**GOVERNMENT OF THE DISTRICT OF COLUMBIA**

**Department of Public Works**



Fiscal Year 2021-2022 Performance Oversight Testimony of

Michael A. Carter

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Before the

Committee on Transportation and the Environment

Mary Cheh, Chairperson

Council of the District of Columbia

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# Introduction

Good afternoon, Chairperson Cheh, members of the Committee on Transportation and the Environment, and staff. I am Michael Carter, Interim Director of the Department of Public Works (DPW). I am joined today by Camille Glover, Deputy General Counsel; Perry Fitzpatrick, Agency Fiscal Officer; and Blake Adams, Manager of the Office of Waste Diversion.

First, I want to thank Mayor Bowser for the confidence shown in me by naming me Interim Director, and I also appreciate the support of City Administrator Kevin Donahue and Deputy Mayor for Operations and Infrastructure Lucinda Babers for our agency’s work.

My testimony will address our FY 2021 accomplishments and challenges, as well as what we have faced so far in FY 2022, including this winter’s multiple snow events.

First, I want to illustrate why DPW is the go-to agency when the need is urgent. Last year Mayor Bowser created the historic Building Blocks DC (BBDC) program. This first-in-the-nation, public health, wrap-around program takes on the escalating crisis of gun violence. As a second chance employer for many years, DPW is uniquely positioned to support this initiative. And we did just that.

BBDC participants, also known as “promise people”, work in a variety of solid waste collections services. Currently, they are being evaluated for conversion to 13-month term employees. With the assurance of continued employment for the successful participants, we hope to see a positive outcome ripple across multiple communities and generations.

We often say DPW provides the services residents, businesses, visitors and commuters use the most. This is an example of one more service we provide – to make a way for those who most need a chance to prove their capabilities.

Now I will describe our other FY 2021 and FY 2022 accomplishments and challenges.

**FY 2021 Accomplishments and Challenges**

*COVID-19 Challenges Prompted Unforeseen Accomplishments*

In FY 2021, COVID-19 prevailed as the all-encompassing challenge we first encountered in FY 2020. When Mayor Bowser created the COVID-19 Government Operations Task Force, several DPW employees joined the task force well into FY 2021. When the Omicron variant struck in FY 2022, the task force was reinstated and, once again, DPW employees were asked to serve.

Our Safety & Security Administration (SSA) Logistics Team is at the heart of our COVID-19-related work. For example, between December 2021 and January 2022, we delivered 80,000 test kits to schools. In the first quarter of FY 2022, the team assembled 223,000 test kits, and assembled another 51,000 last month. In FY 2021, this same team made 712 personal protective equipment (PPE) deliveries, 10,000 test kit deliveries and 11,000 vaccination deliveries.

COVID-19’s impact on our operations and administrative functions endures today. As a result, we have found ways to protect our employees while continuing to deliver the most fundamental municipal services that contribute to the District’s overall health and safety.

For instance, we acquired a disinfectant apparatus to clean DPW worksites where COVID-19 exposures had occurred. We trained staff in its use, thus saving contract expenses. We first used similar equipment in FY 2020 to disinfect our vehicles between uses. This contributed to a safer work environment for sanitation, parking enforcement, and fleet management drivers and their crews.

We also continue to implement our social distancing and hand washing practices. Later in my testimony, I will present more detailed information about the FY 2022 snow season, but I want to note that we continue to stagger our deployment times to reduce the number of people assembled in our yards at one time. Additionally, we provide PPE to all Snow Team members.

COVID-19 revealed the resiliency of our parking enforcement operation. Throughout the pandemic, we continued to vigorously enforce safety-related violations, such as blocking a bus stop, crosswalk or fire hydrant, even as we discontinued enforcing expired meters, residential permit parking and rush hour. However, we increased our enforcement activities at The Wharf and other sites where high visibility congestion and safety hazards were present. We also supported the District Department of Transportation’s (DDOT’s) resurfacing operations by towing vehicles to prevent them from halting this vital work. At the Blue Plains Impoundment Lot, we pivoted away from auctioning vehicles to disposing of salvage vehicles 10 years or older in order to make more spots available on the lot. This contributed to a 91% drop in auctions in FY 2021. We are increasing these auctions in FY 2022 as we see the positive effects of COVID-19 recovery efforts.

