

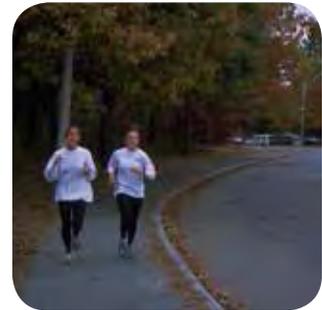
★ MAYOR ★
MARTIN J. WALSH

BOSTON2014
TRANSITION COMMITTEE



Energy, Environment
& Open Spaces
Working Group
Transition Team Report
April 16, 2014

Photos: Kit Pyne





“What can Boston city government do—whether by itself or in partnership with others—to make Boston a national ‘green leader?’”

INTRODUCTION

As part of Mayor-elect Martin J. Walsh’s transition committee, the Energy, Environment, and Open Space Working Group, co-chaired by John Barros and State Senator Linda Dorcena Forry and led by Amos Hostetter, chair of the Green Ribbon Commission, and Alex Bok, former general counsel of clean-tech leader Boston-Power, discussed and solicited input from the Boston community of residents and businesses along with a large number of interested groups.

THE PROCESS

In considering what existing programs to Keep, what new initiatives or expansions to Implement and what goals to Dream to aim for, the mayor-elect asked the Energy, Environment,

and Open Spaces Working Group, “What can Boston city government do – whether by itself or in partnership with others – to make Boston a national ‘green leader?’ You should feel free to interpret the term ‘green’ broadly, whether to refer to climate change, energy efficiency, or other sustainability issues or, alternatively, open space and public spaces in the sense of parks and amenities.”

Representing a cross-section of Boston’s resident, activist, and business community, the Energy, Environment, and Open Space Working Group identified some key themes emerging from the January 7, 2014 public hearing at English High which was attended by over 200 residents and activists, two well attended Working Group sessions during the mayor-elect’s citywide town meeting in December 2013, and the Boston14.org website. These themes, though not exhaustive, serve as a starting point to help guide the Walsh administration as it puts forth its policy initiatives related to energy, environment, and open space.

THE RECOMMENDATIONS

FOCUS 1: CLIMATE ACTION & CLEAN ENERGY

Boston is recognized as a national leader in responding to the challenges of global climate change. The city has set goals and taken action to reduce our carbon footprint, to spark innovation and growth in the

region’s clean energy economy, and to prepare Boston for the consequences of a changing climate. The Working Group recommendations are designed to continue the city’s national leadership on climate action and take it to another level:

- 1) Continue to focus on achieving the interim goal of a 25% reduction in GHG emissions citywide, and to develop and implement innovative policies and programs that can be replicated in cities across the world.
- 2) Prepare to achieve the long-term mitigation goal of an 80% reduction in emissions by 2050.
- 3) Implement a comprehensive climate preparedness strategy that retains the city’s resiliency and vitality under even the most extreme conditions of potential climate impacts.

KEEP

- 1) City Climate Action Plan Team and Strategy: The city has a strong team in place, a good first generation Climate Action Plan, and a plan in place to update its Climate Action Plan in 2014. The team leads three efforts: Greenovate Boston, an innovative engagement strategy to connect a critical mass of Boston residents to practical climate action; Renew Boston, a unique partnership between the city and investor-owned utilities (NSTAR and National Grid) for the co-delivery of energy efficiency



home and business improvements; and a strategic energy management function that has achieved the city target of a 25% reduction in city-government generated greenhouse gas emissions seven years ahead of schedule. Boston's Performance Dashboard is a useful tool to help track and monitor these efforts and should be continued.

2) Boston Green Ribbon Commission: The Green Ribbon Commission (GRC) and its working groups have provided valuable private sector leadership to support the city's Climate Action Plan. It can serve as the foundation for

additional public/private partnerships in support of climate mitigation and preparedness.

