

Department of Consumer and Regulatory Affairs
Department of Energy and the Environment
Department of Health
Department of Public Works
Department of Small and Local Business Development
Mayor's Office of the Clean City
Office of the Chief Technology Officer
Office of Unified Communications

GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR



CAP  **STAT**

RatSTAT





- ◆ Overview
- ◆ Abatement / Enforcement
 - Recommendations
- ◆ Sanitation Management
 - Recommendations
- ◆ Next Steps

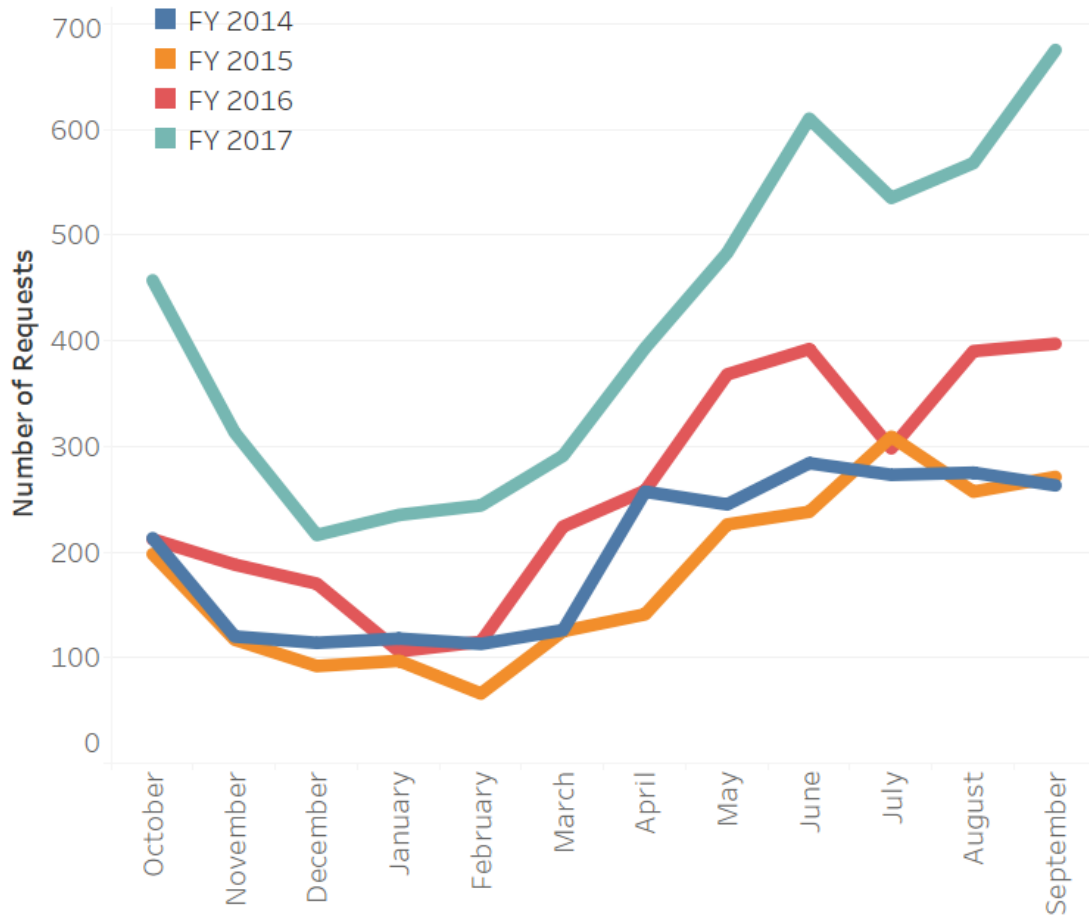


Rats in the District

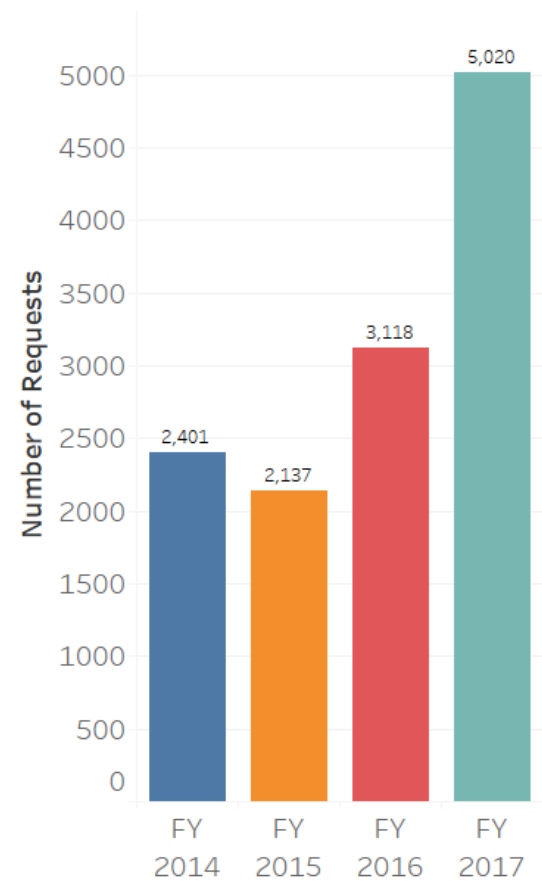
- ◆ Rats in DC are Norway Rats; they require food, water, and a place to live.
- ◆ These rats primarily make homes through burrows in the ground. They like green space, parks, and older infrastructure.
- ◆ They survive off food waste, trash, and pet waste.
- ◆ Abatement strategies include rat poison and traps.
- ◆ Sanitation strategies – reducing the food available to them – will help abatement strategies work better.



