BALTIMORE'S FAIR DEVELOPMENT PLAN FOR



GARY LISS and RUTH ABBE

Zero Waste Associates

NEIL SELDMAN and BRENDA PLATT

Institute for Local Self Reliance

THE FAIR DEVELOPMENT ROUNDTABLE

The Fair Development Roundtable is a coalition with a mission to realize a Baltimore City where everyone has the right to live in communities that are affordable, habitable, healthy and safe, and the right to equitable economic and community development.





"18 year old girl living in a world where no one cares about the safety of this girl
Money money money that seems to be the anthem
Destroying the world and always taking it for granted
No more green, only buildings and all that I can see is landfills and
I'm disgusted, I can't believe we trusted the world but it's not too late to be adjusted
We have our rights according to the amendments
But why do we feel like we've been so resented?
Ignored, shoved to the side where opinions don't matter where opinions only die
It's time to stand up, let our voices be heard
Incinerator move cause your not preferred
It's about that time, to make the choice



CONTENTS

Executive Summary	2
Introduction: Baltimore's Failed Waste System	5
Time for a Just Transition to Zero Waste	11
Fair Development Principles	14
Zero Waste Framework	15
Zero Waste Outcomes and Priority Actions	16
Commitment	17
Clean Air	19
Clean Communities	21
Reclaim Communities	26
More Jobs	32
Create Less Waste	34
Build Community Power	37
Diversion Impact of Zero Waste Initiatives	38
References	40

EXECUTIVE SUMMARY

Much of Baltimore's failed and inequitable waste system is located in South Baltimore. The cumulative impacts are felt by the residents, producing racialized economic and health disparities. This plan identifies the root causes of this waste crisis and how it intersects with racial and economic justice. This Plan will enable the City to move towards a new system of Fair Development aligned with human rights principles anchored to a Zero Waste framework.

By setting a clear Zero Waste goal Baltimore can create a just transition from an economy of extraction to one of reuse and regeneration. This Plan is both a practical guide to how Baltimore can reach this goal as well as a call for political leadership to recognize the climate and waste crises we are in and to make the commitment necessary to carry out this comprehensive plan. It begins with leadership.

By committing to Zero Waste, Baltimore recognizes the need to end the plundering of earth's raw materials in favor of a culture of interdependence with our planet. It is also a stand for social, racial and environmental justice by declaring that no community can be used as a dumping ground, a sacrifice zone, or a staging ground to burn precious natural resources. Baltimore is joining cities and communities all around the world choosing Zero Waste to create jobs with dignity, reduce emissions, replenish the soil, and create healthy living environments.

The Baltimore Sustainability Plan recognized these challenges and opportunities and includes several initiatives to have a major shift towards expanding composting, making the City's recycling program reliably and conveniently available to all, while emphasizing Zero Waste opportunities to create local jobs. There are concrete connections in the Sustainability Plan between community ownership and control of land and sustainable healthy communities. This Plan supports those connections and recommends additional priority actions to achieve the many benefits of Zero Waste.

When implemented, Baltimore's Fair Development Plan for Zero Waste will achieve these outcomes:

CLEAN AIR: End Racist Inequitable Waste system; close the BRESCO incinerator

BUILD COMMUNITY POWER: Ensure Fair Development for ALL through education, enterprises, equity and engagement

> Adopt Zero Waste goal of 90% diversion from burning & burying

CREATE LESS WASTE: Ban single use plastics & public subsidies for polluting industries CLEAN COMMUNITIES:
Expand collections to include universal recycling and composting

RECLAIM
COMMUNITIES:
Create public fund to
resource community
ownership of vacant land
and its care by residents

MORE JOBS:

Require hiring of local residents and services to carry out these changes

COMMITMENT:

Baltimore has a rare opportunity afforded by resident and civic heroes - to make a clear break with the failed history of trash burning incineration in favor of a Zero Waste future by implementing the following Actions:

- 1. Defend and Enforce the Clean Air Act in Baltimore City holding polluting incinerators to higher standards than current state or federal government regulations.
- 2. End Baltimore City's Contract with BRESCO in 2021 allowing for materials to be properly managed using Zero Waste infrastructure.
- 3. End subsidies for trash incineration at the state level remove trash incineration as a Tier 1 source of renewable energy in the state's renewable portfolio standard.
- 4. Adopt Zero Waste bridge strategy calling for expanded collections and increased processing and transfer capacity. Arrange transfer to landfills and compost facilities outside of Baltimore (possibly together with Baltimore County), provide free recycling and composting carts and expand recycling and composting programs.
- 5. Fully Fund Zero Waste Plan initiatives
- 6. Pass Priority Zero Waste policies
- 7. Adopt incentives for waste reduction, reuse, recycling and composting and disincentives to make burning and burying waste more expensive

Reuse, recycling and composting programs also create good, green jobs. Over 780 local processing jobs and over 1,000 manufacturing jobs can be created through the implementation of these Zero Waste initiatives. The City can ensure that jobs in recycling collection and processing contracted by the City are good Green local Jobs (e.g., pay household-sustaining wages, protect workers' rights, guarantee workplace protections, provide medical, leave, vacations and retirement benefits, hire local workers, and provide a 'just transition strategy' for workers whose jobs are lost as a result of closing down landfills and waste incinerators).

Implementing the Zero Waste Priority Actions identified in this Plan will help the City reduce its reliance on landfilling and incineration by 90% by 2040, achieving the City's Sustainability Plan waste and recycling goal.



Zero Waste Plan Outcomes and Priority Actions Diversion Analysis Short-Term (2021-2022)

7	ZERO WASTE OUTCOMES	% DIVERTED	TONS DIVERTED 2021-2022	MAJOR MATERIALS
ONALISERS!	COMMITMENT to 90% DIVERSION	2%	17,800	Food waste, plastics
	CLEAN COMMUNITIES	11%	84,400	Food waste, yard waste, paper, plastics
Sim.	RECLAIM COMMUNITIES	7%	57,100	Building materials, Food waste, paper, plastics, and other
	REDUCE WASTE	1%	5,000	Mixed plastics, paper
	BUILD COMMUNITY POWER	2%	19,800	Food waste, plastics
	Total Additional Diversion	23%	184,100	

Waste prevention, recycling and composting activities also reduce greenhouse gas emissions. Significantly decreasing waste disposed in landfills and incinerators nationwide will reduce greenhouse gas emissions the equivalent to closing 21% of U.S. coal-fired power plants. This is comparable to leading climate protection proposals such as improving national vehicle fuel efficiency.

This Zero Waste Plan will help both residents and businesses contribute significantly to solving some of the biggest challenges facing the community today. Residents who embrace Zero Waste lifestyles will find that they have more time and money for their family, friends and experiences, as they will focus more on what and why they buy things. Businesses that embrace Zero Waste throughout the country have already achieved over 90% diversion of materials from landfills, incinerators and the environment. Those businesses have all saved money, increased efficiency and reduced liability, greenhouse gases, and litter to the environment. Many Baltimore businesses are striving to be more sustainable. Zero Waste will help them get there. The time to act is now.

"We are really behind here in Baltimore with composting and recycling but we have the opportunity to catch up. We have community driven alternatives to the incinerator that could take our city forward with good green jobs instead of dumping more lead and mercury on us and burning precious resources. I am glad that we are at this point because we are really standing up as a community calling on officials to join with us to protect our health and environment so we can move forward."

-RODETTE JONES, Curtis Bay resident and manager of the Filbert St. Garden

INTRODUCTION: Baltimore's Failed Waste System

This Plan was developed by the community under the guidance of United Workers with help from the Baltimore City Office of Sustainability and managed by Zero Waste Associates and the Institute for Local Self-Reliance. Support for this plan was gathered through meetings, workshops and stakeholder interviews.

Meaningful and genuine engagement was conducted with civic organizations, churches, business leaders, universities, community development corporations and individuals from all quadrants of the city. Frontline and directly impacted communities were intentionally a priority for engagement. In-depth discussions on critical issues, concerns with the existing system, and goals for Zero Waste and what would help the most to realize those goals were held. Strong relationships were developed with all those contacted, keeping them informed and getting their input on analyses and reports as they were developed.

This Zero Waste Plan was created through a lens of racial and economic equity paired with the standards of Zero Waste applied world-wide. The community strongly communicated that structural racism and economic disparities have exacerbated the environmental and waste crisis in Baltimore. The burdens of the location of the trash incinerator and other waste facilities and the increase in illegal dumping have fallen disproportionately on black and poor neighborhoods. The reality is that only some neighborhoods have reliable, consistent recycling services while others are ignored, including no recycling in public housing. Although apartments are supposed to have recycling by State law, managers of apartment buildings are getting fined so much for contamination that they are stopping collection of recycling altogether.

The solution to our waste crisis needs to attack root causes, align with human rights principles, and anchor to a Zero Waste framework so that Baltimore can turn the page towards a new system of Fair Development and meeting the needs of people and the planet. A Fair Development vision for Zero Waste links it to the imperative of creating healthy, safe and clean communities with affordable housing and living wage jobs for local residents.