IMPLEMENT

- 1) Regional Climate Summit: Boston and neighboring municipalities face common challenges when it comes to managing climate impacts such as sea level rise (SLR) and coastal flooding. We recommend that Mayor Walsh convene a regional climate preparedness summit in partnership with the Commonwealth of Massachusetts, the EPA, the Metropolitan Area Planning Council, and other regional planning authorities to begin the dialogue about how the region can collaborate on climate preparedness. We further recommend that a key focus of the summit be on aligning federal, state, and municipal climate preparedness strategies.
- 2) Climate Action Plan Update: The Walsh administration should reaffirm its support for the 2014 Climate Action Plan update and highlight it as a priority for 2014, engaging the entire community in climate action while pushing for aggressive targets and interim benchmarks. Successful implementation of the Climate Action Plan requires agencies that control assets, programs, and regulatory review processes internalize and adopt the specific targets of the Climate Action Plan. We recommend that the mayor issue an updated executive order directing all city agencies to appoint a liaison to develop strategies that support meeting Climate Action Plan targets and collaborate with Energy and Environment Services and federal and state agencies to mitigate climate change and make Boston a more resilient city.

- 3) **District Energy:** District Energy and Combined Heat and Power (DE/CHP) offer many untapped opportunities for greenhouse gas reductions and energy savings. Boston should aggressively pursue its strategy for developing a DE/CHP plan for the city, starting with the Innovation District.
- 4) **Short Term Resiliency and Adaptation Planning:** We recommend that the mayor propose a suite of city policies and programs to support short-term actions to help the city and property owners protect their assets and neighborhoods against climate impacts. These should include actions such as hiring a director of climate change preparedness; conducting a citywide climate vulnerability assessment; development of preparedness guidelines and incentives for new and existing residential and commercial building owners to harden, move or lift key utility and building assets; and new building restrictions in flood zones.
- 5) **Neighborhood and District-Scale Resilience Planning Pilots:** We suggest the administration launch a pilot climate resiliency district project to help understand climate preparedness at the neighborhood and individual resident level.
- 6) **Higher Education Climate Partnership:** Our region is home to some of the world's best research universities with enormous knowledge on issues of climate action. We recommend that the mayor convene the presidents of our major research universities and explore the development of a climate preparedness partnership with the city to bring their knowledge to bear on best practices for coastal cities. The partnership could also help position Boston as a national center of excellence in this field.
- 7) **C40 Membership:** Boston is considering joining C40 – a global network of “mega-cities” working on climate action and led by former New York City mayor Michael Bloomberg. In the first 100 days, we recommend that the mayor announce Boston’s intention to join C40 and use that announcement to highlight the city’s commitment to international leadership on climate action.
- 8) **Fund Greenovate in the City Budget:** Greenovate is currently entirely grant funded. We recommend that the program and its budgeted staff be fully supported by the city.

DREAM

The 2014 Climate Action Plan update includes a “2050 and Beyond” planning process to work on long-term climate mitigation and adaptation. As part of this process, the Energy, Environment, and Open Space Working Group recommends:

- 1) **Carbon Neutrality:** The City has a long-term goal of an 80% reduction in emissions by 2050. In 2014, the mayor should announce a major new carbon neutrality initiative in partnership with the region’s world-class research universities to create practical “roadmaps” to achieve the 80X50 goal in key emissions sectors (power, transportation, buildings, water/waste, land use, etc.).
- 2) **Net Zero Buildings:** The city should “lead by example” and work with other large property owners (the federal government, commonwealth, Massport, and others, who collectively own 25% of the city’s non-residential property) to get all public property in the city to Net Zero by 2030.
- 3) **Resilient Boston: Long-Term Climate**

Photo: Kit Pyme



Preparedness: Building a city resilience strategy that enables our region to continue to prosper and grow under increasingly severe changes in climate will require fundamental redesign of our urban form over the next four decades. We do not have the analytical, civic decision-making, zoning/land use rules, and investment structures in place to take on this challenge. Mayor Walsh should launch a Resilient Boston initiative to explore the kinds of public/private partnerships and governance changes that will be needed to establish this social infrastructure.

4) Make Boston a National Leader in Clean Energy Finance: Boston has both 1) the presence of leading clean tech, finance, insurance, and

real estate industry expertise and 2) the need for clean energy financing beyond conventional government subsidy programs to help achieve Boston's goals for energy efficiency and clean energy property improvements. We recommend the mayor take two actions to support Boston's leadership in clean energy finance.

