



Prepared for:
Baltimore City
Department of
Public Works



City of Baltimore

RECYCLING AND SOLID WASTE MANAGEMENT MASTER PLAN

Task 1 – Second Report

Summary of Ideas Shared at Community
Meetings on 4 June and 15 June

26 August 2019

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Background

In response to the need for long-term solid waste and recycling management for Baltimore City, the Department of Public Works (DPW) launched an initiative to identify viable options for improving solid waste diversion, recycling, and disposal in the City. This effort, referred to as [Less Waste, Better Baltimore \(LWBB\)](#), will inform the development of a long-term waste management and recycling strategy to maximize waste reduction, reuse/repair, recycling, and sustainable materials management through 2040 and beyond.

To involve City residents in developing this strategy, DPW is soliciting community input through facilitated community meetings. The third and fourth community meetings (held June 4 and June 15) aimed to provide Baltimore City residents with the opportunity to review and comment on the findings of the research into improving solid waste diversion and to suggest other solid waste management and diversion options for consideration. There are additional clarifications or corrections to what was presented/commented on at the community meetings, incorporated as footnotes to this report.

The dates and locations of these first two meetings were as follows:

Date	Time	Location
Tuesday, June 4, 2019	6:30 p.m. – 8:00 p.m.	Mergenthaler Vocational-Technical High School 3500 Hillen Road Baltimore, MD 21218
Saturday, June 15, 2019	10:30 a.m. – 12:00 p.m.	Enoch Pratt Free Library – Southeast Anchor Branch 3601 Eastern Avenue Baltimore, MD 21224

Q&A on Progress to Date

During open discussions, attendees at both community meetings had the opportunity to pose questions or suggestions to Geosyntec and DPW regarding the master planning effort to improve solid waste diversion, recycling, and disposal. Comments/questions posed by meeting attendees and their respective answers are categorized in the bulleted list below. Input from the first meeting is indicated by an orange dot (•), and input from the second meeting is indicated by a blue dot (•).

LWBB Master Plan

Timeline and Recommendations

- **Question:** What is the timeline to finish the master plan report and implement the initiatives outlined in it? ••
 - **Answer:** The report will be finished in December. It outlines activities and efforts for the next 20–30 years in the city.
- **Question:** How will the master plan come together, and to whom will you be giving these recommendations? What can we as citizens do to encourage progress on these efforts? •
 - **Answer:** Geosyntec will make recommendations to a large team at DPW, including Krystina Bryant, the project manager, and the DPW Director, by the end of the year. Programs will be implemented based on an analysis by DPW. These recommendations will be hosted on the LWBB section of the DPW’s website. Residents should use this website to remain aware of updates and stay involved with the program by providing feedback.
- **Question:** Is this master plan focused solely on Baltimore City, or does it expand out to the rest of the state/to other regions?•
 - **Answer:** This plan focuses entirely on Baltimore City, but it could be shared with other counties or regions.
- **Question:** How will these solid waste management improvement efforts be shaped? •
 - **Answer:** They will be shaped using a 7-point methodology to show which considerations are self-evident as the best options. DPW can still pursue other efforts outside of this methodology that have objective qualities (e.g., recycling at public events—this would help with visibility but won’t gather a large amount of recyclables).
- **Question:** Is there a long-term plan as part of LWBB to set up recycling in the City? •
 - **Answer:** Geosyntec is looking into options for moving recycling operations back into Baltimore. Plastic recycling in particular is at a crisis point since most of it is shipped overseas; there is a push for bills to address this issue. Other efforts to convert plastics into fuels have proven to be cost prohibitive.

Waste Sorts

- **Question:** The data from the winter waste sort was divided by quadrants. Will there be further breakdowns by neighborhood since communities have different waste generation and recycling rates? •
 - **Answer:** The trash sort data was broken down into quadrants because this is the way the city manages the fleets. Geosyntec can look into whether they can break down this data by neighborhood or by street.
- **Question:** How will the data on plastic recycling rates gathered from waste sorts impact the master plan since the rates fluctuate? •
 - **Answer:** The data from each waste sort will be combined to get an average rate.
- **Question:** Why conduct several expensive waste sorts if it is expensive to conduct them and if the data will be averaged in the end? •
 - **Answer:** The City had no comprehensive waste sort data, since it has never conducted its own waste sort before, so Geosyntec needed to conduct new waste sorts to gather data for their analysis. The Scope of Work (SOW) called for 4 waste sorts, but because there wouldn't be much variation between them, Geosyntec conducted only two: one in winter and one in summer (which measured yard waste).¹ Geosyntec is also examining the past Maryland Department of the Environment sponsored waste sorts to glean any other data they can.²

