the region's resilience to climate hazards; and*
- *mitigate climate change on Cape Cod through reducing net regional greenhouse gas emissions in support of the framework and targets established by the Commonwealth.*

Ms. Senatori reiterated the various components of the CAP process for the working group noting that there were several pieces that were taking place in parallel with stakeholder engagement, namely the economic impacts modeling and jurisdictional analysis. She noted that these results would be shared with the working group when they were available.

Ms. Senatori then moved to review the stakeholder engagement timeline for the working group members and highlighted the objectives and outcomes of the first meeting. Meeting No. 1 objectives were to discuss what was known about sector contributions to greenhouse gases and vulnerabilities to future climate impacts, and to develop criteria for use in selecting among potential mitigation and adaptation strategies and actions. Some of the results of meeting no. 1 discussions were the following:

- Adaptation:
  - Who's going to bear the costs?
  - Communicating the cost of doing nothing
  - Need public to understand impacts and need for funding roadway improvements
- Mitigation:
  - Working to provide the most efficient transit
  - Costs related to electric vehicles adoption is still high initially even if they are cost-effective in the long run
  - Electrifying fleet vehicles, including transit vehicles, is a part of the solution but comes with unique challenges

She also noted that the importance of education and outreach was also highlighted both at the government and individual levels. Finally, Ms. Senatori highlighted that the purpose of meeting no. 2 in this working group series was to begin identifying solutions. Working group members were provided with the opportunity to share key reflections since the first meeting. No clarifying questions were asked, and participants indicated they were eager to begin discussion.

## CRITERIA REVIEW

Cape Cod Commission Transportation Program Manager, Steven Tupper, presented the criteria developed from feedback gathered during all four round 1 working group meetings (i.e., Natural Resources & Working Lands, Energy, Housing & Development, and Transportation). During this second meeting of the Transportation working group, members were asked to discuss how these criteria could be used to prioritize among actions developed, what the expectations were for using the criteria, and the possibility of linking them to ongoing studies or initiatives that are part of the CAP development process.

The proposed prioritization criteria compiled from all four of the first working group meetings are the following:

|                    |   |
|--------------------|---|
| <b>Feasibility</b> | Science-based and data-driven actions   |
|                    | Responsive to context                   |
|                    | Clarity/ease of implementation pathway  |
| <b>Impact</b>      | Efficiency/effectiveness of action      |
|                    | Achievement of multiple public benefits |
|                    | Planning for future conditions          |
|                    | Ability to adapt to changing conditions |
|                    | Measurability                           |
| <b>Cost</b>        | Affordability                           |
|                    | Funding Source                          |
| <b>Equity</b>      | Meeting the needs of all citizens       |
|                    | Providing for vulnerable populations    |
|                    | Who pays?                               |

Regarding these, working group members were polled on the following question to gauge which criteria were receiving the most focus in the moment: *from among these criteria, which three seem the most important to you?*

The results of this poll were used to spark discussion amongst the working group members about the implementation of these criteria. For this meeting, the most energy was concentrated around three criteria related to feasibility and impact:

- Efficiency/effectiveness of action (Impact)
- Science-based and data-driven actions (Feasibility)
- Achievement of multiple public benefits (Impact)

Following this brief polling exercise, working group members were invited to offer their reactions, comments, and questions. Commission staff reiterated that the CAP process

regarding prioritization criteria was still the brainstorming and idea collection phase. Moreover, that the discovery of a clear path was ongoing.

Below are working group member questions and comments that followed Mr. Tupper's criteria review presentation. Working group member questions are bolded, and answers from the Cape Cod Commission and/or CBI are italicized.

- **I understand that construction and agriculture are large contributors to emissions. That may not be the case on the Cape, but I think it's significant nation-wide.**

## REVIEW CLIMATE ACTION PLAN STRATEGIES AND ACTIONS FOR TRANSPORTATION

Cape Cod Commission Transportation Program Manager, Steven Tupper, gave an introductory presentation to participants on CAP the identified goals, strategies, actions, and steps for the Transportation focus area. He provided an overview of the entire draft framework, noting the work has been broken down into 5 focus areas, 14 goals, 44 strategies, and 131 actions. He then reviewed the Transportation and goals and strategies, as well as overarching themes and messages that emerged from the pre-meeting survey.