Access to Clean Energy Capital: The mayor should support state legislative approval of Commercial Property Assessed Clean Energy (C-PACE), an innovative financing program that is already working well in Connecticut. Under C-PACE programs, loans to finance energy efficiency or renewable energy improvements are repaid through property tax payments and remain an obligation of the property owner. Similar to a sewer tax assessment, capital provided under the C-PACE program is secured by a first lien on the property, so low-interest, long-term capital that matches the lifecycle of the improvement can be leveraged. Capital can either be raised through government bonds that are secured by the property tax repayment, or from private lenders that accept the C-PACE securitization and payback framework. The mayor should work with the Green Ribbon Commission and the major banks in Boston to make this program available to dramatically expand the payment options for energy efficiency and other clean energy improvements.

Boston as a Global Center of Excellence in Clean Energy Finance: Boston is home to many innovators in the financial sector who are driving a restructuring of global capital markets to create a prosperous, low carbon future. This represents an opportunity to nurture the development of a clean energy finance cluster in the region. The mayor should work with the

Green Ribbon Commission, private equity funds, major asset holders and managers, lenders, insurers, leading NGOs like Ceres, and our business schools to support the evolution of Boston as a global leader in clean energy finance.

5) **Expand Access to Energy Efficiency and Solar for Renters and Low-Income Residents:** The majority of Boston residents (65%) live in rental housing. Many of these residents are low to moderate income families who face multiple barriers to accessing weatherization, energy efficiency, and clean energy programs. The administration should continue to invest in Boston's nationally renowned Renew Boston program with an increased focus on expanding all residents' access to pre-weatherization, energy efficiency, and clean energy programs. This can be accomplished through continuing partnerships with the utilities and agencies like Action for Boston Community Development and the Mass Energy Consumers Alliance, as well as working with community-based organizations with the knowledge, skills, and trust necessary to break through language, cultural, and institutional barriers. The Walsh

administration should also aggressively leverage the city's Homeworks Program and Rental Housing Inspection Ordinance to seriously promote assessments of all cost-effective energy efficiency opportunities.

6) **Make Every School Green and Healthy, a Showcase of Climate Action:** Our children spend most of their time indoors, often in Boston Public School (BPS) facilities that are in significant need of upgrades. Making BPS facilities green and healthy will not only help provide our children with the environment to thrive, but can also inspire them to understand climate action by learning from the buildings themselves. Energy efficiency investments often pay for themselves over a short period of time by reducing operating costs and energy bills. The administration should require BPS to undertake an assessment of all BPS facilities and accelerate investments in energy efficiency and clean energy technologies like solar where feasible. The administration should ensure that all BPS facilities have comprehensive recycling infrastructure to advance Zero Waste goals. BPS' green cleaning and healthy facilities programs should be expanded. All BPS facilities should have interpretive displays that showcase how the facility is green, healthy, and contributing to the Boston's climate action goals, and inspire actions that can be taken at home and in the community. To accomplish these goals, the administration should require the School Committee and Superintendent make Climate Action a priority in its capital plan and keep the USGBC grant funded position of Sustainability Manager position in the Superintendent's office.

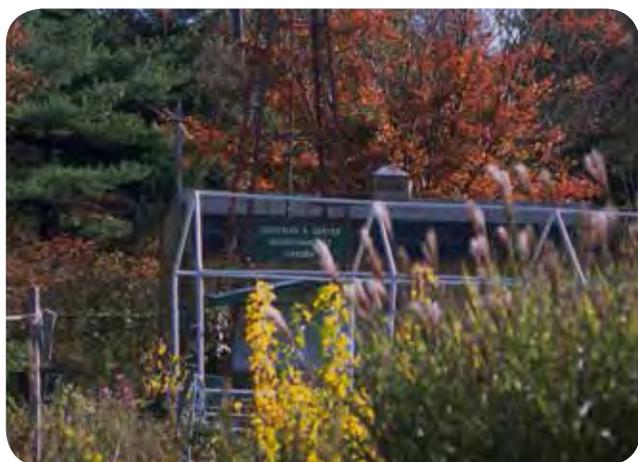


Photo: Kit Pyne



FOCUS 2: PUBLIC OPEN SPACE: PROTECT AND EXPAND PARKS, BEACHES, AND OTHER OPEN SPACE AREAS FOR RECREATION AND ENJOYMENT

The future of Boston lies in its parks and open spaces. Our parks bring people together, diffuse social pressures, educate and strengthen our children, cool our planet, keep us healthy, and add economic value to our endeavors. They can become a powerful organizing force for advancing our city’s image.

