

2018 PROGRESS REPORT

August 2017-September 2018



**ZERO
STARTS WITH
ONE**

CITY OF PHILADELPHIA
ZERO WASTE AND LITTER CABINET

ONE PERSON. ONE COMMUNITY.
ONE BUSINESS. ONE CITY.



Zero Waste & Litter Cabinet

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Glossary

CLIP: Community Life Improvement Program
MDO: Managing Director's Office
ODDT: Office of Data and Digital Transformation
OIT: Office of Innovation and Technology
PPD: Philadelphia Police Department
PPR: Philadelphia Parks and Recreation
PWD: Philadelphia Water Department

Executive Summary

Philadelphia set its Zero Waste goal in a time of one of the biggest upheavals in the history of the recycling industry. In spring of 2018, just eight months after the Zero Waste and Litter Action Plan was released, China released its National Sword Policy, which calls for much more stringent standards on recycling imports such as a 0.5 percent contamination threshold for any imported recycling material. As China is one of the world's leading importers of recyclable plastics and paper, this was devastating to the recycling industry and to large municipalities in the United States and around the world. Whereas Philadelphia once profited from recycling, the City of Philadelphia is paying \$38 per ton for municipal recycling at the time of this writing, nearing the \$64 per ton the City pays to dispose of municipal waste. That is why in our original plan, we stated very clear goals of showing actual reductions in all material that is being generated as waste or recycling. While we want our residents and business community to continue to recycle and increase recycling, we also want to focus on reuse and reduction, which is highlighted by this report.

Philadelphia's Long-term Zero Waste and Litter Goal

Fully eliminate the use of landfills and conventional incinerators by 2035. To do this, Philadelphia will reduce waste generation and increase waste diversion by 90 percent by 2035, with the remaining 10 percent utilized as waste to energy, while combating litter and enhancing the cleanliness of the city's streets and public spaces.

Another focus of this report is a holistic approach to addressing Philadelphia's longstanding litter problem. A problem cannot be solved unless it is first understood, which is why we have invested so much staff time and energy into our City-wide Litter Index and behavioral studies. In this report, you will read about many ways that we are using this data for more concrete outcomes in addressing Philadelphia's litter problem. You will also read how we are analyzing and addressing the many different components of Philadelphia's litter problem to ensure that we are tackling this issue holistically, not piecemeal. For example, the Cabinet has spent the past year putting all of the components together for successful surveillance, arrests, and prosecutions of illegal dumping. This is a complex system that requires the action and coordination of multiple departments. However, this system by itself will not be effective if we are not also better regulating the transport of waste and trying to decrease the number of vacant lots and other areas where dumping occurs. Our goal is to ensure that these systems are effective and sustainable, and we are excited to explain how those systems work in this report.

This plan will only be successful if our residents, business community, community organizations, and municipal employees know how to access it and feel that it is benefiting every neighborhood in Philadelphia. Resources like CleanPHL.org and Philacycle have been an important part of this goal. We are thrilled to launch Neighborhood Litter Control Plans as a more focused initiative to bring resources to the most littered parts of our city. At the heart of this plan is the social compact—a concept that asks what City government can do to provide the resources and equity to improve quality of life in Philadelphia, and asks the residents and business community to utilize those resources and equitable systems to contribute to a better Philadelphia.

We are proud that the Zero Waste and Litter Action Plan is an example of that compact, and we are eager to report on the many programs, policies, and initiatives that we undertook over the past year to progress toward our goals of becoming a Zero Waste and litter-free city. It has been an incredible, collective effort by every department and organization represented on the Cabinet, and we thank all of our partners who worked tirelessly over the past year to implement this Action Plan.



The Waste Reduction Subcommittee works with City departments, as well as the commercial and residential communities of Philadelphia, to better understand the overall diversion rates of the city and to develop strategies for further reduction of the waste stream. This subcommittee supports the current waste reduction efforts of the departments and community stakeholders and aids in the creation of new strategies and the coordination of these efforts across stakeholder groups.

Waste Reduction & Diversion

Introduction

As noted in the Executive Summary of this report, it may seem like an impossible goal to reach Zero Waste in the current challenging recycling market. However, the Zero Waste and Litter Cabinet views this as more of an opportunity than a challenge. Although we certainly want to encourage residents and businesses to continue to recycle and increase recycling, the Cabinet has placed a greater focus on education and capacity building to encourage more reduction and reuse of what are typically considered waste products.

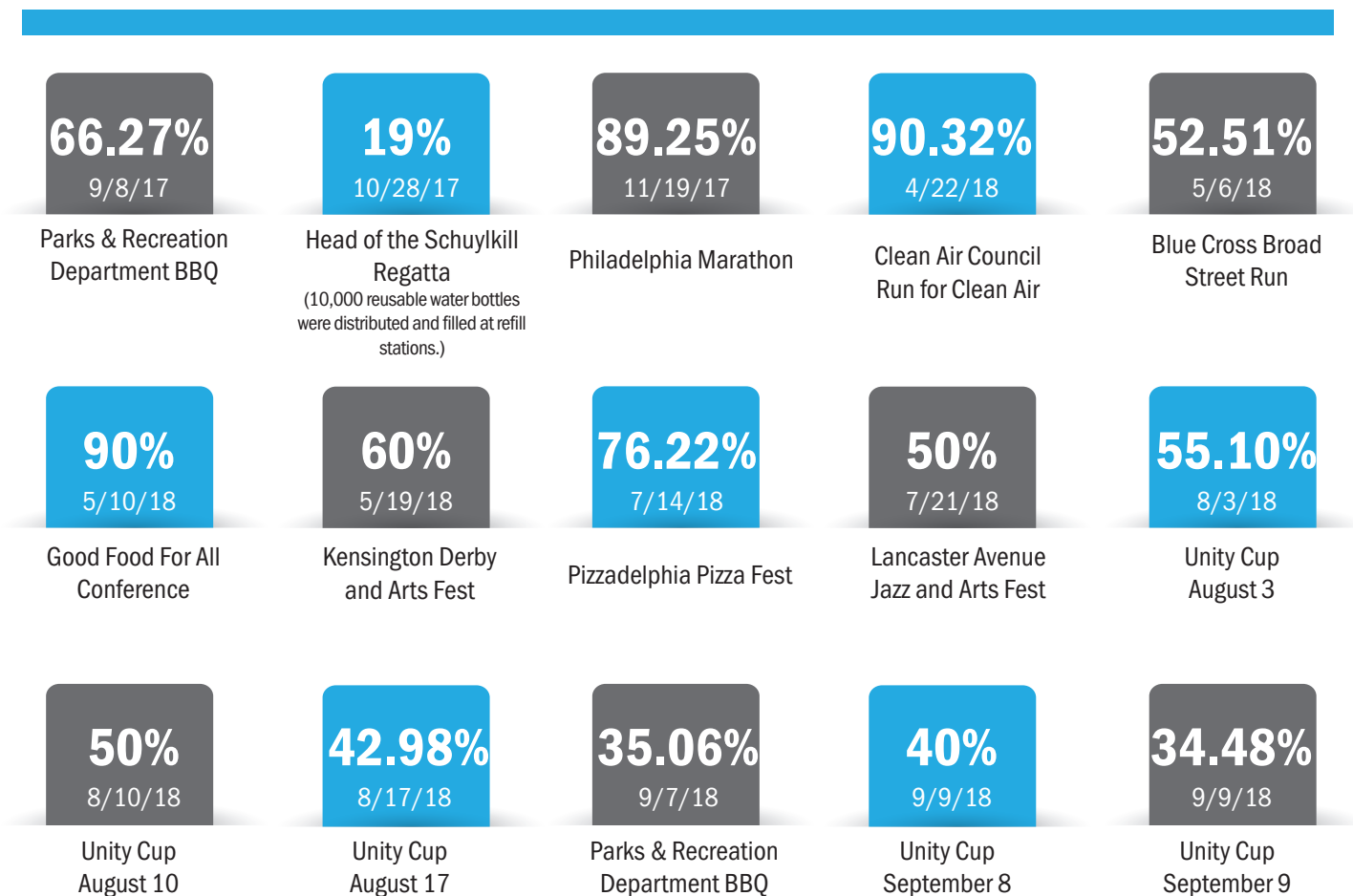
The Cabinet is working to build the physical capacity to divert waste from landfills and incinerators. We have made many strides in building the capacity for organic waste diversion, which you will read about in this section. In the next year, the Cabinet will also assist the Streets Department in rebidding the contracts for both municipal solid waste and recycling. These contracts will continue our aggressive recycling goals, but will also focus on waste reduction and improving our recycling contamination rates.

The Cabinet is also focusing on education and capacity building. Along with our major expansion of Zero Waste Events, we are assessing and addressing waste through our internal Municipal Building Waste Audit Program as well as the revamped Commercial Waste Report (formerly the Commercial Recycling Plan). These efforts seek to work with the business community, local institutions, and City departments to understand the creation and flow of waste in the city and to devise strategies for how to reduce and divert waste from the landfill.

Increased Zero Waste Events

2018 was our first full season of Zero Waste Events with revised special events permits that mandate recycling and provide resources for expanded waste reduction such as composting and utilization of reusable materials at City-permitted events. We must extend a very special thanks to the Managing Director's Office (MDO)'s Special Events Office, Philadelphia Parks and Recreation (PPR)'s Special Events Office, the Streets Department, and PPR's Fairmount Park Organic Recycling Center. Listed on the following page is every event that requested Zero Waste operations for the 2017-2018 event season. Although not all events achieved a 90 percent waste diversion rate, and some data was not available, we are very excited about the expansion of this program. The program was expanded from just three Zero Waste Events in the 2016-2017 season to 21 Zero Waste Events in the 2017-2018 season and counting. We plan to continue to grow this program and to provide waste-reducing services to even more events in the future. With over 17 tons of food waste composted and mandated recycling at every special event in the city, Philadelphia is truly becoming the "Home of Zero Waste Events."

2017-2018 Zero Waste Event Waste Diversion Rates



Events for Which No Data Was Provided

4/7/18 - Race Walking Championships
 4/28/18 - Philadelphia Science Festival; Penn Relays
 8/9/18 - The Food Trust's Night Market Kensington

8/25/18 - Taking Da Gospel 2 Da Streets
 9/9/18 - Clean Air Council Greenfest Philly
 9/16/18 - Unity Cup September 16

With over 17 tons of food waste composted and mandated recycling at every special event in the city, Philadelphia is truly becoming the "Home of Zero Waste Events."

Waste Reduction and Diversion in Buildings

Municipal Building Waste Audit

In fall of 2017, the Cabinet launched its Municipal Building Waste Audit Program, which requires Philadelphia's City-owned and operated facilities to submit a yearly waste audit reporting form to provide information on the materials the facility generates and the haulers servicing the facility. The goals of this program are to have City departments lead by example, get building operators and staff to think more about the waste they generate and how to minimize it, utilize the data collected through the audit to identify opportunities for waste reduction and diversion, and connect departments with information and resources to help limit the amount of waste generated by our city's municipal sector.

401 of the 455 City-owned and staffed buildings identified to participate in the audit submitted reporting forms for the 2017 reporting year—an 88 percent submission rate. The Cabinet is determined to bring this submission rate up to 100 percent and is working with participating departments to help the remaining facilities submit forms.