311 Rodent Inspection Requests



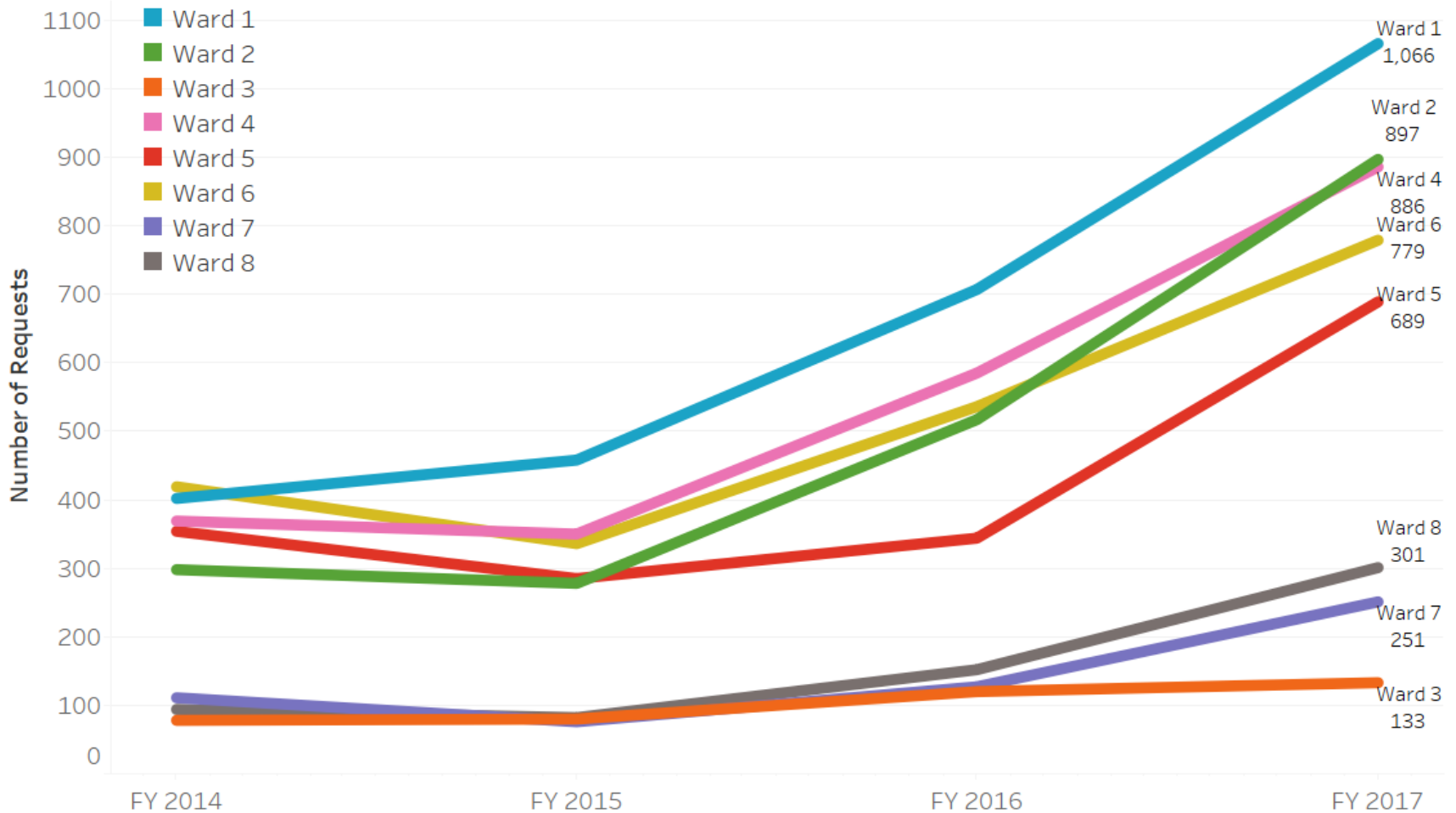
311 Rodent Inspection Requests Each Year



311 requests for rodent abatement have increased by more than 130% from FY15 to FY17; requests spike in summer months



311 Requests for Rodent Abatement by Ward



Requests are concentrated in the city's most densely-populated neighborhoods along major business corridors



DOH is notified of a rat problem.

DOH pest control & DOH code enforcement are sent to the scene

Pest Control goes to property to locate rat burrows

Code enforcement officer checks for trash violations

Pest Control pumps Rodenticide tracking powder or pellets into the burrow

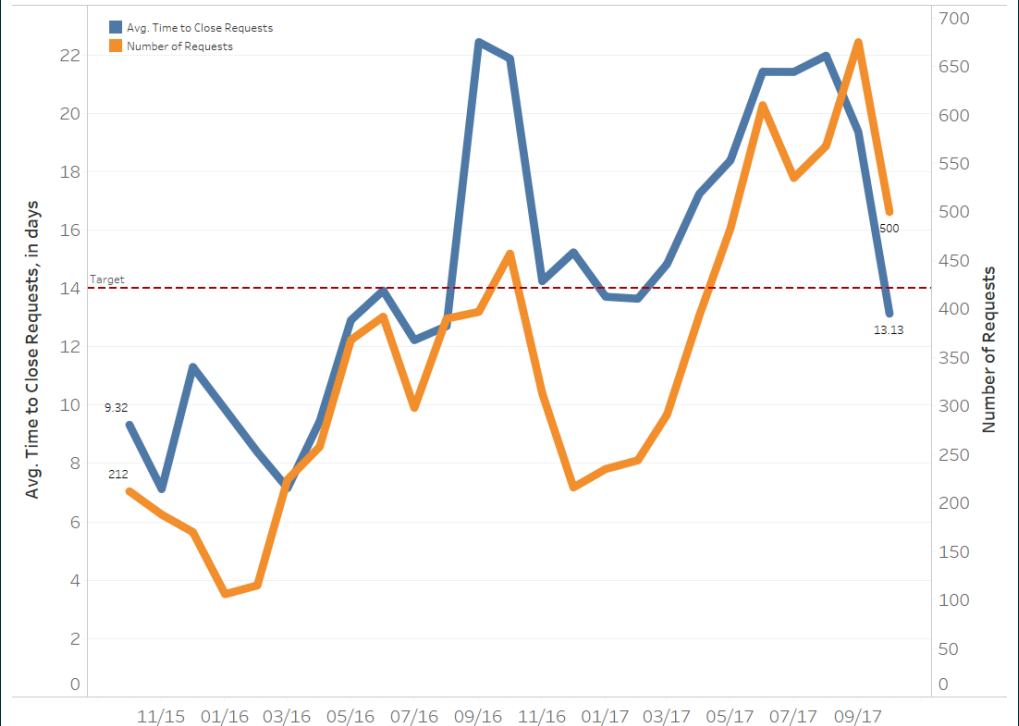
Fines for violations start at \$500 and double each time

Rats ingest poison when grooming, and die, generally in their burrows

Document evidence and issue NOI

8 Pest Control Exterminators
4 Code Enforcement Officers
2 Supervisors

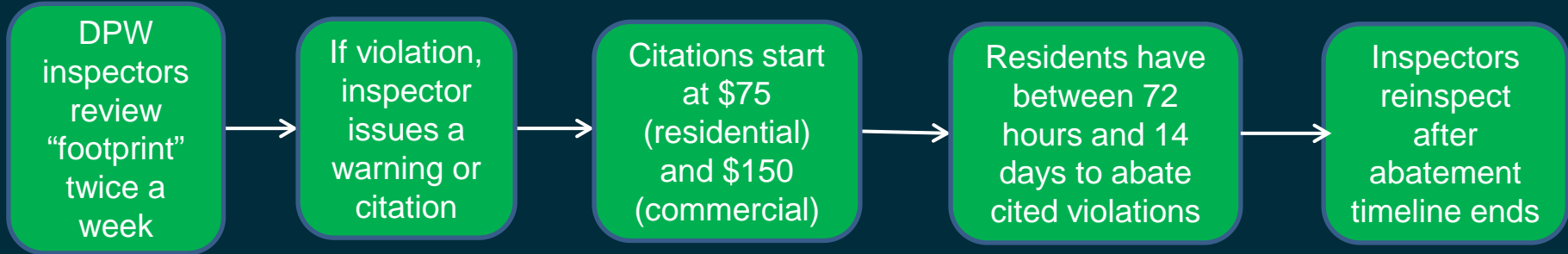
Average Times to Close Requests / Workload



