Government of the District of Columbia



DC Department of Public Works

Testimony of

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Director

Public Oversight Roundtable on District Snow Removal Operations Plan

Committee on Transportation and the Environment

Councilmember Mary M. Cheh, Chairperson

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Introduction

Good morning, Chairperson Cheh and members and staff of the Committee on Transportation and the Environment. I am Christopher Shorter, Director of the Department of Public Works. I appreciate the opportunity to appear before you today to provide testimony on behalf of the DC Snow Team regarding the District's 2017 Winter Preparedness Plan. I am joined today by James Jackson, DPW Deputy Director and Citywide Program Manager for Snow Operations and Perry Fitzpatrick, Agency Fiscal Officer.

I would like to start by thanking and acknowledging the Mayor and the City Administrator for their leadership and continued support. Their ongoing guidance throughout the planning and preparedness process have played an especially important role in ensuring we have the people, resources and equipment needed to appropriately respond this winter season.

I would also like to take a moment to thank you and the members of the Committee on Transportation and the Environment for the opportunity to testify on behalf of the DC Snow Team this morning.

Directors Dormsjo, Gillis and I, along with the staff within the Department of Public Works, District Department of Transportation, the Department General Services and other support agencies, have used the off-season to take a comprehensive look at our planning and operations for this year's snow and inclement weather season.

As you know, the Snow Team integrates multiple DC government agencies to share a single purpose: ensuring the District is safe to navigate after the end of a snow storm and resuming normal government service and business commerce in an efficient, environmentally sustainable and safe manner.

2015-16 Winter Season Recap

The 2016 winter weather season is remembered for the District's unprecedented response to a historic 28-inch snow event. On January 22nd, the record setting snow began falling and continued for 3 days resulting in a State of Emergency declaration.

I am proud to share the following points as evidence of the District's success:

- The Snow Team cleared snow and ice from 1,100 miles of roadways and 241 bridges, including the 75-mile National Highway System.
- The District's roads were cleared within 48 hours of the end of the snowfall and we reopened government agencies 48 hours after the end of the snowfall.
- District schools reopened on Wednesday, January 27th, two days earlier than neighboring jurisdictions. The District opened 10 schools on Monday, January 25th to provide emergency food to students and families.
- And I'm particularly proud to say, that DPW resumed trash and recycling collection four days after the end of the snow fall, much faster than in previous years.

Lessons Learned

As has been widely reported, this past season brought one of the largest snowstorms in the District's history. The storm demanded a an unprecedented response to restore the District government back to normal operation. That said, we experienced challenges and have worked diligently over this past year to evaluate our performance to prepare for this upcoming winter season.

Like in previous years, the DC Snow Team conducted an after-action review with key members of the operations team and support agencies to review what went well, what went as expected and what needed to be evaluated for improvement in the snow program.

The expanded snow team includes the Homeland Security and Emergency Management Agency, the Metropolitan Police Department, DC Water and the Office of the State Superintendent of Education Division of Student Transportation.

The Winter Maintenance Plan reflects months of evaluating the previous year's performance, after action recommendations from the community partners, government partners and the Executive Office of the Mayor. We are analyzing

options to improve performance during the upcoming snow season to make decisions about personnel deployment, equipment and other purchases, and overall system-wide management.

2017 Winter Maintenance Plan Features

With this information, we worked collaboratively over the past year to better understand and improve our Winter Maintenance Plan for the 2017 Snow Season which I will outline this morning.

Key improvements for the 2017 Winter Maintenance Plan include:

- **Staffing** New staffing plan with clear delineated roles and responsibilities to better support the snow field operations.
- **Training** Expanded training curriculum for administrative functions and field operations.
- Administrative Support Strengthened capacity in our quality assurance and quality control processes, contractor oversight, finance and administrative controls, and performance management.
- Upgraded AVL System Upgraded Automated Vehicle Location (AVL) system available in both municipal and contracted vehicles to better track the status of road conditions.

Snow Operations and Deployment

As you know, the Winter Maintenance Plan divides the District into 14 overall geographical zones that includes 71 primary and secondary road routes and 82 residential routes for snow and ice removal.

During a snow event, we deploy 6- and 10-wheel dump trucks with plows and salt spreaders along these routes. We call them heavy plows. Our light plows are deployed along the 82 residential routes, which are smaller streets. When the heavy plows finish their routes, we re-deploy them to support the light plows working on the residential routes.

The District has 447 pieces of equipment that can be deployed in a snow and ice event. We significantly increased our contracted services to ensure additional resources can be used in a large-scale or impactful snow or ice event.