The Transportation working group had 2 goals, 7 strategies, and 30 actions specific to its focus. Amongst these, those that working group members prioritized for discussion during the second meeting broadly fell into the following two categories:

- Reducing vehicle miles and enhancing alternative transportation
- Electrification of the transportation system

### Discussion #1: Reducing vehicle miles and enhancing alternative transportation

Ahead of the first breakout group discussion, Mr. Tupper presented the strategies and actions identified in the pre-meeting survey as priorities for further discussion by group members in the first category: reducing vehicle miles and enhancing alternative transportation. CBI facilitator Stacie Smith then reviewed specific survey comments relevant to those strategies and actions.

Below are working group member questions and comments that followed Mr. Tupper's presentation. Working group member questions are bolded and answers from the Cape Cod Commission are italicized.

- **How does accessibility of Cape Cod fit into CAP? How will the Commission's planning efforts address the question of bridge construction (during and after), and what it will mean for those accessing the Cape?**

- *Commission: With regards to planning around bridge construction, an important consideration is that major infrastructure projects will hopefully last for 100 years. The Commission wants to think about the regional vision for a multimodal transportation system for travel on and off the Cape before, during, and after construction of the bridge.*
- **The bridge may have a more nuanced impact on emissions than expected. A question to answer is whether the bridge’s increased capacity will lead to more traffic and an increase in congestion (idling) and gas, or if the increased capacity will decrease congestion so much that it acts as an offset to current emissions. The cleaner personal transportation becomes, the lower the emissions from vehicle travel on the bridge will be, too.**
- **Alternative modes of transportation on and off the Cape will need to be considered more than they are today. There Bridge construction will offer opportunities for alternative modes to gain popularity. Commuter rail extension are being pursued in Bourne, but the pandemic has delayed the progress of those efforts. Technological advances could also help to create more viable alternative transportation methods of accessing the Cape.**
- *Commission: This discussion is highlighting things that the Commission wants to continue to discuss as the canal bridge planning process progresses. It will be important for the Cape to understand key questions to ask as we make investment decisions. Please note that there is a meeting tomorrow afternoon on the potential on bringing rail to our region.*

Following the introductory presentation, working group members were then broken into 2 small groups for parallel deep dive discussions to review and discuss the specific goals, strategies, and actions connected to reducing vehicle miles and enhancing alternative transportation. Those of particular emphasis for the meeting are highlighted below.

*For the full list of DRAFT Transportation and Community goals, strategies, actions, and steps used for discussion, please see Appendix B.*

| Goal  | Strategy                      | Actions   |
|---|-------------------------------|---|
| Reduce emissions from the transportation sector | Reduce vehicle miles traveled | Explore pricing mechanisms that incentivize GHG reduction strategies and funds other strategies |

|  |  |   |
|--|--|---|
|  | Enhance public transportation, bicycling, walking, and shared transportation options | Improved coordination between modes   |
|  |  | Expand passenger rail service   |
|  |  | Expand and improve the bicyclist and pedestrian network as alternate transportation modes |
|  |  | Consider new water transportation options   |
|  | Encourage more efficient land use patterns   | Promote Transit Oriented Development (TOD)  |
|  |  | Focus Growth in Activity Centers  |
|  |  | Consider undevelopment where appropriate  |

Working group members were specifically asked to affirm, add to, and/or amend the above, in particular, to elaborate and brainstorm around the “steps” that might be required to implement the strategies and actions to *achieve* the respective goals. Additionally, participants were asked to preliminarily identify any key actors who would be necessary to execute successful implementation. Below is a brief synthesis of the results of this conversation.

### ***Reduce Vehicle Miles and Enhance Alternative Transportation***

Several key inputs emerged from across the discussion of goals, strategies, actions, and steps within the reduce vehicle miles and enhance alternative transportation category. The edits, additions, and amendments group members suggested highlighted the need for

promotion of existing alternative transportation options; incentivizing virtual civic and business engagements, even after the pandemic has ended; and improving the existing public transit network (e.g., subsidizing transit, improved parking for buses and public transit, electrifying municipal fleets, etc.). Group members proposed adding an additional strategy concerning idling policies, which would include enforcing state idling laws, conducting public outreach and education campaigns, and encourage greater use of school buses for schools. Looking at the strategy of promoting Transit Oriented Development, members noted the importance of expanding rail service, ferry connections, and reducing the number of cars driving to lots to catch buses – members commented that transit officials should be at the table early for all new development conversations.