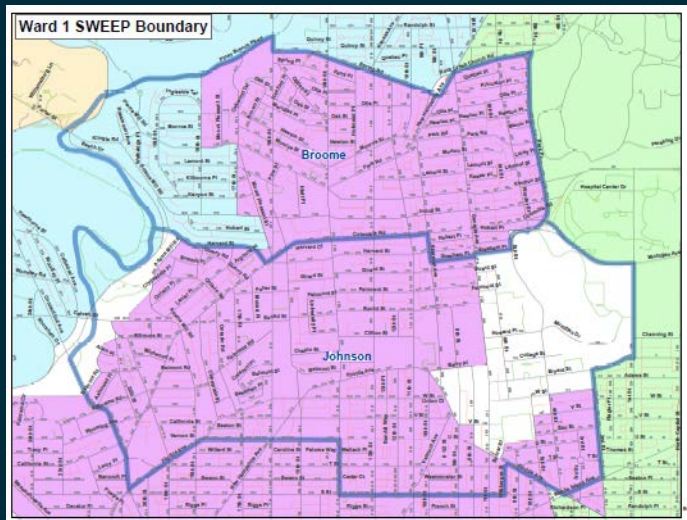
311 Requests are closed within SLA
51% of the time



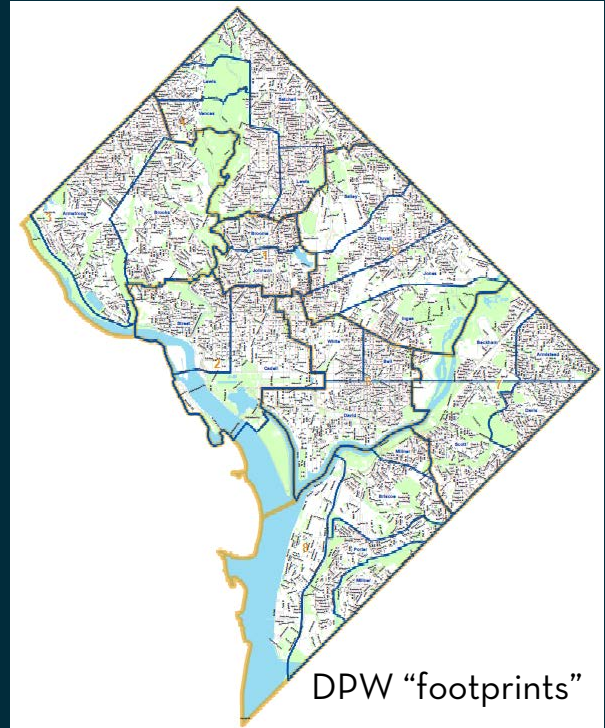
DPW inspects for solid waste violations at residential and commercial units



25 Inspectors (3 dedicated to environmental crimes)

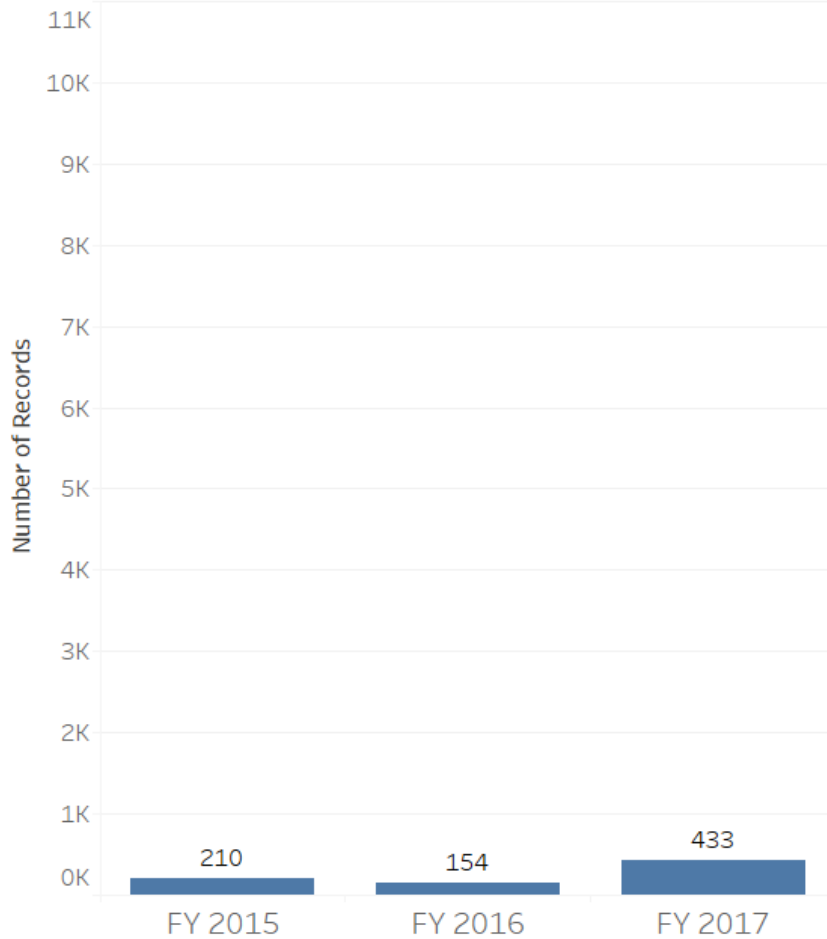


Example of Ward 1 "footprints"

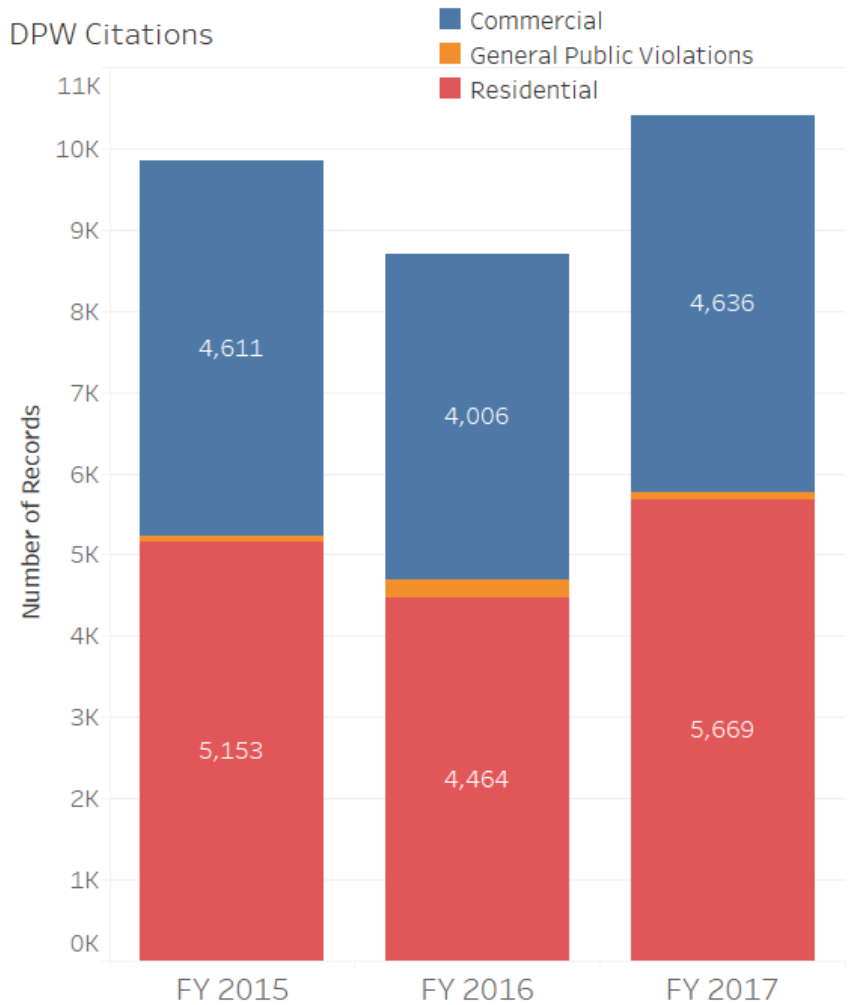


DPW "footprints"