Survey and Data Analysis

- **Question:** Will you ask specific, targeted questions like whether Baltimore should continue to use the Elkridge recycling processing plant or whether Baltimore should continue a single-stream waste collection? •
 - **Answer:** The report won't look deeply into specific questions like these, but Geosyntec is looking into whether the City should look for other options besides the Elkridge plant and other scenarios like dual-stream.
- **Question:** Did the survey ask for information on race and income? This information would be helpful to have since the City deals with racial and poverty challenges. •

¹ It is noted that there would be useful data to gain from spring and fall, however, the City decided to conduct two waste sorts, rather than four, due to budgetary constraints as well.

² The City's recycling processor, Waste Management, recently conducted a sort of the City's residential single-stream recycling. It will be helpful to compare Geosyntec's studies with this sort.

- **Answer:** No, the survey didn't ask for this information because people may have found the request off-putting (especially when asking about income), but this is a fair point.
- **Question:** Do you have the survey responses broken down by zip code? Were the responses to the questions asking residents' satisfaction with services statistically significant for all zip codes?
 - **Answer:** The answers are all zip code dependent—respondents living in low-income neighborhoods more than likely rated their satisfaction lower than respondents living in wealthier neighborhoods. Information in the survey results presentation does not drill down to this level.
- **Comment:** I never heard about the survey and wish it had been more publicized. I have a lot of recommendations for consideration (Note that these recommendations are incorporated throughout this report) ●

Organics

Composting

- **Question:** The City is threatening to remove certain community composting programs (e.g. Filbert Street Garden). Can you influence them to not shut down these programs? ●
 - **Answer:** Yes, Geosyntec will recommend that the DPW incentivize community gardens and composting programs.³
- **Question:** Can vacant lots that have been turned into composting centers as part of the City's Adopt-A-Lot program be protected from having their permissions revoked? Currently, the City has authority to revoke the community agency over these adopted at any time, despite the investments made to establish them⁴ ●
 - **Answer:** Yes, Geosyntec will recommend that the DPW support lots used for this purpose.
- **Question:** How much success has Geosyntec had working with schools to reduce food waste? ●
 - **Answer:** Geosyntec has not interacted with schools yet in Baltimore, but a similar study conducted by Geosyntec in Frederick County recommended for schools to implement composting. A pilot composting program at different elementary, middle, and high schools has shown moderate success.

³ It is noted that the Filbert Street Garden is located on a portion of DPW owned property that houses a water storage tank. DPW is looking to acquire adjacent property for water utility upgrades to avoid interfering with the community garden footprint.

⁴ The City only revokes community agency from adopted lots if it has a need for the space.

- **Additional comment:** The Office of Sustainability is working with schools to reduce the amount of food waste they generate by encouraging them to order and offer only the amount of food needed (i.e., avoid over-ordering or serving students too much food). We don't work with composting programs in schools because there is no existing capacity to compost the food scraps and schools currently do not have the ability to compost on-site.
- **Comment:** The Office of Sustainability is collecting food scraps at local farmers markets every Sunday from 8AM–12PM through December. ●

Yard Waste

- **Question:** Could the City provide a tree trimming service for residents (e.g. deal with nuisance tree limbs over power lines, etc.) and burn the cut tree limbs at BRESCO to generate electricity, which would help offset the costs of the service (avoid LF disposal costs and have better energy reliability)? ●
 - **Comment:** Neil Seldman (an attendee in the audience, co-founder of the Institute for Local Self-Reliance) responded that the incinerator is the largest polluter in the City, so DPW should avoid sending more material there. Instead, promoting programs similar to Camp Small (which is run by the Department of Recreation and Parks to collect and sell tree material) would help make the City money on processing yard waste and avoid creating more pollution.

Commercial Sector

- **Question:** What is the composition of organic material waste generated by the commercial sector? ●
 - **Answer:** Geosyntec can look further into the data they gathered to determine the composition.