A theme raised throughout the discussion by multiple members was the public education and outreach efforts that will be necessary to communicate the actions to and benefits of reducing vehicle miles traveled and enhancing alternative transportation (e.g., communicating safety protocols with more shared streets, promoting the economic development benefits of increasingly connected bike and pedestrian infrastructure around activity centers, promoting the health benefits of more recreational alternative transportation, etc.).

Working group members identified the following key actors for further exploration:

- Car manufacturers and sellers
- Public transit officials
- Business community
- Town officials

## **Discussion #2: Electrifying the Transportation Sector**

To set the stage for the second breakout group discussion, Mr. Tupper presented the strategies and actions identified in the pre-meeting survey as priorities for further discussion by group members in the second category: electrifying the transportation sector. CBI facilitator Stacie Smith then reviewed specific survey comments relevant to those strategies and actions.

Below are working group member questions and comments that followed Mr. Tupper's presentation. Working group member questions are bolded and answers from the Cape Cod Commission are italicized.

- **Storage of energy is an important component to the discussion of EVs. Existing regulations do not allow us to transfer energy from batteries into EV chargers to charge cars. In a storm event in California, the EVs were locked down the last 2-3 years as the system would go down. If our poles come down through a resiliency event on the Cape, there is a good chance that electrification gets knocked down.**

- *CBI: Adaptation to resiliency events is an important part of this conversation. The Energy Working Group is also thinking about how batteries fit into this conversation.*
- **At some point, we should be looking at how much electricity is required to support a full transition to EV infrastructure, including how much it costs individual owners. If the Cape transitioned to 100% EV usage, we need to have an idea of how fantastic that would be and the potential issues that would arise.**
  - **It is a near-zero marginal cost if you are powering EVs through renewables. The challenge is capturing the renewable energy and keeping it on Cape or Cape Cod becoming an exporter of clean energy and reaping the economic benefits. Right now, it seems that renewable energy captured is heading to Boston and NYC.**
  - **In Sweden, transitioning to EVs resulted in much more car driving. I don't want to see a Cape Cod that has twice the congestion once we've all gone electric.**
- **My last breakout group discussed the incredible reduction of fossil fuel burn that is taking place during COVID-19. By holding this working group meeting virtually, we are likely saving 30 gallons of gas. Anywhere in the CAP where we talk about electrification, we need to note that actions like holding a Zoom meeting is also a form of electrifying transportation. We should be noting that nuance and incentivizing those opportunities. For example, the Commission could come out and decide to hold 90% of its meetings virtually, even after COVID. From the standpoint of convincing people, we need to stress that electrification of transportation includes electrification of end destination/uses.**
  - *CBI: There might be a strategy about getting people out of those cars and another about electrifying cars. We will be trying to thread all those strategies together towards one purpose.*

Following the introductory presentation, working group members were then broken into 2 small groups for parallel deep dive discussions to review and discuss the specific goals, strategies, and actions connected to electrifying the transportation sector. Those of particular emphasis for the meeting are highlighted below. *(For the full list of DRAFT Transportation and Community goals, strategies, actions, and steps used for discussion, please see Appendix B.)*

| Goal  | Strategy  | Actions  |
|---|---|--|
| Reduce emissions from the transportation sector | Accelerate the electrification of the transportation system | Support investments in EV infrastructure and programs that incentivize EV adoption, including for Cape visitors* |



|  |   |   |
|--|---|---|
|  |   | Electrify public transit vehicles   |
|  |   | Electrify vehicle fleets (municipal vehicles, school buses, delivery vehicles, etc.)                            |
|  |   | Electrify ocean-based transport (personal watercraft, commercial fleets, improve dockside infrastructure, etc.) |
|  | Make efficiency improvements to the transportation system | Improve the efficiency of freight movement (including waste) by all modes (on-road, rail, and waterborne)       |

Working group members were specifically asked to affirm, add to, and/or amend the above, in particular, to elaborate and brainstorm around the “steps” that might be required to implement the strategies and actions to *achieve* the respective goals. Additionally, participants were asked to preliminarily identify any key actors who would be necessary to execute successful implementation. Below is a brief synthesis of the results of this conversation.