DOH Citations



DPW Citations

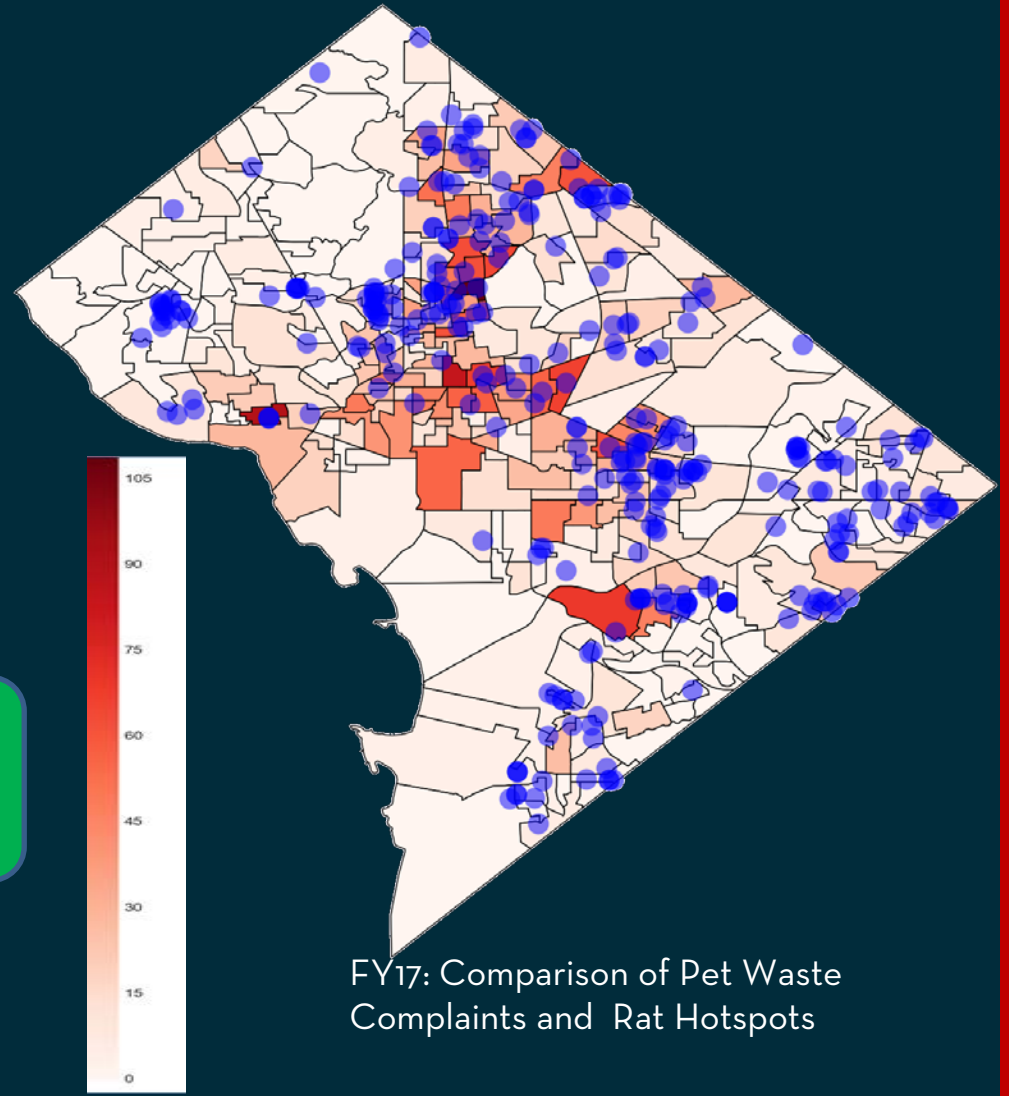
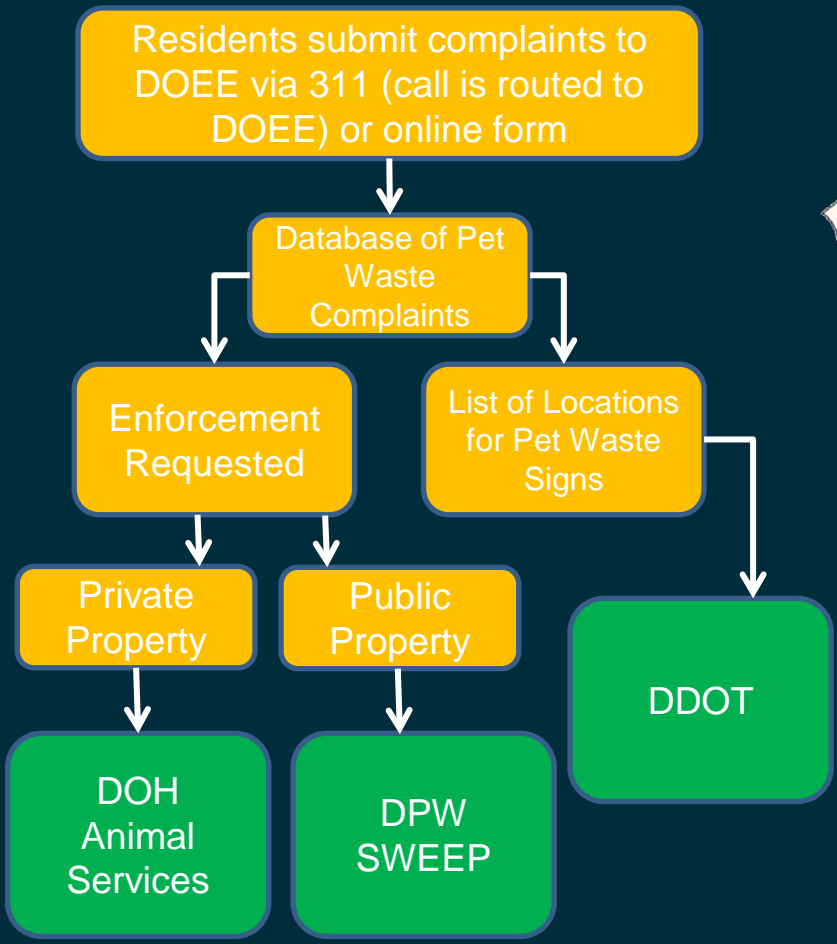