Organic Material in Landfills

- **Question:** Will an organics ban for landfills be considered? ●
 - **Answer:** There is currently a state-wide yard waste disposal ban in effect, and the City is looking at an organics ban, but there are a lot of moving parts involved in implementing something like this. Geosyntec can look at similar programs that currently lack regulatory or political support to determine what infrastructure is needed to help move them forward. Geosyntec will let technology inform the “soft support” needed for this effort in the beginning.
- **Comment:** Adding compost to landfills can help increase decomposition rates. ●

Recycling

Plastics

- **Question:** What types of plastics are acceptable to recycle besides types 1 and 2? •
 - **Answer:** In general, rigid plastics #1-7 can be more easily recycled via MRFs, but polystyrene, films, and plastic bags cannot be through curbside collection.
- **Comment:** It would be wonderful to ban plastic bags. We should look at bills that had been introduced in MD in the past to ban their use and figure out why they were unsuccessful. •

Bins

- **Question:** Why do people need to pay for recycling bins? •
 - **Answer:** This is a good question to ask, since trash cans are free. It's something we will think about.
- **Comment:** Residents living in rowhouses/apartments without yards don't have room to put their waste or recycling bins (and if a third bin is implemented it will be even harder) anywhere except in the street, where the bins can block emergency vehicles. •

Existing Challenges and Opportunities

- **Question:** What currently happens to recyclable products (e.g., plastics) in Baltimore? ••
 - **Answer:** Residential recycling goes to the Waste Management Recycle America (WMRA) processing plant in Elkridge. Plastics 1 and 2 are shipped to a domestic end user, cardboard and paper are sent to pulping mills, and aluminum is sent to a smelter to make into new cans. Approximately 20% of the material sent to WMRA is rejected either because it cannot be recycled or because there is no market for it. The City, through this contract, exports many plastics to Malaysia and Indonesia (and possibly Turkey) now that China does not accept them anymore.⁵ There is a congressional

⁵ This statement was made at the meeting, however is not accurate. The Elkridge facility processes all plastics domestically and the Baltimore City contract requires all plastics #1 & 2 to be recycled. Plastics #3-7 are either being recycled or disposed of domestically. This is based on communication with Waste Management, dated August 1-5, 2019.

bill being considered that would help with the domestic infrastructure gap to process recyclables. Some domestic plastic recycling markets have conversion to fuel capabilities but those are small scale.

- **Additional comment:** Glass is also not currently being recycled at the Elkridge plant, but it is being used in internal processes, to displace the use of dirt at landfills.⁶
- **Comment:** Dante Swinton (an attendee in the audience, coordinator at the Energy Justice Network) stated that the organization’s competition pilot programs in Westport and Cherry Hill communities in Baltimore have increased recycling rates. There will be more of these implemented. He stated that the City can make money on materials like plastic because there is still a market for it in the Northeast. The Beyond Dirty 4 effort involving the U.S. Chambers of Congress and retailers like Target, Walmart, etc. are doing a pilot in Orlando, FL regarding zero waste efforts.
 - **Response:** Geosyntec asked for the Energy Justice Network’s research on the Northeast recycling markets, since Geosyntec has not heard of any strong market presences there, especially in relation to plastics, and Dante agreed to send it. As of July 2019, Geosyntec has not received any of this information for consideration in the plan.
- **Comment:** Independent waste management/processing companies have no financial incentive to divert more material from their waste stream by recycling. ●
- **Comment:** The City is gradually increasing opportunities to recycle. The Jones Falls Farmers Market, for example, separates waste collection into clear bags in bins for recyclables and trash, so it is easy to see what bin contains which type of material.⁷ State mandates to increase access to recycling, especially to multi-family units, would help increase these opportunities faster. ●

Potential Opportunities

- **Comment:** Using a combination of glass and blacktop to repave streets would help re-use glass bottles if they’re not being recycled at the Elkridge plant.
- **Comment:** Baltimore should invest in a processing plant that is owned by and operated in the City, to include the option of regional inputs from other jurisdictions. The plan should recommend that City try and become as independent as possible and prioritize its equipment and better capture glass for recycling, etc. The Elkridge processing plant used now is too big and inefficient. ●

⁶ For further clarification, the glass from the Elkridge facility is being used at Waste Management landfills as alternate daily cover and as engineering material for projects throughout the landfill. This is based on communication with Waste Management, dated August 1, 2019.

⁷ The City’s Office of Sustainability is running its own food waste drop-off program at one location at the Jones Falls Farmers Market, for composting.