ZERO WASTE PLAN ENGAGEMENT: EQUITY

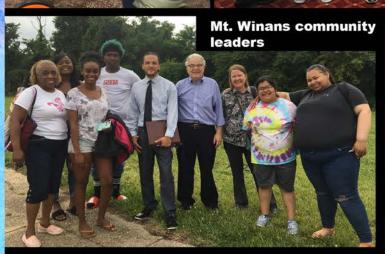














We prioritized the participation of communities and stakeholders directly impacted by the inequities of our current waste system. In depth listening sessions were held with residents, community associations, faith institutions, community development corportations, social service agencies, schools, universities, businesses, community land trusts, city officials and agencies across Baltimore.



ABOVE: The BRESCO trash incinerator, in operation since 1985, is Baltimore's single worst air polluter causing \$55 million dollars in medical costs for residents each year.

BELOW: Baltimore City residents calling for an end to the BRESCO incinerator and policies that direct public money to incineration as a source of clean renewable energy.

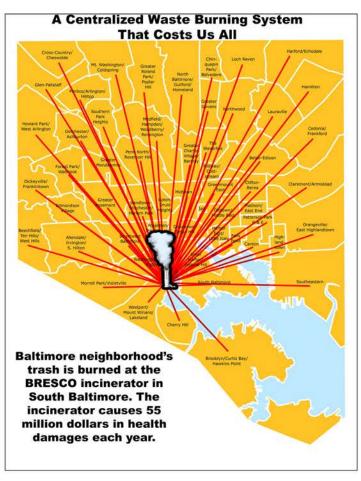


Baltimore's failed waste system is epitomized by the cumulative impact of locating so much of the industrial waste infrastructure in South Baltimore, reinforcing racial and economic disparities including life expectancy and asthma rates. These disparities go back generations. In fact, the South Baltimore and Curtis Bay region of the city was annexed in 1917 to be zoned for a myriad of industrial polluters and waste services. After decades of toxic chemical manufacturing, conditions were so hazardous in the Fairfield and Wagner's Point neighborhoods that residents had to be permanently evacuated. What happened to Fairfield and Wagner's Point are in line with the redlining, blockbusting and disinvestment that has targeted black and poor neighborhoods. It is particularly crushing to look out across the Harbor and see the other side, where public investment has created a "Gold Coast" spreading from the Inner Harbor to Harbor East, then to Harbor Point, and soon to Port Covington. Baltimore is a segregated city of private wealth creation subsidized by municipal, state and federal resources at the expense of staggering health inequities and an enormous black wealth gap (median incomes half that of whites, 31% less homeownership).2

Baltimore's worst air polluter is the Baltimore Refuse Energy Systems Co. (BRESCO) trash incinerator, where 80% of Baltimore's waste is burned. The BRESCO incinerator, the City's municipally run landfill, the nation's largest medical waste incinerator, a CSX coal terminal, and other industrial polluters are concentrated in South Baltimore (see Figure 1. The frontline communities directly impacted by these facilities and those directly impacted by illegal dumping on vacant properties are tired of getting dumped on.

BRESCO produces more mercury, lead, and greenhouse gases per hour of energy than each of Maryland's four largest coal-fired power plants.³ BRESCO was responsible for 36% of all stationary sources of air pollution in Baltimore in 2014 and fined for mercury violations in 2009.⁴ The incinerator burns toxic chemicals in plastics derived from fossil fuels, damaging air quality and health. A recent Chesapeake Bay Foundation study found that BRESCO alone causes 55 million dollars in health damages to residents every year.⁵





South Baltimore is dominated by toxic industries – trash, medical waste, animal incinerators – along with a range of other industrial polluters. Residents of neighborhoods surrounding the incinerator have a lower life expectancy than those from neighborhoods only a few miles away. The concentration of pollution in this one region has compounding effects: poverty that comes from disinvestment, poor housing quality, and lack of adequate health care. On average, Curtis Bay residents live 15 years less than residents of wealthier white neighborhoods like Roland Park.⁶ One of the biggest indicators of residents' respiratory health is the city's asthma rate, which doubles the rate across the state of Maryland and nearly triples the national average. Baltimore's asthma hospitalization rate is 40%, the state is at 18% and the nation as a whole 14%.⁷

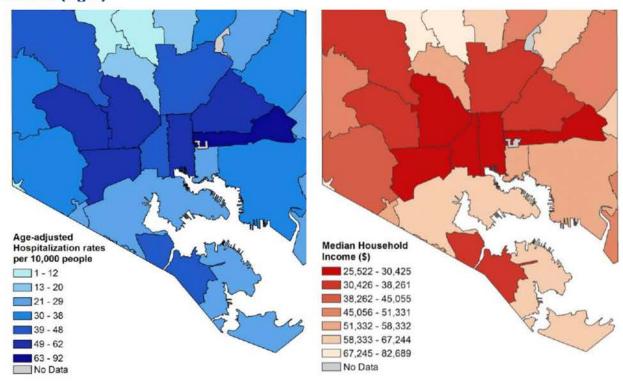
BRESCO is a major contributor to the climate crisis as well:

Incinerators emit more CO2 per megawatt-hour than coal-fired, natural-gas-fired, or oil-fired power plants and also emit nitrous oxide... Nitrous oxide is a potent greenhouse gas that is approximately 300 times more effective than carbon dioxide at trapping heat in the atmosphere... Significantly decreasing waste disposed in landfills and incinerators will reduce greenhouse gas emissions the equivalent to closing 21% of U.S. coal-fired power plants. This is comparable to leading climate protection proposals such as improving national vehicle fuel efficiency.8

Baltimore needs environmentally sustainable methods for generating energy, not incineration. By adopting this Plan, Baltimore will become a leader in the nation as well as across the state of Maryland, where we are already seeing the negative impacts of the climate crisis.

With the adoption of the Baltimore Clean Air Act and Governor Hogan's Clean and Renewable Energy Standard (CARES) strategy, it is urgent to plan for the close of BRESCO. The incinerator could be forced to discontinue operations as soon as September 2020, as it will likely not be able to meet the new emissions standards set by the Baltimore Clean Air Act and could have its renewable energy tax incentives withdrawn this year. Last year Detroit's incinerator closed abruptly due to new regulations and the threat of litigation; the city had to respond overnight to this abrupt closure to send waste to landfills 30 miles away. Detroit did not create a contingency plan to transition away from incineration. Baltimore needs to plan now and not be caught by surprise when BRESCO closes down.

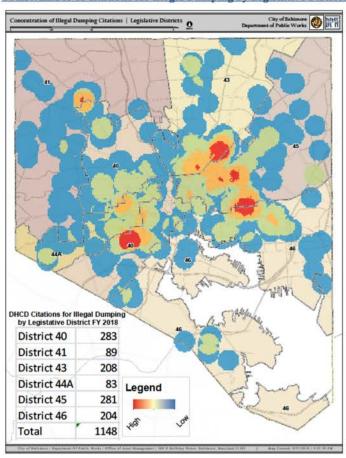
2013 Asthma Hospitalization Rates (left) and 2013 Median Household Income (right)



Trash that doesn't get burned at BRESCO and pollute the air is often illegally dumped on vacant land, or in our alleyways and waterways. Despite a variety of efforts, Baltimore's Department of Public Works has failed to successfully address the illegal dumping problem. An estimated 10,000 tons of trash are illegally dumped in Baltimore every year. The level of rental housing evictions is a huge contributor to this issue—Baltimore has the second highest eviction rate in the country, following just behind Detroit. Personal belongings like furniture and clothes are often dumped at the City's estimated 44,000 vacant buildings and lots. Mayor Jack Young recently released a list of the City's 10 worst dumping violators, which is comprised mostly of non-transparent property holding Limited Liability Companies.

The worst illegal dumping areas are in Black and poor communities that have the highest concentration of vacant properties and evictions. In 2018, Baltimore city reported 1,148 illegal dumping complaints. West Baltimore's District 40 had the highest number of complaints with 283.13 Even Baltimore's acclaimed Inner Harbor is not immune to the inadequate waste management system; the famous Mr. Trash Wheel has collected tons of debris from the water, including more than 850,000 plastic bottles and 627,000 plastic bags.14

Total Number of Citations for Illegal Dumping by Legislative District





A shift to a Zero Waste approach will help to address unemployment and underemployment of many in our communities. The incinerator only employs about 50-60 non-union workers. Unemployment in Brooklyn/Curtis Bay is at 11.8%.15 In McElderry Park unemployment is more than double the city's overall rate at 15%.16 In Sandtown-Winchester and Harlem Park the unemployment rate is 20%.17 Calculating these rates in the current tight labor market indicates that residents in these communities are structurally unemployed and will remain so without intervention. A jobs program spurred by the creation of Zero Waste infrastructure should be a part of a proactive approach to structural unemployment. New systems for expanded collections, processing, manufacturing repair, reuse, recycling, composting, and maintaining vacant lots will create an estimated 1,800 permanent jobs over the next 5 years.