Commercial fines from DOH start at \$500; from DPW start at \$150

*Note, DPW has more FTEs (25 vs 4 for DOH) and issues a broader range of citations



DOEE manages complaints about pet waste



FY17: Comparison of Pet Waste Complaints and Rat Hotspots

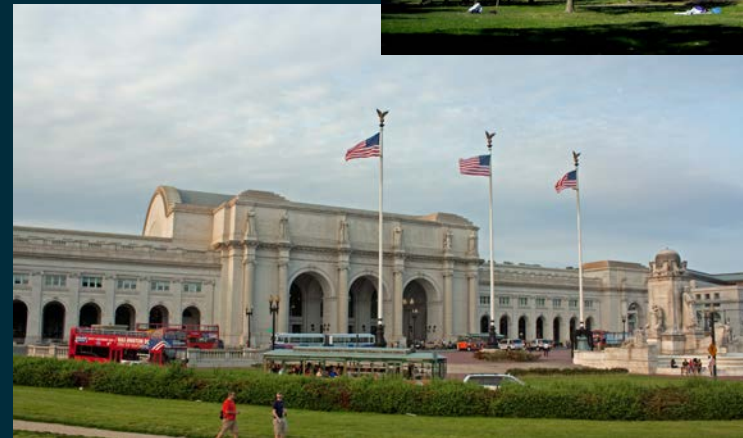
DOH Partnership with National Parks Service to abate in public parks



FY17 High Priority Areas:

- ◆ DuPont Circle
- ◆ Farragut Park
- ◆ Columbus Plaza
- ◆ Petersen House
- ◆ Murrow Park
- ◆ Freedom Plaza
- ◆ Washington Circle
- ◆ Franklin Park
- ◆ Reservations 178, 177, 177A
- ◆ Rawlins Park
- ◆ African American Civil War Memorial
- ◆ Triangle across from Murrow Park
- ◆ Triangle at 16th Street, Columbia Road, and Harvard Streets NW
- ◆ Triangle at 16th and Irving
- ◆ Triangle at 16th and Lamont Streets NW
- ◆ Triangle at 16th Street and Park Road NW
- ◆ Lincoln Park
- ◆ Stanton Park
- ◆ Folger Park
- ◆ Marion Park
- ◆ Seward Square

Agreement with NPS funds 4 pest controllers for 4 hours of overtime every Saturday



Predictive Rat Modeling

DOH, with help from OCTO and The Lab, is testing a new model that targets locations for proactive inspection, based on where Rodent Control is likely to find rat burrows.

Top predictors include:

- population density
- building age
- zoning

Validated in the field in October and November. Results will be reported next month.



Predicted Probability of Rodent Infestation



Recommendations: Abatement

◆ DOH:

- Reduce SLA for rodent abatement from 14 days to 3 days
- Consider staffing requirements to meet lower SLA, in conjunction with a pilot of private pest control companies
- Pilot use of private pest control companies for abatement; shift District worker responsibility to QA/QC, educating residents, and code enforcement
- Move to proactively abate rodents, through predictive algorithm and 'footprint' strategy
- Align enforcement efforts between DOH and DPW, including fee structure and staffing
- Modernize code enforcement and rodent control with electronic data tracking system
- Pilot the use of dry ice for rodent abatement



Categories of Trash in District

		Number in District	Pickup Responsibility & Frequency	
Residential		Residential Trash Cans	200,000 cans	DPW; Weekly/ Twice a Week
	Public		Public Litter Cans	7,056 cans
		Smart Cans	400 cans	DPW; Nightly
		Public Compactors	25 compactors	DPW; Weekly
DC BID		DC BID Trash Cans	2204 cans	BID Employees; by need up to 3-4 times/day
Commercial & Multi family residential		Commercial Trash	~13,000 commercial bldgs	Private; Varies
		Large Residence Trash (4 or more units)	~12,000 residences	Private; Varies
		Private Compactors	29 District funded compactors	Private; Varies



Improving Residential Trash Storage

DOH Pamphlet

DIEZ PAUTAS PARA CONTROLAR ROEDORES

- Mantenga su basura en envases metálicos o de plástico grueso con su respectivo tapa.
- Coloque su basura afuera poco antes de la recogida; no deje su basura en bolsa afuera toda la noche.
- Mantenga las esquinas alrededor de su casa libres de basura y los jardines podados para evitar ratones.
- Mantenga las comidas cerradas en envases de vidrio o metal con su respectivo tapa.
- No deje comida de perro afuera por mucho tiempo. Asígneles de guardarla en envase con tapa.
- Mantenga el interior y exterior de su propiedad libre de comidas, basura, y desamparados.
- Asígneles que su sótano no tenga huecos o aberturas. Las huecos se deben reparar con cemento.
- Asígneles de tener tela metálica en sus ventanas, libre de fallas, y en buena condición.
- Mantenga cerrados los puertos de alambres; use bordes móviles debajo las puertas exteriores para evitar la entrada de roedores.
- Evite la acumulación de trastos, como materiales de construcción, leña, y otra clase de trastos sobre el suelo. Si debe guardar, lo mejor es utilizar muebles de repique y dejar espacio arriba del suelo para poder mantenerlo limpio.

TEN TIPS TO RODENT ACTIVITY

- Store garbage in metal or heavy plastic containers with tight fitting lids.
- Place trash outside shortly before pickup.
- Remove weeds and debris near buildings and in yards where rats can hide easily.
- Store open food in metal or glass containers with tight fitting lids.
- Remove unsewn pet food. Store pet food in secure containers.
- Sweep up food remnants, litter and trash, both inside and outside homes and businesses.
- Inspect all interior and exterior walls for cracks where rodents could enter. Seal holes with mortar.
- Inspect all screens on windows. Replace and repair screens as necessary.
- Add metal weather stripping and trim to doors to prevent gnawing and entering underneath.
- Remove hiding places for rodents. Store materials such as lumber and boxes on a rack with a clean, open area underneath. Remove junk and unused materials.