- **Comment:** We need to increase access to recycling in public spaces and aim for one-for-one trash and recycling bins; including recycling bins along walking paths or at major events like Artscape would help encourage more people to recycle.⁸ The City should serve as a role model for recycling. •

Education and Involvement

Messaging

- **Question:** We need to broadcast and repeat anti-littering messaging to get it to sink in, like slogans on trash bins, highly visible messages and signage. A previous mayor had a great anti-littering campaign, try and repeat it. Can you recommend this? •
 - **Answer:** Yes, the message needs to be re-emphasized.
- **Comment:** I developed a documentary (it's on YouTube) about trash in the City and preventing litter in the Chesapeake Bay called "Baltimore: Pick It Up." I'm bringing ideas on how to help improve litter prevention to DPW and other organizations including the Chesapeake Bay Foundation and Blue Water Baltimore. •
- **Comment:** Montgomery County does a good job of marketing its recycling commodities through Maryland Environmental Services (MES). The City should look to replicate this autonomy and not rely on a private facility. Should consider options like the North Carolina glass recycling facility or high solid waste tip fees like in D.C. The City should think about recycling as revenue and as avoided disposal costs since garbage costs money to dispose and does not generate revenue in the markets •

Community Involvement

- **Question:** Are there any plans to develop advisory boards like in NYC for waste management/recycling that would allow more transparency and residents from low-income or communities of color the opportunity to provide their input? •
 - **Answer:** This is a very good suggestion, though long-term plans with stakeholder support will only be successful if there are champions in the communities willing to work on these issues.
 - **Additional comment:** The Office of Sustainability has various advisory boards (though DPW has none for solid waste or for this project specifically), and Washington, D.C. has an advisory committee that meets once every three months.

⁸ Recycling bins are required as part of the Special Event Recycling Plan (SERP) but the City has a difficult time enforcing recycling. Most recyclables that are collected at special events are heavily contaminated. Also, BCPD does not allow plastic bins to be used at special events so paper bags are used for trash and recyclables. Bags are labeled recycling when placed at special events, but they are often overlooked and used as trash bags.

- **Question:** Would it be appropriate to use high schoolers' community service requirements to have them help pick up trash in neighborhoods? This would be a good way to get young kids involved and show them the difference they could make in their community. This could also be an education component if they are to learn about the technology behind solid waste management⁹ •
 - **Answer:** Yes, this could be a good way to get them involved.
- **Comment:** More people, especially low-income residents, should be employed in construction, recycling, and composting. Using public and private funding sources (e.g. the non-profit Civic Works) would help shoulder some of the costs, so DPW is not responsible for funding everything. •
- **Comment:** Competitions between neighborhoods or streets for recycling/composting to win prizes can help encourage residents to engage, clean up and recycle. One previous effort through Healthy Harbor—the Green Stoop Challenge—encouraged people to plant trees and other plants in front of their houses, but this may not have been adequately funded. •

Fines and Incentives

Fines and Mandates

- **Question:** Why is it not mandatory for city-owned buildings like Royal Farms Arena or public library to recycle?¹⁰ Why does the City charge the building for a recycling service? Howard County Fairgrounds has public recycling programs •
 - **Answer:** For buildings used for big events, the Department of Homeland Security requires DPW to lock up their large recycling containers during events. This policy was implemented after the bombing at the Boston Marathon. DPW can put out cardboard containers to collect recycling, but not being able to use the bigger containers is a significant missed opportunity. Additionally, recycling is not free so DPW is not capable of providing this service to public buildings without charging for it, so many buildings forgo the service. Geosyntec will look at recommending in the plan that operational costs, such as recycling services, be automatically incorporated into the lease, etc., so that this cost can be passed onto

⁹ DPW's Summer Youth Workers do have cleaning days to clean in communities. DPW is working with BCPS to become a registered Service Learning Site.