### ***Electrification of the Transportation System***

Several themes emerged from across the overarching discussion of goals, strategies, actions, and steps within the electrification of the transportation system category. The edits, additions, and amendments group members highlighted the importance of data collection and public communication in order to advance electrification efforts –education and outreach (e.g., EV car shows) underpin the effectiveness of implementation, and data collection and tracking (e.g., tracking of EV car sales) will be essential for measuring progress. Regarding supporting both private and public transit electrification, members named the importance of encouraging the purchase of a variety of different types of EV (e.g., private cars, RTA transit fleets, police cars, tourist transit trollies, etc.) and establishing EV charging stations. In addition to the transport of people on the Cape, members also spoke to improving the efficiency of freight movement by all modes with suggested incentives for deliveries made by EVs. Beyond transitioning to EV, members also highlighted the need to ensure that the electricity powering EVs comes from renewable energy sources, like solar, and that Cape residents and organizations have the capacity to store that renewable energy.

Working group members identified the following key actors for further exploration:

- Car manufacturers and sellers
- Public transit officials
- Aviation industry stakeholders
- Municipal policymakers

## REVIEW CLIMATE ACTION PLAN STRATEGIES AND ACTIONS FOR COMMUNITY

Cape Cod Commission Transportation Program Manager, Steven Tupper, gave an introductory presentation on the Community goals/strategies/actions around communication, data, policies, and partnerships that might support the transportation strategies and actions. The Community focus area has 5 goals, 9 strategies, and 18 actions specific to its focus. Mr. Tupper highlighted the role of the Community goals in helping accelerate and ensure the health, safety, and equitability of other CAP focus area strategies through improved public education and communication, increased data collection and access, and formation of strategic partnerships and collaborative efforts.

CBI facilitator Stacie Smith then reviewed specific survey comments relevant to the presented Community strategies and actions, noting additional proposed actions or steps from members; focus on policy advocacy at local, regional, state, and federal levels; partnerships with relevant organizations, companies, and trusted local leaders; and linking the Transportation goals, strategies, actions, and steps to the creation of new jobs on Cape Cod.

Following the introductory presentation, working group members then participated in a full-group discussion to review and discuss the goals, strategies, and actions connected to Community. Below is a brief synthesis of the results of this conversation.

- **Power of partnerships and collaboration:** There is a high-level of collaboration that already exists between transit leaders. When talking about partnerships, if transportation leaders are all on the same page and putting their money where their mouth is, it sends a great message. The Commission also has forward-thinking people in each Cape community to rely on to recognize opportunities to move forward on climate issues. Beyond the public sector and individual engagement, it will also be essential for the Commission to effectively engage the private sector, like car companies and banks.
  - *Commission: The Commission is currently working with the Chamber of Commerce, realtors, home builders, etc. The Cape Cod Climate Change Collaborative is also a focus group, which includes Cape Cod Five Bank.*
- **Document participation:** If the Commission documented the participation they have received (and will receive) in the CAP process from residents and organizations, it will help foster the integration of work life, personal life, and civic

engagement. Doing so over social networks will also help draw attention to the efforts.

- **Reminder of present impacts:** Discussions about climate impacts often focus on the future, but the Cape needs to talk about present impacts and how much climate is costing us today. It's easier to sell a shift in climate strategy when people understand the costs.
- **Municipal staff capacity:** For the strategy "Increase capacity within municipal staffs; provide outside technical assistance," the Commission should not think that it will be difficult to create and fund new positions, but it could be supported by grants or investments from the private sector.
- **Commission support on funding:** The Commission is in a unique position to see various funding opportunities that smaller groups may miss. The Commission could create a position to help find and raise money through grants so that the CAP steps could be implemented.

## PUBLIC COMMENT

*No public comment was made during this meeting.*

## NEXT STEPS AND WRAP UP

Commission Executive Director Kristy Senatori presented on next steps, articulating that their aim for the next meeting on December 18, 2020, would be to bring the database back to the Working Group and to focus on identifying the actors/areas for better integration. She also highlighted the Student Climate Ambassador Program, which will be kicking off shortly, outlining the application process and encouraging members to reach out to any interested students they may know to apply.