The data and qualitative feedback the Cabinet has received from City departments through the Municipal Building Waste Audit have already led to exciting outcomes, including:

- Waste audit forms submitted by certain departments identified a need to recycle construction and demolition debris and waste cooking oil, so the Procurement Department is currently working on setting up contracts for these materials.
- The City's electronic and universal waste contracts are being combined to streamline recycling processes and make it easier for City departments to recycle these materials.
- Certain facilities that had not been receiving recycling collection were added to the Streets Department's recycling collection routes.

Municipal Building Waste Audit Requirements

As part of the program, each City-owned and staffed building is required to:

1

Fill Out Municipal Building Waste Audit Form

2

Publicly Post Form

3

Distribute Copies of Form to Employees

4

Make Sure Recycling is Easy and Bins are Abundant

5

Install Recycling Signage



- A Philadelphia Water Department (PWD) facility that generates food waste (the Bureau of Laboratory Services) has set up a composting system.
- PPR is using comments that facility contacts provided on waste-related challenges they are facing to determine which facilities could use interventions and additional support, such as installation of waste corrals to prevent curbside dumping and additional recycling education and outreach.
- Through the program, all participating City departments were provided with information about recycling requirements as well as proper disposal and recycling contracts and procedures.
- Standardized recycling signage, recycling bin stickers, and other outreach materials and resources were distributed to all participating departments and made easily accessible on CleanPHL.org.
- Certain City-owned facilities are tracking their waste generation and submitting optional reporting forms on a monthly basis. They will be able to use this information to track changes over time and identify opportunities to reduce and divert waste.
- The Cabinet gained insights on how to change the program to make it as user-friendly as possible and is making modifications to the reporting form for the next round of yearly reporting.

The Cabinet has begun outreach to facility contacts to ask them to submit yearly waste audit forms for the 2018 reporting year. In addition to City-owned and staffed facilities, buildings that the City leases will now also be required to report. The Cabinet looks forward to continuing engagement with City departments to provide assistance with waste management issues, identify needs and gaps in waste management practices and potential solutions, ensure that department staff have the most updated information on recycling and disposal processes, and highlight inspiring stories and accomplishments from within City departments as we work together to advance toward Zero Waste.

Commercial Waste Report

To expand and adapt the Municipal Building Waste Audit Program to the commercial sector and engage Philadelphia businesses and institutions in the Zero Waste movement, the Cabinet and Streets Department are redeveloping the City's Commercial Recycling Plans into a new Commercial Waste Report. The new digital

form and reporting system will require all commercial properties to submit a Commercial Waste Report annually to report on the property's waste and recycling practices. The new form collects additional information not included in the current Commercial Recycling Plans, including information on composting, donations, and waste-related challenges. The data collected through this system will be used to help the City make data-informed decisions about programs and policies relating to waste management in the city's commercial and institutional sectors. In addition to completing mandatory yearly reporting, businesses, institutions, and organizations will also have the option to report monthly on their waste reduction and diversion practices and diversion rates through the Zero Waste Partnership Program, which is detailed in the next section.

According to the Philadelphia Recycling Office, only 22 percent of commercial buildings in the city have completed a Commercial Recycling Plan, which is required under Act 101 and Philadelphia Code sections 10-717 and 10-724. The new Commercial Waste Report system will be launched this fall, with an aim to dramatically increase this compliance rate through a targeted reporting period (October through December) and an extensive outreach and advertisement plan. Through the new Commercial Waste Report system, we are working to increase compliance with the City's

commercial waste and recycling regulations and help Philadelphia's businesses and organizations better understand their waste generation and options for waste reduction and diversion.

Zero Waste Partnership Program

Along with the launch of the new Commercial Waste Report this fall, the Cabinet and Streets Department are launching the Zero Waste Partnership Program, a new way for the City and local businesses, institutions, and organizations to collaborate on achieving Zero Waste in Philadelphia. Zero Waste Partners take the extra step to report on their Zero Waste practices and waste diversion rates by submitting a reporting form on a monthly basis. Not only does this program encourage Zero Waste practices throughout the city, but it encourages knowledge sharing between the City and Zero Waste Partners: the Partnership Program will give the City access to data about waste management practices in the city's commercial and institutional sectors and give Partners the opportunity to share their best practices and influence future goals and policies. Partners will earn special incentives for implementing Zero Waste practices, such as eligibility for the Sustainable Business Tax Credit and exclusive marketing tools from the City, including a branded window decal and a Zero Waste Partner certificate.

Zero Waste Partnership Program Tiers

The Zero Waste Partnership Program has three tiers: Partner, Silver, and Gold. Any business or organization in Philadelphia can achieve status as a Zero Waste Partner, Silver Partner, or Gold Partner. Each tier corresponds with achieving a certain level of waste diversion and implementing Zero Waste practices.





Developed City-wide Waste Diversion Rate Calculation

Waste diversion rate—a measure of the amount of waste diverted from the landfill through practices like source reduction, recycling, reuse, and composting—is a standard metric used to measure progress toward Zero Waste. To identify strategies for how Philadelphia can minimize its waste, we need to understand the complete picture of how waste is currently diverted away from the trash in Philadelphia. Providing an accurate estimate of Philadelphia's city-wide waste diversion rate requires that the City capture information about its waste stream beyond data for trash and single-stream recycling that has not been included in previous

estimates. To do this, a new system was developed to systematically track Philadelphia's waste stream in its entirety, and the City's inventory of local waste management operations was updated to include new materials and processes for which there had not previously been any reporting mechanisms in place.

Information about the weight of materials handled by recycling companies in Philadelphia is currently reported to the Philadelphia Recycling Office, as required by Act 101. Data about reuse, composting, and other methods of waste diversion obtained through the newly-developed system will be combined with the Recycling Office's data to form a more complete picture of Philadelphia's waste stream. Many of the materials

To determine Philadelphia's city-wide waste diversion rate, the following formula will be used:

Waste Diversion Rate (WDR) = **Tons Diverted/Tons Generated x 100**

Tons Diverted = Tons Donated + Tons Repaired/Resold + Tons Reused/Upcycled + Tons Recycled (including mail-in, drop-off, or take-back programs) + Tons Composted + Tons Fed to Animals + Tons Incinerated (for energy recovery) + Tons to Engineered Fuel Product

Tons Generated = Tons Landfilled + Tons Incinerated (conventional) + Tons to Professional Disposal (of regulated materials or proprietary technology) + Tons Diverted

Processes Included in City-wide Waste Diversion Rate Calculation

DIVERSION PROCESSES



- Donate
- Repair/Resell
- Reuse/Upcycle
- Recycle
- Mail-in or drop-off only recycling program (not by manufacturer)
- Manufacturer take-back (recycling)
- Compost
- Animal feed
- Incineration (energy recovery)
- Engineered fuel product

DISPOSAL PROCESSES



- Landfill
- Incineration (conventional)
- Professional disposal of regulated materials
- Manufacturer take-back (disposal)

and processes included in the new system, such as organic waste collected by local compost haulers, donated materials, and some materials processed by small recycling businesses, have not been included in previous city-wide waste diversion rate estimates.

The Cabinet utilized the new set of materials and processes to build a database of local haulers, recycling facilities, donation facilitators, and City operations that handle the materials. During the summer of 2018, entities included in this database were contacted and asked to report on the weight of material they handled in 2017. The information collected is being compiled in a waste diversion database, where the Cabinet is tracking waste

diversion for Philadelphia's commercial and residential sectors. This information will continue to be collected and compiled during the fall of 2018 and will be used to calculate the city-wide diversion rate.

This process of conducting outreach, having local entities report their numbers, and estimating the City's waste diversion rate will take place on a yearly basis. This newer, more comprehensive measurement of Philadelphia's diversion rate and yearly benchmarking will allow the City to identify gaps in capacity to divert specific materials and consider different options to determine the most effective strategies for minimizing waste and advancing toward the city's Zero Waste goal.



2017 Waste Diversion Highlights

3,079.9
tons of organic materials

like yard waste, leaves, and wood chips were composted at Philadelphia Parks and Recreation's Fairmount Park Organic Recycling Center.

2.58
tons of donated food

were recovered through Philadelphia Parks & Recreation's partnership with the MEANS Database food recovery program.

1,082.87
tons of material

were recycled by the Philadelphia School District.

6,623
tons of material

were recycled at SEPTA facilities, including 107,790 tons of waste cooking oil, 1,098 tons of wood waste, 17 tons of lightbulbs, 2,894 tons of metal, 4,372 tons of clean rubble, and 16 tons of rubber.

More than 7 tons

of recyclable material were removed from local waterways through the Philadelphia Water Department's Litter and Floatables Control Program and related activities such as waterway cleanups with local partners like United by Blue, Friends of the Wissahickon, and the Tookany/Tacony Watershed Partnership Trash Task Force.

Next Steps

Zero Waste Events

Continue to provide Zero Waste services to event organizers and to expand and grow the Zero Waste Events Program.

Reducing Waste in Buildings

Continue yearly Municipal Building Waste Audit reporting at all City-owned and staffed facilities, and expand the program to cover City-leased facilities for the 2018 reporting year. Use the data to identify ways to improve waste management practices and reduce and divert waste from City buildings. Launch the Commercial Waste Report system in fall 2018.

Zero Waste Partners

Launch the Zero Waste Partners Program in fall 2018, and continue to work to incentivize and recognize sustainable waste management practices in Philadelphia's commercial and institutional sectors.

City-wide Waste Diversion Rate Calculation

Continue to compile data to calculate Philadelphia's city-wide waste diversion rate and repeat the process yearly to track changes in the city's diversion rate over time.

Composting

The Cabinet has been working on many different aspects of developing a city-wide composting system to serve residents and bring capacity to the City's operating departments. In the next year, we hope to build on the following action points to expand composting to more residents:

The Streets Department invested in an Organic Feasibility Study to be released in the coming year analyzing the current capacity for using existing infrastructure and building new infrastructure for organics diversion. This study will also be instrumental in attracting private investment such as the proposed RNG Anaerobic Digestion Plant in the city's Point Breeze neighborhood.



In 2018, Philadelphia's Food Policy Advisory Council (FPAC)'s Zero Waste Subcommittee wrapped up its Compost System Design Competition, a yearlong project to spread community composting. The goal was to identify a mid-size, easily-replicable, neighborhood-scale composting system that costs less than \$500 in supplies. The subcommittee promoted the competition to schools and maker spaces across the city and beyond and received 13 entries. Experts from Bennett Compost and the Dirt Factory chose two finalists: a cylindrical tank design from The Workshop School and a refurbished chest freezer design from a Zero Waste education organization in British Columbia, Canada. In August 2018, FPAC hosted the Compost System Design Competition 'Big Reveal' at Share Food Program in the Allegheny West neighborhood. At the event, FPAC unveiled the two finalist designs and announced that the competition was a tie because both of the designs had flaws in the testing period. In the next phase of this project, FPAC will offer three mini-grants of \$400 in seed funding to build a three-bin compost system at community organizations, schools, or other neighborhood spaces. FPAC is also offering a small stipend to a community partner interested in continuing to test one of the finalist designs. The community partner will work directly with the original designers for a three-month period of testing.



Litter Enforcement and Cleaner Public Spaces

Introduction

The Zero Waste and Litter Cabinet is proud to report that in just one year, we have either completed or put into action 75 percent of the 31 initial recommendations for litter enforcement and cleaner public spaces laid out in our 2017 Action Plan. This section will map out how this comprehensive strategy is being implemented and leading to immediate action and long-term, sustainable change.

