

NEMSN Profile: Cambridge, MA

Community Profile¹

<i>Area (sq. Miles):</i>	6.4
<i>Population:</i>	110,402
<i>Population Density:</i>	17,277.90
<i>Households:</i>	45,569
<i>Median Age:</i>	31.5
<i>Median Household Income:</i>	\$89,847
<i>Poverty Rate:</i>	12.80%

City Department:

Title: Environmental and Transportation Planning Division

Staff: Iram Farooq: Assistant City Manager for Community Development,
Susanne Rasmussen: Director of Environmental & Transportation Planning.

Responsibilities: Responsible for addressing climate change by developing policies and programs to reduce energy use, protect natural resources, and reduce pollution.

Programs/Policies: Partner with other departments around municipal initiatives and work with the city's businesses, institutions and residents to further their efforts to reduce their climate impacts.

Frameworks: Compact of Mayors, STAR Communities, Metro Boston Climate Preparedness

Interview:

What have been your biggest successes in the past 2-3 years?

- Pilot Program over past two years on big multi-family buildings.
- Working with Eversource to have one person working with you on all different types of energy efficient incentives. Instead of having to work with 8 million different programs and contracts. Also partnered with them to provide free solar assessment as part of all energy assessment through ES. And up to 8 hours of advice time to work on particular barriers and to evaluate quotes as they come back.
- Working with banks to tie in lenders, along with pulling in their property manager contracts.
- Approaching the launch of community aggregation. "Cambridge Community Electricity" automatic opt-in for 25% more solar than was there before. Also a 100% green option (for 2-3 cent premium). This will happen July 1st and are now in the public outreach stage.
- There is going to be a "HeatSmart" program that will be run like a Solarize Program later this year.

Given the range of your priorities, which do you consider to be your top priorities?

Please explain why you have chosen these priorities?

How important are the metrics to the progress of the programs and policies?

- 1 - we have obtained a five-star rating from STAR
- 2 - tracking recycling/composting stats; in the process of completing zero waste master plan
- 3 - track multiple transportation stats on ongoing basis; have vision zero; pedestrian; bicycle; and transit strategic plans and complete streets policy
- 4 - comprehensive planning around storm water management; developing drinking water conservation plan (have our own drinking water supply)
- 5 - 25-year net zero action plan to eliminate GHG from the built environment
- 6 - annual municipal, 3rd party-verified GHG inventories; newly completed community-wide GHG inventory (to be updated every 3-5 yrs)
- 7 - developing equity/economics indicators as part of current citywide planning effort (Envision Cambridge) being completed end of calendar 2018 (in addition to updated mobility, climate and environment and housing indicators)
- 8 - not entirely sure what is meant by community engagement, but we are tracking the engagement through the 3-yr Envision Cambridge planning process

What resources are needed to complete your strategies and priorities? Are they currently available to you? If not, do you know where/how to obtain them?

How has the local community promoted its sustainability efforts to members in the community?

What are the top 3 barriers that you consider to be beyond the control of the municipality, which have limited your ability to implement sustainability initiatives?

Sustainable Profile ²

Overview

- Solid Waste Reduction & Recycling
- Food & Agriculture
- Transportation
- Storm Water
- Energy
- Development
- Greenhouse Gas Reduction
- Climate Preparedness
- Equity & Economics

- Community Engagement

Sustainable Plans

	Targets/Goals	Published Plan	Metrics/Reporting
Solid Waste Reduction & Recycling	✓	✓	✓
Food & Agriculture			
Transportation	✓	✓	✓
Storm Water	✓	✓	✓
Energy	✓	✓	✓
Development	✓	✓	✓
GHG Reduction	✓	✓	✓
Climate Preparedness	✓	✓	
Equity & Economics			
Community Engagement	✓		✓
Totals	8	7	7

Data Source: University of New Hampshire Sustainability Institute: Program Implementation Survey 2017

Solid Waste Reduction & Recycling

Top Priorities

- Increase Recycling Rate to 60%.

Strategies

- Continue to work on options for a more widespread program for composting garbage.
- Implement waste prevention programs at the municipal, business and institutional levels.
- Increase the rate of recycling.
- Increase food composting by commercial and institutional establishments.
- Assess and improve existing municipal purchasing policies to increase the use of recycled paper and other products.

Food & Agriculture

Top Priorities

-

Strategies

-

Transportation

Top Priorities

- Increase Average Fuel Economy to 40 MPG
- Reduce Vehicle Miles Traveled by 10%.
- Improve facilities for walking and cycling.

- Reduce motor vehicle travel with promotion and education programs.
- Reduce motor vehicle emissions.
- Promote Transit improvements.

