Baltimore Zero Waste Plan
A Just Transition to an Equitable Future
Stakeholder Process

- Plan developed by community
- Guided by United Workers
- Helped by Baltimore Office of Sustainability
- Zero Waste Associates & Institute for Local Self-Reliance
What We Heard: Urgency & Equity

• Communities continue getting dumped on – an unacceptable inequity
• With Clean Air Act, urgent to plan for major change
• BRESCO incinerator, landfill and other polluting waste infrastructure are concentrated in South Baltimore
• $55 million of health impacts/year need to stop. Baltimore has 40% asthma rate
• Illegal dumping needs to stop
• Inequitable recycling (including no recycling at public housing)
• Residents are already taking the lead on Zero Waste and are a strength to build upon
What we heard: Prioritize Equity

It is a racist system because it stacks all the polluting ways we deal with waste in one part of town - which is poor and black - outcome health damages - asthma - life expectancy disparities - poor black communities get the burdens.

Environmental Injustice: poor and black communities bear most of the burdens.
What we heard: Equity Gains

• Follow Laws: Clean Air Act and Equity Assessment Program
• Reach Sustainability Plan Goals for 90% diversion from burning and burying
• Cleaner air
• Cleaner communities
• Safer communities
• More jobs
• Less waste
• Meaningful and genuine engagement
Builds on Sustainability Plan

- 90% diversion from landfill and incinerator
  - BRESCO faces near term closure due to Baltimore Clean Air Act
  - Stakeholders want Just and Equitable Transition away from BRESCO
- Expand Waste to Wealth initiative
- Legislation and policies to reduce wasting
Zero Waste Plan Guiding Principles

- Define Success
  - Adopt Zero Waste Definition

“Zero Waste: 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.”

International Peer-Reviewed Definition of Zero Waste
Zero Waste Plan Guiding Principles

- Define Success
  - 90% Diversion by 2040
  - Donate 20% of Edible Food by 2030
  - Divert 50% of Food Waste by 2030
Zero Waste Plan Guiding Principles

- Highest & Best Use

Hierarchy to Reduce Food Waste and Grow Community

- Prevention: Do not generate food waste in the first place! Reduce portions, buy what you need, and organize your fridge for optimal food usage.
- Feed hungry people: Direct food not suitable for people to animals such as backyard chickens or to local farmers’ livestock.
- Composting in backyards or in homes: Avoid collection costs!
- Onsite composting or anaerobic digestion: and community composters can accept material from off site or simply process their own material.
- Composting or anaerobic digestion at the small town or farm scale: These systems handle typically between 10 and 100 tons per week and are designed to serve small geographic areas.
- Facilities serving large geographic areas that typically handle more than 100 tons per week: Material generally leaves the community in which it is generated.
- Mechanical Biological Mixed waste treatment: Mixed garbage is mechanically and biologically processed to recover recyclables and reduce waste volume and the potential for methane emissions before landfill disposal.
- Food waste should be banned from landfills and fresh incinerators due to their high capital costs, pollution, and contribution to greenhouse gas emissions.
Zero Waste Plan Guiding Principles

- Universality
- Equity – Stop Burning and Dumping on Community
- Participation
- Transparency
- Accountability

Destiny Watford, 2016 Goldman Environmental Prize Winner
Bridge Strategy to Zero Waste Needed

• Detroit Incinerator closed abruptly 5 days after citizen lawsuit was to be filed
• Had to quickly arrange to send waste to Landfills 30 miles away immediately as they had not planned for this contingency
• With City Adoption of Baltimore Clean Air Act, there is real prospect that BRESCO will not be able to continue to operate and City contract with BRESCO ends 12/31/21
• Need to plan now for that contingency, and not be surprised by that
Bridge Strategy to Zero Waste
Based on examples from around U.S.:

• Don’t Renew BRESCO contract
• Transfer to landfills and compost
  – Baltimore County considering transfer
• Expand Recycling & Composting
  – Free Recycling & Compost Carts
• Stop Dumping
• Landfill is not the answer - Zero Waste is.
San Francisco, California

• Recycling & composting for all = 40% within 2 years
• Mandatory recycling & composting = 80%
San Fernando, Philippines

- Adopted Zero Waste as a Principle
- Diverted 55% in 6 months
- 12% in 2012 to 76% in 2017
- Model for Decentralized Waste Management – MRFs in 33 of 35 villages.
Capannori, Italy