Philadelphia's complex litter and waste problems are a cumulative result of many challenges including population decline, aging infrastructure, a diminished tax base resulting in strained City services, and a persistent poverty rate that impedes private and community investment in neighborhoods. But as Philadelphia gains population and economic vitality, this plan seeks to ensure that all Philadelphians benefit from cleaner neighborhoods and more efficient City services.

The Enforcement and Cleaner Public Spaces Subcommittee works to audit the current enforcement, fines, and penalties of littering and illegal dumping to better understand what enforcement most effectively addresses litter and how to best coordinate enforcement efforts. This subcommittee also uses data collected from the Data Subcommittee to best determine strategies surrounding enforcement and waste collection in the public realm.

In this section, you'll read about many aspects of how the Cabinet is addressing the root cause, immediate needs, and long-term goals of an issue. One example of this is our illegal dumping strategy. As you'll read, in the past year we have taken immediate steps such as supporting legislation to increase fines and other penalties for illegal dumping. We also conducted a comprehensive audit of the entire process for prosecuting illegal dumping and filled in gaps such as the need for an Environmental Crimes Unit to issue warrants for illegal dumping based on evidence gathered from these crimes. We have also expanded communication with the District Attorney's Office and Law Department to ensure that these crimes are properly prosecuted.

However, we understand that we will not arrest our way out of this issue. This is why the Cabinet has engaged City Council on other recommendations such as mandating that developers list their waste hauling companies on all permits to create a paper trail of accountability. This will also lead to a future registry of all waste haulers in the city for a variety of materials so we can better regulate this industry. We are also using our Neighborhood Litter Control Plans to engage residents in these activities and hold both the City and community groups accountable for ensuring that these efforts are effective.

These long-term, comprehensive strategies are needed to disrupt the current landscape of illegal dumping in Philadelphia and to sustain these actions into the future.

Litter Enforcement

Short-term Priorities

1. Improve tire regulation and enforcement
2. Include construction and demolition waste plans on all Licenses and Inspections (L&I) construction, demolition, and alterations permits
3. Coordinate and improve illegal dumping surveillance
4. Increase illegal dumping fines
5. Impose mandatory community service hours for illegal dumping diversion programs
6. Impose seizure of vehicles involved in illegal dumping crimes
7. Increase and streamline illegal dumping cases in court system
8. Coordinate education and enforcement of the requirements of the waste bin law for all commercial establishments selling prepared or prepackaged food
9. Increase zoning code enforcement of interior trash storage for new construction or variances
10. Identify and enforce dumpster-free streets
11. Increase enforcement and education on improper waste set outs
12. Increase enforcement of \$300 moving violation for throwing trash out of a window
13. Mandate that all circulars are designed as door hangers
14. Revise Section 9-604 (5)(6)(7)(8) of the Philadelphia Code regarding hauler reporting

Long-term Priorities

1. Create a formalized Environmental Crimes Unit within Philadelphia Police Department Neighborhood Services Unit
2. Develop monthly Code Violation Notice (CVN) reports for issuing departments
3. Ban plastic bags
4. Coordinate commercial waste pickups with commercial waste haulers
5. Create a 311 "Street Trash" ticket
6. Improve coordination with Scrap Yard Task Force
7. Include an abatement fine when CLIP abates vacant lots

Cleaner Public Spaces

Short-term Priorities

1. Increase enforcement and education of mattress disposal regulations
2. Determine the most strategic placement of public waste receptacles and map their locations
3. Study increased access to lidded residential recycling bins
4. Increase outdoor recycling at parks and recreation sites
5. Increase removal of illegal clothing donation bins
6. Expand access to sanitation convenience centers
7. Construct trash corrals for recreation centers
8. Increase proactive solutions for illegal sign abatement

Long-term Priorities

1. Consider restoration of street sweeping
2. Increase support of temporary and long-term community solutions to activate and secure vacant lots

 Priority has been implemented
  Priority implementation is in progress
  Priority has yet to be addressed

Illegal Dumping and Clean Up Data 2016-2017

	2016	2017	% Change
Total CLIP Heavy Dump Clean Ups	139	58	58% decrease
Total Streets Heavy Dump Clean Ups	921* (Fiscal Year)	2,720* (Fiscal Year)	195% increase*
Total Weight of Material Collected through Streets Heavy Dump Clean Ups	10,582 tons	8,770 tons	17% decrease
Total Number of Department Generated 311 Requests through Litter Index	N/A	864	N/A
Total Number of 311 Requests from Public for Littering/ Dumping <small>*These numbers include every call for littering and dumping.</small>	18,772	21,896	17% increase
Total Number of Illegal Dumping Cases Charged by DA's Office	12	11	8% decrease
Total Number of Successful Illegal Dumping Prosecutions by DA's Office	4	10	150% increase
Total Number of Collection Events for the Water Department's Litter and Floatables Control Program	106,138	110,297	4% increase
Total Weight of Material Collected through the Water Department's Litter and Floatables Control Program	10,181.2 tons	8,477.2 tons	17% decrease
Illegal Clothing Donation Bins Removed	187	240	22% increase

* Updated 3.22.19.

Launched Neighborhood Litter Control Plans

The Streets Department and the Cabinet, in partnership with other City agencies and nonprofit partners, are developing Neighborhood Litter Control Plans. These plans involve comprehensive strategies and metrics for addressing litter and illegal dumping in individual Philadelphia neighborhoods. Selection of neighborhoods is being guided by Litter Index data to prioritize this process by identifying areas of the city with the highest Litter Index scores (and most problematic litter conditions). This strategy includes engaging residents and community-based organizations working in specific neighborhoods through community meetings, using their feedback to develop plans, implementing services, and continued follow-up. The first Neighborhood Litter Control Plan for Southwest Philadelphia, which served as the pilot area for this process, was released in September 2018. Examples of data utilized in the Neighborhood Litter Plan process for Southwest Philadelphia are included on the right. The Streets Department and the Cabinet are currently developing Neighborhood Litter Control Plans for Kensington and Strawberry Mansion, and we intend to revisit these neighborhoods every three months to monitor progress on these initiatives.

This information
is also available
at [CleanPHL.org/
neighborhoodlitterplans](https://CleanPHL.org/neighborhoodlitterplans).

Neighborhood Litter Control Plan Data for Southwest Philadelphia

Neighborhood
Average Litter
Index Score

2.36
(out of 4.0)

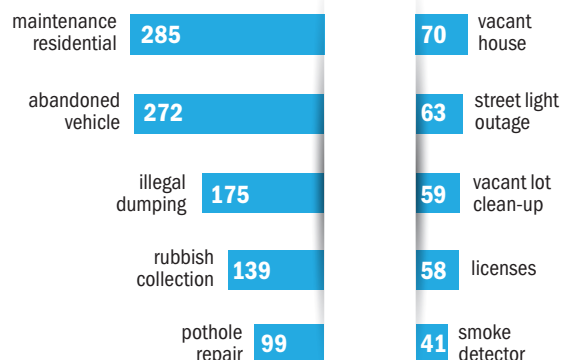
60% of the areas scoring a "4" in Southwest Philadelphia fall within the service area encompassing this plan

Average Recycling
Diversion Rate:

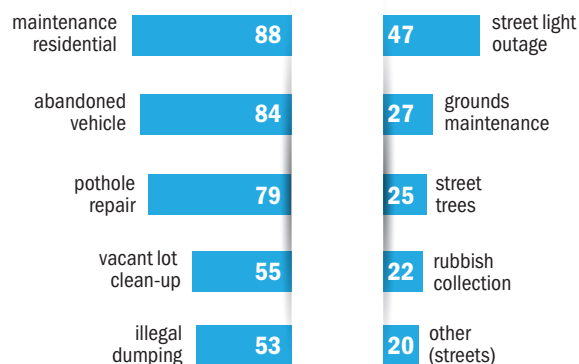
15.2%
for entire
service area

top 10 Service Requests

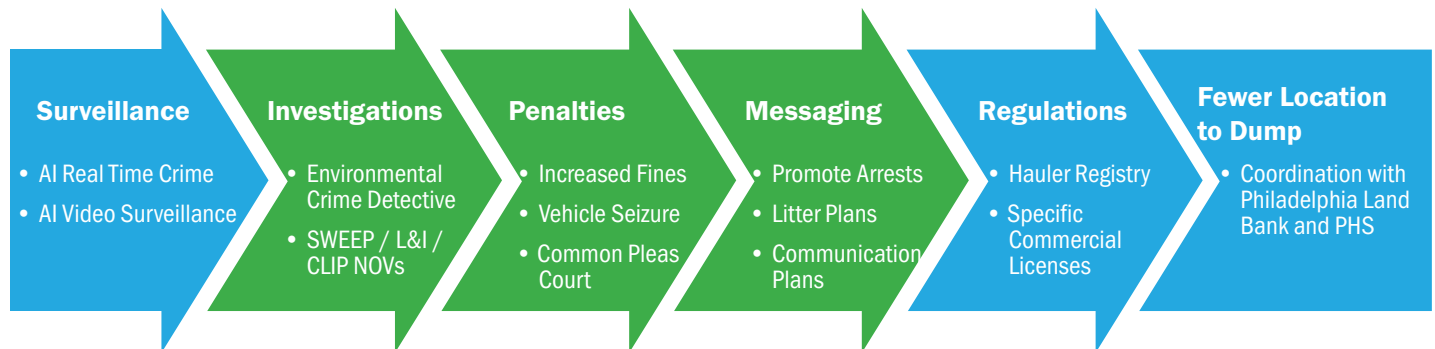
zip code 19142



zip code 19153



Illegal Dumping Enforcement and Prevention



Developed an Illegal Dumping Strategy

The above flowchart represents the order of operations that the Cabinet is using to holistically address the illegal dumping crisis in Philadelphia. We understand that although illegal dumpers need to be held accountable through the criminal justice process, we will not arrest our way out of this problem. That is why we have focused on a broader process of addressing illegal dumping. The green circles in the flowchart signify initiatives that we have already completed, and the yellow circles signify initiatives that are in-progress. Below are further descriptions of these efforts.

Increased Illegal Dumping Fines

The Cabinet worked with Councilman Derek Green's office and supported his successful legislation to increase the criminal fines for illegal dumping from \$300 to \$1,000 for the first offense, \$1,500 for the second offense, and \$2,000 for the third offense. The Cabinet also did a full analysis of every fine available and what type of dumping these fines correspond to, and provided this information to law enforcement to ensure that the highest fines can be applied to the appropriate crimes.

Imposed Seizure of Vehicles Involved in Illegal Dumping Crimes

The Cabinet worked with Councilman Bobby Henon's office and Council President Darrell Clarke's office to ensure that our municipal ordinances match changes in the state ordinances for vehicle forfeiture. This solidified the ability on the municipal level to seize and forfeit vehicles involved in illegal dumping crimes.

Increased and Streamlined Illegal Dumping Cases in Court System

The Litter Enforcement and Cleaner Public Spaces Subcommittee meetings focused on reviewing identified illegal dumping criminal cases in the Philadelphia Police Department system with representatives from the DA's office. This review ensured that all necessary entities were aware of these cases and that they were coded and submitted for prosecution correctly, and successfully prosecuted. The results of this strategy were beyond expectations with nearly a 90 percent successful prosecution rate in 2017—up from 33 percent in 2016.