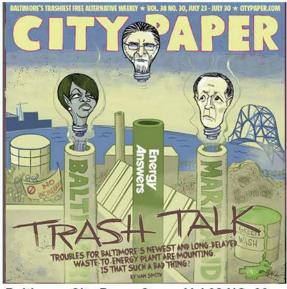
Time for a Just Transition to Zero Waste

In 2008 the South Baltimore 21225 zip code had the highest toxic air emissions in the nation. 18The following year, City and state leaders approved a substantial increase in trash burning infrastructure in the area, green lighting the construction of the largest trash burning incinerator in United States history. The authorized Energy Answers incinerator was to be constructed less than a mile from Benjamin Franklin High School, and within 3 miles of three Elementary and Middle Schools. That year Maryland Governor Martin O'Malley legislated an ongoing subsidy for the project by granting it the same renewable tax breaks as solar and wind energy. On the day this measure was signed into law, Energy Answers donated \$100,000 to the Democratic Governors' Association over which O'Malley presided. Adding to this political patronage, a consortium of municipalities, school systems including Baltimore City Public Schools, and local nonprofits signed energy purchasing contracts with the incinerator. Mayor Stephanie Rawlings-Blake called the project a "national model." Page 120 project a "national model." Page 220 pro

In spite of the broad political support, Energy Answers had financial difficulties preventing the project from progressing. Youth leaders at Benjamin Franklin High School who had formed Free Your Voice, a human rights committee of the United Workers, decided to begin a divestment campaign calling for each entity to end its energy purchase agreement with Energy Answers. Free Your Voice succeeded at convincing Baltimore City government, the school system, and others to break from their agreements.²¹ After a six-month public pressure campaign that culminated in a youth-led civil disobedience action, the Maryland Department of Environment terminated the permit for the project.²² One of the campaign's leaders, Destiny Watford, won the 2016 international Goldman Environmental Prize, garnering international media coverage and establishing relationships with global leaders in environmental justice and sustainability.²³ The Maryland Daily Record named Watford "Innovator of the Year," and Time Magazine selected her as one of their "10 Next Generation Leaders."²⁴



Destiny Watford, 2016 Goldman Prize Winner for North America



Baltimore City Paper Cover. Vol 38 NO. 30



Community art created in response to Energy Answers Incinerator proposal

By shuttering the Energy Answers incinerator project, students, parents, teachers and workers defined a vision for a Baltimore in which no community is treated like a dumping ground. They set a goal for

Baltimore to make a just transition to Zero Waste.

Since the grassroots victory in shutting down the Energy Answers incinerator, Baltimore elected officials, City agencies and grassroots leaders have begun to create a path towards Zero Waste. On April 24, 2017, the Baltimore City Council conducted an informational hearing on "Moving Baltimore to Zero Waste." City Council Bill 17-0022R was introduced and read at the hearing, then formally adopted on June 5, 2017. The resolution requests:

Representatives from the Department of Public Works, the Health Department, Baltimore City Public Schools, the Office of Sustainability, the Department of Housing and Community Development, and other City agencies involved with waste reduction efforts in Baltimore appear before it, along with experts on Zero Waste efforts nationwide, to discuss the development of a Zero Waste plan for Baltimore that will advance sustainability, public health, and job creation.

The City's 2019 Sustainability Plan₂₅ was approved by the City Council on March 18th, 2019. The bill formally adopting it was signed into law by Ex Officio Mayor Young on Earth Day, April 22nd, 2019. A number of initiatives included in the Sustainability Plan have been endorsed by the City Council and incorporated into this Plan for further development. These initiatives include expanding compost collections, making the City's recycling program reliably available to all, and emphasizing the creation of local jobs and support of community land ownership.

The City Council has taken others steps to address the systemic waste problem, like banning certain types of waste. After banning styrofoam in 2018, the council succeeded in passing a plastic bag ban in January 2020. Additionally, they are encouraging the development of grassroots infrastructure to increase diversion of food waste. The Baltimore Office of Sustainability and the Natural Resources Defense Council have launched the Food Matters program which aims to divert food waste through composting and to create systems for the distribution of good food to those in need. The Food Matters program has two big goals: reduce food waste to 50% of its current level by 2030 and reduce residential food waste by 80% by 2040.26

ZERO WASTE CIVIC CHAMPIONS

Led the call for Baltimore to create a Zero Waste Plan.



"Global warming is "global" in impact but local in solution, best met from "neighborhoods up" in grassroots alliance across the land. Proud to be part of ours!" - BALTIMORE COUNCILWOMAN MARY PAT CLARKE

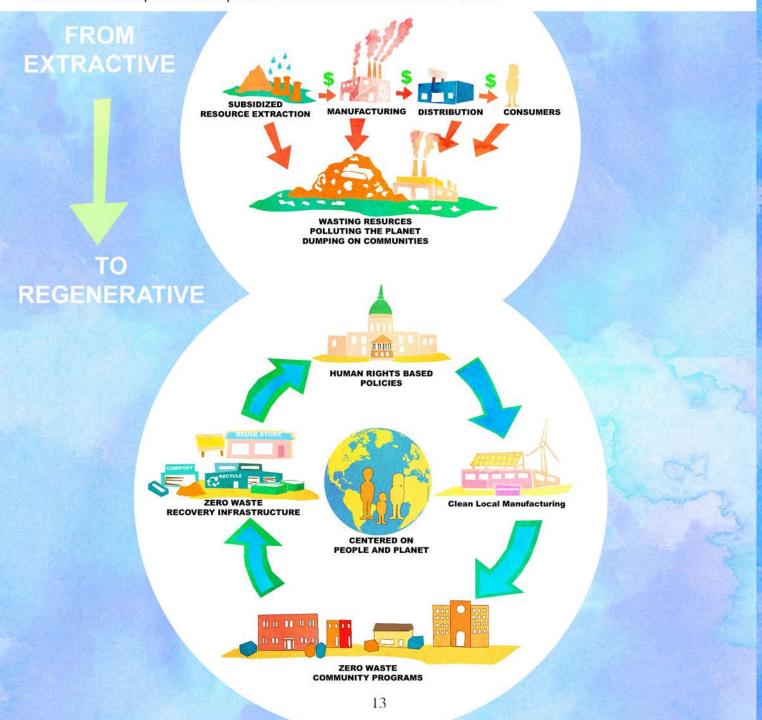


"It's got to be closed. That was my narrative and directive: to shut down Wheelabrator." - BALTIMORE COUNCILMAN ED REISINGER

Led the passage of Baltimore's Clean Air Act.

Under the leadership of City Council President Brandon Scott (formerly the City Council representative for the City's 2nd district), the Equity Assessment Program was introduced in 2018. This was passed and signed into law shortly thereafter. As required by this new program, City agencies are mandated "to assess existing and proposed policies and practices for disparate outcomes based on race, gender, sexual orientation, or income and to proactively develop policies, practices, investments to prevent and redress those disparate outcomes". We view this Plan as part of a larger process to identify structural inequality and solutions, with particular implications for the Department of Public Works, the Department of Housing and Community Development, and the Mayor's office of Employment Development, among others.

This Plan recognizes that Baltimore has been building toward this moment, and now is the time to implement Fair Development Principles, legislation, and policy initiatives. This Plan builds on the hard work that came before and supports the City ending the BRESCO waste management contract with Baltimore City when that contract expires in 2021. United Workers and the Fair Development Roundtable sought out a team with the experience, expertise, and values to initiate this planning process and put Baltimore on the path to an equitable and Just Transition to Zero Waste.



Fair Development Principles

UNIVERSALITY: Zero Waste shall increase all city residents' ability to access the resources required to meet their fundamental needs including good jobs, clean air, healthy communities, and work with dignity. It shall address these needs in a coordinated way. No single Zero Waste goal shall be pursued to the detriment of other fundamental needs.

EQUITY: Zero Waste policies must reallocate resources to communities that have been disinvested and used as dumping grounds. Zero Waste policies and programs will address race, class, economic, and health disparities.

PARTICIPATION: Zero Waste policy decisions, including the provision of public contracts, subsidies, and tax revenue, must reflect the input and interests of the constituents. The City must create processes that gather meaningful input from residents and relevant stakeholders at all phases throughout planning, formation, implementation, and monitoring.

TRANSPARENCY: Zero Waste developments and policies and must be discussed, decided, implemented, and monitored in an open, accessible manner that maximizes examination and review by city residents. Performance reports and program evaluations should be made public and available online.

ACCOUNTABILITY: Public agencies implementing Zero Waste must facilitate developments and programs that are universal, equitable, participatory, and transparent, and shall be held responsible for breach of that duty by an effective means of redress and remedy.