Boston’s connection to parks and open space began with the creation of the very first public park in America – the Boston Common—and expanded with Frederick Law Olmsted’s Emerald Necklace. Boston also boasts new park models: the Boston Harbor Islands Recreation Area, the Southwest Corridor and Rose Kennedy Greenway atop transportation corridors, and the heavily used ball fields of West Roxbury’s Millennium

Park, built on a landfill. Boston has the most community gardens per capita of any other U.S. city. Our new mayor can build a name for our city by taking green space to the next level. Together we can reinvent and restructure Boston’s parks and open spaces for 21st century living by: (1) Making Boston a world leader in the quality, scope, and innovation of its public open spaces; (2) Utilizing all outdoor resources—city and state owned parks, bikeways, streets and sidewalks, playgrounds and schoolyards, transportation corridors, community gardens, plazas, vacant lots, green roofs, institutional and commercial open spaces, urban wilds, and the Harbor, with its HarborWalk, islands & public beaches in East Boston, South Boston, and Dorchester—to bring a wide range of outdoor opportunities and experiences to all Bostonians; and (3) Increasing investment in our parks and open space planning, programming, operations, and capital needs through all possible funding avenues.

KEEP

- 1) The high quality of our open space: Examples include: (1) reliable and consistent park maintenance; (2) the city’s goal of planting and maintaining 100,000 new trees by 2020 to increase the tree canopy from 29% to 35%; (3) the Grassroots Program in Department of Neighborhood Development (DND) that provides capital funds to create or upgrade new community gardens and parks; and (4) Beautify Boston grants for neighborhood park improvements.
- 2) Valuable outdoor programs that promote recreation, education, health, employment, and the arts, including summer jobs for teens, ParkARTS, NeighborWalk, Boston R.O.C.K.S.

summer youth programming, and the Mayor’s Cup sports tournaments.

- 3) Park partnerships: Boston open space partners run the gamut from park friends’ groups and nonprofits to state and federal agencies. Continue to use these relationships to enhance our parks, open spaces, and public beaches by: (1) encouraging joint projects and programming and (2) using the city’s “bully pulpit” to improve parks not controlled by the city, such as the Rose Kennedy Greenway and DCR properties.

IMPLEMENT

- 1) Fully utilize the Mayor’s existing tools to improve the quality of Boston parks and open spaces.
 - a) Recruit a strong, creative Parks Commissioner with national urban parks connections and knowledge of best practices to build a modern, innovative Parks Department. Involve the Parks Partners and “friends” groups explicitly in the process.
 - b) Pass the Community Preservation Act.
 - c) Simplify procedures for turning vacant DND and BRA (Boston Redevelopment Authority) lots into open space. The current system is unwieldy and non-transparent.
 - d) Create a special Boston Public Schools (BPS) schoolyard maintenance fund and hire an advocate to maximize the investment of the Boston Schoolyards Initiative that restored 88 BPS schoolyards.

- e) Eliminate bureaucratic barriers to make it easier for park partners to bring resources, maintenance, and capital improvements to Boston’s open spaces, parks and beaches.
 - f) Make the 2014 Open Space Plan a more specific, action-oriented document to drive future-looking parks and open space creation & restoration.
- 2) Spend More Time Outside! Jumpstart a Boston-wide mayor’s campaign with small grants, new programs, activities in parks, inter-agency leadership, and lots of programs for all ages. Involve community organizations, expand Hubway, and provide outdoor experiences for all BPS students.
 - a) Make “Circle the City”: a city-sponsored monthly event to bring bicyclists and pedestrians onto a major boulevards, like Memorial Drive on Sundays in Cambridge.
 - b) Boston Moves for Health. Recruit local



Photo: Kit Pyne



fitness leaders to bring yoga, line dancing, tai chi, boot camp, and Zumba to parks across the city.

c) Sponsor outdoor summer concerts and movies that everyone can look forward to in a signature park in every neighborhood.