Created a Formalized Environmental Crimes Unit within Philadelphia Police Department's Neighborhood Services Unit

After careful review of the process for arresting and prosecuting illegal dumpers, it was determined that a major gap existed in the ability to arrest illegal dumpers based on evidence collected rather than an immediate arrest by law enforcement. The Cabinet developed and submitted a proposal to the Philadelphia Police Department (PPD) requesting an Environmental Crimes Unit in the Major Crimes Division. This proposal was supported and accepted by PPD, and in August 2018, our Environmental Crimes Detective began working cases. The Cabinet sees this as an integral piece of the arrest process, and we believe it will significantly increase the volume of arrests and successful prosecution of illegal dumpers.

Coordinated and Improved Illegal Dumping Surveillance

The Cabinet has conducted a full overview of all camera networks available to monitor illegal dumping and has also worked with the Office of Innovation and Technology (OIT) and academic institutions to explore the most effective and efficient technologies to monitor and review video footage of illegal dumping. We are currently in the process of finalizing those studies and beginning to employ these innovations in video surveillance on known dumping sites.

Included Construction and Demolition Waste Plans on all L&I Construction, Demolition, and Alterations Permits; Improved Tire Regulation and Enforcement

The waste hauling industry in Philadelphia remains largely unregulated, which is a major driver of illegal dumping. Although Pennsylvania Act 90 gives sole authority to the state to regulate waste hauling vehicles over 10,000 pounds as well as all vehicles hauling tires, there are many trucks hauling waste that do not meet these requirements. To address this issue, the Cabinet worked on the following two pieces of legislation:

1. The Cabinet worked with Council President Darrell Clarke's office on legislation, passed in fall 2017, that will require all permit applicants for demolition, alteration, and new construction to list their waste hauler from a drop-down list of haulers registered with the City of Philadelphia.
2. The Cabinet worked with Councilwoman Maria Quinones Sanchez's office on pending legislation to create a "Tire Dealer Business License" that would require tire dealers to keep better records of the tires they receive and dispose of as well as select a state-approved tire hauler from a drop-down list at the time of obtaining their license. This hauler registry will be included new Licenses and Inspections Eclipse program and will be operational in 2019.

Mapping and Creating a Plan for Strategic Placement of Public Waste Receptacles

As is described in further detail in the Data section of this report, the Cabinet and a team of staff from various City departments are working to develop a city-wide map of public trash can locations and a strategy for optimal public waste receptacle placement. To create this map, OIT is aggregating existing maps of big belly trash can locations, park and recreation site trash cans, and Streets Department wire street baskets, along with other datasets, to produce a comprehensive map of public trash cans in the city. The new map is being analyzed along with Litter Index data and the results of a behavioral science study the Cabinet conducted around waste receptacle placement in parks and along commercial corridors to develop a data-driven strategy for optimizing waste receptacle placement. This comprehensive map of all public trash cans will also allow the City to identify ways to more efficiently manage collection routes.

To make it easier for community-based organizations to add new public trash cans in areas with insufficient trash can coverage, the Cabinet is working with the Streets, Commerce, and Law Departments to develop a new public-private partnership program where community groups that sign a memorandum of understanding with the City will be able to place and maintain public trash cans.

In an effort to reduce illegal dumping of household trash and provide trash storage options in residential areas that lack storage capacity, the Streets Department is launching a pilot program called Phil-a-Can, which will allow residents in certain neighborhoods to store lidded, City-issued waste receptacles in designated locations in the public right-of-way. Residents will need to opt-into the program, which will be implemented in phases and offered to densely populated residential neighborhoods that have high rates of litter and illegal dumping, and where residences lack outdoor waste storage.

The Cabinet is thankful to Councilwoman Cheryl Parker for her successful legislation to require all dumpsters on private land to be placed behind an opaque fence so that the waste is not visible to the public and to further reduce the ability to illegally dump in a dumpster.

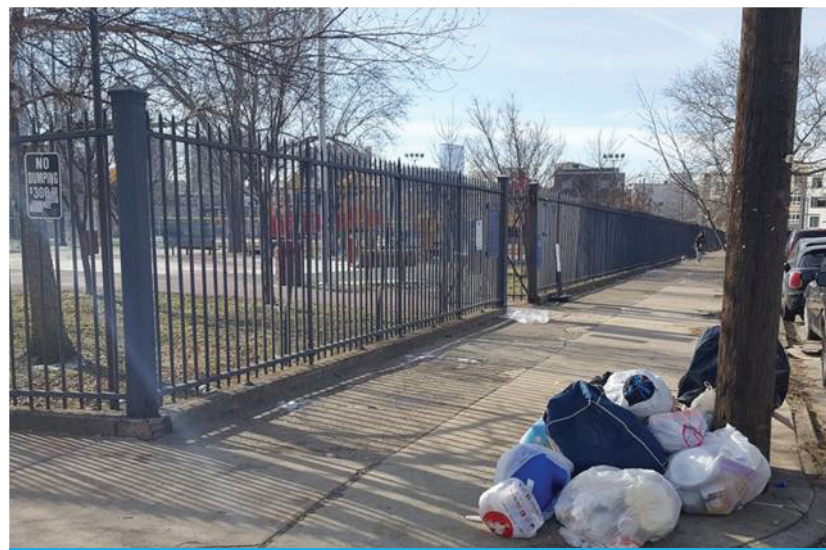


Increased Outdoor Recycling at Parks and Recreation Sites

In efforts to reduce overall waste and increase its department's waste diversion rate, PPR is expanding its outdoor recycling operations. In 2017, the first 22 pilot recreation facilities in Northwest Philadelphia were fully equipped with recycling bins and pick-ups. Data collected by PPR yielded a waste diversion rate rising from 15 percent to 19 percent over the course of the 2017 calendar year. The data showed a steady upward trend in recycling, demonstrating that the longer the receptacles and collections are provided in area, the more likely the community is to familiarize with and use them. By the end of 2018, three more districts, encompassing almost 60 additional facilities, will join the program with their own recycling capabilities.

Constructed Trash Corrals for Recreation Centers

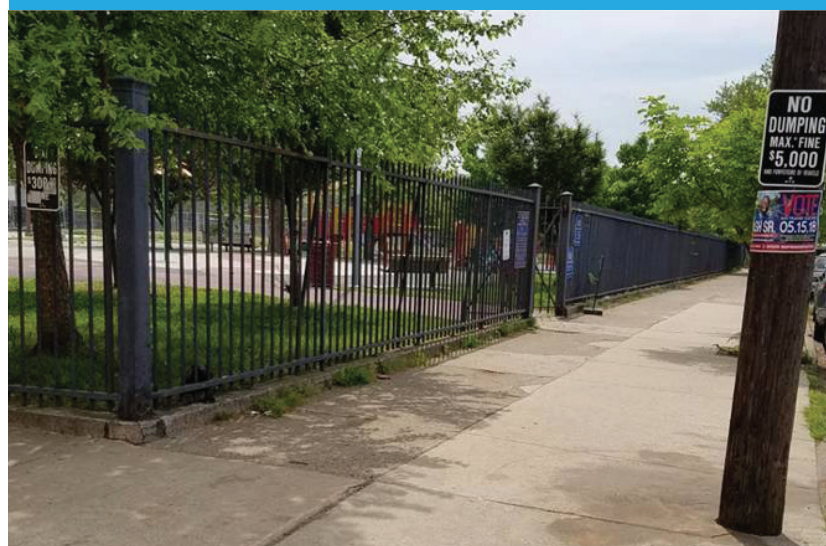
To discourage illegal dumping at recreation centers and playgrounds, PPR is installing waste corrals at certain sites, using Litter Index data for site selection. The waste corrals provide a designated place for facilities to put their trash so that household waste is not added to facility-generated waste curbside. So far, the department has installed waste corrals at four parks and recreation sites, and they plan to add 15 more waste corrals at sites throughout the city.



Francisville Recreation Center before waste corral installation



Francisville Recreation Center waste corral



Francisville Recreation Center after waste corral installation. "Our trash situation has been 99% resolved," said Francisville Recreation Center Recreation Leader JJ Postiech. "I have not seen much trash on the corner in weeks."

Implemented Proactive Solutions for Illegal Sign Abatement

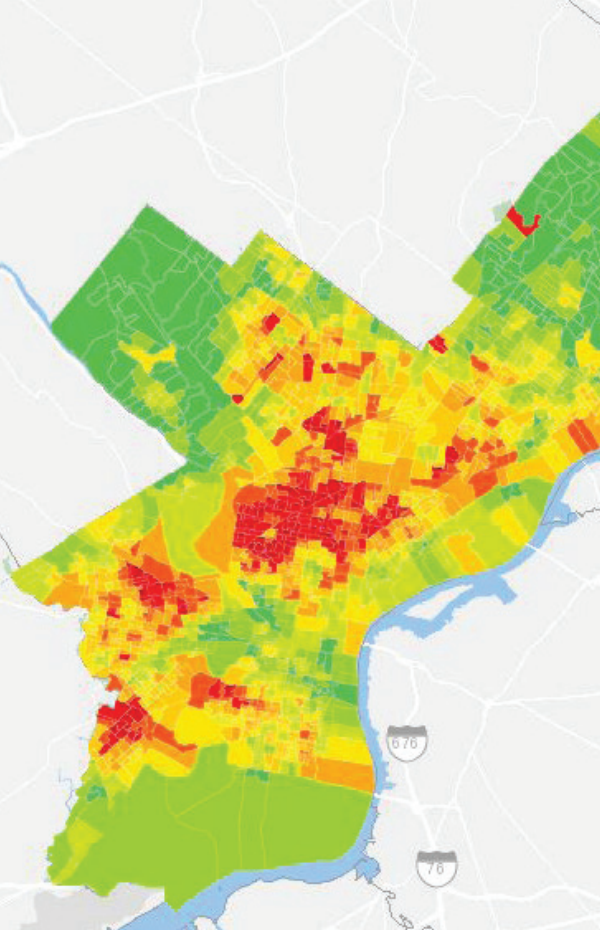
Illegal signs posted in the public right-of-way on utility poles, traffic signs, or trees are often predatory in nature and tend to end up as litter. To address illegally posted signs and the litter they cause, the Cabinet is working to engage with community groups and provide them with the resources they need to remove illegal signs. In June of 2018, the Cabinet held its first Illegal Signs Roundup, where 24 community groups across the city collected over 8,000 illegal signs posted in the public right-of-way. Participating groups earned \$0.50 per sign up to \$250 (or 500 signs) to remove the signs, which are being repurposed by the Mural Arts Trash Academy. The Cabinet will continue to communicate with the roundup participants, or the "Bandit Signs Brigade," throughout the year to provide updates on illegal signs removal efforts and opportunities to stay involved. To step-up enforcement efforts, the Cabinet is working with the Department of Licenses and Inspections to investigate the root issue of the illegal signs problem, the companies that pay per sign to have them posted. During the roundup, community groups took photos and kept track of where they removed signs, sharing this information with the Cabinet to aid enforcement efforts.



Next Steps

- Continue working through the list of 31 recommendations to complete the in-progress recommendations and address the remaining recommendations.
- Launch a major illegal dumping strategy that addresses the operational needs to increase arrests and to make these efforts public through a coordinated communications and media outreach plan.
- Continue developing and implementing Neighborhood Litter Control Plans in the top ten most littered parts of the city.





