



City of Cambridge

Executive Department

YI-AN HUANG
City Manager

November 14, 2022

To the Honorable, the City Council:

In response to Awaiting Report Item Number 22-72, regarding a report on outlining the efficacy of the Private Property Rodent Control Program and the SMART Digital Rodent Control Boxes, and any changes being contemplated to these current programs, please be advised of the following:

For many years, the City has been committed to confronting the problem of rodents in a variety of ways by addressing issues on public property, helping residents on private property, working to control rodents during construction projects, enforcing sanitary codes and ordinances, and educating the public.

Private Property Rodent Control Program

To expand rodent control efforts in Cambridge, the City has contracted with a private pest control company to offer a residential rodent control assistance program as part of the City's broader rodent control efforts. This program, which launched in September 2021:

- Is free
- Provides inspection and at least 3 baiting/trapping/follow-up inspections within a 60-day period at no cost to the resident
- Is available to residential properties with 4 or fewer units
- Can be requested by the property owner and/or tenants

Both Inspectional Services Department (ISD) staff and the pest control contractor inspect the property and provide specific feedback on issues that should be addressed to help prevent rodent activity.

Since the program launched, 754 properties have applied and 631 have been approved to participate. ISD has completed a total of 910 inspections (including both initial and final) as part of this program. This progress has been made despite a gap in contractor services between June



and September 2022. The first company that the City contracted with completed 1,244 inspections, but then stopped responding to ISD requests of approved applications starting in June 2022. Their contract was terminated in August, and a new contractor, Secured Environments, started on September 29. Secured Environments has completed 343 inspections to date, including resolving a backlog of 253 unserved properties left by the previous contractor.

The amount of resident related complaints regarding the contractor's services have greatly reduced with the addition of Secured Environments. Secured Environments have promptly answered all resident inquiries upon receipt of detailed inspection reports given to each applicant after every service. Each applicant receives a detailed inspection checklist specific to their property with recommendations and is also given follow-up inspection reports with information about how much rodent activity was found. Since February 2022, 15% of residents have selected to have snap traps placed at their property, while 85% selected to have the contractor choose the method they see fit.

This program has proven very successful in engaging more residents in rodent control efforts to help educate them about many of the common causes of rodent issues on properties. The access to private properties that ISD has gained has been very helpful and increased face-to-face interactions with residents allowing staff to share simple tips like the importance of eliminating food and water sources on properties. Both staff and residents report these interactions have been very helpful in providing important information to many residents who would otherwise not have reached out to the city for assistance.

SMART Digital Rodent Control Boxes

As part of its ongoing commitment to mitigating rodent activity, in April of 2022 the City launched a six-month SMART box pilot program with Modern Pest Services to bring the latest rodent-control technology to Cambridge and evaluate its effectiveness.

From April through September, the City and Modern Pest installed and serviced 30 Smart boxes and 10 smart pipes city wide (unfortunately due to technical issues smart pipes were not installed until September). Over the course of this pilot, ISD, and the Department of Public Works (DPW), monitored the data and worked with Modern Pest Control to respond to rodent activity throughout the city. In the first four months the 30 smart boxes were able to capture and kill 277 rats. For the month of September smart pipes were able to kill 103 rats across all 10 devices.

While this program is still on-going, Public Works is in the process of contracting and expanding this program to provide services on both public and private property year-round.

Status of the Rat Liaison Position

The City is in the process of finalizing a job description to fulfill the roles and responsibilities envisioned by the "rat liaison" position. This new position of Project Coordinator/Environmental Health in the ISD will be posted in early December 2022. The Project

Coordinator will lead public outreach to residents and businesses on rodent issues, develop comprehensive plans and strategies around rodent control, and will serve as a liaison to the City Council on related matters. This role will contribute to policy discussion around other environmental health issues, particularly vector control, confronting the City as needed.