3) Quick and Visible Improvements:

a) Bring park permitting online accompanied by transparent facility calendars. Easy-to-implement models exist in Brookline, Cambridge, and many other cities. Create a multilingual outreach program to ensure non-English-speaking communities can access parks.

b) Focus park capital improvements in areas with high levels of income disparities & chronic disease.

c) Recycling in parks: Resolve contract issues to expand the Boston Common pilot program.

d) Promote Urban Farming: Implement Article 89 and incorporate urban agriculture initiatives into new and existing developments, including the use of rooftops, land owned by nonprofits, universities, school districts, and the city.

e) Large event venues: Make full use of City Hall Plaza and other public venues to lessen the impact of big events on parks, especially the Boston Common and Franklin Park.

4) Ensure new open spaces will be built in the future: While development pressures are cyclical, recent experience demonstrates how quickly a neighborhood (e.g., the Seaport) can change in a boom economy. Immediate plans should be undertaken for:

a) The Waterfront: Commission a group of city planning and design experts, independent of the BRA, to recommend optimal open space and active recreational uses of the few remaining undeveloped waterfront parcels, especially in the Seaport, East Boston, North End, and the Harbor Islands, and to protect

view corridors to the harbor in these areas.

- b) Allston Projects: Harvard expansion and Mass. Pike relocation: Develop a comprehensive plan and implementation strategy, including government funding and Harvard's promised Public Realm Flexible Fund, for open spaces related to I-90 improvements and Harvard expansion (e.g., Rena Park, Smith Field, and the grove of trees at the Charlesview development site).
- c) Fairmount Line Corridor: Plan new open spaces in Dorchester, Mattapan, and Hyde Park; host a competition to create outdoor "living rooms" as destinations for neighbors and transit riders.

5) Continue and accelerate major park and open space improvement projects: Including but not limited to:

- a) The South Bay Harbor Trail: This project connects Roxbury with the waterfront which is 40% complete, with 100% of the design completed and all funds allocated.
- b) Muddy River Phase II: Advocate for continued full federal funding of Phase 2 of the Muddy River restoration project in the Fenway.
- c) East Boston Greenway: Complete the final section to Constitution Beach.

DREAM

Make Boston's urban parks and open spaces #1

- 1) Invest: Allocate a minimum of 1% of the city

budget (currently at 0.7%) for parks and open space to properly fund operations, innovative planning and capital projects.

- a) Make parks more livable: Install water fountains in every park. Add lighting and play fountains where feasible. Build bathroom facilities in parks. Add bike racks.
- b) Community Gardens: Commit to support and expand gardens through Parks Department staff and funding. Hire a community garden liaison.
- c) Urban Wilds: Provide maintenance, capital and program resources to realize the potential of these unique areas.

2) Cross the Aisle: Work with other levels of government to fully realize the potential of our new and existing large, signature parks.

- a) DCR (Department of Conservation and Recreation) parks: Create a seamless park system for Bostonians. Collaborate to end duplication resulting from two park management systems. Begin with manageable steps, e.g., joint Citizen Connect, park permitting systems, and shared landscape expertise.
- b) Harbor Island parks: Bring adventure to families by making the islands accessible and affordable.
- c) Rose Kennedy Greenway: Support adequate annual funding commitment from MassDOT, and resolve long-term conservancy lease issues.
- d) Charles River Underpasses: Support

pedestrian/cyclist underpasses at bridge crossings for an uninterrupted 7-mile path (Allston – Museum of Science).

3) Tackle Big Ideas, Projects, and Improvements:

- a) Uncover Charlesgate, the connection between the Emerald Necklace and the Esplanade, currently covered with a series of overpasses. Bring city life to ground level, as is being done across the country.
- b) Keep building and add to linear parks like HarborWalk and the Neponset River Greenways that connect to our blue spaces.
- c) Hire dedicated park managers for the largest, most populous parks: Craft 21st century management plans for individual city parks.