The Data Subcommittee uses collaborative and innovative data management processes and tools to collect and analyze existing waste and litter data from each department represented in the Cabinet and subcommittees. This subcommittee also developed the revamped City-wide Litter Index and manages the yearly litter indexing process.

Data

Introduction

One of the first steps the Cabinet took when drafting its Action Plan in 2017 was to research what made other cities successful in addressing litter. After speaking with professionals in New York, Los Angeles, and San Francisco, we discovered that litter indexing was a major part of their strategies to make more data-informed decisions on how to assess programs and areas of the city where these programs took place.

That is why the Cabinet invested so much time and energy in revamping the City-wide Litter Index, which the Streets Department first established in 2007. Using better technology and engaging more departments, we now have the most comprehensive dataset ever collected on litter conditions in Philadelphia. As you'll read about in this section, this data is being used internally by departments to make better decisions on their operations to address litter, such as the deployment of trash cans and waste corrals at Parks and Recreation sites.

It is also being used collaboratively across departments and community groups to better understand areas of collective focus. The Litter Index data was what informed selection of neighborhoods for the Neighborhood Litter Control Plans, and aside from publishing the results on CleanPHL.org, the Cabinet has also worked with OIT and the Office of Open Data and Digital Transformation (ODDT) to train community groups on the use of Litter Index data and how to do their own litter indexing.

Finally, this data will be collected every year and used as the metric to show how the City of Philadelphia is improving on its goal to clean up the city. This data-driven method for decision making is also applied to commercial and municipal waste management practices as well as our city-wide waste diversion rate, to track our progress toward Zero Waste.

We are very proud of the collaborative and transparent systems that have been developed for our data collection and are excited to explain the processes we use to employ this data to take concrete action to address litter and minimize waste in Philadelphia.

Compiled and Released the Litter Index

In 2017, Philadelphia's City-wide Litter Index was redeveloped into a map-based survey of litter conditions across the city's streets, vacant lots, parks and recreation sites, public school sites, green stormwater infrastructure, riverways, transit stations, and other rights-of-way. The index is digitized using cloud-based surveys developed by OIT using map-based GIS locations to ensure accuracy. The revamped Litter Index was piloted in two Philadelphia neighborhoods—Brewerytown and Port Richmond—in spring of 2017. The Data Subcommittee compiled feedback from field staff, department data analysis staff, and OIT staff to refine the Litter Index survey and process before expanding city-wide.

From August to December 2017, 37 staff from six City departments and agencies surveyed the City assets and property their departments are responsible for, including over 42,000 streets. After the 2017 surveying was complete, OIT aggregated the data before publishing it publicly on CleanPHL.org and Open Data Philly in February of 2018. Now, residents can visit the website, type in an address, and view block and neighborhood-level Litter Index scores as well as information on the resources available to help them keep their neighborhoods clean and learn how to get involved, such as the average recycling diversion rate for the block, the neighborhood's trash and recycling day, whether the block has a Block Captain, and the nearest Park Friends Group.

2017's city-wide litter indexing also provided many insights on how the process and the surveying app could be streamlined and improved. Field staff from different City departments provided their feedback and identified potential improvements. As a result of this feedback process, several changes were made to the Litter Index survey form, including:

- The "Litter Count" field was removed, as it took the surveyor too much time to estimate the litter count, and this data was not a major factor once fully analyzed.

- A field for "Litter Type" was added, allowing the surveyor to identify the types of litter present at a site. This information is helpful to the City departments deployed to clean up heavy dump sites and allows us to develop an overall understanding of commonly littered items and the locations where they are most commonly seen.
- The survey was modified to eliminate duplication of records, and certain survey fields were modified to streamline the surveying process.

The Litter Index survey will be conducted on a yearly basis. After receiving training on the new survey and scoring system, field staff began surveying for the 2018 Litter Index in early August. The 2018 surveying will continue until the end of the year, and when the survey is complete, the data will be aggregated, published publicly, and analyzed along with the 2017 Litter Index data to assess how litter conditions across the city have changed over time. In 2019, the Cabinet will release a report detailing how conditions have changed, comparing the Litter Index data with other datasets and providing recommendations for future use of the data.

Yearly Litter Index Process



Ways the Litter Index Data is Being Used

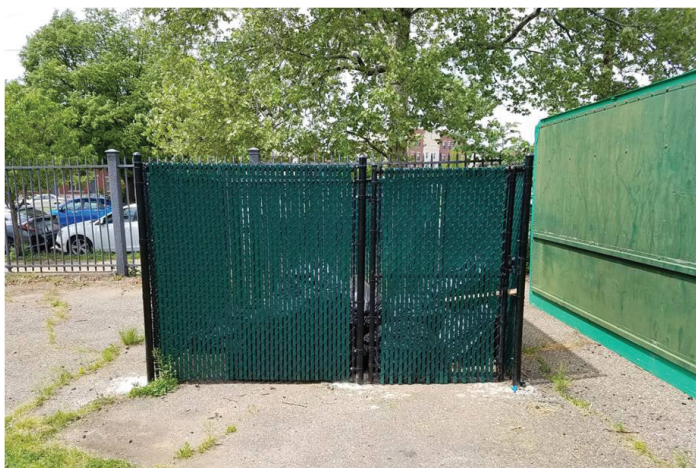
Data from the 2017 Litter Index survey was released publicly in early 2018 to help Philadelphians understand and visualize litter conditions throughout the city. While serving as a public resource, the Litter Index data is also being used internally by City departments, allowing them to develop data-driven strategies and policies for addressing litter in our city. The data is being used:

1. To Create Neighborhood-Specific Plans for Controlling Litter

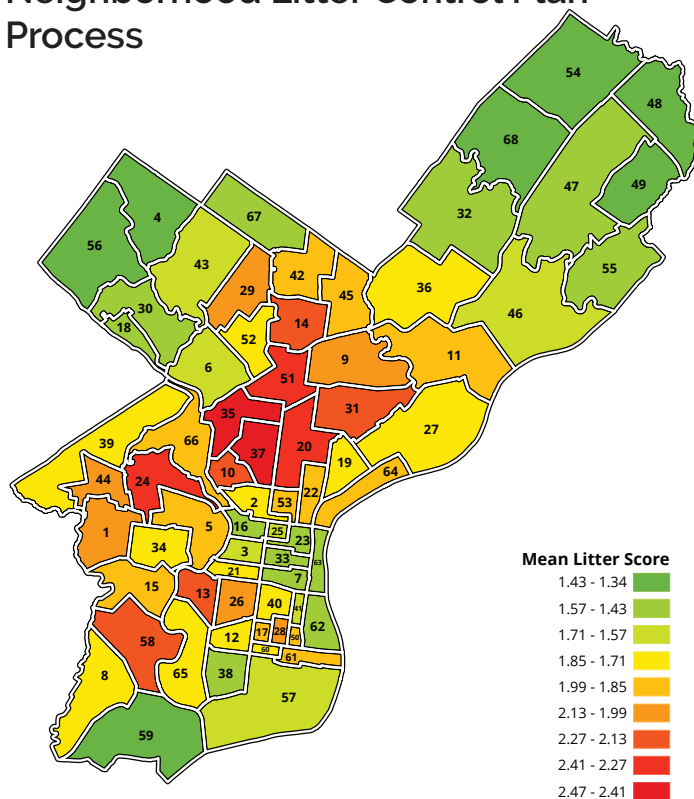
OIT, with the help of Keep Philadelphia Beautiful and the Commerce Department, used the 2017 Litter Index data to divide the city into clusters based on Litter Index scores and groupings of registered community organizations working in specific areas of the city. This map is being used to designate boundary areas for the Neighborhood Litter Control Plan process.

2. To Guide Which Parks and Recreation Sites Will Have Waste Corrals Installed

To discourage illegal dumping at recreation centers and playgrounds, PPR is installing waste corrals, using Litter Index data for site selection by prioritizing the most littered sites, or those with the highest Litter Index scores. The waste corrals provide a designated place for facilities to store their trash so that household waste is not added to facility-generated waste curbside. So far, the department has installed waste corrals at four parks and recreation sites, and they plan to add 15 more waste corrals at sites throughout the city.



Neighborhood Cluster Map for Neighborhood Litter Control Plan Process



Neighborhoods with Highest 2017 Litter Index Scores (Most Littered Areas)

North Central Philadelphia/Strawberry Mansion
Temple Area
Parkside
Hunting Park
Norris Square
Southwest Philadelphia
Kensington
Grays Ferry
Brewerytown/Sharswood
Logan/Niceto

3. By the Philadelphia Water Department To Determine Potential Waterway Dumping Hotspots

PWD is analyzing Litter Index data along with its own operational data to determine if additional waterway dumping hotspots should be included to its maintenance schedules and watershed protection programs. This data can also help the Water Department target certain areas for focused education and outreach around litter and water pollution.



4. By Organizations and Residents Conducting Their Own Analyses and Surveys

One of our goals is to have the public use the Litter Index data and platform to conduct their own surveys and analyses. In July of 2018, the Cabinet held a Litter Index Community Training in partnership with ODDT to give representatives from community organizations, data and technology professionals, and residents a basic understanding of the Litter Index, an overview of tools to understand and visualize City data, and guidance on how to conduct litter surveying in their communities. Our hope is that groups and individuals utilize the data to conduct neighborhood-specific analyses, learn about how litter conditions are connected to other issues in Philadelphia neighborhoods, and advocate for funding for neighborhood cleaning and beautification projects.

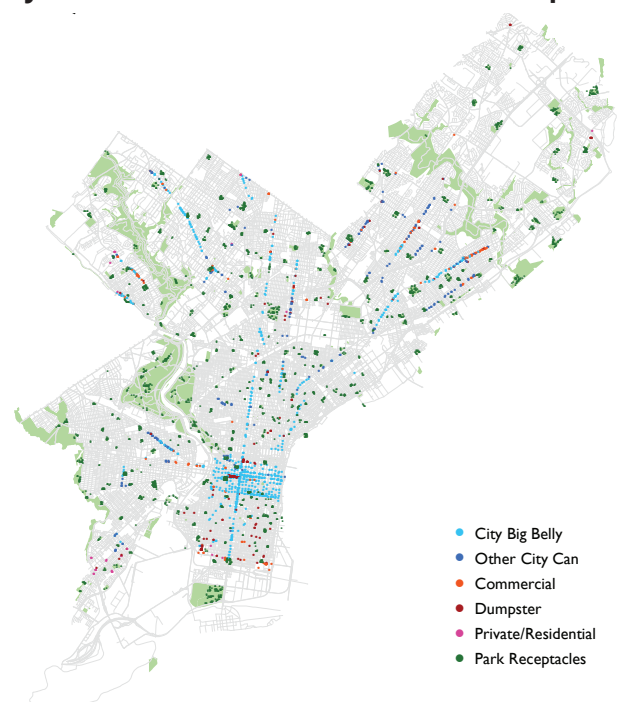


5. To Develop a Plan for Optimizing City-wide Waste Receptacle Placement

A team of staff from various City departments is working to analyze the Litter Index data in conjunction with a newly-created city-wide map of trash can locations. This is being combined with the results of a behavioral science study the Cabinet conducted around waste receptacle placement in parks and along commercial corridors to develop a data-driven strategy for optimizing waste receptacle placement around the city. With support from the Cabinet, OIT is developing the this comprehensive map of trash can locations, aggregating existing maps of the locations of big belly trash cans, wire trash baskets maintained by the Streets Department, and outdoor trash cans at parks and recreation sites and incorporating new datasets.