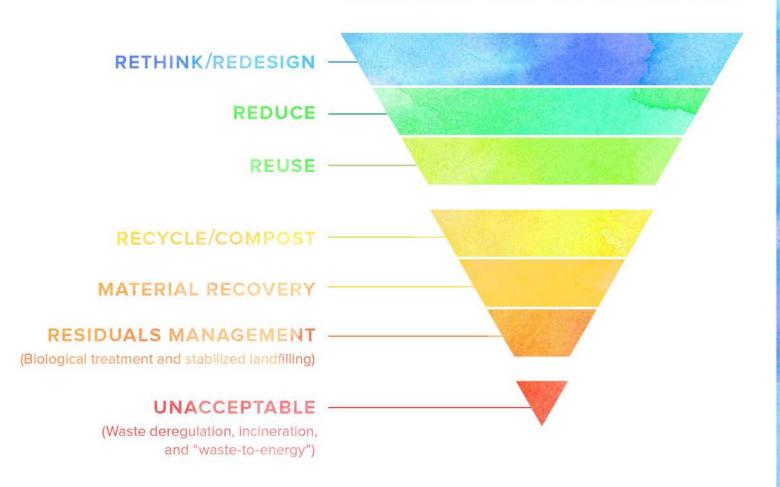


Zero Waste Framework

This Plan combines the Fair Development Principles with the internationally and peer-reviewed Zero Waste framework. This means "the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning, and with no discharges to land, water, or air that threaten the environment or human health."28

The above Zero Waste definition and the Zero Waste Hierarchy of Highest and Best Use are key policies that define the Zero Waste framework used in this Plan.

THE ZERO WASTE HIERARCHY





"When I arrived in Baltimore, my lungs were clean. 45 years later, I have respiratory problems, bronchitis, asthma. We need to do something about the air we breathe in Baltimore City." -RANDOLPH FORD, Baltimore City resident

Outcomes and Priority Actions

When implemented, Baltimore's Fair Development Plan for Zero Waste will achieve these outcomes:



Bottom Line for Baltimore: 800,000 tons diverted



Zero Waste initiatives will divert 800,000 tons of materials resulting in 90% per year diverted from landfills.

Bottom Line for Baltimore: 1,800 JOBS



By implementing the Zero Waste Plan we will create 1,800 good green jobs.



By setting a clear Zero Waste goal of 90% diversion from burning and burying, Baltimore can create a just transition from an economy of extraction to one of regeneration. This Plan is both a practical guide to how Baltimore can reach this goal, as well as a call for political leadership to recognize the climate and waste crises we are in and make the commitment necessary to address them.

Baltimore is joining cities and communities all around the world choosing Zero Waste as a way to create jobs with dignity, reduce emissions, replenish the soil, and create healthy living environments.

Priority Actions are required to commit to Zero Waste:

- 1. Establish a Zero Waste goal to divert 90% of all materials discarded in the city from landfills, incinerators, and the environment by 2040. This Plan will guide the implementation of this Zero Waste goal.
- 2. Make Zero Waste a citywide Priority. Create a culture within City government to work collaboratively to implement Zero Waste policies and programs and to recognize this as a shared challenge. Establish Zero Waste goals and initiatives within each City Department and each public school focusing on employment and waste reduction outcomes. Support schools to implement Zero Waste as part of their sustainability plans that include paid employment for students to staff onsite school-based composting, gardens, reuse, and recycling programs.
- 3. Issue a Request for Proposals (RFP) to attract mission-based or worker owned recycling and composting operators capable of meeting Baltimore's need for expanded collections. The RFP should include: Long Term Contract (10 years+); inclusion of community benefits in evaluation criteria;

local hiring, living wages, benefits, and career pathways; preference for local markets; recovery of quality materials; economic development; community-based social marketing; and resource management, performance-based contracting incentives.²⁹ [Previous experience with implementing successful zero waste initiatives should be highly valued.]

4. Establish source-separated recycling and organics collection in all City facilities. All public trash containers should be accompanied by a recycling container of equivalent or larger size. Organics containers should be added anywhere food is served.

5.Establish a Sustainable Purchasing Committee to promote sustainable purchasing of products and services (durable/reusable products, recycled-content paper, mulch, locally produced products) and follow the Precautionary Principle.³⁰ Support the use of cooperative purchasing programs through City procurement policies to buy recycled products.

ZERO WASTE SAVES PUBLIC MONEY



Reducing waste generation and diverting waste from incinerators and landfills lowers the costs of disposal and disposal site maintenance for cities. Reduction, reuse, recycling, and composting systems are cost-effective, readily available and scalable.



BOTTOM LINE FOR BALTIMORE:

By implementing the Zero Waste Plan Baltimore will save \$56 million dollars in waste disposal costs currently going to the incinerator and landfill.

"Burning trash is not clean energy and BRESCO must be closed. Baltimore can and must do better for its residents and for our planet."

-HEATHER MOYER, Baltimore Faith Leader



CLEAN AIR





End waste incineration

Trash incinerators like BRESCO emit more GHGs than coal CLOSE HIGH-EMISSION WASTE FACILITIES End landfilling of organic waste

Organic waste in landfills emits methane, a GHG 25x more potent than CO2.



Plastic is made from fossil-fuels. Incinerating plastic wastes results in similar climate impacts to burning other fossil fuels.



Preventing food waste is the best option to avoid emission from landfills; it can reduce emissions by 75.5 GT CO2e over the next 30 years.



For years Baltimore residents have called for relief from the city's worst air polluter-- the BRESCO incinerator. City Council's unanimous passage of the Baltimore Clean Air Act demonstrated that residents' voices were heard. Baltimore's leadership is on firm footing in recognizing the perils of incineration, an unacceptable practice within the Zero Waste hierarchy. Incineration, landfilling of non-stabilized waste, illegal dumping, open burning, and littering are all unacceptable waste management practices because they don't allow for material recovery, have adverse environmental impacts, and undermine the transition to Zero Waste by justifying continued production of discards. Baltimore has a rare opportunity afforded by resident and civic heroes to make a clear break with the failed history of trash incineration in favor of a Zero Waste future.

These Priority Actions are required to support Clean Air:

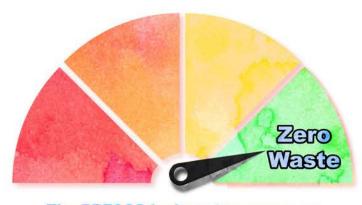
- 1. Defend and enforce the Clean Air Act in Baltimore City, holding polluting incinerators to higher standards than current state or federal government regulations.
- 2. End Baltimore City's contract with BRESCO in 2021, allowing for materials to be reclaimed using Zero Waste infrastructure.
- 3. End subsidies for trash incineration at the state level-- remove trash incineration as a Tier 1 source of renewable energy in the state's Renewable Portfolio Standard.

- 4. Adopt Zero Waste bridge strategy calling for expanded collections and increased processing and transfer capacity. Arrange transfer to landfills and compost facilities outside of Baltimore (possibly together with Baltimore County), provide free recycling and composting carts to all residents and expand recycling and composting programs.
- 5. Fully Fund Zero Waste Plan initiatives.
- 6. Pass Priority Zero Waste policies.
- 7. Adopt incentives for waste reduction, reuse, recycling and composting Zero Waste more economically viable. Disincentivize burning and burying waste by making it more expensive.

ZERO WASTE COMMUNITIES ARE HEALTHIER



\$55 million dollars in reduced health care costs



The BRESCO incinerator causes an estimated \$55 million in health damages every year. Implementing the Zero Waste Plan and closing the incinerator will reduce healthcare costs paid by residents.

"Incinerators poison our air, and put our lives at risk, especially those folks who live in poor neighborhoods like Curtis Bay, where I grew up. My mom, for example, last year almost died because she had an asthma attack. It would be easy to say, 'Well, you can't pin that back to incineration.' But what I can tell you is that there is a real cumulative impact when we think about the polluting developments that happen and exist in poor neighborhoods like Curtis Bav." -DESTINY WATFORD

Curtis Bay resident and leader

CLEAN COMMUNITIES

EXPANDED COLLECTIONS THROUGH MISSION BASED RECYCLING AND COMPOSTING

Reduce Extraction through recycling

MISSION
BASED
RECYCLING
&
COMPOSTING

Fight climate change with composting

Recycling paper avoids deforestation.



Recycling plastic displaces virgin plastic production & avoids fossil fuel use.



Mission based recycling creates 10x more living wage jobs that incineration and landfilling.

Composting avoids methane emissions from landfills and enhances soil's capacity to sequester carbon.



In 25 years, healthy soils could sequester 10% of annual human caused GHG emissions.

China's recent National Sword waste import ban exposed U.S. recycling systems as deeply flawed and reliant upon foreign markets, but the problems extend beyond materials that have traditionally been considered as recyclable. Domestic end markets for materials are underdeveloped. Poor sorting and collection practices mean bales of mixed paper and plastic are often contaminated, and therefore can't be recycled. Some of these recyclables are ending up in landfills and incinerators, where they contribute to climate change and damage communities' environmental health.

As part of a comprehensive Zero Waste strategy, recycling and composting programs need to be redesigned so they are not set up to fail. Instead, Baltimore can lead with its values by awarding contracts for recycling and composting services to mission-based and/or worker-owned companies or nonprofit organizations. Mission based recyclers around the country have demonstrated that even in these more difficult times for recycling, through key attention to Zero Waste principles, sustainable operations are possible.

Mission-based recyclers:

Emphasize education and building trust with the public and their workers to keep materials clean and contamination rates low.

Work collaboratively with local businesses to establish long-term local markets for quality recycled materials marketed for their highest and best use.