FOCUS 3: ENVIRONMENTAL JUSTICE,



Photo: Kit Pyne

HEALTH, AND TRANSPORTATION

Boston has been a leader in ensuring that all of its residents have access to clean air, water, and land. Many neighborhoods have organized themselves and worked with city environmental and public health agencies to ensure that everyone has a healthy environment and access to environmental benefits. Despite progress, there are still neighborhoods that are disproportionately burdened by environmental problems and lack equal access to environmental “goods,” such as access to parks, beaches, open space, clean streets, green amenities, and recreational opportunities.

The Commonwealth’s Office of Energy and Environmental Affairs has adopted an environmental justice policy where, “Environmental justice (EJ) is based on the principle that all people have a right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment. Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental

benefits.” We recommend that the Walsh administration adopt a similar goal, leading to the enactment of an EJ ordinance and other efforts to improve health and transportation.

KEEP

- 1) Environmental health enforcement: Keep the Boston Public Health Commission’s environmental health enforcement of Safe Auto Shops and Safe Salons programs to protect people and the environment from toxic chemical exposure.
- 2) Rental Housing Inspection Ordinance: This is an important tool to identify and address indoor air quality issues (mold, pests, rats) that contribute to childhood asthma.
- 3) Support for healthy and local food: Maintain support for Office of Food Initiatives and the Boston Public Market. Continue Boston Bounty Bucks, which promotes use of SNAP (food stamp) benefits at farmer’s markets by providing a dollar for dollar matching incentive for all SNAP purchases up to \$10.

IMPLEMENT

- 1) Strict Enforcement of the State’s “no idling” law while working with state and federal partners to curb idling of vehicles throughout the city. This reduces harmful emissions. Alternatively, pass a more strict and enforceable Boston anti-idling ordinance, potentially dedicating revenue from violation fees to subsidizing the cost of pollution filters.
- 2) Diesel emissions ordinance: Pass a diesel emission reductions ordinance to further reduce emissions pollution and improve air quality. Work to redesign city contracting to incentivize

construction companies to install filters on diesel engines to remove toxins.

- 3) Support the Complete Streets Program and deployment of traffic calming and signal timing measures so as to better manage traffic, reduce emissions from idling vehicles, and protect pedestrians and bicyclists.
- 4) Support the implementation of Article 89, Urban Agriculture Zoning: Prioritize the development of new urban agriculture, with a focus on urban farming, in low income and underserved neighborhoods. Ensure local residents are key participants. Open up the Boston Food Council to include additional stakeholders and increase its transparency and public engagement. Ensure resources for Boston Public Health Commission oversight of the soil safety protocol.
- 5) Environmental participatory budget process: \$1 million from the capital budget and created in the spirit of the city’s current youth participatory budget process. Grassroots assemblies will gather project ideas and elect delegates to work with the city to develop these ideas into proposals. Proposals will be voted on, with those receiving the most votes implemented.
- 6) Green and Healthy City: Establishing a seamless connection between environmental and health programs is critical to a safer and more sustainable Boston. At the highest level, this means integrating Energy and Environment Services’ Climate Action Plan with the Boston Public Health Commission’s “Health-in-all-Policies” framework, using a dual lens of climate and health to design, implement, and evaluate city initiatives. The city should devote particular attention to database management,

targeted marketing, and leveraging the power of community environmental and health partners. This will help ensure, for example, that residents live in well-insulated homes and pay affordable bills while also understanding the importance of smoke-free policies and good air quality within those homes. As noted, permitting reviews, rental inspection, HomeWorks, Greenovate, and Renew Boston are several opportunities to cross-promote programs and track useful information.

- 7) Neighborhood green standards and report card: Create standards and scorecards to ensure equitable access for every neighborhood to green assets: gardens, parks, trees, bike paths, etc.
- 8) Exposure to Toxic Chemicals: Expand programs to reduce chemical exposure and implement a citywide green purchasing policy. Using the model of Boston's Safe Auto Shops and Safe Salons programs, work with dry cleaners or other small business sectors to reduce toxic chemical use and release. Lead by example and shift markets towards safer chemicals by purchasing the safest available cleaning products, furniture, personal care products, electronics, light bulbs, and other products in all city departments.
- 9) Mass Pike Viaduct Replacement/Realignment project: Support the creation of a multi-disciplinary team from the city to collaborate with Allston/Brighton community members and advocacy groups working with MassDOT and Harvard. Planning will advance rapidly in 2014 for this recently announced \$260M MassDOT project that will reshape dozens of acres in Allston. This project has great open space, transportation, and economic development potential.