Other street trash cans are being mapped using a program called CycloMedia, which provides the ability to digitally travel down each street in the city and identify and map street trash can locations using satellite imagery. This map will continue to be developed as new datasets are made available, such as baskets maintained by Block Captains, trash cans placed outside commercial food establishments, and maps of trash cans on commercial corridors developed by community groups that place and maintain public trash cans through a new public private partnership program with the City, which will be launched this fall.

City-wide Trash Can Location Map



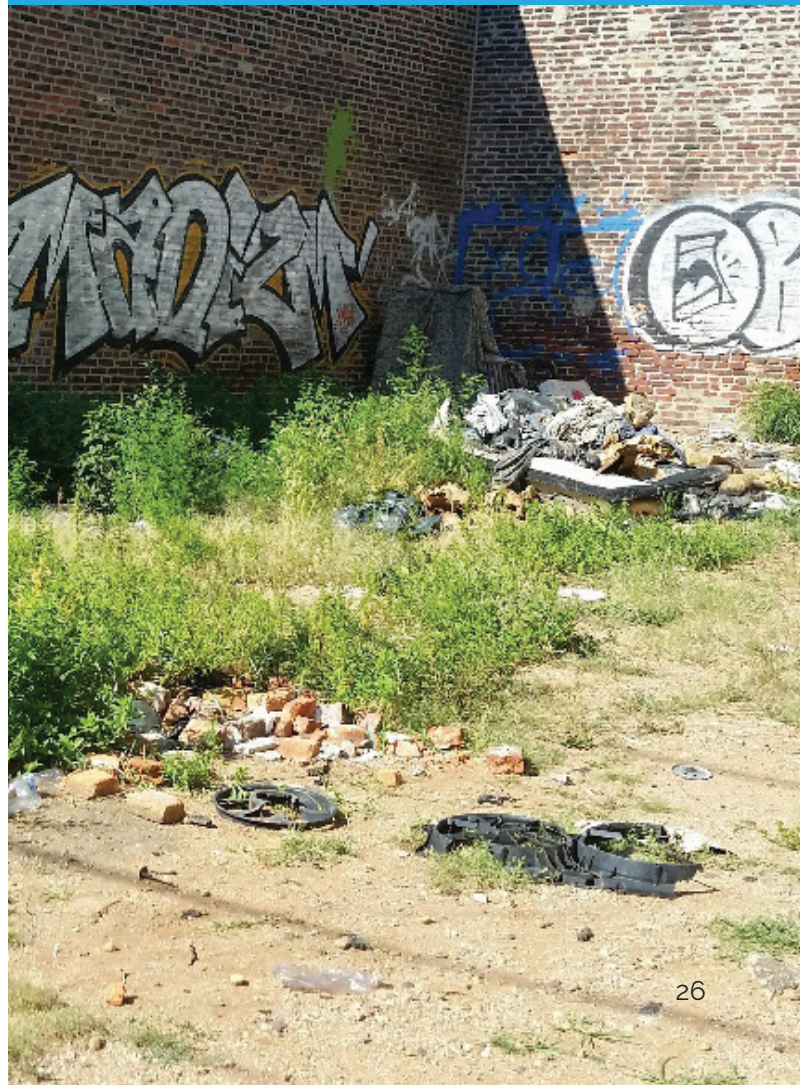
Streamlined 311 Illegal Dumping Requests

After compiling the illegal dumping clean up incidents and tonnage numbers collected by the Streets Department, the Community Life Improvement Program (CLIP), and PPR (which has recently begun collecting this data), we compared these numbers to the number of 311 illegal dumping requests. However, when analyzing this data, we found that the 21,869 records of illegal dumping ranged from major dumping of construction debris to a small bag of trash being left near a big belly trash can. Although the Cabinet seeks to clean up all illegal dumping, to specifically address major illegal dumping, we needed to filter out this information. This goal was aligned with the Action Plan Litter Enforcement recommendation of creating a "Street Trash Ticket." After close study of the issue, we developed the following course of action:

1. Unify the language throughout all operating departments on what is considered a "heavy illegal dump" by using the Litter Index's 4 rating designation—Litter in the amount that would require heavy machinery and a team of people to remove.
2. Add that language to the 311 call center script and the 311 app to gain this information from the individuals making the service requests.
3. Vet the information through pictures or further details to ensure that the illegal dumping actually requires this response by the designated operating department.
4. Send this filtered information to the operating department so that the field workers are better equipped to deal with the severity of the dump.
5. Generate weekly reports of this data for the Cabinet's Data Subcommittee to review to identify illegal dumping patterns, which will also be shared with the Litter Enforcement and Cleaner Public Spaces Subcommittee.

Next Steps

- Complete 2018 Litter Index surveying, aggregate and publish data, and produce the 2019 Litter Index Report.
- Continue to utilize Litter Index data within City departments to develop data-driven strategies for addressing litter and illegal dumping in Philadelphia.
- Continue to develop strategy for city-wide waste receptacle placement.
- Work to address any other data needs as they arise.





Behavioral Science

Introduction

The Zero Waste and Litter Cabinet is incredibly thankful for its partnership with GovLabPHL and its academic partners working on waste and litter-related behavioral science studies from Temple University, Swarthmore College, and the University of Pennsylvania. In the discourse surrounding waste and litter, many reasons are cited such as socio-economic conditions, learned behavior, and lack of resources and infrastructure.

While there may be some truth to these reasons, it can be dangerous to rely on these observable or theoretical phenomena without proper research and rigorous testing of the hypotheses. That's why GovLabPHL is such an important resource. GovLabPHL develops innovative and evidence-based practices across Philadelphia City government to address municipal challenges. The Behavioral Science Subcommittee was able to work together to execute two successful experiments. The first experiment tested the effect on recycling rates when recycling bins are easily accessible as well as the effect on litter conditions when these bins have lids. The second experiment tested the effect that dramatically increasing and decreasing trash cans has on the litter conditions of commercial corridors and parks and recreation spaces.

We are excited to provide the results of both of the experiments in this report as well as to share potential future experiment topics. At the time of this writing, both of the completed studies are influencing process improvements in recycling bin distribution and increasing public trash can coverage in Philadelphia. The goal of these experiments is to lead to improvements in City government, and the process we created to develop the experiments, execute them, and implement new programs and policies based on their findings is already leading to these improvements.

The Behavioral Science Subcommittee works with outside experts as well as GovLabPHL to develop and execute behavioral studies that analyze individual habits and neighborhood conditions that lead to more littered and less littered areas with a goal to inform public messaging and initial neighborhood strategies for litter reduction and more awareness on waste collection systems.



Conducted an Experiment on Trash Receptacle Placement

Testing the Effect of Various Public Waste Receptacle Numbers on Litter and Staff Time (August 2017-May 2018)

Objective

Address the litter problem in Philadelphia by attempting to find the number of public trash cans that optimizes trash disposal in cans as opposed to litter and illegal dumping.

Hypothesis

Increasing the number of receptacles would decrease litter, whereas decreasing the number of receptacles would increase litter.

Methods

Changed the number of trash cans available in four parks and three commercial corridors during certain periods

Measured the amount of trash collected from cans and the time spent collecting litter

Used Litter Index to measure litter rates

Results

Less trash was collected from receptacles when trash receptacles were less available.

Decreasing the number of available receptacles increased the percentage of trash collected as litter.

Decreasing the number of available receptacles increased the staff time spent cleaning litter.

Recommendations and Outcomes

Use the results of this study to make the economic and operational justification based on litter reduction and reduction in staff hours picking up litter to increase the number of publicly accessible waste receptacles across many assets such as commercial corridors, parks, recreation centers, and other highly-trafficked streets.

Use the insights learned from this experiment to plan for future placement or removal of receptacles in public spaces.

Use the results from this experiment to reinforce the City's current business outreach campaign to ensure businesses fulfill their public waste receptacle requirements and to encourage businesses to "adopt-a-receptacle" to decrease litter around their businesses.

Conducted an Experiment on Distributing Recycling Bins with Lids

Testing the Effect of Lidded Recycling Bins on Recycling Volume to Prevent Litter (August 2017-May 2018)

Objective

Address the litter problem and recycling in Philadelphia by examining whether lidded recycling bin distribution has an effect on recycling volume and litter.

Hypothesis

Increasing the availability of lidded recycling bins would lead to increased weights of recycling collected and decreases in litter.

Methods

Recycling bins with lids were distributed at two recreation centers in Port Richmond and two in Brewerytown with the intention of influencing recycling volume and litter on two recycling routes in each neighborhood.

Tonnage of recycling collected was measured on the four recycling routes.

The Litter Index was used to measure the effect of the different treatments on litter rates.

Sanitation workers were asked to complete surveys to record lid use data.

Results

In Port Richmond, the effect of distributing recycling bins on recycling tonnage was likely to have had a positive effect on levels of recycling.

Preliminary analysis did not find evidence that bin distribution affected litter rates.

Qualitative data collected from conversations with residents who received lidded recycling bins noted that they would be more likely to use lids if the lids were attached. Residents also reported that they use the lids inside their homes or in their backyards.

Recommendations and Outcomes

Use experiment results to craft policy and regulation on increasing recycling bin distribution locations through a strategic partnership with the Streets Department and PPR.

Pilot an investment in larger bins with attached lids.

Use lessons learned from this project to inform the possible purchasing of bins for a future city-wide residential composting program.

Next Steps

Current Experiment

Testing the Effect Messaging on Illegal Dumping Behavior

The Behavioral Science Subcommittee is currently running an experiment to test the effect of positive and negative messaging on illegal dumping behavior. This experiment is underway and will run until spring of 2019.

Future Experiments

Building off of the 2017 experiments and their outcomes, the Behavioral Science Subcommittee will continue to analyze trash receptacle placement and recycling bin distribution to further inform the City's investments and policies in these areas. The Subcommittee will also continue to develop and execute experiments on other topics using data-driven, scientific methods to learn more about what motivates individual actions related to litter and waste.



Communications and Engagement

Introduction

One of the best compliments the Zero Waste and Litter Cabinet has received was from the industry magazine Waste Dive, which summed up the Zero Waste and Litter Action Plan in this way:

"Philadelphia's approach is different than how some other cities have rolled out their own "zero waste" programs, often from the top-down with resident engagement a secondary priority, and could be a model for others that are considering similar plans."

We're proud that the industry recognizes that community engagement and communications were not an afterthought of our Zero Waste and Litter Action Plan, but rather a feature built in to make the plan successful. Whether it's making Litter Index information and opportunities to get involved in neighborhood cleaning efforts readily available on our website CleanPHL.org, recruiting 57 Philacycle Captains and counting to spread the word of Zero Waste in their communities, or building our "Bandit Signs Brigade" to combat illegal signs, we know that this plan will not be successful unless residents, the business community, and our municipal employees understand the plan and know how to access resources to help them minimize waste and prevent litter.

Over the past year, we have built a centralized, collaborative messaging system that connects to the communications and engagement systems of every City department and organization represented on the Cabinet. We have had some major success in promoting great waste and litter-related projects through CleanPHL.org's Don't Waste This Idea section, telling inspiring stories of Philadelphians going above and beyond to tackle waste and litter in the website's Spotlight section, and spreading the word on the need to reduce our city's waste, especially our use of single-use plastics.