Health Regulation and Licensing Administration
Rodent Control Division
(202) 535-1954

DOH

Excerpt from DPW Handout

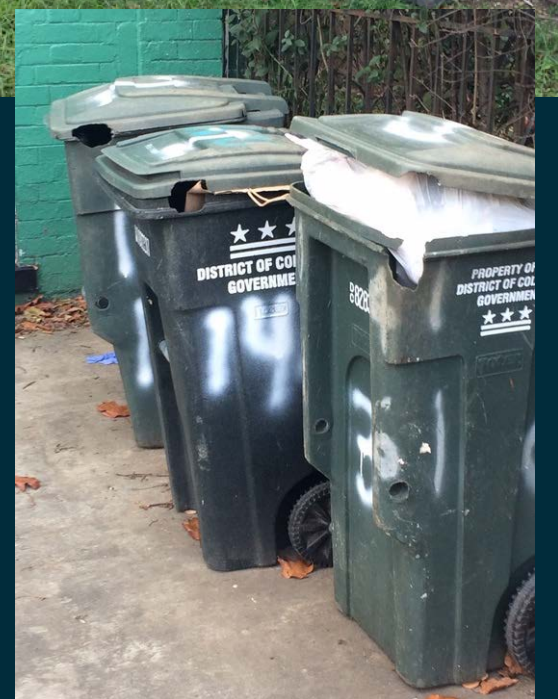
DID YOU KNOW TO:

- Put all trash in plastic bags and place them in intact trash cans with tightly fitting lids.
- Place trash and recycling out no earlier than 6:30 PM the day before your collection day(s). Return your trash and recycling cans to your property by 8 PM on your collection day.
- Prevent rats! Do not put trash out for collection in cardboard boxes, plastic bags, grocery bags or trash cans with holes or without lids. Put all trash in plastic bags and place them in intact trash cans with tightly fitting lids.
- Cut back tree limbs so they do not overhang or obstruct the free use of public space. Cut tree limbs smaller than 6" into 4' lengths and tie in small bundles. On collection day, place the bundles with your trash.
- Do not dump illegally! Call 311 to set up a bulk trash collection appointment. Place your bulk items no earlier than 6:30 PM the day before or no later than 6 AM on your appointment day.

Keep the public space near your property clean. This includes sidewalks, alleys, tree boxes, storm drains and gutters.

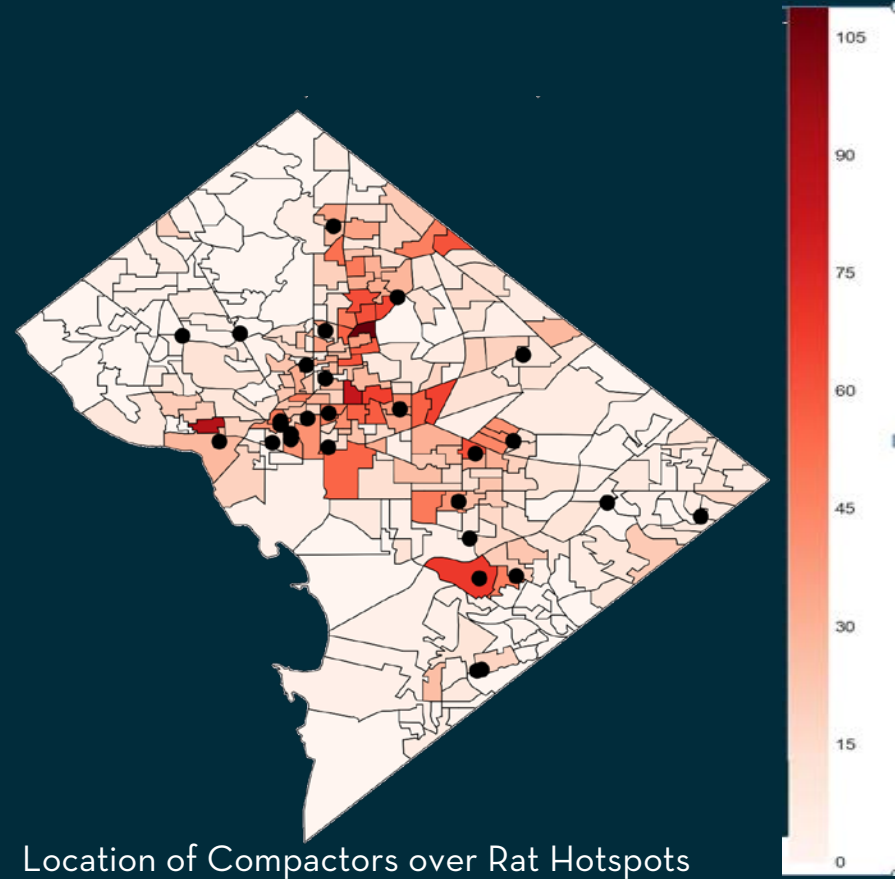
PUBLIC SPACE:

- Do not post promotional/advertising materials on trees, litter free and clear of vegetation to prevent rat harborage is the property owner's responsibility.
- Do not post promotional/advertising materials on trees, litter free and clear of vegetation to prevent rat harborage is the property owner's responsibility.
- Do not post promotional/advertising materials on trees, litter free and clear of vegetation to prevent rat harborage is the property owner's responsibility.



DPW, DOH and DSLBD partnered to pilot grants to businesses for trash compactors

- ◆ One-time funding for \$1M in FY17; \$459K was awarded
- ◆ Grant process was only 3 months
- ◆ Over 100 businesses and property owners stated interest.
- ◆ 29 eligible applications were approved. Grants covered the cost of equipment purchase, up to \$13,500 and lease, up to \$9,000.



Public Litter Cans

- ◆ Public cans are emptied nightly between 9:30 PM and 6 AM, 7 days a week
- ◆ Cans are cleaned and/or replaced on an as needed basis

Pilot projects:

- 25 Clean Cube compactors deployed across high traffic locations
- OCTO and DPW piloted smart cans with sensors to alert DPW when full
- DPW and The Lab @ DC partnership to pilot signs to reduce littering



Recommendations: Sanitation Management

◆ Mayor's Office of the Clean City:

- Develop overall sanitation strategy for the District, including residential, commercial and public litter cans
- Develop and coordinate public awareness campaign(s) at different agencies to ensure standardized messaging about proper trash storage and removal
- Consider any needed changes to sanitation regulations, including those that impact small multifamily residences and commercial businesses
- Reboot Adopt a Block program and develop anti litter program

◆ DPW:

- Work with OCTO to use rapid deployment teams to empty high usage trash cans during the day, utilizing sensor technology
- Pilot additional compactors in high traffic corridors; work with The Lab @ DC to determine locations and measure impact
- Schedule cleanings for public litter cans
- Wash down busy corridors or streets nightly/weekly
- Align enforcement efforts between DOH and DPW, including fee structure and staffing

◆ DSLBD:

- Restart grant program for compactors and continue through FY19; formally expand opportunity to property owners and multifamily properties. Partner with appropriate agencies to implement program

◆ DCRA:

- Work with The Lab @ DC to explore ways to incentivize property owners to maintain their property

◆ DOEE:

- Work with OUC to add pet waste complaints and sign requests to 311
- Streamline complaints process between agencies involved



Implementation Timeline

▪ Immediate (2 to 3 weeks)

- Pilot the use of dry ice for rodent abatement (DOH)
- Work with OCP to develop contract specifications for a private pest control company; focus on strong performance based contract w/goal of reducing SLA from 14 to 3 days (DOH)
 - Reduce SLA for rodent abatement from 14 days to 3 days
 - Begin use of private pest control companies in select areas and measure impact
 - Shift District worker responsibility to QA/QC, educating residents, and code enforcement
- Submit proposal to use rapid deployment teams to empty high usage trash cans during the day, utilizing sensor technology, including cost and timeline for implementation (DPW)
- Schedule cleanings for public litter cans (DPW)
- Wash down busy corridors or streets nightly/weekly (DPW)