The reality of decreased traffic in FY 2021 led to a decreased need for enforcement. That allowed our parking officers to contribute to residents by staffing COVID testing sites at three separate locations until the sites were closed in late 2021. They also assisted with parking enforcement at polling locations throughout the District and were route monitors for the leaf collection program.

The new “working from home” lifestyle also affected our solid waste operations. We suspended residential mechanical street sweeping and its companion parking enforcement operation. Suspending mechanical street sweeping reduced our debris tonnages; however, in FY 2021, we observed a substantial increase (15,220 tons in FY 2021 vs. 6,377 tons in FY 2020) in debris tonnage collected over FY 2020 once street sweeping resumed in June 2021.

In addition, we believe COVID-19 and its effect on the economy and business community contributed to reduced solid waste tonnage brought to the transfer stations by private haulers, along with an increased tipping fee for trash that rose to $70.62 per ton and the Benning Road closures that led haulers to choose alternate sites.

Residents’ staying at home in larger numbers also contributed to a 14.3% increase in bulk collections. In FY 2020, there were 62,035 bulk requests, while in FY 2021 there were 70,947 bulk requests.

I want to applaud our staff for their many contributions to the District. At last May’s Employees Appreciation Ceremony, Mayor Bowser recognized DPW employees’ service, valor and heroism. Examples cited included maintaining scheduled services under challenging circumstances; creating the iconic, and now historic, Black Lives Matter mural; and supporting our civic institutions of elections and the presidential inauguration. These employees’ performance during the pandemic shows just how valuable their work is to ensure the vitality of the District.

**How Technology and Analysis Will Drive Future Accomplishments**

Becoming more technology-centric is the key to realizing greater efficiency, improving quality control, and nurturing a more fulfilled workforce. By putting in the effort on the front end, we will reap benefits on the back end.

DPW is leveraging Information Technology to support existing business operations and launch new initiatives. Introducing effective technical solutions for long-standing manual processes and empowering staff to use these tools will enhance their day-to-day experiences.

Using technology wisely must include evaluating its effectiveness. With the implementation of new technology, DPW is simultaneously measuring progress to determine if the technology improves our performance in alignment with workload measures. We are introducing technology to achieve greater productivity and efficiency.

Our Solid Waste Collections Division is an example of how technology can improve our work experience. We collect trash and recycling from 105,000 households each week. Trash collection is a complex balance of people, equipment, supplies, logistics, traffic flow, road conditions, and weather. These factors come into play to meet our goals of collecting waste and recycling on time. Not even the pandemic stopped us from achieving a 98% and 99% completion of recycling and trash collections.

*Cloud-based Solid Waste Management Platform*

Recently, we introduced a cloud-based Solid Waste Management platform to optimize, analyze, and streamline waste operations. This platform allows us to monitor and observe trash and recycling routes in real-time, identify exceptions at the curb, and perform waste audits to educate residents on the proper disposal of their household waste.

As I stated earlier, our residential trash and recycling track records are excellent; however, there are instances when we miss a bin, and the resident lets us know. The photographs produced by this tool can differentiate which residences are missed from those with no materials set out in time for collection.

We also can use this tool to better educate residents about their role in ensuring on-time collections. That includes knowing when they need to put out their trash and recyclables, and return the empty containers to their property. This is especially important as our population grows, to ensure we prevent trash pile ups and blocked streets. With this technology, we will be able to better pinpoint where we need to conduct more targeted community outreach and educational campaigns through social media.

So far, we have outfitted 65 vehicles with enhanced Internet of Things, or IoT, technology that has increased our situational awareness for trash and recycling routes. We are using a combination of Automatic Vehicle Location (AVL), in-cab imaging, and mobile devices to capture data as our vehicles travel through the city.

Our goal for FY 2022 is to optimize our Collections Division’s operations using the Solid Waste Management System. The combination of AVL, imaging, and mobile devices allows for more data-driven decision-making and better use of resources across this division.