¹⁰ It is mandatory for City-owned and State-owned buildings to recycle.

the tenant/consumer, so that recycling is included and paid for up front. It needs to be built into the cost of doing business so it is not an option and recycling needs to be thought of as a public service, not a revenue generator.¹¹

- **Additional Answer:** It is mandatory for city-owned buildings to recycle. The City does not charge for recycling collection. DPW will collect recyclables from city-owned buildings on their collection days, but it is the responsibility of each building to collect and place their recyclables at the appropriate collection point. However, the City will not collect mixed refuse or recyclables from commercial or office buildings due to the large volume of materials larger buildings can produce.
- **Comment:** Law enforcement needs to be more aggressive with fining or ticketing people who litter or allow trash to accumulate in front of their homes. ●
- **Comment:** San Francisco experimented with requiring residents to pay for trash disposal (PAYT) and based payments on income rather than the number of bags (since larger households/multi-family would skew the payment). Currently San Francisco does not use this method ●
 - **Additional comment:** Some jurisdictions have found success using this method and others have not. Would need a lot of education and enforcement for it to work.
- Ban plastic bags

Incentives

- **Comment:** Paying people for recycling and requiring them to pay for waste by-the-bag may help encourage more recycling. ●
 - **Additional comment:** There is an app that rewards people for picking up litter. If users show proof that they helped clean up trash, they receive additional minutes on their cellphone plan.
- **Comment:** We should provide bottle deposit stations that give money back to help encourage recycling. ●

Construction/Demolition

- **Question:** Is any of the waste generated from construction/demolition recycled, or is it all being sent to landfills? ●

¹¹ For reference, DPW does not charge for recycling pick up at all.

- **Answer:** Yes, a lot of construction material is being recycled.¹²
- **Question:** Are there required City/State/Federal percentages or mandates for recycling construction waste? ●
 - **Answer:** Not currently, but this can be one of the recommendations Geosyntec provides to DPW.
- **Question:** Can you recommend making it easier for contractors, especially small ones, to recycle construction waste in the City (e.g. a lot of material has to be taken up to Perry Hall which is not close) and making it easier for them to properly dispose of the rest of the waste? ●
 - **Answer:** Yes, it should be easier for construction waste to enter into the waste management system.¹³
- **Comment:** Demolition crews in the City appear to be doing a better job of collecting doors, windows, and other recyclable parts from vacant houses than they did in the past. ¹⁴ ●

¹² Approximately 513,615 tons of non-MRA recyclables were recycled in Calendar Year 2017. Non-MRA recyclables include construction demolition and debris, land clearing debris and recycled fluids, which fall outside the scope of the standard MRA Recycling Rate. Source: <https://mde.maryland.gov/programs/LAND/RecyclingandOperationsprogram/Documents/Table%2017.pdf>

¹³ The Small Hauler Program located at the Northwest Transfer Station and the Quarantine Road Landfill was created specifically with small contractors in mind. Per the Small Hauler Program, smaller contractors or haulers are charged \$20 per load up to 7,000 pounds and \$3.38 per 100 pounds over 7,000 pounds. Unfortunately, the Small Hauler Program does not have the capacity to recycle construction waste at the moment.

¹⁴ The City partners with Details, a branch of the Humanim non-profit, to deconstruct and salvage houses within blighted areas.

Next Steps

The comments above will be used by the consultant team as inputs in its recommendations to DPW. Updates regarding further report review and comment periods and the master plan will be communicated via the [Less Waste, Better Baltimore website](#).

Based on comments received on the Draft Report, a Final Report will be prepared and submitted to DPW. A mechanism for public review and submission of comments on the Final Report will again be provided, details of which will be communicated via the [Less Waste, Better Baltimore website](#).

Appendix A: Workshop Structure and Scope

A team of professional facilitators led the workshop to focus discussions, optimize the use of time, and permit the lively exchange of ideas among participants. Participants were encouraged to ask questions or share advice/suggestions on the information presented in the meeting and the overall direction of the master plan. The workshop included the following sessions:

- Opening Session, reviewing the meeting scope and structure
- Information Presentation, exploring the progress and activities conducted to date under the master plan project and sharing results from the community survey
- Q&A Session, inviting public comments and questions from those in attendance

The workshop scope and boundaries, which were introduced in a PowerPoint presentation at the beginning of the meeting, included the following:

- This effort is focused on the City's **long-term planning** and decision making through 2040 and beyond. The City recognizes that many City residents face immediate waste management needs, but participants are asked to focus on solutions that can improve the City's waste management into the long term.
- The community meetings are designed to **look forward** at the best options for the future of the City, not back at past successes or failures. Accordingly, participants are asked to avoid lengthy speeches about what may have occurred in years past without also offering positive contributions for improving the future.
- The community meetings are intended to **inform** the solid waste management options that are considered in the strategic plan. **No final decisions** regarding solid waste management options or will be made during the community meetings.

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