Following the request for outreach about the Student Climate Ambassador Program, CBI facilitator Stacie Smith named a few additional steps for members to take between meetings, as requested at the beginning of the meeting. She advised that members go out and talk with their constituents to get their feedback on the draft goals, strategies, actions, and steps, and ask their constituents: "What steps they are taking or working on regarding adaptation and mitigation around climate impacts in transportation? What would it take for them to consider alternatives?"

Ms. Senatori thanked members for their time and participation and closed the call.

## APPENDIX A: LIST OF PARTICIPANTS

| Participants |           |
|--------------|-----------|
| First Name   | Last Name |
| Guy          | Busa      |
| Tom          | Cahir     |
| Paul         | Cleary    |
| Bob          | Davis     |
| Grove        | Harris    |
| Lauren       | McKean    |
| Jim          | Wolf      |
| Bill         | Holcombe  |
| Rosemary     | Carey     |
| Amy          | Graves    |
| Ed           | DeWitt    |

## **APPENDIX B: CAPE COD CLIMATE ACTION PLAN GOALS, STRATEGIES, ACTIONS AND STEPS DRAFT**

(See next page for handout made available to stakeholders)

## GOAL 1: REDUCE EMISSIONS FROM THE TRANSPORTATION SECTOR

### Strategy 1: Reduce vehicle miles traveled

| Action   | Steps                      |
|--|----------------------------|
| Improve broadband access across Cape Cod   | <i>None identified yet</i> |
| Support work from home policies  | <i>None identified yet</i> |
| <b>Explore pricing mechanisms that incentivize GHG reduction strategies and funds other strategies</b> | <i>None identified yet</i> |

### Strategy 2: Enhance public transportation, bicycling, walking, and shared transportation options\*

| Action   | Steps  |
|--|--|
| Encourage carpooling and ridesharing*                  | <i>None identified yet</i>   |
| Expansion and improvements of park and ride facilities | <i>None identified yet</i>   |
| <b>Improved coordination between modes</b>             | <i>None identified yet</i>   |
| Reduce parking standards/requirements                  | <i>None identified yet</i>   |
| Improve and expand the public transit network          | <ul style="list-style-type: none"> <li>■ Expanding routes</li> <li>■ Expanding service days/hours</li> <li>■ Increase frequency on busy routes</li> <li>■ Focus on predictability/reliability</li> </ul> |
| <b>Expand passenger rail service</b>                   | <ul style="list-style-type: none"> <li>■ Expanded passenger rail</li> <li>■ Consider local/light rail service (intra-Cape)</li> </ul>  |

## GOAL 1: REDUCE EMISSIONS FROM THE TRANSPORTATION SECTOR

|   |   |
|---|---|
| <b>Expand and improve the bicyclist and pedestrian network as alternate transportation modes</b>                        | <ul style="list-style-type: none"> <li>■ Encourage adoption of Complete Streets policies</li> <li>■ Bike share and rental programs</li> <li>■ Bicycle infrastructure (including lighting, end-of-trip facilities)</li> <li>■ Retrofitting existing roads to better accommodate non-motorists</li> <li>■ Encourage responsible use of electric bicycles</li> <li>■ Support safe routes to schools efforts</li> </ul> |
| <b>Consider new water transportation options</b>  | <ul style="list-style-type: none"> <li>■ <i>None identified yet</i></li> </ul>  |
| <b>Strategy 3: Accelerate the electrification of the transportation system*</b>   |   |
| <i>Action</i>   | <i>Steps</i>  |
| <b>Support investments in EV infrastructure and programs that incentivize EV adoption, including for Cape visitors*</b> | <ul style="list-style-type: none"> <li>■ Develop programs to reward tourists for utilizing local EV rentals</li> <li>■ Zoning – encourage EV stations in new/redevelopment</li> <li>■ Support renewable energy production/battery storage/charging at transportation terminals</li> <li>■ Additional public EV charging station</li> <li>■ Support financing options for EV purchases/EV infrastructure</li> </ul>  |
| <b>Electrify public transit vehicles*</b>   | <i>None identified yet</i>  |
| <b>Electrify vehicle fleets (municipal vehicles, school buses, delivery vehicles, etc.)*</b>                            | <i>None identified yet</i>  |
| <b>Electrify ocean-based transport (personal watercraft, commercial fleets, improve dockside infrastructure, etc.)*</b> | <ul style="list-style-type: none"> <li>■ Dockside EV infrastructure</li> <li>■ Offer incentives like providing a discount on docking fees if you have an electric craft</li> </ul>  |
| <b>Strategy 4: Make efficiency improvements to the transportation system</b>  |   |
| <i>Action</i>   | <i>Steps</i>  |
| Address inefficient traffic signals, upgrades   | <ul style="list-style-type: none"> <li>■ Retime/adaptive signals</li> <li>■ Consider replace with roundabout</li> <li>■ LED upgrades</li> </ul>   |