*Thermal Cameras in Use at the Fort Totten Transfer Station*

In FY 2021, we installed 13 IP-based thermal cameras inside the Fort Totten Transfer Station. The cameras are an insurance policy that supports improvements in disposal operations. Each camera monitors a designated space on the tipping floor for elevated heat signatures. The camera system alerts staff members who monitor the system for all heat-related events, including mixed-refuge piles and overheating vehicles. This system allows for analysis using detailed reports generated on-demand.

*Other Technology Enhancements*

While I spoke at length about what we are doing to expand technology in our solid waste operations, we are doing the same throughout DPW.

In FY 2022, we will install License Plate Recognition System (LPRS) to capture information regarding all vehicles entering our transfer station scales. This data is vital information to pinpoint drop-off of hazardous waste and reduce security incidents at the sites. The project is on schedule to be completed by the end of the fiscal year.

Our Contact Centers have fully migrated to a cloud-based, omnichannel call center solution to streamline contact flows and enable staff to accept calls from off-site locations. This enhances our COVID-19 response posture.

*311 Service Requests*

DPW is evaluating workflows for 311 service requests to improve end-to-end verification, service delivery, and the service request resolution process. We understand the needs of our residents and will be laser-focused on meeting service request-related Key Performance Indicators (KPIs).

*Parking Enforcement Leads DPW in Technology Use*

Our Parking Enforcement Management Administration’s (PEMA’s) use of technology took off more than 20 years ago when handhelds, followed by LPRS devices, were introduced. Here are some of their more recent advances.

* The Abandoned Vehicle Investigation Module in the Officer Command Center (OCC) allows Abandoned Vehicle Investigators to perform their daily tasks via a mobile device in real-time. This represents a transition from paper to an electronic reporting system, thus making the investigative process more efficient and streamlining the complaint resolution process.
* The Parking 311 Request Module in OCC allows employees to receive and close out 311 service requests via a mobile device.
* The Towing Control Application allows tow truck drivers to receive work requests via their mobile device and enables supervisors to manage and dispatch service requests to the field via the OCC back office. Also, managers can track drivers’ locations using a real-time mapping module. The effect is to have illegally parked vehicles removed more quickly, thus improving traffic flow.
* The Dispatch and Lot Management System (DLMS) provides a technical platform for PEMA’s Blue Plains Impoundment Lot staff to effectively manage their operations, and to smoothly facilitate the needs for the critical towing processes.

At the beginning of FY 2022, PEMA introduced a pilot program, a rapid response team, to respond to the top parking-related services requests that had been received by the Metropolitan Police Department (MPD). The goal is to act on the request within an hour of it being received, rather than within 24 hours, which had been the previous response time. Since October 2021, PEMA has achieved a 40% rate for responding within one hour of receiving a service request. That rate increases to 63% for responding within two hours or less.

*Enhanced Technology Introduced in the Snow Program*

DPW leads the District Snow Team and, every year, our IT staff introduces new technologies as they upgrade existing ones. We are testing imaging technology in our snow vehicles to transmit real-time photos of street conditions during events. We can use this data to monitor drivers' performance closely to identify when streets are passable for motorists to drive throughout the city.

Our use of technology prompts more data-driven decisions during real-world weather events.

**Fleet Continues to Push the Technology Envelope**

*Expanding the Use of Electric Vehicles and the Installation of Charging Stations*

The District is a leader in the use of alternative fuel vehicles, and we are expanding our electric vehicle (EV) fleet, along with the charging stations necessary to support them. This year we are making these charging stations available to the public.

DPW’s fleet is known for its heavy vehicles, and we are researching vendors that have 100% electric equipment. For instance, we found a vendor that offers 100% electric sweepers and another that offers 100% electric trash trucks.

Another goal is further diversifying our fleet of electric vehicles. When an agency requests a vehicle, our policy is to offer an EV within the requested class.

We are also pursuing options to lease electric vehicles to further increase our EV fleet, and are working with the Office of Contracting and Procurement to explore our options.

DPW continues to embrace transportation electrification by installing 99 electric charging stations throughout the District of Columbia in FY 2021. Also, 30 packers run on 100% biodiesel, enabling our fleet to transition to fuels that reduce greenhouse emissions while continuing to use our existing diesel infrastructure. As I stated previously, we are also researching vendors that have 100% electric equipment, and we have identified a vendor that offers 100% electric sweepers.