DREAM

- 1) Environmental justice: Work with environmental justice leaders to develop and pass an Environmental Justice ordinance for Boston that would establish a process for meaningful participation for all neighborhoods and policies for equal protection and equitable access to environmental benefits.
- 2) U-Pass: Support U-Pass proposal for MBTA-passes paid for by universities (with legislated minimal cost to students) for all full-time college and graduate students in the MBTA service area. These funds should be used to help re-capitalize the MBTA.
- 3) Hubway expansion: Expand Hubway to all Boston neighborhoods if demand is present; expand bike network citywide with safe, sole purpose bike paths where possible. Ensure there are sufficient bike racks at schools so young people can bike to school.
- 4) Increase access to healthy food, schools, medical services, and more by ensuring that every city residence is within a 5-minute walk to a bus or other transit node.
- 5) MBTA: Given the importance of Boston to the MBTA system in terms of riders, stops, and tracks, advocate for Boston to have membership on the MBTA board comparable to MWRA (Massachusetts Water Resources Authority) board.
- 6) Ferries: Expand the existing network of existing transportation between Boston's neighborhoods and between the Harbor Islands, the city, and nearby coastal communities to get people out of their cars and into lower emission, energy efficient ferries.

7) Cultivating a GreenSTEM and Green Jobs Pipeline: We recommend focusing not just on STEM (Science, Technology, Engineering and Math) but GreenSTEM for the City's youth. GreenSTEM is STEM with a focus on environmental solutions. Environmental solutions are drivers of the 21st century economy. We recommend building a workforce pipeline from our high schools to community colleges and higher education facilities to the clean tech companies in Boston that result in the city's youth being perceived as viable future employees. We also are focused on developing practical ways for Boston workers to participate in and benefit from the growing clean tech and environmental sector, including adults who are interested in moving into this sector as part of a career change.

FOCUS 4: WASTE REDUCTION/ RECYCLING/MATERIALS MANAGEMENT

Boston should innovate its food and waste systems to grow the local economy. The city currently spends over \$40 million annually on municipal solid waste collection, recyclables processing, composting and disposal contracts, and has a diversion rate well below the national average. Boston manages only residential waste, leaving commercial entities to contract on their own. Five sets of residential contracts cover the

city's five waste districts.

Every ton diverted from disposal to recycling/composting/materials reuse from the 240,000 tons collected annually saves the city \$56/ton, yet the current diversion rate is under 20%. In addition, as long as the cost of materials management and diversion per ton is less than the tipping cost per ton, these should be encouraged. Almost all of what is not diverted goes to incinerators (waste to energy facilities), which produce toxic public health impacts in host communities, few jobs, and high costs for taxpayers.

KEEP

- 1) Separate contracts for collection, recyclables processing, composting, and disposal.
- 2) No incentive for volume of waste: The current waste contracts are geographic in nature and rightfully avoid a problematic incentive to increase overall volume of waste collected.

IMPLEMENT

- 1) Recycling contracts: We recommend extending all current waste, recycling, and composting contracts for at least 6 months, to determine what's needed to increase recycling in a manner that maximizes benefits to all stakeholders. Boston must also resolve key contract problems:
 - a) Use a Request for Proposals process instead of the current Invitation for Bids, allowing for weighing important factors other than lowest price in the final

