

Call for Solutions: Waste Reduction and Diversion

The City of Philadelphia is in need of creative solutions for reducing waste and increasing waste diversion away from landfills and incineration. Technology can play a critical role in education and tracking around issues of waste and supporting the City's zero waste goals. How can technology support the City's promotion and measurement of waste diversion and reduction?

Through the Office of Innovation and Technology, the City will award up to \$34,000 to a solution provider to pilot a technology-enabled approach to addressing this important issue in Philadelphia. The selected pilot will launch in early 2020 and be completed by June 30, 2020.

Responses are due January 16, 2020 at 5 p.m. and should be submitted via email to: Pitch.and.Pilot@phila.gov.

Background

The City has the goal of fully eliminating the use of landfills and conventional incinerators by 2035, including by increasing waste diversion by 90 percent, while enhancing the cleanliness of streets and public spaces. Despite an increase in population and construction, Philadelphia has experienced a decrease in overall waste since 2007 while increasing the percentage of waste that is recycled.

The Streets Department is responsible for collecting trash from thousands of receptacles throughout Philadelphia, including residential curbside trash, traditional wire street bins, and Big Belly trash and recycling receptacles. The City's Commerce Department contracts with private commercial corridor managers to maintain public trash cans and the Zero Waste and Litter Cabinet launched the Community Cans project to expand these efforts. Philadelphia Parks and Recreation maintains public trash cans on their sites. Waste is an issue outside of these containers, as well: through the Zero Waste & Litter Cabinet, the City has established a Litter Index to provide a clear, specific, and objective benchmark on litter conditions across Philadelphia.

The Zero Waste & Litter Cabinet runs several programs to reduce waste and increase waste diversion rates. Individuals or groups applying for a Special Events Permit register as a

“Zero Waste Event.” Businesses, institutions, nonprofits, and community organizations can participate in the City’s Zero Waste Partnership program, through which they are recognized for completing a variety of waste reduction and diversion activities.

Philadelphia is a pilot city for the Thriving City Initiative organized by C40, Circle Economy, and Doughnut Economics Lab. Through the initiative, the City is working to develop a public and private sector strategy for reducing waste and consumption while at the same time continuing to rebuild Philadelphia’s economy.

The Streets Department has expanded its recycling office and negotiated a new contract with Waste Management for management of residential recycling. The Recycling Office is also working on a campaign to reduce contamination of recycling streams.

The City’s Department of Parks and Recreation issued a request for proposals in September 2019 to establish and manage a compost facility on PPR property and collect food scraps from rec centers. The program is expected to begin in spring of 2020. Parks and Recreation is also launching a community compost network that will add community-operated public composting bins to neighborhood parks, gardens, and school sites.

Resources and Additional Information

[Executive Order No. 13-16: Zero Waste and Litter Cabinet](#)

[Zero Waste & Litter Cabinet Action Plan](#)

[2018 ZWL Progress Report](#)

[CleanPHL Website](#)

About Pitch & Pilot

Pitch & Pilot is a program developed as part of the [SmartCityPHL Roadmap](#) to engage the private sector, academia, and the public in designing smart city solutions for Philadelphia’s unique challenges. The program aims to support connections between well-articulated City problems and private sector solutions while meaningfully incorporating input and feedback from the community.

The selected solution provider will be expected to work with the Zero Waste & Litter Cabinet to conduct a pilot of the proposed solution. Together, the sponsoring department and solution provider will determine the pilot duration and location. The solution provider will be responsible for collecting baseline data, developing a work plan and securing the Zero Waste and Litter Cabinet’s approval, and creating a formal, written evaluation of the pilot’s impact.

In addition to up to \$34,000 to support a pilot project, solution providers can expect the following benefits from participating in Pitch & Pilot:

- **Partnership:** Solution providers will have access to City departments and resources to support the piloting of their solutions.
- **Testbed:** A pilot project in Philadelphia provides an opportunity to prove concepts and refine products in the country's sixth-largest city. Solution providers will engage relevant users, collect and analyze data, refine or iterate on a product, and demonstrate a solution's value to the City, to investors, and to other potential customers.
- **Shaping Philly's Future:** Successful pilots will help the City identify appropriate technologies to address these issues and have the potential to shape future, larger-scale procurements.

Application Process and Timeline

1. Review the selection process and evaluation criteria.
2. Review the City's terms and conditions for miscellaneous purchase orders [here](#). The selected solution provider will contract with the Office of Innovation and Technology through a miscellaneous purchase order.
3. Submit questions about the application process to Pitch.and.Pilot@phila.gov by January 2, 2020. Questions and answers will be posted on the [Pitch & Pilot website](#) by January 8, 2020.
4. Complete [the mandatory campaign contribution disclosure forms](#).
5. Send your application by email to Pitch.and.Pilot@phila.gov by January 16, 2020 at 5 p.m.