▪ Within 30 days

- Submit proposal to align fee structures and staffing of code enforcement and solid waste inspectors, including timeline (DOH and DPW)
- Develop a regular replacement schedule for residential trash cans (DPW)
- Work with The Lab @ DC to submit recommendations to locations for additional compactors, including a proposed schedule for deployment and testing (DPW)



Implementation Timeline Continued

▪ **Within 30 days continued**

- Submit plan and timeline to add pet waste complaints and sign requests to 311 (DOEE and OUC)
- Develop and coordinate public awareness campaign(s) at different agencies to ensure standardized messaging about proper trash storage and removal (Clean City)
- Reboot Adopt a Block program and develop anti litter program (Clean City)
- Move to proactively abate rodents, through predictive algorithm and 'footprint' strategy (DOH)

▪ **Within 60 days**

- Work with DCHR to develop cross trained PD for rodent control and code enforcement (DOH)
- Develop overall sanitation strategy for the District, including residential, commercial and public litter cans (Clean City)
- Consider any needed changes to sanitation regulations, including those that impact small multifamily residences and commercial businesses (Clean City)
- Submit proposal to modernize code enforcement and rodent control tracking with electronic data tracking system (DOH)
- Restart grant program for compactors and continue through FY19; formally expand opportunity to multifamily properties (DSLBD)





Appendix

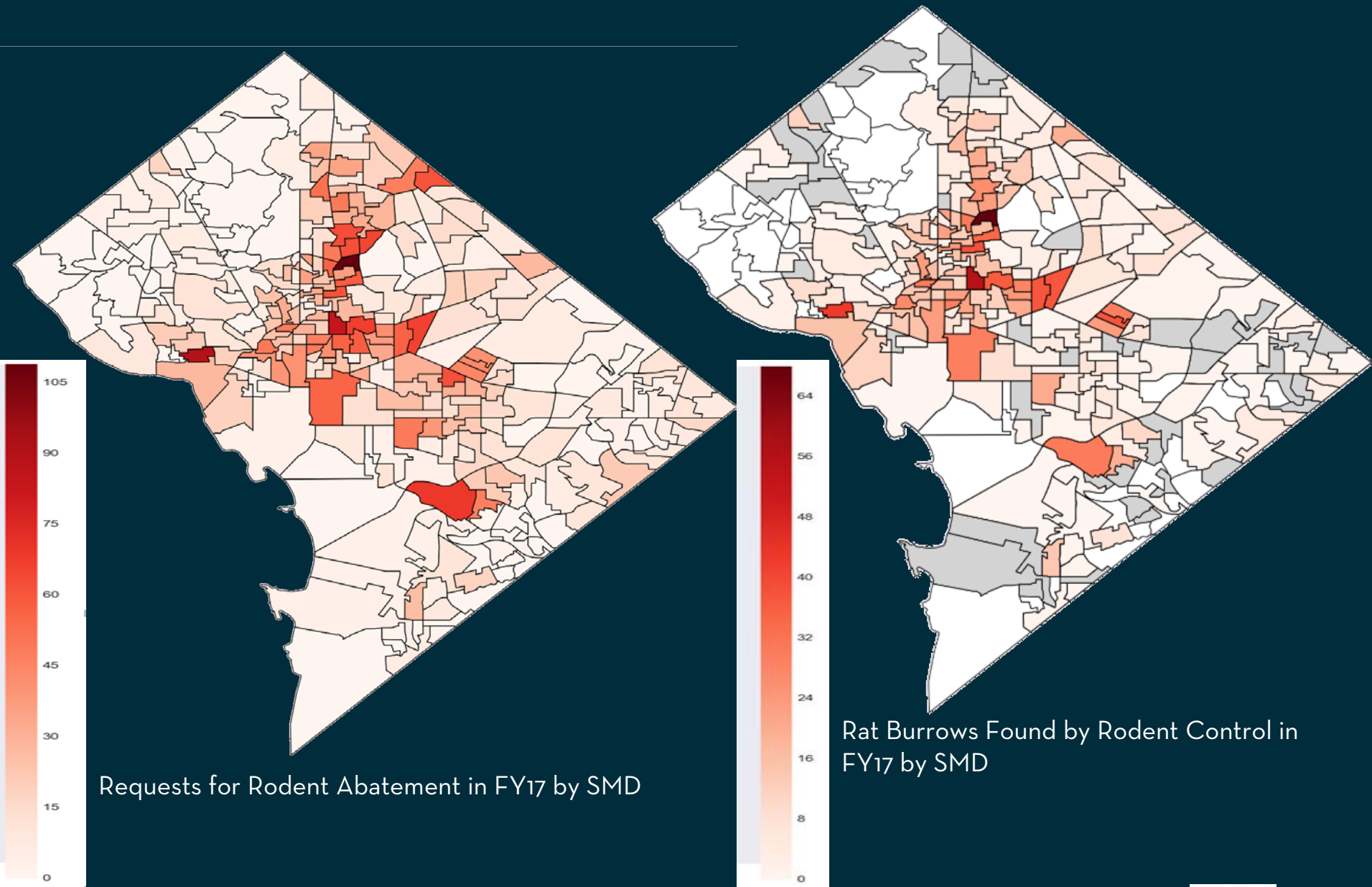


Challenges Recap

- ◆ District's sanitation response is spread across multiple agencies, not always in coordination with each other
- ◆ Small multifamily buildings are expected to manage own trash, but often don't have professional management or proper contracts for trash hauling
- ◆ DOH doesn't formally track follow up for code enforcement officers and pest controllers; data entry process needs modernization
- ◆ DOH primarily reactive to requests for rodent abatement, not proactive review of problem areas
- ◆ Rat abatement exterminators don't issue fines for trash violations; a DOH code enforcement officer must be deployed as well
- ◆ DOH code enforcement officers and DPW solid waste inspectors operate independently and are not coordinated
- ◆ Rodenticide might not be the most effective at abating rats; other options have drawbacks as well
- ◆ Public may not understand the importance of proper trash storage; connection to rat infestations may not be necessarily obvious
- ◆ Residential trash cans are not regularly replaced; residents must request and pay for a replacement
- ◆ Public cans emptied nightly; sometimes fill up before they can be emptied
- ◆ Cost of trash can upgrades can be significant - compactors cost \$3,385; sensors cost \$240 per unit with a \$60 annual fee - with unclear outcomes for reducing rodents.
- ◆ Short time frame to disseminate grants for compactors to businesses; only 50% of the funding was expended this year
- ◆ Compactor grant funds only legislated for businesses. However, property owners receive DOH citations and residential properties in mixed-use corridors would be interested as well.