Obtain better market prices by reliably providing high quality materials that businesses can count on as feedstock for their operations.

Report honestly and transparently so communities can partner with them and make improvements based on facts and experience.

Retain employees longer by providing safe and healthy work environments, with living wages and benefits. Special attention is paid to hiring from the community and to providing youth development, training programs, and career pathways.

Innovate and re-invest resources for community benefit rather than shareholder profits.

Advocate for Zero Waste policies, climate action, local food and environmental justice.



MISSION-BASED RECYCLING

Currently, Baltimore's recycling system is wedded to a Big Waste company, which has a fundamental conflict of interest: landfill companies make large profits from having materials placed in their facilities and fear recycling because it diverts materials from their facilities and lowers their profits.

Landfills are Big Waste's cash cows and the leverage they can use to stop genuine competition. By one estimate₁, they make 10 times as much profit on landfills as on recycling.

When organized citizens formed the recycling movement in the late 1960s, the waste industry responded to the threat of recycling. They took control of MRFs₂, that is, the sites where recyclables are taken to be separated into valuable materials. Putting these companies in control of recycling presents them with a dilemma. Their internal economics encourages them to maximize profits by diverting recyclable materials to their own landfills. Yet society demands they maximize recycling.

In Baltimore, the city uses an out of town Big Waste company to process the city's recyclables. The city pays for shipping the materials about 15 miles out of town, pays for the company's 30%+ profit margins for inefficient and low quality processing (glass, which makes up 20-25% of the recycling stream, is not clean enough to sell despite heavy demand for materials).

This scenario can be readily changed.

Baltimore can improve recycling through cooperation between the DPW and a mission based recycling organization. Such an approach would reduce costs of recycling, improve the value of recovered materials, create new small businesses and jobs for residents, and stimulate the local and regional economy. At the same time Baltimore will contribute to stabilizing the global environment by reducing pollution from extractive industries and making the polluting BRESCO incinerator unnecessary.

Mission based recycling enterprises are successful in Boulder, CO, Berkeley, CA, and Twin Cities, MN. Each has a unique working relationship with their local government agencies. These enterprises feature respect for workers, for the community and for the environmental in the following ways:

- 1. High levels of recycling that yield clean and easily marketable materials
- 2. In-city processing that employs local residents and reduces transportation costs
- 3. Low rate of industrial injuries to workers in a sector that is among the most dangerous in the economy.
- 4. No temporary workers.
- Employment of unionized workers.
- 6. Education and public awareness outreach that mobilizes residents for recycling at home, work and recreation.
- 7. Creation of permanent recycling culture in government, community and commerce. One that values discarded materials not as waste but as a vital resource for reviving and sustaining a healthy and well-run city

By integrating mission driven recycling with the DPW Baltimore can realize sustainable materials management within 3-5 years and maintain this system for generations to come.

- 1. Mike Garfield (2006). How, Despite Overwhelming Public Support, the Waste Industry Has Undermined Recycling.
- 2. Forester Media (2002). The Impact of Waste Industry Consolidation on Recycling

Short-Term (2020-2021)

- 1. Provide free 65-gallon recycle carts to every household. Provide free 32, 65 or 96 gallon organics carts to every household. Allow households to share containers where there are space constraints.
- 2. Expand surplus food recovery organizations to reduce food waste and distribute to food deserts in the
- 3. Provide outreach materials and education to all households on a consistent basis.
- 4. Develop requirements for recycling and organics services to be implemented by all businesses and institutions In Baltimore. Include mandates for local, non-profit, mission-based and worker-owned operators in reuse, recycling and composting contracts.
- Prohibit commercially generated food waste from being disposed of in trash dumpsters citywide.
- Collect Fall leaves separately from trash and mulch them at Camp Small or another facility.
- 7. Provide free backyard/home composting bins to Baltimore residents.
- 8. Provide funding for community gardens and farms to support a distributed community composting network.
- Hire a full-time staff person to advance diverse composting infrastructure.

Medium-Term (2022-2027)

- 1. Build on rollout of expanded collections by adopting metered collection service (Save as You Throw). Adopt metered collection service in rolling carts for single family (32 or 65 gallons for recycling, 32, 65 or 96 gallons for organics, and 32 gallons for non-recyclable base services in property taxes; additional services for a fee). Once metered service is implemented, include garbage service as a line item on property tax bill or as a separate bill (to provide a signal that garbage service is not free). Once the billing system is working smoothly, create an incentive for single-family and multi-family residents to save money on their garbage bill if they reduce wasting and increase recycling through "Save-as-You-Throw" rates.
- 2. Require recycling and organics collection services for all commercial buildings. Phase in requirements based on the size of building or business (starting with the largest businesses and institutions) to achieve no recyclable or organic materials in trash and no trash in recycling. Require permitted haulers to provide (or provide for) recycling collection for all their customers. Phase in based on customer size and type.
- 3. Provide recycling dumpsters for all public housing.





RECYCLE MORE









RECLAIM COMMUNITIES





Combine to create the conditions for illegal dumpting most concentrated in black and poor communities.



More than 10,000 tons of trash is illegally dumped in Baltimore City every year, and this unacceptably high level of dumping disproportionately impacts Black and poor communities. Underlying this dumping crisis is Baltimore's staggering number of vacant lots and buildings coupled with the 2nd highest eviction rate in the nation. The recently published "Top Ten Illegal Dumpers List" was comprised mostly of property holding limited liability corporations and construction debris haulers. This status quo costs the City money and residents' equity, and is an ongoing threat to public safety. A study of Philadelphia's estimated 40,000 vacant properties gives us an idea of what the costs are. Researchers found that vacant properties reduce a home's value by an average of \$8,000 per home, cost the City \$20 million annually in maintenance costs, and deprive the City of \$2 million a year in tax revenue.32 By going to the roots of the problem and investing in solutions, we can build an alternative housing and development economy.

In addition to the lost equity and loss of tax revenue to Baltimore, residents and City leaders have long expressed concerns about public safety. In 2010 the Baltimore Sun reported "Abandoned Homes Tax Baltimore Fire Department," describing the 15% of all fires that occurred on vacant property.33 In 2020 this 15% figure still has not changed. On January 3, 2020, four fires broke out within 2 miles of each other in West Baltimore, displacing at least one resident and injuring a firefighter. Councilman Kristerfer Burnett who represents the West Baltimore neighborhood where these fires occurred said, "These are the things that keep people up at night." 34

In December of 2019, fires destroyed 17 vacant properties in just one week.35 In order to address this illegal dumping and public safety issue, Baltimore City must dedicate more resources for affordable housing and make a major annual commitment to deconstructing vacant properties. This should include taxing real estate speculators trading in non-owner occupied properties. These investments will raise equity for Black neighborhoods, increase tax revenues, and strengthen public safety while contributing cost savings from lowering the maintenance costs associated with vacant properties.

This Plan calls for major annual investments through a tax on real estate speculation that is projected to generate \$20 million annually, which could produce an estimated 200 renovations and employ almost 440 people in a single year.

Another \$20 million is called for through general obligation bonds to fund the deconstruction of 1,500 vacant houses annually. Deconstruction involves the careful removal and salvaging of key materials (bricks, plumbing, doors, windows and lumber) before demolition, which are then reused and repurposed, diverting these materials from landfills.³⁶



Priority Actions that foster responsible community land ownership and tighter enforcement of dumping activity are required:

Short-Term (2020-2021)