- decision, such as living wage, diversion efforts, climate concerns, local hiring, etc.
- b) Divide waste and recycling hauling contracts in at least one waste district (possibly the one with the lowest diversion rates) into smaller areas, to encourage smaller local businesses to compete and provide an incentive for community participation
 - c) Apply the Boston Living Wage Ordinance to require safe workplaces, and prohibit use of subcontracted temporary workers in recyclables processing contract language. If no bidders for recyclables processing contracts are currently willing to offer a living wage to workers, the city should make an official commitment to prefer the first qualified bidder willing to do so, providing an incentive for responsible evolution of the industry.
- 2) Embrace a Zero Waste future: The City should set a goal of achieving Zero Waste, and set into motion a public planning process to get there.
 - 3) Expanded Bottle Bill Referendum: The mayor should continue to strongly support an updated Bottle Bill to include non-carbonated beverage containers in order to increase recycling rates and reduce street litter.
 - 4) Organic Waste & Green Economy: Boston should plan to comply with and expand on the state's coming commercial organic waste ban in a way that maximizes the local green economy. The city can pilot residential curbside composting and plan strategically to feed organic waste into composting businesses that in turn supply community gardens and urban farming.
 - 5) Reuse and Materials Management: Designate staff to coordinate expansion of the reuse and repair sector through zoning changes, public education, and technical expertise, keeping usable materials out of the waste stream while growing the local green economy.
 - 6) Schools: Prioritize recycling education and ensure all classrooms and offices are equipped with bins to encourage behavioral shift.
 - 7) Multi-family: Set recycling goals for multi-unit housing and develop educational materials for landlords and managers. Consider incentives or fees based on goal attainment. Consider fines for landlords and housing managers who do not provide ample space for recycling bins, either curbside for smaller buildings or dumpsters for larger properties including those managed by the BHA (Boston Housing Authority).
 - 8) Commercial: Consider ways to stimulate commercial recycling, which comprises well over half of total waste volume, including through city contracting or with a mandate.
 - 9) More pickups: Incentivize recycling by increasing recycling pickups and decreasing trash pickups, particularly in districts with more frequent trash pickup.
 - 10) Reserve new revenue from recycling fees for diversion education and implementation.
 - 11) Change the current practice in the Boston Parks Department so all organic material and woody debris are composted in parks maintenance yards or through city compost sites.

DREAM

- 1) Zero waste (ZW): Implement a ZW strategy that targets 75% diversion rate by 2030 and ZW by 2050. ZW is a path to sustainability through redesign of production, consumption, and disposal systems that leads eventually to all or almost all waste materials being used to create new materials. A ZW master plan process for Boston could include a wide range of policies, but should take into account the interests of all stakeholders.
- 2) Pilot innovative mechanisms to increase diversion: Before investing in citywide changes, Boston could give promising ideas trial runs in specific neighborhoods. For instance, it could pilot curbside collection of residential organic waste for composting to foster economic opportunity and serve urban agriculture while removing climate pollutants from the waste stream. To succeed, such pilots need many of the same supports as full-scale implementations, including community education and technical assistance.
- 3) Enable a culture shift with recycling education: A strong public education program can set the stage for dramatic, long-term improvements in behavior and understanding the value of green policies. Recycling education should be an intrinsic part of a broader sustainability curriculum in schools. It can also be promoted through robust outreach campaigns ahead of policy changes. A volunteer ‘neighborhood ambassador’ network can inform and organize residents at the local level.
- 4) Extended Producer Responsibility: Pass ordinances requiring producers of toxic and hard-to-recycle materials, particularly electronic waste, to take back their products for

appropriate disposal after consumers discard them, as many cities and states are starting to do.

- 5) Replace Existing Trash Cans with dual trash/recycling in schools, city buildings, sidewalks, and parks.

Energy, Environment & Open Space Working Group

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- Alexander Bok, CEO, Boston Baseball Field of Dreams; Former General Counsel, Boston-Power, Inc.
- Amos Hostetter, CEO, Pilot House Associates; Co-chair, Green Ribbon Commission

Members

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- Kalila Barnett, Executive Director, Alternatives for Community and Environment
- John Barros, Former Boston School Committee Member, Transition Team Co-Chair
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- Gloribell Mota, Co-Founder and Director, Neighbors United for a Better East Boston
- Christine Poff, Executive Director, Franklin Park Coalition; Lead Organizer, Boston Park Advocates
- Bud Ris, President and CEO, New England Aquarium
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Organizational titles and affiliations are provided for identification purposes only.