NEMSN Profile: Boston, MA

Community Profile[1]

Area (sq. Miles):	*48.4*
Population:	*669,469*
Population Density:	*13,841.80*
Households:	*261,492*
Median Age:	*31.8*
Median Household Income:	*$58,263*
Poverty Rate:	*20.50%*

City Department:

Title: Environment, Energy & Open Spaces Cabinet
Staff: Austin Blackmon: Chief.
Responsibilities: Preserve and enhance the resources of our built and natural environment, to promote affordable, efficient, reliable and safe energy systems, and to provide clean, green, safe and accessible open space for residents and visitors.
Programs/Policies: Oversees programs and policies on energy efficiency, green buildings, groundwater, park planning, recycling, renewable energy, and certain transportation issues.

Interview:

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

- Signed a performance based ESCO contract with Honeywell which will cover the majority of municipal buildings. The innovation of this performance contract is that it guarantees yearly savings and payback for private sector investors.
- Mayor Walsh committing to carbon neutrality by 2050.
- The completion of the Climate Ready Boston report, a comprehensive study on strategies for improving Boston's resiliency in the face of climate change.

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

- Carbon Free Boston planning initiative with Boston University and the Carbon Neutral Cities Alliance's Zero Net Carbon Buildings initiates. Combined, these efforts will map out Boston's strategies and pathways to achieving carbon neutrality by 2050.
- Zero Waste planning RFP being issued by the City.
- Performance based ESCO with Honeywell.

Please explain why you have chosen these priorities?

Carbon neutrality by 2050 is the most ambitious environmental goal for the City. Planning out how we are going to achieve this goal – through zero waste programs, performance based contracts energy efficiency retrofits, and city-wide planning studies – is of critical importance.

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

Climate impact, cost effectiveness, and replicability remain the most important metrics for our programs. Exactly how do we define "carbon neutral" is not as much as a priority as the strategies we implement for the next 20 years will be largely the same no matter on the definition we choose.

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?
While the planning efforts we are engaged with are achievable with current capacities, the implementation of the recommended strategies will require additional resources.

How has the local community promoted its sustainability efforts to members in the community?
Our Greenovate Boston program has been highly successful in engaging with the wider community around our sustainability work.

What are your 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

Solid Waste Reduction & Recycling

Top Priorities

- Commercial Solid Waste Reduction
- Residential Solid Waste Reduction
- All new public trash bins will come with recycling bins.
- Expand recycling in parks

Strategies

- More robust recycling policies
- Composting programs
- Garbage disposal installation
- Put down garbage disposals and sewage route to anaerobic digesters on Deer Island.
- City will explore designs than can minimize contamination in public recycling

Food & Agriculture

Top Priorities

- Reach 35% tree canopy coverage by 2030
- Improve access to local, healthy food.

Strategies
- Use public-private partnerships and citizen volunteers for tree planting and maintenance.
- Repurpose vacant lots
- Food resilience study

Transportation

Top Priorities
- Improve Fuel Economy
- 5.5% below 2005 VMT
- Complete streets
- Increase bike commute mode sharing from 2% to 10% by 2020.

Strategies
- Re-envision Boston's transportation system to dramatically reduce emissions from this sector.
- VMT reduction strategies
- Mass Transit/Parking
- Car Sharing
- Bike Programs
- Behavior change in transportation
- Build 365 miles of bike lanes, cycle tracks and paths by 2043.
- Provide multiple transportation options including Hub way, car-sharing, public transit and pedestrian way finding in a single location.
- Bus priority lanes

Storm Water

Top Priorities
- Explore a community-wide storm water fee
- Accelerate neighborhood storm water management

Strategies
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Energy

Top Priorities
- GHG reduction goals of 25% by 2020 & 80% by 2050
- 72,000 Completed Homes Energy Audits
- 36,000 Weatherization, heating system replacements, or other significant upgrades.
- Reduce energy consumption across all BERDO buildings (Building Energy Reporting and Disclosure Ordinance).
- 15% of energy use from co-generation.
- Use 10 MW of commercial solar.
- Continue Open Space Plan for equitable park systems that continue to provide multiple benefits.

Strategies

- Expand energy efficiency programs through targeted outreach & new financing mechanisms.
- Increase local & low-carbon energy sources, (e.g. expanding district energy & co-generation.)

Development

Top Priorities

- Renew Boston Electric Utility Efficiency programs
- Renew Boston and Utility Efficiency programs
- Behavior Change-Buildings
- Renew Portfolio Standard
- Make low-carbon heating a priority

Strategies

- Encourage sustainable development that creates opportunities for current and future residents.
- Implement Housing a Changing City, the 2015-2021 Open Space plans.
- Neighborhood-level planning and use a neighborhood network.
- Make multi-family housing more efficient.
- Vet and incentivize adoption of smart grids and low-carbon innovation on buildings.

Greenhouse Gas Reduction

Top Priorities

- Update a more rigorous GHG inventory and projections.
- Lower the cap on power plant emissions to make electrical supply less carbon-intensive.
- GHG reduction goals of 25% by 2020 & 80% by 2050.

Strategies

- Incorporate remaining GHG emissions reduction needed between 2014 and 2020.
- Incorporate Macro trends (such as changes in the electric grid and population growth);
- Incorporate past program participation trends.
- Standardize rules, minimal fees and an adequate feed-in tariff for grid interconnection.
- Citywide or regional carbon tax.

Climate Preparedness

Top Priorities

- More comprehensive climate preparedness strategies.
- Assess vulnerability.
- Include climate change in all planning and review.
- Establish preparedness indicators.

Strategies

- Track and publicly report on the Climate Action Plan's progress year-over-year.
- Use performance measurement, targets and goals to motivate climate action and behavior change.
- Work with regional and state agencies, and surrounding communities to align and accelerate regional preparedness planning.
- Incorporate climate preparedness into existing local planning and community engagement efforts.

- Ensure public and private sector developments and major capital projects are prepared for expected climate change over their projected life.
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Equity & Economics

Top Priorities

- Ensure equitable access to green jobs and facilitate job training.
- Promote equity in all policies and programs
- Promote good green jobs and economics equity

Strategies

- Crosscutting themes including social equity, economic development and public health and safety.
- Make sustainability and climate change relevant to each of Boston's diverse populations.

Community Engagement

Top Priorities

- Create a website that tracks implementation, performance measures and lessons learned.
- Promote climate action at the neighborhood level.
- Collaborate with community in program development and implementation.
- Establish green teams and champions at every school.
- Boston Public Schools will make sustainability a part of curriculum.

Strategies

- Support grassroots, community-driven climate action efforts.
- Incorporate sustainability into all aspects of education.
- More extensive and inclusive community engagement.

Support a citywide awareness campaign, Equip individuals to take action.

Sources:

1.) "Census Profile: Boston Town, Suffolk County, MA." *Census Reporter* Web. July 5, 2017.
2.) "Greenovate Boston: 2014 Climate Action Plan Update." *Greenovate Boston.* https://drive.google.com/file/d/0B8vOULo8A81TYmJRSTJWTk0tMFk/view