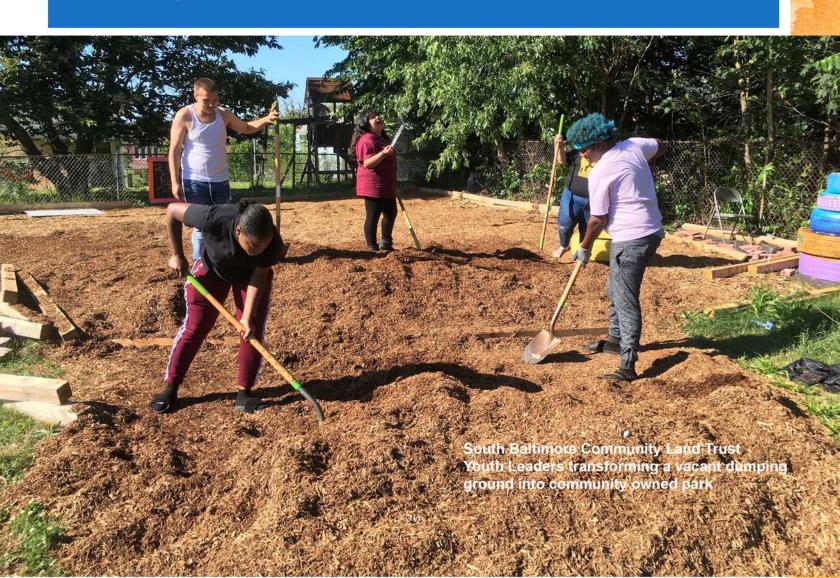
- 1.Create a "\$1 vacant lot program"₃₇ to award properties to non-profits and community-based organizations with a stewardship and development plan. Pair this effort with an "End Illegal Dumping Fund" of \$1 million annually to operationalize the maintenance of these lots empowering residents to reclaim these parcels and to put them into productive use as land for affordable housing, gardens, farms, and play spaces. The fund is to prioritize reallocation of resources to frontline communities that have historically been dumped on, disinvested in, and disproportionately impacted by destructive disposal activities (e.g. landfills and incinerators).
- 2.Commit \$20 million annually from municipal economic development bonds or other revenue sources for jobs deconstructing nuisance and vacant properties and reusing/recycling recovered building materials.
- 3.Require landlords to store possessions for evicted tenants. Prevent illegal dumping of possessions at the curb or in nearby vacant lots by reopening a City-run storage facility. The facility provides an opportunity to store possessions without destroying them and facilitates residents' retrieval of their possessions.
- 4. Create and fund a Tenant's Right to Counsel program.38
- 5. Prohibit evictions except for those with "Just Cause."
- 6.Coordinate the enforcement of illegal dumping violations equally throughout the city. Build on current City efforts including the Clean it Up! campaign initiating by Mayor Jack Young to publicly identify top illegal dumpers in the city and hold them accountable.39
- 7. Honor the Memorandum of Understanding between Baltimore City, The Fair Development Roundtable, and Community Development Network to allocate \$20 million to the Affordable Housing Trust Fund annually by 2023.
- 8.Pass the original "Fund the Trust Act" introduced in March 2018.40 The legislation was sponsored by the entire Council including current Mayor Jack Young and City Council President Brandon Scott. This bill would increase transfer and recordation fees for non-owner occupied properties and would generate approximately \$20 million annually for the Affordable Housing Trust Fund.

RISE. RECLAIM. REBUILD! RISE RECLAIM REBUILD by Taylor Smith Hams and Valeska Populoh

9. Increase reuse and salvage of building materials through programs like Humanim's Details, Brick and Board, Second Chance and Loading Dock by evaluating City-owned buildings that could be repurposed to house these efforts. Identify financial incentives that could increase the number of buildings available for these purposes.

Medium-Term (2022-2027)

- 1. Mandate source-separation of recyclable materials on-site and recycling of all discarded materials from construction, remodeling, and demolition projects (75% diversion of target materials/100% diversion of concrete and asphalt) through the building permit process. Require certification of diversion levels of the recycling facilities used and hold deposits that would be returned upon proof of recycling. Require small haulers, anchor institutions, manufacturers, and others to report where they take the materials they collect and divert.
- 2. Promote facilities and businesses certified as TRUE Zero Waste and encourage others to be certified.
- 3. Establish space requirements for recycling, composting, and trash in planning and building permits to facilitate the collection of those materials separately.
- 4. Require deconstruction of commercial buildings and retain industrial-zoned buildings for use by local manufacturers.
- 5. Support local construction debris recycling and/or transfer facilities by aiding them in the siting and permitting processes.
- 6. Develop resource recovery centers around the city where residents and small haulers can drop off a full range of products such as packaging and materials (e.g. bulky goods, furniture, clothes, toys, recyclables and compostables) to make it easier for people to do the right thing.
- 7. Partner with federal, state, and local economic and community development agencies and programs to expand local markets for reused products, recycled materials, and compost products. Use traditional economic development tools (e.g. low interest loans, siting and permitting assistance) to help existing businesses to expand or to attract new businesses.

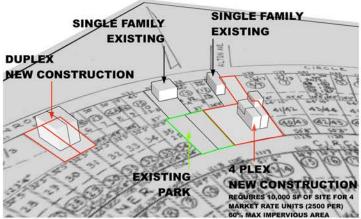


COMMUNITY LAND TRUSTS:

a proven model for communities to control land and development

Community land trusts (CLTs) are nonprofit organizations governed by a board of CLT residents, community residents and public representatives that provide lasting community assets and shared equity homeownership opportunities for families and communities. CLTs develop rural and urban agriculture projects, commercial spaces to serve local communities, affordable rental and cooperative housing projects, and conserve land or urban green spaces. However, the heart of their work is the creation homes that remain permanently affordable, providing successful homeownership opportunities for generations of lower income families.

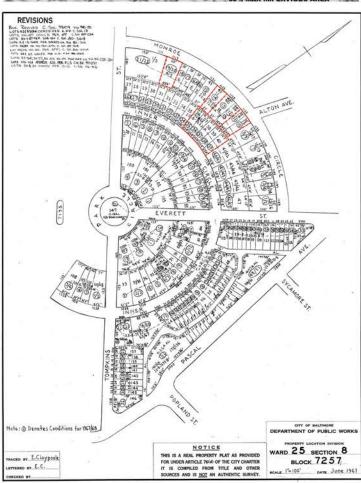




SOUTH BALTIMORE COMMUNITY LAND TRUST

The South Baltimore Community Land Trust is gaining community ownership of vacant homes and lots to create permanently affordable housing and safe community green space. Youth SBCLT leaders gained ownership of 10 lots used for illegal dumping across the street from their high school in Curtis Bay and are now creating a neighborhood park and a plan for 8 units of permanently affordable passive housing. SBCLT's vision is to scale up to create hundreds of affordable homes - eliminating dumping grounds and creating jobs.





REUSE-BASED SOCIAL ENTERPRISE

Reuse-based social enterprises divert valuable materials including mattresses, furniture, books, and appliances from incinerators and landfills through reuse and repair to create economic, social and environmental benefits. St. Vincent de Paul of Lane County, Oregon (SVdP) a leading waste-based social enterprise has achieved these outcomes in pursuing zero waste:

ENVIRONMENT: SVdP diverted a total of 30,488,270 pounds of materials from landfills and incinerators in 2017 including 353,000 mattresses recycled. Other materials diverted for reuse include: 8,786,652 pounds of books, 164,307 pounds of shoes, belts and purses and 66,431 pounds of videos and cds.

JOBS: SVdp creates full-time living wage jobs, including health care benefits, marketable skills, and a career path. SVdP employs 463 people in its reuse-based enterprises, many of whom have barriers to employment and career training.

ECONOMY: SVdP generates revenue to fund social programs and services through the sale of diverted materials. In 2017, SVdP's mattress recycling businesses yielded \$1.4 million in net income.

COMMUNITY: SVdP repairs or repurposes diverted materials for sale as quality goods at affordable prices. SVdP uses revenue from the sale of reused goods to assists low-income people to obtain affordable housing.

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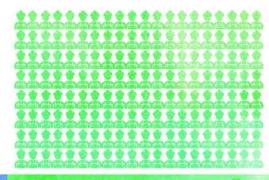
Require hiring of local residents and services to implement Zero Waste

ZERO WASTE CREATES GREEN JOBS Number of jobs created per 10,000 tons of materials









Burn/bury 1 job Composting 4 jobs Recycling 10 jobs

Reuse 75-200 jobs











Reuse, recycling and composting programs also create good, Green jobs. The Institute of Local Self-Reliance has researched employment generated by recycling and composting and reuse industries. Their research found that on a per-ton basis, sorting and processing recyclables can create 10 times more jobs than landfilling or incineration. Recycling-based manufacturers employ more people at higher wages than collection and sorting. Over 780 local processing jobs, 1,000 manufacturing jobs and hundreds of youth jobs can be created through the implementation of the Zero Waste initiatives. Ensure that City jobs in recycling collection and processing jobs contracted by the City are good Green local jobs that pay household-sustaining wages, protect workers' rights, guarantee workplace protections, provide medical, leave, vacations and retirement benefits, hire local workers, and provide a 'just transition strategy' for workers whose jobs are lost as a result of closing down landfills and waste incinerators.

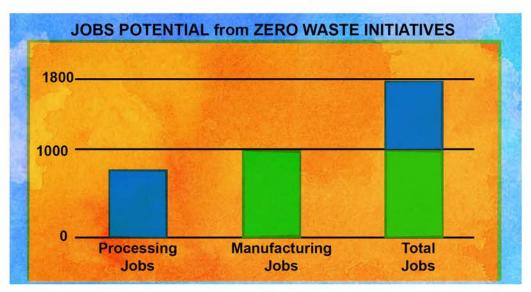
To create more jobs, priority actions are:

- 1. Require a set-aside of at least 25% of all City recycling collection and processing contracts for local small businesses and nonprofit agencies.
- 2. Ensure that City jobs collecting organics and processing jobs contracted by the City are good Green jobs (e.g. pay household-sustaining wages, protect workers' rights, guarantee workplace protections, provide medical, leave, vacations and retirement benefits, hire local workers, and provide a 'just transition strategy' for workers whose jobs are lost as a result of closing down landfills and waste incinerators).
- 3. Require a set-aside of at least 25% of all City organics collection and processing contracts for local small businesses and nonprofit agencies.