Questions due	1/2/20
Responses to questions posted	1/8/20
Applications due	1/16/20 by 5pm
Finalists notified (estimated)	1/27/20
Pitch event (estimated)	Week of 1/27/20
Selected vendors notified (estimated)	Week of 2/3/20
Pilot begins	Early March 2020
Pilot ends	June 2020

Evaluation and Selection

Proposals will be evaluated by the Pitch & Pilot Working Group – led by the Office of Innovation and Technology and comprised of representatives from City departments and agencies, University partners, and the private sector – with the technical expertise of the

Zero Waste and Litter Cabinet. Any contract awarded as a result of this process will be between the selected solution provider and the Office of Innovation and Technology.

Solutions will be evaluated based on the criteria below and their alignment with the four guiding principles of the SmartCityPHL Roadmap: locally-inspired, innovative, equitable, and collaborative.

- **Responsive:** The proposal addresses the need presented by the problem statement.
- **Inclusive and equitable:** The proposed solution prioritizes disadvantaged Philadelphians and respects the privacy of any data collected.
- **Feasible:** The solution provider has the capability to conduct the proposed pilot.
- **Pilotable:** The proposed solution can be deployed in a limited capacity before ramping up. The solution should be piloted in public and/or commercial settings (i.e., not in households).
- **Scalable:** The pilot solution can be extended beyond the pilot phase in a way that is sustainable for the City.
- **Innovative:** The proposed solution represents a new approach to addressing an important problem in Philadelphia.

Finalists will be asked to present their ideas in person (or via video chat, if in-person participation is impractical) at a pitch event. In addition to further exploring the finalists' alignment with the above criteria, the pitch event will give them the opportunity to demonstrate their ability to engage relevant stakeholders.

Submission Outline

Please submit your response in accordance with the following outline, limiting the main contents of your response to ten pages or less. Supplementary information may be included as appendices, but your main submission should provide sufficient information for the evaluation committee to assess your proposal.

1. **Solution Overview:** Please describe your proposed solution and how it addresses the need described in the problem statement. (1500 words or less)
 - How is this problem currently being addressed in Philadelphia and beyond? What distinguishes your solution from others, and what has prevented its adoption before now? Does your solution build upon existing efforts?
 - Have you implemented the proposed solution before? If so, in what context? Please provide a brief description of the situation, location, scope, and results. If not, what steps remain before it can be deployed?
 - What risks are involved in deploying your solution and how do you intend to mitigate those risks?
 - At what scale, for how long, and where would you like to pilot your solution? How will this differ from a larger deployment? What do you expect to learn, and how do you expect to scale up?

- 2. Financial Considerations:** Please provide information to help us understand how the adoption of your solution would impact City finances. (1000 words or less)
 - How much funding are you requesting? Please describe the underlying costs of the pilot.
 - What is the unit price of your solution?
 - What is your business model at scale? How is it a sustainable solution? What sources of funding or revenue would be required?
 - Does your solution have the potential to generate revenue for the City?
- 3. About You:** Please describe your team and the individuals who will work on the pilot. (1000 words or less)
 - Who will work on this project and what is their experience with the relevant subject matter, technology, and population that will be included in this pilot? Please describe any past experience working with city government, prototyping or piloting new solutions, and developing technology in this field.
 - What makes your team uniquely positioned to address this problem?
 - What City resources (personnel, software systems, etc.) will be required during the pilot stage of the project?
 - How do you plan to coordinate and structure the input and technical review from the City agency team critical to developing your pilot solution?
- 4. Inclusion and Equity:** Describe how your solution will prioritize low-income and disadvantaged Philadelphians. (1000 words or less)
 - Is your solution beneficial and accessible to low-income or disadvantaged Philadelphians and persons with disabilities? How will you address any physical, financial, language, educational, or technological barriers that might prevent all Philadelphians from accessing your solution?
 - Please explain where in Philadelphia you would like to pilot the solution and why.
 - How do you plan to engage community members during the pilot process and beyond?
- 5. Data:** If relevant, explain how you intend to manage data collected during the pilot and future implementation in a way that protects privacy and security. (500 words or less)
 - Does your solution involve collecting data from users?
 - How will you ensure anonymity and security of any data collected?
 - Does your plan involve selling or otherwise monetizing the data that is collected?
- 6. Evaluation:** Please describe how you will evaluate the impact of the pilot. (1000 words or less)
 - List any indicators you expect to be impacted by your solution, their baseline levels (if known), and the expected change to that baseline during the pilot period.

- Explain how you plan to collect data in order to support the evaluation of the pilot.
- Has the effectiveness of your solution been evaluated previously, either internally or by a third party? If so, please share the context and results.

Appendix A: [Mandatory Campaign Contribution Disclosure Forms](#)