Strategies

- Continue researching options for promoting and creating some of the infrastructure needed for electric vehicles.
- Continue and expand measures to reduce commuting by single-occupancy vehicles and encourage alternative modes of transport.
- Continue to implement the Vehicle Trip reduction Ordinance.
- Install more bicycle lanes and parking facilities.
- Create and improve off-road paths including railroad rights-of-way.
- Conduct information and promotion programs to encourage alternative modes of travel.
- Acquire alternative fuel and hybrid vehicles.
- Develop a municipal Green Fleet policy.
- Support extensions of the Green Line.
- Acquisition of alternative fuel buses.

Storm Water

Top Priorities

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Strategies

-

Energy

Top Priorities

- Improve Energy Efficiency of Electricity by 12.5%.
- Reduce Natural Gas and Fuel Oil Use by 10%.
- Reduce Emissions Associated with Electricity Generation by 40%.
- Purchase 20% of Energy From Green Power Sources.

Strategies

- Institute an energy management system for municipal facilities.
- Recruit businesses and institutions into the EPA Energy Star program.
- Promote replacement of electric generation facilities fueled by coal and oil by supporting a federal and state renewable portfolio standard.
- Purchase green power for the municipal electric load and encourage green power purchasing by businesses, institutions and households.
- Install renewable energy systems and fuel cells to improve electric systems reliability.
- Work with state officials to create and implement a building energy labeling system.

- Create City-funded incentives for energy efficiency actions, using Energy Efficiency Community Block Grant funds.

Development

Top Priorities

- Develop zoning changes that encourage mixed-use development and density around transit.
- Investigate policies to promote green and light-colored roofs, shading for parking lots, and use of lighter-colored paving.
- Use zoning and incentives to foster mixed-used, transit-oriented development.
- Optimize building design and the use of vegetation to shade buildings and reduce the urban heat island effect.
- Promote the design and construction of “green buildings”
- Work for transit-oriented regional land use planning.

Strategies

- Encourage denser development near transit stations.
- Design durable buildings with flexible re-use options.
- Use permitting and incentives to create more open space for trees.
- Use geographic information systems to map the city’s tree canopy coverage and assess the environmental services provided by the urban forest.
- Encourage the use of the Leadership in Energy and Environmental Design (LEED) green building standards through zoning incentives and requirements.
- Work with public officials in other communities to create an effective regional land use plan.

Greenhouse Gas Reductions

Top Priorities

- Reduce GHG emissions by 20% below 1990 levels.
- Reduce and prevent annual GHG emissions of 494,400 tons of carbon dioxide.

Strategies

- Improve efficiency of electricity use by 12.5%.
- Reduce natural gas and fuel oil use by 10%.
- Reduce emissions associated with electricity generation by 40%.
- Purchase 20% of electricity from green power sources.
- Increase average fuel economy to 40 MPG.
- Reduce vehicle miles traveled by 10%.
- Increase recycling rate to 60%.

Climate Preparedness

Top Priorities

- Complete Climate Change Preparedness & Resilience Plan. (2018).

Strategies

-

Equity & Economics

Top Priorities

-

Strategies

-

Community Engagement

Top Priorities

- Provide City leadership.
- Undertake a citywide campaign.
- Build on existing efforts
- Monitor progress
- Establish a Coordinating Committee

Strategies

- Improving energy efficiency of municipal, installing renewable energy systems and purchasing green power, increasing the fuel economy of City vehicle fleet.
- A campaign to draw all sectors together in a common effort to reduce GHG emissions.
- Launch programs to improve energy efficiency in buildings such as businesses, schools and other community centers.
- Track and report indicators such as energy use, transportation factors and waste volumes.

The City should establish a standing committee to monitor progress and advise the City Administration on implementation of the plan.

Initiative Implementation

Cambridge, MA	Not Yet Considered	Planning	In Progress	Fully Implemented
Curbside Composting			✓	
Zero Waste Policy			✓	
Community Gardens				✓
Urban Agriculture & Local Food Programs		✓		
Complete Streets				✓
Bike Share/ Rail Trail				✓
Green Storm Water Infrastructure Upgrades			✓	
Commercial/Municipal Building Upgrades			✓	
Municipal Energy Aggregation				✓
Municipal Solar Installations			✓	
Community Solar Installations		✓		
LED Conversions: Streetlight				✓
LED Conversion: Municipal Buildings			✓	
Mixed-Use Development				✓
Urban Infill				✓
Sustainable Housing for Low-Income Families			✓	
Aiding Local Business With Sustainable Programs			✓	
Updated Website with Events/Reports				✓
Online Solar Map & Solar Market Place				✓
Comprehensive Net Zero Action Plan for Buildings				✓
EV Strategy			✓	
Totals		2	9	10

Data Source: University of New Hampshire Sustainability Institute: Program Implementation Survey 2017

Sources:

1. "Census Profile: Cambridge, MA." *Census Reporter*. N.p., n.d. Web. 20 June 2017.
2. "Climate Action Status Report." *City of Cambridge 2011*.
http://www.cambridgema.gov/~media/Files/CDD/Climate/climateannualreports/climate_report_2011.pdf?la=en