- Door-to-door collection was introduced in stages across the municipality between 2005 and 2010.
- By that time, 82% of municipal waste was separated at source, leaving just 18% of residual waste to go to landfill.
Zero Waste Initiatives

- 6 Major Zero Waste Initiatives
- 65 strategies to be implemented in:
  - Short-Term (2020-2021)
  - Medium-Term (2022-2027)
  - or Long-Term (2028-2040)
- Implementation will achieve 90% by 2040
Zero Waste Plan Initiatives

1. Packaging & Product Bans
   - Ban plastic bags & single use plastics
   - Support State legislation on packaging, Bottle Bill, product bans, minimum content, fees & redesign
Zero Waste Plan Initiatives

2. Recycling & Composting for All

- Free large carts for recycling & composting
- Phase in services universally & equally (Res. & ICI)
- Home, on-site and community-scale composting
- Preferences, set asides, grants & Good Green Jobs
- Site composting, MRF & transfer facilities
Zero Waste Plan Initiatives

3. Deconstruct & Recycle Buildings

- Reuse abandoned buildings for alternate use
- Require deconstruction, source separation, certified C&D facilities and space for recycling
Zero Waste Plan Initiatives

4. City Lead by Example

- Zero Waste goals for each City department
- Source separated recyclable & compostable materials collection in all City facilities & schools
- Sustainable Procurement
Zero Waste Plan Initiatives

5. Engage & Educate Community

- Extensive outreach (incl. Master Composters)
- Anchor institutions lead on Zero Waste as models
- Promote repair, resale & reuse (e.g. repair fairs)
- Use grants, Block Leaders, preferences and setasides
Zero Waste Plan Initiatives

6. Turn Wasting into Resources

- Reallocate resources to frontline communities
- Create community gardens, farms, and reuse and recycling operations from vacant lands and buildings
- Partner with Community Land Trusts to develop sites
- More recycling drop-offs & store evicted possessions
- Support more reuse and repair
Zero Waste Plan Initiatives
Diversion Analysis

- Total Citywide disposal ~1 million tons (residential, industrial, commercial, institutional, construction and demolition)
- Current diversion is ~19-28%
- Zero Waste Plan initiatives estimated to divert an additional ~800,000 tons
- Projected diversion at full implementation would be ~90%
## Zero Waste Plan Initiatives

### Diversion Analysis: Short-Term

<table>
<thead>
<tr>
<th>Zero Waste Initiative</th>
<th>% Diverted</th>
<th>Short-Term Tons Diverted</th>
<th>Major Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. More Packaging &amp; Product Bans</td>
<td>2%</td>
<td>5,000</td>
<td>Mixed plastics, paper</td>
</tr>
<tr>
<td>2. Recycling &amp; Composting</td>
<td>20%</td>
<td>84,400</td>
<td>Food waste, yard waste, paper, plastics</td>
</tr>
<tr>
<td>3. Building Deconstruction &amp; Recycling</td>
<td>10%</td>
<td>46,600</td>
<td>Building materials</td>
</tr>
<tr>
<td>4. City Lead by Example</td>
<td>2%</td>
<td>17,800</td>
<td>Food waste, plastics</td>
</tr>
<tr>
<td>5. Community Education and Engagement</td>
<td>2%</td>
<td>19,800</td>
<td>Food waste, plastics</td>
</tr>
<tr>
<td>6. Turning Waste Into Resources</td>
<td>2%</td>
<td>10,500</td>
<td>Food waste, paper, plastics other</td>
</tr>
</tbody>
</table>

**Total Diverted:** 184,100
Zero Waste Plan Initiatives
Jobs Potential

Jobs Potential from Zero Waste Initiatives

- Potential Local Processing Jobs
- Potential Manufacturing Jobs
- Total Potential Jobs
What can Commission Do?

1. Review and Adopt Zero Waste Plan as meeting key Sustainability Plan action

2. Ask DPW to work with Zero Waste Associates to ensure that Geosyntec analysis of transfer stations and disposal options include a near-term Bridge Strategy
If you’re not for Zero Waste, how much waste are you for?

Zero Waste Associates
Gary Liss, 916-335-1637
gary@garyliss.com

Institute for Local Self-Reliance
Neil Seldman, 202-898-1610
nseldman@ilsr.org