We are very proud of the communications and engagement infrastructure we have built, and we are confident that building this infrastructure into the foundation of the Cabinet's Action Plan will lead us to a Zero Waste and litter-free future.

Waste Not: Philadelphia's route to better recycling

THURSDAY, MARCH 2, 2017 BY CATALINA JARAMILLO 4 COMMENTS

The Communications and Engagement Subcommittee develops strategies to engage City departments, residents, businesses, and other stakeholders to better understand litter and waste challenges by using clear and unified messaging that is informed by more sophisticated data, improved collaboration between City departments, and increased outreach to residents.

CleanPHL Year-end Analytics

From August 1, 2017 to September 17, 2018



CLEAN
PHL



725

New Facebook
Likes

For a total of

5,174

Facebook engagements
22,154



499

New Twitter
Followers

For a total of

2,687



225

New Instagram
Followers

For a total of

333



29,460

Visits to
CleanPHL.org

Pageviews

57,595

with about 11%
of visits from
returning visitors



320

Residents
Volunteered

with Philacyle at
Zero Waste
Events



47

Block Captains
were Recruited

as a result of
CleanPHL.org



49

Events Added to
CleanPHL.org

events calendar



77

Press Stories
Published

mentioning the
Zero Waste and
Litter Cabinet



17,280

CleanPHL.org
Visitors

used the Litter
Index map
search function
to search their
litter scores



57

Residents were
Trained

as Philacyle
Captains



24

Community
Groups
Participated in
the Illegal Signs
Roundup

8,000+
signs removed



50

Community
Groups Joined
the Bandit Signs
Brigade



24

Community
Presentations
Were Given

by the Zero
Waste and Litter
Cabinet



455

New Monthly
Newsletter
Subscribers



15

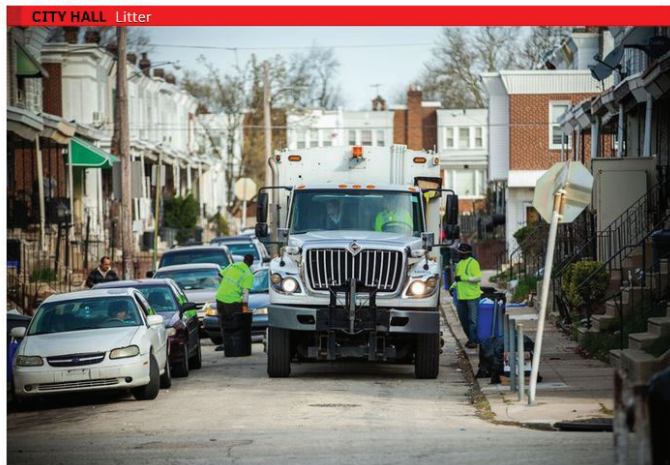
Residents,
Community
Group
Representatives,
& Data Pros

were trained on
using Litter Index
data

See how your block ranks on Philly's new litter map

City officials will use litter index to make data-driven decisions

BY **JOHN KOPP**
PhillyVoice Staff



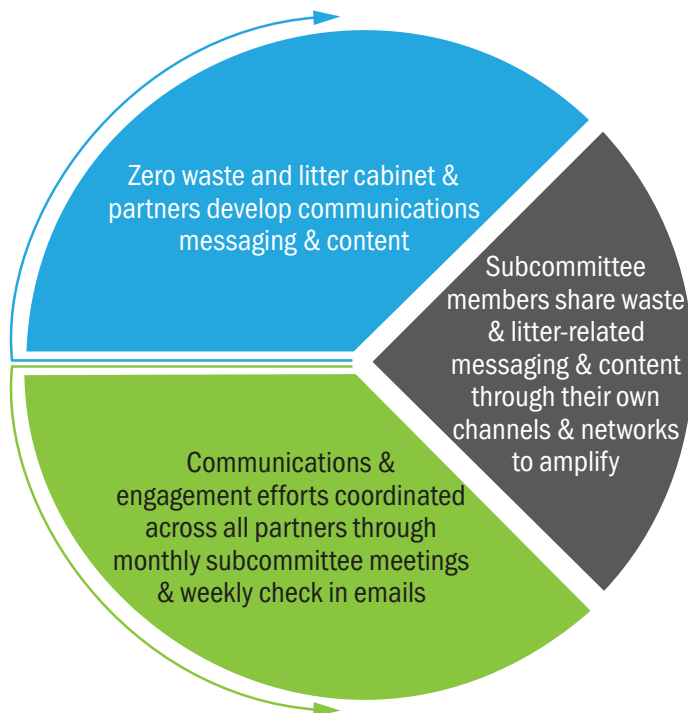
Collecting the trash from Creston Street, Wednesday, April 15, 2015.

THOM CARROLL/PHILLYVOICE



BRIEF

Philadelphia ramps up community engagement with new 'Philacycle' rewards program



Implemented Coordinated Messaging

Over the past year, the Cabinet has built and implemented a collaborative messaging structure that connects to the communications and engagement systems of every City department and organization represented on the Cabinet. Through monthly meetings and weekly updates, this subcommittee's members help to coordinate outreach and unify messaging around the extensive waste and litter-related work carried out by City departments and partner organizations, resources available through the City and partners, and opportunities to get involved. Through progress over the past year, the Cabinet has seen first-hand the power of coordinating messaging across City departments and community stakeholders to spread the messages of a Zero Waste and litter-free city.

601 E INDIANA AVE

PHILADELPHIA, PA 19134-3042

Litter Index Block Score

3.33

out of 4.0

Litter Index Neighborhood Average

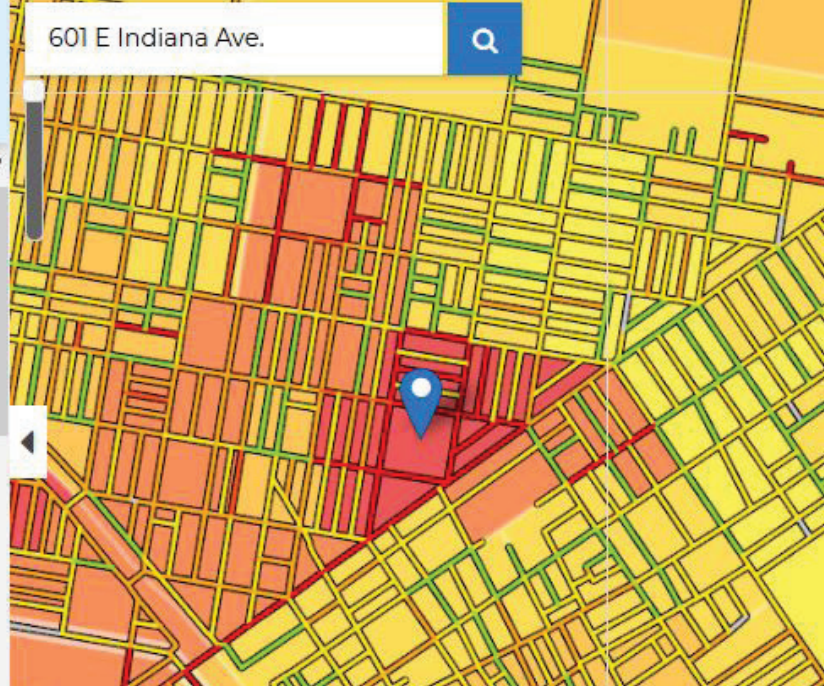
3.01

out of 4.0

TRASH &
RECYCLING
DAY

Monday

601 E Indiana Ave.



When a CleanPHL.org visitor uses the Litter Index map search function to search a specific address, the block and neighborhood-level Litter Index scores appear, along with a navigable Litter Index map and a sidebar with engagement opportunities for keeping that specific block clean.

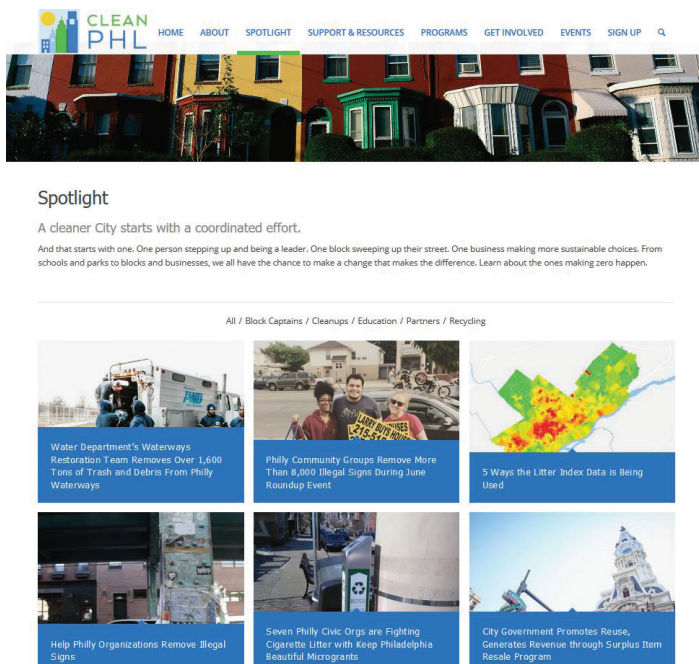
Expanded CleanPHL

The Cabinet's website—CleanPHL.org—was launched in August of 2017 and aggregates resources from many City departments and outside partners, serving as the City's comprehensive digital platform for litter and waste related-information. This centralization of resources allows visitors to the site to access information like their block's Litter Index scores, recycling and waste reduction tips, and details on the Cabinet's programs and initiatives, all in one place. Our goal is to have residents re-visit CleanPHL.org regularly to learn how their neighborhood's Litter Index scores change over time, read about how their fellow Philadelphians are taking action to tackle waste and litter, and find new opportunities to get involved in helping Philadelphia advance toward its Zero Waste goal. Since the website's launch, it was visited 29,460 times, with about 11 percent of those visits coming from returning visitors.

One of CleanPHL.org's main features is the Litter Index map search function, through which users can search an address to view block and neighborhood-level Litter Index scores and find engagement opportunities to help keep their communities clean, including whether that block has a Block Captain, what the block's trash and recycling day is, the nearest Park Friends Group, and the block's recycling diversion rate. It is an overarching goal

of the Cabinet for the Litter Index to become the tool that brings each individual neighborhood to the cleanest litter rating possible. Over the past year, visitors utilized the website's Litter Index map search function 17,280 times.

Several new sections have been added to CleanPHL.org, including a Spotlight section where the Cabinet shares stories about Philadelphians going above and beyond to tackle waste and litter, a Don't Waste This Idea section where we highlight community-based organizations across the city that are taking innovative approaches to tackling litter and reducing waste, a Zero Waste Tips page where we share small changes that residents can make to reduce their waste, and a Neighborhood Litter Control Plans section, where we share Neighborhood Litter Plans as they are released and provide updates on their progress.



The Cabinet wants CleanPHL.org to serve as a living, breathing resource and is committed to making improvements over time based on public feedback. We received suggestions that certain pieces of information should be added to CleanPHL.org's Litter Index search page, such as a list of nearby registered community organizations. These changes were incorporated into the website, and the Cabinet looks forward to continuing to engage with the public and incorporate feedback to make the CleanPHL platform as useful and as widely-used as possible.