*Applying Technology to Our Safety and Human Capital Programs*

Technology is part of our safety program, which has begun using the Office of Risk Management’s eRisk program for accident and crash reporting, driver authorizations, and workers compensation reporting. We also have installed 12 Automated External Defibrillators (AEDs) at DPW facilities, which enables us to participate in the Mayor/FEMS PAD (public access defibrillator) Program. The program shares information on the location of the AEDs via the nationwide app called Pulse Point. Fortunately, we have not needed to use any of these units.

Technology also plays a new role in our Human Capital Administration. When the Safety Unit upgraded its policies and procedures to acknowledge the transition to electronic processes, these documents were stored in DPW’s HR Corner, an online depository of policies and procedures. This ensured easy access for DPW employees.

**Strengthening Our Commitment to Achieving Zero Waste**

*New Multi-Family Zero Waste Program Started in September*

To support the fast-growing multi-family sector’s ability to recycle successfully, we introduced a robust toolkit to help apartment buildings, condominiums, and cooperatives deliver recycling programs to the more than 400,000 residents who live in these buildings. The District’s ambitious zero waste goal of 80% diversion by 2032 will be reached when residents and businesses recycle more, and recycle more efficiently. Providing additional support to the multi-family sector will bring us closer to the win.

*Conducted the District’s Largest Recycling Campaign Ever*

A campaign was implemented between March and September 2021 to educate residents on the *Do Not Bag Recyclables* program while encouraging their participation. The campaign had a dual thrust: digital, print, mail, and billboard communications; and the *Feet on the Street* curbside recycling tagging campaign.

During the campaign, all 105,000 households that receive DPW collection services were mailed a descriptive postcard with best practices for recycling and how to prevent contamination from entering their blue bin. On two different occasions, we provided personalized recycling education and outreach to more than 20,000 DPW-serviced households. The results of this work, paired with operational improvements at Fort Totten Transfer Station, prompted an 11% recycling contamination rate, the lowest rate ever observed.

*Planning to Begin on Zero Waste DC Plan*

DPW will conduct a year-long citywide planning cycle to develop the city’s Zero Waste DC Plan. DPW staff, alongside the Interagency Waste Reduction Working Group, will engage residents, businesses, and government officials to establish a series of actions, targets, and goals that will allow the city to achieve 80% waste diversion from landfill and incineration. No prior waste diversion project to date can compete with this plan’s potential impact.

*Other Recent Initiatives*

Last summer, we successfully launched our new residential curbside yard waste composting collection program that uses the appointment system introduced to the bulk collection program. Since then, we have received almost 5,400 service requests to remove yard waste. As a result, more than 136 tons of yard waste have been diverted from landfills and recycled.

DPW’s curbside yard waste composting program empowers residents to divert yard waste from landfills and is essential for any jurisdiction to reach high levels of waste diversion.

**Snow FY 2022 vs. Snow FY 2021 and FY 2020**

In FY 2020, 0.6 inches of snow fell in the District. Almost ten times that amount, 5.4 inches, fell last year, but this was still not a lot of snow. In January 2022, we received more than 12 inches of snow, and the season is not over yet. We have met our performance standards for making the streets passable following the end of each snowfall this season. Fortunately, none of our snow events this year has required activating our surge response to engage additional contract resources when accumulation is predicted to reach 18 inches or more of snow.

We also conducted our initial phase of the calcium magnesium acetate (CMA) pilot test. In FY 2021, DPW and the Department of Energy and the Environment (DOEE) met monthly to prepare for the implementation of the Salt Reduction Pilot in FY 22. On Friday, January 14th, the District Snow Team successfully ran the pilot, applying rock salt, liquid brine, and CMA in varying amounts across six snow routes in the District. DPW and DOEE are evaluating the final results of the first pilot event while preparing to turn around operations for additional pilot "runs" during the remainder of the season.

**Conclusion**

Thank you, Chairperson Cheh, for this opportunity to testify about DPW’s performance in FY 2021 and FY 2022 to date, and for your support of our agency. We will continue to meet our stakeholders’ needs for routine services, as well as those related to the pandemic, weather, emergencies, and special events. Additionally, we will continue to introduce mechanisms to exceed our stakeholders’ expectations.

I am happy to answer any questions you may have.