## GOAL 1: REDUCE EMISSIONS FROM THE TRANSPORTATION SECTOR

|  |   |
|--|---|
| Address bottleneck locations (congested roadways and intersections)  | <i>None identified yet</i>  |
| Upgrade LED for streetlights   | <i>None identified yet</i>  |
| <b>Improve the efficiency of freight movement (including waste) by all modes (on-road, rail, and waterborne)</b> | <i>None identified yet</i>  |
| Strategy 5: Encourage more efficient land use patterns   |   |
| <i>Action</i>  | <i>Steps</i>  |
| Mix land uses where possible   | <ul style="list-style-type: none"> <li>■ Zoning that allows commercial and residential uses in the same area</li> </ul>   |
| Promote infill and adaptive use development  | <ul style="list-style-type: none"> <li>■ Density bonuses or increased coverage for developments that are redeveloping or infilling</li> </ul>   |
| <b>Promote Transit Oriented Development (TOD)</b>  | <i>None identified yet</i>  |
| Focus Growth in Activity Centers   | <ul style="list-style-type: none"> <li>■ Zoning that promotes density in Community Activity Centers (but outside of Special Flood Hazard Areas)</li> </ul>  |
| Consider undevelopment where appropriate   | <ul style="list-style-type: none"> <li>■ Zoning that promotes compact multifamily development in walkable areas</li> <li>■ Buy-out program for vulnerable properties</li> <li>■ Zoning that minimizes impervious surfaces (allows multi-story buildings) that allows for more natural area for sequestration</li> </ul> |



## GOAL 2: IMPROVE THE RESILIENCE OF THE TRANSPORTATION SYSTEM TO THE IMPACTS OF CLIMATE CHANGE

### Strategy 1: Adapt critical transportation infrastructure for climate change impacts

| <i>Action</i>                                   | <i>Steps</i>               |
|---|----------------------------|
| Low-lying roads – elevate, relocate, or abandon | <i>None identified yet</i> |
| Culverts  | <i>None identified yet</i> |
| Bridges   | <i>None identified yet</i> |
| Evacuation routes/potentially disconnected area | <i>None identified yet</i> |

### Strategy 2: Design transportation infrastructure for future conditions

| <i>Action</i>  | <i>Steps</i>               |
|--|----------------------------|
| Redesign for future precipitation/storm patterns             | <i>None identified yet</i> |
| Planning for the impact of increased temperature/heat events | <i>None identified yet</i> |

## COMMUNITY GOALS, STRATEGIES, AND ACTIONS

### GOAL 1: IMPROVE BROAD PUBLIC KNOWLEDGE AND UNDERSTANDING OF CLIMATE CHANGE IMPACTS AND PROGRAMS

Strategy 1: Increase education and communications about climate change mitigation options

| ACTION  | <i>Steps</i>   |
|---|--|
| Identify the legal framework that towns and other actors must work within (consider how to reach vulnerable populations)                              | <ul style="list-style-type: none"> <li>■ Identify how information flows through neighborhoods, how to reach vulnerable populations</li> </ul>  |
| <b>Provide guidance for communities that help prioritize actions to reduce greenhouse gas emissions</b>   | <i>None identified yet</i>   |
| Improve communication between municipalities  | <i>None identified yet</i>   |
| Develop curriculum and hands-on programming for students of all ages to become informed about climate change and the actions available to address it* | <ul style="list-style-type: none"> <li>■ Engage students and faculty (high school and college) in the development of curriculum. Include department of education to change curriculum.</li> <li>■ Widely distribute the Climate Action Plan in print and other media; include town halls, libraries, bookstores, Chambers of Commerce, etc.</li> </ul> |
| Provide information about the impact that eating a plant-based diet can have on personal greenhouse gas emissions                                     | <ul style="list-style-type: none"> <li>■ Vendor fairs, lectures, peer influence (climate influencers)</li> </ul>   |
| Identify individual actions or lifestyle choices that individuals can take; provide that information as guidance                                      | <ul style="list-style-type: none"> <li>■ Utilize the Climate Action Networks to distribute information</li> </ul>  |
| <b>Identify and distribute a GHG calculator to assess emissions associated with personal travel, consumption choices, etc.</b>                        | <i>None identified yet</i>   |