Rodent Complaint Data

While the ability for residents to report rodent issues online, via an app, by email, or over the phone has been available for many years, the City streamlined how we receive and document rodent complaints beginning in January 2020. This was done to ensure all complaints are logged in SeeClickFix (SCF) to have better data to monitor locations of reports and track the amount of issues year over year. Below are some data from the past 4 years:

- **2018** - 219 reports (*before all requests logged in SeeClickFix*)
- **2019** - 235 reports (*before all requests were logged in SeeClickFix*)
- **2020** - 739 reports
- **2021** - 784 reports
- **2022** -- 689 reports (*as of 11/1/21*)

As you can see, the data for 2018 and 2019 did not capture the full picture of rodent activity in the city. However, with the introduction of more streamlined data collection in 2020, we can now begin to see a “baseline” of activity for 2020, 2021 and 2022 showing an approximate average of around 700 rodent reports per year. Knowing that we now have some “good data,” we’ll continue monitor these overall complaint numbers to be able to see if there is, in fact, a marked increase in a certain year that tells us that activity is on the rise.

Inspectional Services’ Response Data

Even with the increase in reports, the ISD has kept up with demand and better improved on how quickly an inspector is able to receive a complaint, review the information, and inspect a property. Below are some data for the past 5 years showing how many days, on average, it took ISD to respond to a rodent complaint on private property:

- **2018** - 9.8 days
- **2019** - 10.8 days
- **2020** - 6.8 days
- **2021** - 3.5 days
- **2022** - 3.9 days

During the period from when the private property rodent program has been active (9/15/2021 - 10/30/2022), SCF generated 973 Rodent sightings, 951 of which have been closed with findings or without. During that same period, inspectors have done 1,851 inspections for rodents including over 900 for free rodent baiting program. They have also done 537 Inspections for trash violations and complaints resulting in 441 Citations and 110 Tickets.

Inspectional Services' Inspection and Permitting Program Related to Rodents

ISD is responsible for following up on rodent issues/complaints on private property. Their Housing and Sanitary Inspectors work with businesses to ensure their trash and dumpsters are properly maintained, enforce ordinances to regulate dumpsters, use strategies to identify problem areas by doing sweeps to tag at-risk conditions, mapping of complaints, and enhanced staff training on rodent behavior and control, and handle the bulk of reports of rodent sightings the City receives to investigate possible causes.

Inspectors respond to the specific address and assess rodent activity and make recommendations to the management company, property owners or tenants. While there, they will expand the inspection to neighboring properties or businesses to try to identify other contributing factors to rodent activity in the area. Inspectors attend neighborhood meetings to meet with residents, answer questions, and hand out brochures related to preventing rodent activity and have arranged neighborhood meetings/walks to review active sites and discuss best practices. ISD staff also do proactive neighborhood sweeps to identify problem areas and leave brochures and door hangers with information on best practices in preventing rodent activity that also includes contact information to reach out to the department for an inspection and other help.

ISD works with large property management companies across the city to coordinate and educate on preventing activity, and all restaurant Sanitary Inspections include monitoring for rodent activity inside and outside of the establishment.

Requests for Demolition Permits are first reviewed by Housing Inspectors to confirm rodent baiting is done prior to the start of demolition and throughout the entirety of the project. Exterminators are required to email all reports to ISD for monitoring. Inspectors also visit larger non-demolition construction sites when reports are received about rodent activity. If there is evidence of activity, contractors are ordered to exterminate and send reports to ISD.

Other Rodent Control Initiatives

Rodent Task Force

The City Manager's Office, Public Health, ISD (ISD), and Public Works (DPW) departments hold regular internal Rodent Taskforce meetings with additional stakeholders from Cambridge Public Schools, Cambridge Housing Authority, MIT, and Harvard University to discuss better coordination efforts to address rodents and will continue to enforce ordinances related to dumpsters, curbside trash, and private property cleanliness issues.

Solid Waste Management

DPW oversees all of the city's Solid Waste programs. This includes curbside trash, recycling, and compost collection as well as street cleaning. Through the use of in-house compliance officers, DPW routinely inspects all of the city trash routes to insure proper setout of barrels and adherence to the City's trash and recycling ordinances. They also work closely with ISD inspectors on improperly stored trash on private property.