Engaged Thousands on Social Media

The Cabinet has a robust social media presence that aggregates and shares content across City departments and other stakeholders involved in the Cabinet, amplifying the messaging of our City, nonprofit, institutional, and business community partners and working with them to have them help promote the Cabinet's messaging. Over the past year, the Cabinet has worked to grow its social media audiences and to consistently share engaging content through the @CleanPHL social platforms. A main tenant of the Cabinet's social media strategy is to use social platforms to engage directly with residents, responding to their comments and concerns and cultivating positive interactions.

SWITCH TO REUSABLE BOTTLES



YOU'LL SAVE \$266 EVERY YEAR

#WASTELESSWEDNESDAY

Wasteless Wednesday Campaign

One of the Cabinet's most successful social media campaigns has been its Wasteless Wednesday campaign, through which we provide residents with helpful tips on how they can take action to:

- Reduce the amount of waste they send to landfills
- Adapt Zero Waste lifestyle actions like avoiding single-use plastics
- Switch out disposable products for reusable ones
- Learn how to properly recycle and compost at home

Each Wednesday, the Cabinet posts from the CleanPHL social media accounts a graphic focusing on a specific waste reduction tip and a link to CleanPHL.org's Zero Waste Tips page, tagged with #WastelessWednesday. Many City departments and other stakeholders have shared the posts the Cabinet crafted or their own posts about their department or organization's waste-related accomplishments, amplifying the message and driving traffic to the CleanPHL website. Since the campaign began in June 2018, hundreds of users engaged with the CleanPHL Wasteless Wednesday posts on Facebook, Twitter, and Instagram. The Cabinet looks forward to continuing engage and interact with residents and other community stakeholders through its digital platforms and to expand its social media presence over the coming year.



Photo by Blanche Helbling, Keep Philadelphia Beautiful

Distributed Six Newsletters

To stay in touch with folks who are interested in the Cabinet's work, the Cabinet sends a monthly email newsletter containing news and announcements, upcoming events, and links to recent press coverage. People can subscribe to this email list through a form on CleanPHL.org or in-person at events where the Cabinet has a presence. Since the Cabinet began to build its email contact list in August of 2017, 455 subscribers have joined the list. The newsletter has had an average open rate of 29 percent and an average click rate of 12 percent, which is high for industry standards. The Cabinet also utilizes the City's employee newsletter to reach an internal audience of City employees.


August 2018



What's New?

BOLD ACTION WILL AVOID DISPOSAL OF AT LEAST 87 MILLION TONS OF WASTE BY 2030

23 Global cities and regions commit to advance towards Zero Waste

Philadelphia Joins 22 Other Pioneering Cities and Regions in Commitment to Accelerate our Transition to a Zero Waste Future

Philadelphia joined 22 other pioneering cities and regions in signing the C40 Cities "Advancing Toward Zero Waste" Declaration, promising to reduce waste sent to landfills or incinerators by at least 50%, lower per capita waste generation by 15%, and increase waste diversion rates to at least 70% by 2030. To achieve these targets, the signatory cities have committed to actions such as reducing food waste, mitigating the use of single-use/non-recyclable plastics, improvements to construction waste recycling, ensuring benefits are distributed equitably, and publicly reporting on progress. [Learn more.](#)



Water Department's Waterways Restoration Team Removes Over 1,600 Tons of Trash and Debris From Philly Waterways

Get Involved + Get Rewarded

There are two different ways to help out the community, and you'll be able to earn all sorts of great rewards when you do!



Philacycler Volunteer

What you'll do: Volunteer at one event and complete one training session.

What you'll get: Earn up to 500 points, and get exclusive access to high-value gift cards.



Philacycler Captain

What you'll do: Attend one of four trainings per year, lead volunteers at an event or clean up, educate neighbors and learn online.

What you'll get: Earn up to 1,200 points, and get exclusive access to high-value gift cards.

Launched the Philacycle Program

In the fall of 2017, the City's existing Waste Watchers Program which helped event organizers to reduce waste at city events merged with the Recyclebank Recycling Rewards program to form Philacycle, a community outreach and engagement platform that allows residents to take action to help Philadelphia advance toward Zero Waste and get rewarded when they do. Residents who register with Philacycle can earn rewards points for recycling, learning about waste online, holding cleanup events in their communities, educating their neighbors on Zero Waste, and volunteering at Zero Waste Events.

Building off of the successes of the Waste Watchers Program, 320 Philacycle volunteers were recruited to help event attendees properly sort their waste at the 21 Zero Waste Events held so far during the 2017-2018 events season. Along with the Cabinet's stated goal of making Philadelphia the "Home of Zero Waste Events," the Communications and Engagement Subcommittee saw a great opportunity to expand the scope of the Philacycle program to further build capacity for grassroots organizing for Zero Waste and litter abatement by developing a curriculum that certifies Philacycle Captains.



After being trained on Zero Waste principles for cleanups, event volunteering, and community education, Philacycle Captains serve as ambassadors for Zero Waste and litter in their communities. Philacycle Captains are responsible for completing the training curriculum as well as a certain number of actions per year. Since the Philacycle Program was launched, 57 Philacycle Captains have been trained at three Philacycle Captains Training sessions, which take place quarterly. To engage with residents who have been trained as Captains, the Philacycle team sends a monthly Captains newsletter and also holds happy hours to thank Captains for what they do, connect them with their peers and the Philacycle team to share successes and challenges, and learn about upcoming opportunities. We look forward to continuing to build this on-the-ground army of resident ambassadors for Zero Waste and litter by continuing to recruit, train, and engage with Philacycle volunteers and Captains in the coming year.



Next Steps

CleanPHL

- Publish the 2018 City-wide Litter Index data on CleanPHL.org in early 2019.
- Continue to build and expand CleanPHL.org, adding new resources and incorporating feedback to make the site as useful as possible and increase user engagement.
- Continue to engage with Philadelphia residents, businesses, and other partners in person and through our digital platforms.

Philacycle

- Continue to recruit and train new Philacycle Captains and volunteers to build the on-the-ground army for Zero Waste, encouraging them to get out into their communities and spread the word on how to take action and get involved to help the city progress toward its Zero Waste goal.

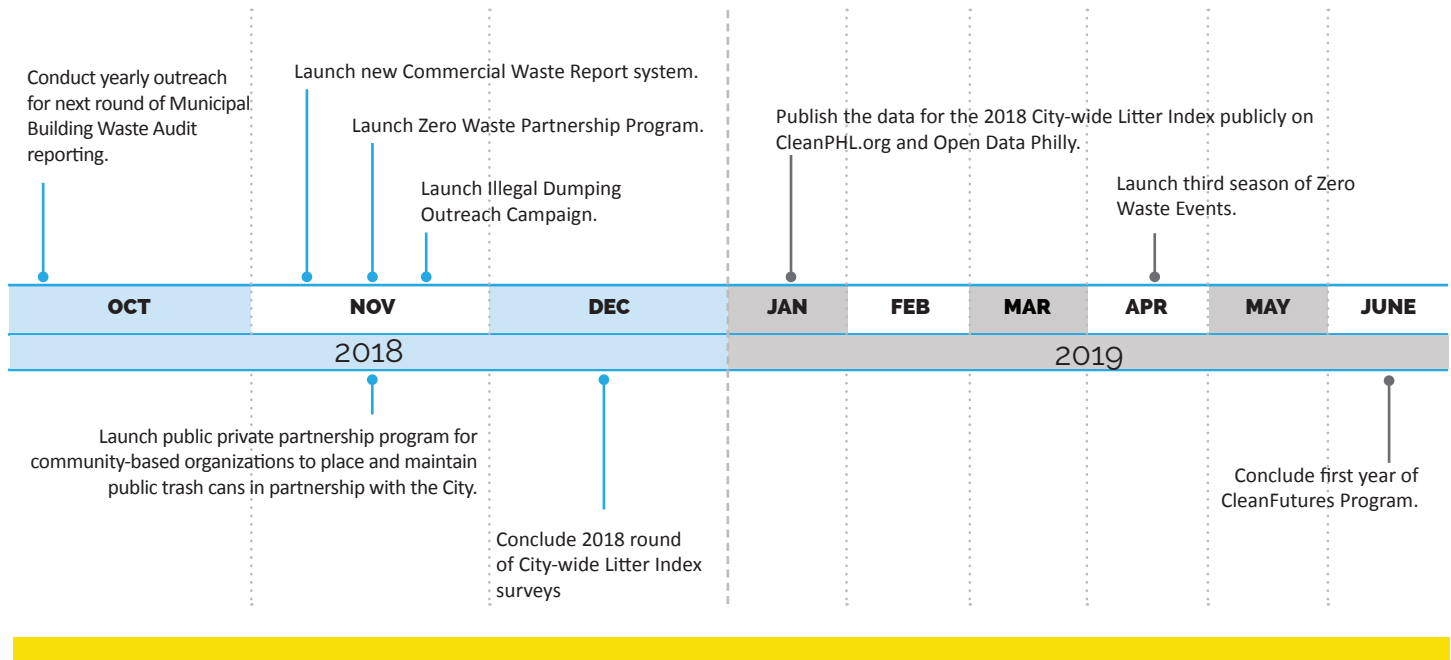
CleanFutures

- In September 2018, the Cabinet was awarded \$7,500 through the City's Innovation Fund for the creation of a program called CleanFutures, a contest-based citizen science and advocacy program to engage Philadelphia School District students in reducing litter. The CleanFutures Program will be developed

and managed through a partnership between the Cabinet, the School District's GreenFutures Program, Keep Philadelphia Beautiful, and the environmental intelligence company Litterati. CleanFutures will utilize Litterati's platform to track the types of litter found on school grounds and then match schools with the resources to find innovative ways to reduce that litter. The program will engage with all K-12 School District public schools. Within each school, CleanFutures will conduct outreach to science and sustainability-based classes and clubs, and Litterati will cover all of the program's technology needs. A model curriculum exploring the vocabulary of litter, the geographic movement of litter, the philosophy of litter, the math to understand the data, and examples of how to successfully utilize the data to advocate for change in litter behavior will also be offered to each participating school instructor.

- Funding allows for fifty schools to join the Litterati platform. CleanFutures launched in September 2018 and will conclude in June 2019 to coincide with the school year. We believe that CleanFutures will make a major and lasting impact on how Philadelphia students view litter and what they can do to help keep Philly clean.

2018-2019 Timeline



Across the Entire Timeframe

- Continue to provide Zero Waste services to event organizers and to expand and grow the Zero Waste Events Program during the 2018-2019 event season.
- Continue working through the list of 31 Enforcement and Cleaner Public Spaces recommendations to complete the in-progress recommendations and address the remaining recommendations.
- Continue developing, implementing, and measuring the progress of Neighborhood Litter Control Plans in the top ten most littered parts of the city.
- Continue to utilize Litter Index data within City departments to develop data-driven strategies to addressing litter and illegal dumping in Philadelphia.
- Conclude and create reports for current behavioral science experiment on illegal dumping messaging.
- Continue to expand CleanPHL.org's digital presence, adding new resources and incorporating feedback to make the website as useful as possible while building our social media and email communications platforms.
- Continue to recruit and train new Philacycle Captains and volunteers to build the on-the-ground army for Zero Waste, encouraging them to get out into their communities and spread the word on how to take action and get involved to help the city progress toward its Zero Waste goal.

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