**Strategy 2: Increase education and communications about climate change adaptation options**

| <i>Action</i>              | <i>Steps</i>               |
|----------------------------|----------------------------|
| <i>None identified yet</i> | <i>None identified yet</i> |

**GOAL 2: ACCELERATE ADOPTION OF EMISSIONS REDUCTION STRATEGIES AND ACTIONS ACROSS REGIONAL AND LOCAL GOVERNMENTS**
**Strategy 1: Where suitable, identify and adopt regional goals and policies that help advance mitigation strategies and actions**

| <i>Action</i>   | <i>Steps</i>  |
|---|---|
| Adopt a goal in the Regional Policy Plan (RPP) to advance the Commonwealth's greenhouse gas reduction goals   | <i>None identified yet</i>  |
| Adopt a new performance measure in the RPP that tracks progress on greenhouse gas emissions   | <i>None identified yet</i>  |
| <b>Adopt objectives in the RPP to promote low carbon transportation alternatives, low carbon technologies for building heating and cooling, to promote carbon sequestration through land use practices, and to promote low carbon energy generation</b> | <i>None identified yet</i>  |
| Amend existing technical guidance to advance net or near zero construction methods and elements, including solar considerations*  | <i>None identified yet</i>  |
| <b>Develop technical guidance to support the new RPP goal and objectives</b>  | <ul style="list-style-type: none"> <li>■ Develop technical guidance on Net or Near- Zero construction; alternate fuel sources and HVAC systems; Electric vehicles including transit; bike and pedestrian networks; means for preventing the reduction of, and promoting new carbon sequestration</li> </ul> |

**Strategy 2: Create mandates for municipal mitigation actions**

| <i>Action</i>              | <i>Steps</i>               |
|----------------------------|----------------------------|
| <i>None identified yet</i> | <i>None identified yet</i> |

**Strategy 3: Increase capacity within municipal staffs; provide outside technical assistance**

| <i>Action</i>   | <i>Steps</i>  |
|---|---|
| Increase technical assistance capacity within regional organizations to support local governments (develop model bylaws, regulations, and policies) | <ul style="list-style-type: none"> <li>■ Develop model bylaws, regulations, and policies to assist local governments</li> </ul> |
| Create and fund new staff positions within municipal government to advance climate change actions   | <i>None identified yet</i>  |
| Provide grant-writing assistance  | <i>None identified yet</i>  |

**GOAL 3: INCREASE DATA COLLECTION AND ACCESS**
**Strategy 1: Identify more granular, town-specific data of GHG emissions**

| <i>Action</i>  | <i>Steps</i>               |
|--|----------------------------|
| <b>Request legislative change to mandate provision of fuel use data at municipal level</b> | <i>None identified yet</i> |

**GOAL 4: ENSURE THE HEALTH, SAFETY, AND EQUITABILITY OF MITIGATION AND ADAPTATION SOLUTIONS**
**Strategy 1: Assess opportunities for green economy to create jobs with livable wages**

| <i>Action</i>              | <i>Steps</i>               |
|----------------------------|----------------------------|
| <i>None identified yet</i> | <i>None identified yet</i> |

## GOAL 5: ESTABLISH STRATEGIC PARTNERSHIPS TO ADVANCE SHARED GOALS

### Strategy 1: Foster collaborations between levels of government

| Action  | Steps                      |
|---|----------------------------|
| Look at opportunities to combine road retrofits with new utility installations (e.g. wastewater when addressing sea level rise or flooding) | <i>None identified yet</i> |

### Strategy 2: Foster collaborations between the public and private sectors\*

| Action   | Steps                      |
|--|----------------------------|
| <b>Identify opportunities for strategic partnerships to advance common goals or objectives</b> | <i>None identified yet</i> |