4. Provide adequate funding through rates, bonds or public financing to support Zero Waste policies and programs. Provide technical expertise and assistance to frontline communities to implement Zero Waste policies and programs. City Zero Waste jobs and/or jobs contracted by the City need to pay prevailing wages, protect workers' rights to organize, guarantee workplace protections against wage theft and sexual harassment, provide healthcare benefits and hire local workers. City Zero Waste jobs and/or jobs contracted by the City need to guarantee household-sustaining wages, family and medical leave, paid sick leave, vacations and retirement security to ALL City of Baltimore workers. Develop a 'just transition strategy' for workers whose jobs are lost as a result of closing landfills and waste incinerators.



By implementing the Zero Waste Plan we will create 1,800 good green jobs.

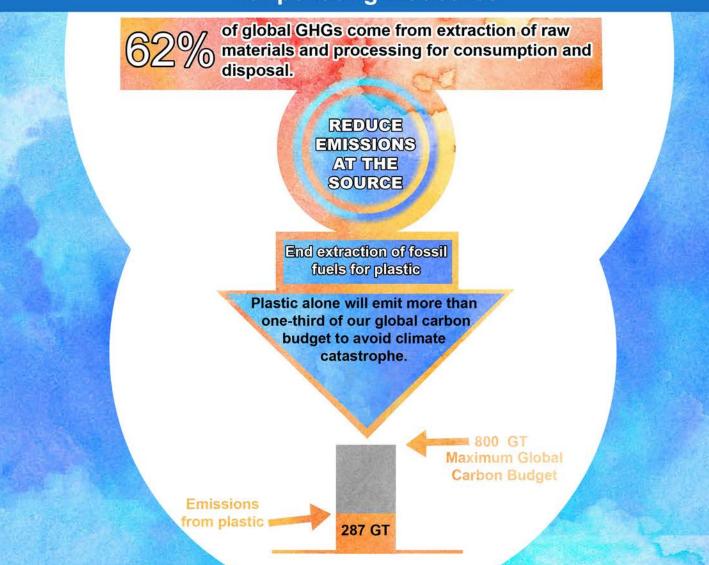




CREATE LESS WASTE:



Ban single use plastics and public subsidies for polluting industries



Only 9% of plastics ever discarded have been recycled. The maximum recycling level for the current mix of plastics used is somewhere between 36% and 53% even with the best available recycling technology. 42 While activists and policymakers make gains in the renewable energy sector, the fossil fuel industry is looking to plastics as its new frontier. Without major intervention, plastic production will quadruple and comprise 15% of the global carbon budget by 2050.43 Meanwhile, municipalities and taxpayers bear the cost of collecting, sorting, processing, and transporting an ever-growing volume of plastic waste. Improving our waste management systems to more effectively recover and repurpose materials is necessary, but downstream strategies must be paired with upstream strategies to reduce waste at the source. Planning for Zero Waste supports climate change mitigation, decreases environmental pressures, improves air quality, and supports local economic development. Public policy interventions should ban the single use plastics that erode municipalities' recycling ability.

Priority Actions to create less waste include:

Short-Term (2020-2021)

- 1. Effectively implement plastic bag ban. Work with all major businesses that have been providing plastic bags to develop clear and consistent messages everywhere in the city about what the law says, and how residents and visitors are expected to cope with this change.
- 2. Support State legislation and policies to reduce waste and increase recycling and composting such as: a.Bottle bill to add a deposit on the sale of beverage containers that encourages people not to litter them and for others to collect those that are littered
- b.Reduce single use plastics support for statewide bans of plastic bags and expanded polystyrene containers like Baltimore has already adopted
- c.Connect the cap like aluminum cans were redesigned for pull tab lids to stay connected to the can, technology is now available to keep caps connected to plastic bottles, to reduce caps being littered and choking wildlife
- d.Bans of materials going to landfills and incinerators like Massachusetts has adopted about 15 different materials that are banned, which stimulates new recycling businesses to collect, process and market those materials
- e.Minimum recycled content for paper and plastic products this requires the use of recycled products by businesses, which greatly stimulates the demand for the collection of those materials
- f.Product stewardship for hard-to-recycle items including requirements that retailers that sell hard to recycle items collect and recycle them (e.g. paint, rechargeable batteries and cell phones are often the focus for specific legislation)
- g.Fees on materials that go to landfills and incinerators many local and state programs charge fees per ton for trash disposed in landfills and/or incinerators, often used to help fund reuse, recycling and composting infrastructure)



Medium-Term (2022-2027)

- 1. Expand on the polystyrene foam ban adopted in 2018 to eliminate other single-use plastic and paper products coated with per- and polyfluoroalkyl substances (PFAS). Require reusable foodware at dine-in establishments.
- 2. Encourage use of reusable "to-go" boxes for takeout food by promoting services offered by the private sector, and/or through economic development tools such as low interest loans and permitting assistance for entrepreneurs offering these services.
- 3. Adopt minimum recycled content requirements for manufacturers to reduce extraction of new materials and build local markets for recycled materials.

Long-Term (2028-2040)

1. Adopt ordinances or support State law to require businesses that sell hard-to-recycle products or use hard-to-recycle packaging to take those back at their stores. Other municipalities have successfully implemented this policy for mattresses, cigarette butts, household hazardous wastes and discarded electronics. Stores work through Product Stewardship Organizations organized for each industry that are responsible for managing the materials collected and ensuring their reuse, recycling, or composting.

Bottom Line for Baltimore: 633,000 metric tons of greenhouse gas emissions reduced



Using the U.S. EPA Waste Reduction Model (WARM), the Zero Waste initiatives will reduce greenhouse gas emissions by 633,000 metric tons of carbon dioxide equivalent.



Priority Actions to build community power include:

Short-Term (2020-2021)

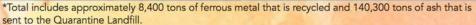
- 1. Provide information on items that can be reduced, repaired, reused, recycled, and composted through billboards, bus and truck wraps, social media, radio, and TV public service announcements. Educate and empower youth on how they can implement Zero Waste at home and at school, and encourage them to promote Zero Waste programs.
- 2. Provide resources for existing non-profit groups to provide master composter training, host compost demonstrations, and support community-scale and on-site composting operations.
- 3. Partner with anchor institutions to lead the way on Zero Waste. Medium-Term (2022-2027)
- 4. Provide grants to Zero Waste social enterprises, entrepreneurs, mission-based recyclers, composters, digesters and reuse organizations to bolster businesses needed to achieve Zero Waste.
- 5. Create and expand repair and reuse centers such as the Station North Tool Library. Encourage development of repair and resale enterprises for products such as mattresses, box springs, furniture, appliances, electronics and textiles.
- 6. Train Zero Waste Block Leaders to teach residents about recycling and organics recovery. Provide them with host party kits of reusable cups, plates and cutlery, to assist with community-based marketing.
- 7. Maximize the flow of resources, control, and decision-making to impacted communities. Advance community-led planning for community wealth building initiatives.
- 8. Set-aside at least 25% of all City Zero Waste outreach, education and dissemination contracts for small businesses and nonprofit agencies in frontline communities.

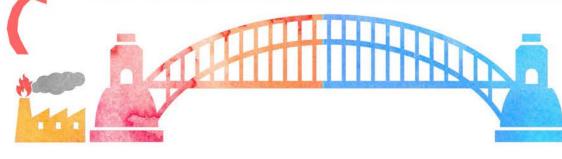
Impacts of Zero Waste Initiatives

Implementing the Zero Waste Priority Actions identified in this Plan will help the City reduce its reliance on landfilling and incineration by 90% by 2040, achieving the City Sustainability Plan's waste and recycling goal. Implementing this plan will dramatically reduce the one million tons of waste that are disposed of annually by residents and businesses in Baltimore.

Under Maryland law, materials are tracked based on different classifications to document diversion and disposal. The City had an unadjusted 19 percent diversion rate. This figure was adjusted to 28 percent after adding credits for resource recovery and source reduction. Using conservative estimates for capture rates by material type, implementing this Plan's short-term (2020-2021), medium-term (2022-2027), and long-term (2028-2040) Zero Waste Priority Actions will result in the diversion of nearly 800,000 tons of waste from the landfill, allowing Baltimore to reach 90% diversion by 2040.