Compost Program

Because food scraps make up 40% of household trash, separating them out significantly reduces trash and gets food scraps out of landfills to protect the climate. Composting also helps the City combat the rodent issue. Compost carts have locks or latches which secure food waste. Both trash and compost carts are made of thicker plastic than most barrels available in retail stores. The curbside compost bins provided by the city are made of a durable plastic and a secure locking lid that is resistant to pests. While the main goal of compost program is to reduce waste and protect the climate by reducing potent greenhouse gas emissions at landfills, an added benefit is the removal of a major food source for rodents from the general waste stream. By removing this food source and placing it in a secure locking container, we can better limit rodents' access to food.

Standardized Trash Carts

Earlier this year DPW distributed standardized trash carts city wide. These trash carts are another piece of the puzzle to address rodent control and prevention in Cambridge. To help reduce rodents in your neighborhood, the city encouraged residents to use these new trash carts and avoid placing trash in bags on the curb whenever possible, keep the lids closed tightly on the new trash carts, and separate food waste from your trash by participating in the City's free curbside compost program. The goal of the Standard Trash Cart program is to improve:

- Rodent control and public health. The new carts will reduce easy access to food for rodents.
- Worker Safety, the trucks can mechanically lift and empty the new carts. This will reduce lifting impacts on DPW staff.
- Sidewalk accessibility. Lids are attached to the cart and will not fall on the sidewalk. Larger buildings will need fewer carts because their carts will be bigger (65 gallons instead of 50 gallons). This leads to fewer sidewalk obstructions.

Big Belly Solar Trash Compactors

Over the last decade, the DPW department has been replacing standard open top public area litter bins with Big Belly solar compactors. The Big belly solar trash compactor is a smart, solar-powered, compacting waste or recycling station. This compacting model holds five to ten times real capacity over an average traditional waste bin. It is equipped with sensors that monitor and report fullness levels and collection activity. It harvests solar power to compact waste and communicate its real-time status. Because these units are fully enclosed, we have found them to be effective in controlling rodents particularly in business districts and parks. These units are currently specified in all city construction projects and DPW is swapping out traditional barrels for Big Belly units on an annual basis.

Traditional Baiting and Monitoring

DPW is responsible for responding to rodent issues on public property, and monitors and baits problem public areas on a weekly basis with their rodent control contractor. They work closely with ISD Inspectors regarding baiting catch basins, sewers, broken sewer lines, and any openings in the public way when evidence of rodents exists. Both departments are in constant contact and maintain close relationship when it comes to rodent control.

Carbon Monoxide Treatment in Specific Areas

Beyond the ongoing private baiting program, City staff have continued to explore non-traditional approaches to rodent control and have had some success with carbon monoxide (CO) applications to eliminate active burrows. This CO method has been used in a few selected locations this year with good outcomes. This approach is accompanied by CO monitoring. Staff are currently exploring the purchase of a device to generate CO rather than relying on pest control contractors.

Rodent Birth Control

Rodent fertility control has also been discussed in monthly Rodent Task Force meetings. In August this group invited a biologist and advocate for rodent fertility to discuss the prospects of using this method on a large scale. Staff learned that there are currently major initiatives in several cities, especially in CA after a statewide ban on the use of frontline anti-coagulants was enacted in 2020. Some of the limitations in taking this approach include the movement of individual rats within a dense urban community and the parallel use of poison by private property owners. Ideally, users of fertility control would be most likely to succeed in an area with an isolated rodent population, like a farm, with a well-defined rodent population that doesn't continuously mix with adjacent rodent populations. Nevertheless, the efficacy of this approach in urban areas by public sector agencies can be advanced by observing the results of this method and deriving best practices from pilot programs now underway in several cities in California.

Resident Resources

A rodent resources website is available at www.cambridgema.gov/rodents and physical information was developed, updated, and is routinely provided to residents by ISD staff with information on how to prevent and spot rodent activity around their property. In February 2020, this information was mailed to all property owners in Cambridge, and we have plans to mail additional information to residents in Spring of 2023 as part of renewed efforts to make residents - and renters in particular - aware of how to best control and deter rodents and let them know about resources available to them.

I look forward to continued collaboration between the Council and staff as we work to improve and expand the City's rodent control efforts.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Yi-An Huang', with a stylized flourish at the end.

Yi-An Huang
City Manager