46.1% of 311 service requests lead to treatment of rat burrows by Rodent Control in FY17;



Requests for Rodent Abatement in FY17 by SMD

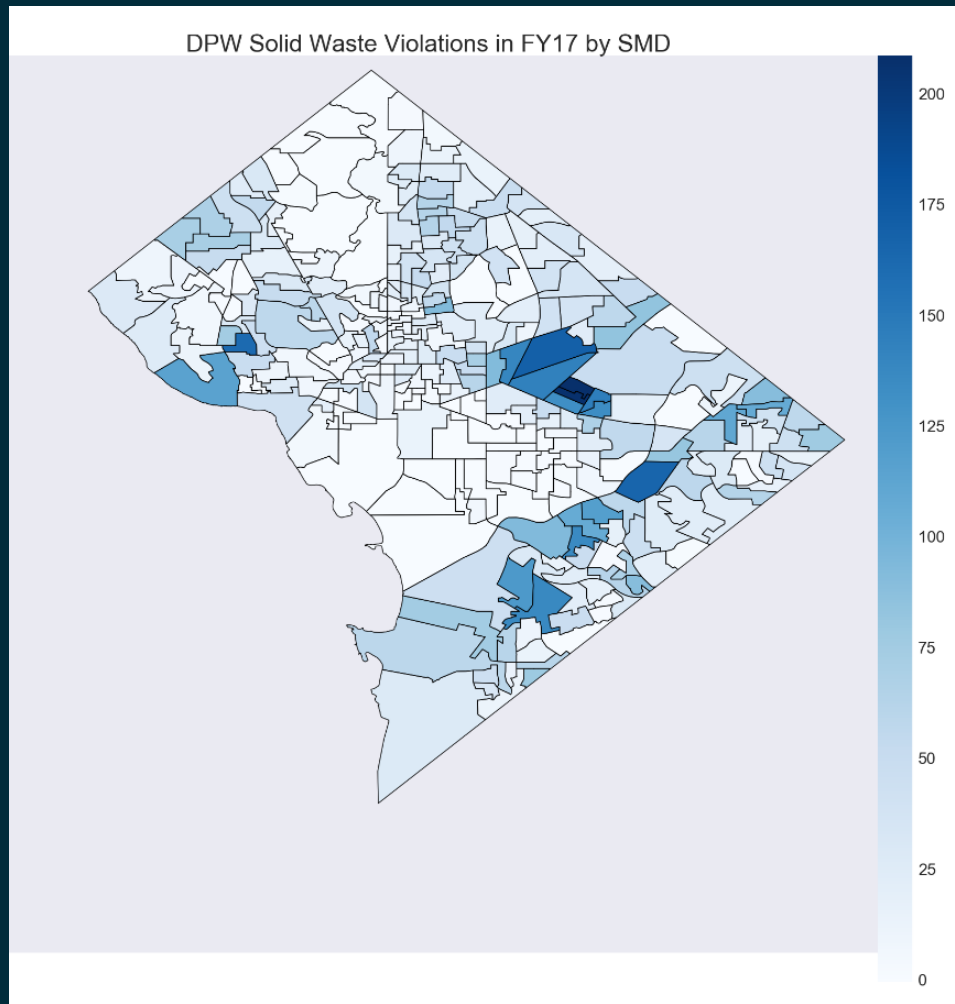
Rat Burrows Found by Rodent Control in FY17 by SMD



Abatement

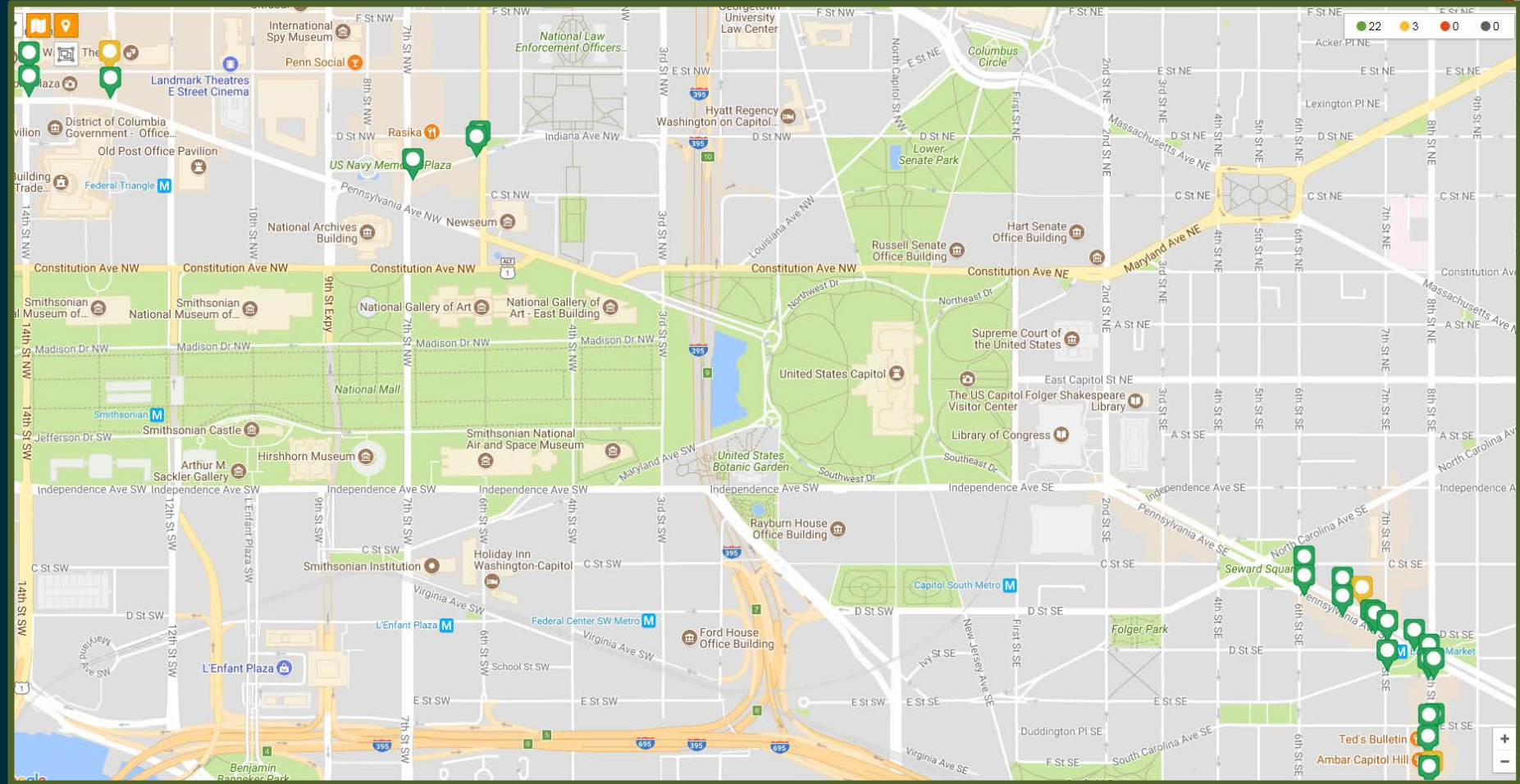
Office of Budget and Performance Management





Map view of DPW's solid waste violations for FY17





25 Trash Compactors have been deployed across the District



DPW and OCTO piloting sensors on trash cans that indicate when full

- ◆ Data is in the early stages of analysis
- ◆ Concerns about DPW's ability to rapidly respond to a full can
- ◆ In addition to abatement, potential benefits include more efficient and timely routing of trucks and crews and validation of sanitation work completed
- ◆ Questions of scalability and cost