Facility	Tons		
Baltimore Refuse Energy Systems Co. (now Wheelabrator)	378,500*		
Quarantine Road Landfill	481,600		
Other Disposal Facilities	279,900		
Total	1,140,000		
Net Total (adjusted for ferrous and ash)	991,300		







Zero Waste Priority Actions	Short	Medium	Long	Total
1. Commitment	17,800		No	17,800
2. Clean Air				
3.Clean Communities	84,400	84,400	99,900	268,700
4. Reclaim Communities	57,100	375,800	10 -	432,900
5. More Jobs			1 The	
6. Less Waste	5,000	5,000	12,500	22,500
7. Build Community Power	19,800	35,600		55,400
Total	184,100	500,800	112,400	797,300

REFERENCES

- 1. Brenda Platt, David Ciplet, Kate M. Bailey, & Eric Lombardi. (2008). Stop Trashing the Climate (pp. 2–10). Institute for Local Self-Reliance.
- 2. Brakkton Booker. (2018, August 7). In Baltimore, The Gap Between White and Black Homeownership Persists. In All Things Considered. National Public Radio. https://www.npr.org/2018/08/07/632497683/in-baltimore-the-gap-between-white-and-black-homeownership-persists
- 3. Greg Masters. (2011, October 13). Waste-to-Energy Dirtier Than Coal-Fired Power Plants, Report Claims.

https://cnsmaryland.org/2011/10/13/waste-to-energy-dirtier-than-coal-fired-power-plants-report-claims/

- 4. Energy Justice Network. (n.d.). Biomass/Waste Incineration. http://www.energyjustice.net/files/md/baltimore/incineration.pdf
- 5. George D. Thurston. (2017). Regarding the Public Health Impacts of Air Emissions from the Wheelabrator Facility. https://www.cbf.org/document-library/cbf-reports/thurston-wheelabrator-health-impacts-2017.pdf
- 6. CBS Baltimore WJZ. (2017, July 6). 20-Year Gab in Life Expectancy Between Richer, Poorer Areas of Baltimore. https://baltimore.cbslocal.com/2017/07/06/life-expectancy-baltimore/
- 7. Environmental Integrity Project. (2012). Air Quality Profile Of Curtis Bay, Brooklyn and Hawkins Point, Maryland (p. 57).
- 8. Brenda Platt, David Ciplet, Kate M. Bailey, & Eric Lombardi. (2008). Stop Trashing the Climate (pp. 2–10). Institute for Local Self-Reliance.
- 9. Energy Justice Network. (2010). EPA eGrid 2010 CO2, SO2 and NOx Emissions Data for U.S. Electric Power Plants. http://www.energyjustice.net/egrid
- 10. Luke Broadwater. (2015, December 10). Baltimore eviction rate among highest in country, study says. The Washington Post.

https://www.washingtonpost.com/local/baltimore-eviction-rate-among-highest-in-country-study-says/2015/12/10/a94b7b98-9d09-11e5-a3c5-c77f2cc5a43c_story.html

- 11. Peter Sabonis, & Matthew Hill. (2016). Community Land Trust, Tools for Development Without Displacement (p. 23). The Baltimore Housing Roundtable.
- 12. Tiffany Watson. (2020, February 5). Mayor Young releases list of top 10 residents, businesses cited for sanitation violations. Fox Baltimore.

https://foxbaltimore.com/news/local/mayor-young-releases-list-of-top-residents-businesses-cited-for-illega I-dumping

- 13. Baltimore City Department of Public Works. (2018). Annual Report on Actions Taken to Remediate Illegal Dumping in Baltimore City FY 2018.
- https://publicworks.baltimorecity.gov/sites/default/files/Illegal%20Dumping%20Remediation%20Report%20FY2018.pdf
- 14. Peter O'Dowd. (2019, April 16). Meet Mr. Trash Wheel: Baltimore Harbor's Googly Eyed Garbage Gobbler. In Here and Now. National Public Radio.

https://www.wbur.org/hereandnow/2019/04/16/mr-trash-wheel-baltimore

- 15. areavibes. (2020). Brooklyn-Curtis bay Employment Information. https://www.areavibes.com/baltimore-md/brooklyn-curtis+bay/employment/
- 16. Baltimore Neighborhood Indicators Alliance- Jacob France Institute. (2015). McElderry Park Neighborhood Data Profile.

https://bniajfi.org/wp-content/uploads/2016/04/McElderry-Park-Neighborhood-Profile-2010-2015.pdf

- 17. Baltimore City Health Department. (2017). Baltimore City Neighborhood Health Profile, Sandtown-Winchester/Harlem Park
- 18. Environmental Integrity Project. (2012). Air Quality Profile Of Curtis Bay, Brooklyn and Hawkins Point, Maryland (p. 57).
- 19. Annie Linskey. (2011, November 27). Firms with interests in Md. Pour cash into DGA. The Baltimore Sun. https://www.baltimoresun.com/maryland/bs-md-dga-fundraising-figures-20111127-story.html
- 20. Fern Shen. (2015a, December 2). Poised to battle climate change in Paris, mayor sidesteps incinerator in Baltimore. Baltimore Brew.

https://baltimorebrew.com/2015/12/02/poised-to-battle-climate-change-in-paris-mayor-sidesteps-incinerat or-in-baltimore/

21. Wheeler, T. B., & Wenger, Y. (2015, March 25). City cancels deal with trash-burning power plant. The Baltimore Sun.

https://www.baltimoresun.com/news/environment/bs-md-city-incinerator-20150325-story.html

22. Fern Shen. (2015b, December 15). Incinerator Protesters Arrested at MDE Headquarters. The Baltimore Brew.

https://www.baltimorebrew.com/2015/12/15/incinerator-protesters-arrested-at-mde-headquarters/

- 23. The Goldman Environmental Prize. (2020). About The Prize. https://www.goldmanprize.org/about/
- 24. Maryland The Daily Record. (2016). Free Your Voice.

https://thedailyrecord.com/innovator-of-the-year/winners/free-your-voice/

- 25. Baltimore Office of Sustainability. (2019). The 2019 Baltimore Sustainability Plan (p. 177). Baltimore City. https://www.baltimoresustainability.org/plans/sustainability-plan/
- 26. Baltimore Office of Sustainability. (2020). Food Matters Program.

https://www.baltimoresustainability.org/projects/baltimore-food-matters-program/

27. Equity Assessment Program, Council Bill 18-0223, 2018 (2018).

https://baltimore.legistar.com/LegislationDetail.aspx?ID=3479033&GUID=F8F69E91-90DE-48EF-AE13-075556055BA1

- 28. Zero Waste International Alliance. (2018). Zero Waste Definition. http://zwia.org/zero-waste-definition/
- 29. U.S. Environmental Protection Agency. (2020a). Contracts and Franchise Agreements for Waste Haulers for Transforming Waste Streams in Communities.

https://www.epa.gov/transforming-waste-tool/contracts-and-franchise-agreements-waste-haulers-transforming-waste-streams

U.S. Environmental Protection Agency. (2020b). WasteWise Resource Management: Innovative Solid Waste Contracting Methods.

https://www.epa.gov/smm/wastewise-resource-management-innovative-solid-waste-contracting-methods

- 30. Zero Waste International Alliance. (2018). Zero Waste Hierarchy of Highest and Best Use 7.0. http://zwia.org/
- 31. Alex Danovitch. (2019, November 11) Expert testimony to Baltimore City Council Health Committee, November 20, 2019.
- 32. Catherine Lucey. (2010, November 11). Abandoned properties have reduced city home values by an average of \$8,000, study finds. The Philadelphia Inquirer. https://www.goldmanprize.org/about/
- 33. Jessica Anderson. (2010, October 19). Abandoned homes tax Baltimore Fire Department. The Baltimore Sun.

https://www.baltimoresun.com/maryland/baltimore-city/bs-xpm-2010-10-19-bs-md-ci-vacant-fires-201010 18-story.html

- 34. McKenna Oxenden, & Jessica Anderson. (2020, January 3). "These are the things that keep people up": Four fires burn within two mils iin West Baltimore overnight. The Baltimore Sun. https://www.baltimoresun.com/maryland/baltimore-city/bs-md-ci-cr-overnight-fires-20200103-66xcyadadnbp3djcxelsyzkaaa-story.html
- 35. Lorraine Mirabela. (2019, December 8). Five of 17 fires in Southwest Baltimore over last week ruled arson; police make two arrests. The Baltimore Sun. https://www.baltimoresun.com/news/crime/bs-md-cr-arson-southwest-baltimore-20191207-fzkkzqq2pbfijc kf4tpt2ykzt4-story.html
- 36. Catherine Rentz. (2019, October 14). Community Leaders Sound Alarm Over Fires in West Baltimore Vacant Homes. The Baltimore Sun. https://www.baltimoresun.com/politics/bs-md-ci-fires-west-baltimore-20191014-lgyduyav7ffvbo6hdespamz vlq-story.html
- 37. Selena Hill. (2018, April 13). Baltimore May Sell Homes for \$1 to Revive Neglected Neighborhoods. Black Enterprise. https://www.blackenterprise.com/baltimore-sell-homes-1/
- 38. Bruce Cory. (2018, September 12). Can a Right to Counsel Slow Down the "Eviction Machine"? [The New School Center for New York City Affairs]. Urban Matters. http://www.centernyc.org/can-a-right-to-counsel
- 39. Tiffany Watson. (2020, February 5). Mayor Young releases list of top 10 residents, businesses cited for sanitation violations. Fox Baltimore. https://foxbaltimore.com/news/local/mayor-young-releases-list-of-top-residents-businesses-cited-for-illega l-dumping
- 40. Maryland Center on Economic Policy. (2018). Revenue Options for Baltimore City's Affordable Housing Trust Fund. http://www.mdeconomy.org/wp-content/uploads/2018/04/MDCEP-Housing-Revenue-Policy-Brief-1.pdf
- 41. Green Business Certification (2018) TRUE Zero Waste Rating System of the U.S. Green Building Council. https://true.gbci.org
- 42. UN Environment report (2018) "Banning single-use plastic: lessons and experiences from countries"
- 43. Material Economics (2018) "The Circular Economy a Powerful Force for Climate Mitigation"