The District has three basic mobilization plans for snow events that may range in severity from a dusting to a full-blown blizzard:

- 1. **Full Deployment** for snow coverage of ½ inch to 6 inches and deployment above 6 inches.
- 2. Partial Deployment for a dusting of snow.
- 3. **Prowl Deployment** for bridges and overpasses.

The current status of our equipment readiness is as follows:

- 834 District Snow Team Personnel;
- 183 Heavy Plows;
- 180 Light Plow Pick Ups;
- 18 Front-End Loaders;
- 41 Bobcats and Skidsteers;
- 3 Skidsteer Trailers
- 240 Portable AVL systems;
- 12 Liquid Dispensing Trucks;
- 10 New Liquid Dispensing Gators with Plows and Spreaders;
- 30,000 tons of salt held in reserve, and;
- 6,000 tons of beet juice and 29,000 tons of brine hot mix.

Additional factors we consider when responding to snow events are service delivery and safety for the residents, businesses, commuters and visitors of the District of Columbia.

We also will use the Road Weather Information System (RWIS) for air and pavement temperatures as well as other weather data. Through the Regional Integrated Transportation Information System (RITIS), we have access to regional traffic monitoring, construction and real-time incident reporting that affects traffic.

Environmental Considerations

Additionally, this season we identified potential snow storage sites in each quadrant of the District in partnership with the Deputy Mayor for Planning & Economic Development's office and Department of Energy and Environment (DOEE) to improve environmental controls.

The selected sites are being evaluated by DOEE to ensure each site is a half-acre, has the capacity for storm water control measures, presents limited traffic and safety concerns, and lie within the combined sewer system.

Staffing

I stated earlier that we developed a new staffing plan to clarify roles and responsibilities. This new staffing plan outlines clearly delineated assigned roles and responsibilities to allow for increased oversight and control of the Winter Maintenance and snow response operation.

The organizational chart breaks out roles and responsibilities within 5 sections including incident command, planning, finance, logistics, and snow operations.

Beginning this year, at least two personnel within each section are trained to serve in 12-hour A and B shifts. The shift rotation allows for personnel to alternate roles and responsibilities as needed for the full length of the snow event or emergency.

Training

As you all are aware, our success largely is dependent on our team's ability and knowledge to complete their job. Therefore, we expanded our training curriculum this past year to ensure all agencies understand expectations and their assigned role within the updated Winter Maintenance Plan.

To that end, we also conduct hours of classroom and road course training for drivers and other personnel, including staff assigned in the areas of snow command, safety, planning, logistics and finance and administration.

We attend monthly meetings with regional partners, including Metropolitan Area Transportation Coordination (MATOC) Program, which includes the Virginia Department of Transportation (VDOT), the Maryland State Highway Administration (SHA) and local surrounding counties.

Furthermore, we facilitate weekend trainings at Okie Street and St. Elizabeth's for our light and heavy plow drivers. These trainings include simulated streets with parked vehicles and sand to simulate snow removal. To date, 300 employees

have completed this training and we are on target to have all vehicle operators trained by December 2nd.

This past Friday, 150 DC Snow Team leaders were trained at Gallaudet University on snow and ice response through real-world scenarios.

The training curriculum culminates with the annual "Dry Run," which is scheduled for this Friday, October 28th. All personnel involved in the District's snow response will participate in this final dress rehearsal in preparation for the winter season.

Quality Assurance and Quality Control

The DC Snow Team has also enhanced the quality assurance/quality control team and system called QA/QC to provide real time eyes on reports of current road conditions. The QA/QC 2-person team will report on the snow zone coverage and completion by all plows and the quality of the condition of the road. Most importantly, the QA/QC teams will provide real-time verification of the data populated by the AVL map.

Upgraded Automated Vehicle Location System

The District was among the first jurisdictions to use automated vehicle locator technology on our snow equipment, yet our system sorely needed to be updated. This year we upgraded our AVL system to increase functionality and reliability allowing us to provide timely tracking on the status of road conditions.

The upgraded AVL system will provide us with key information, including where our vehicles are located in the city; plows in service and their road route location; plowed streets; plow speeds and whether plows are dispensing salt. The information is then instantly populated in an internal AVL map in our Snow Command Center.

Unlike previous years, this year both contracted vehicles and District-owned vehicles will be equipped with the new Automated Vehicle Location (AVL) system to ensure we are receiving the most accurate picture of road conditions before, during and after winter storms.

We will also host a public facing map using the same AVL technology on snow.dc.gov to provide residents with the latest information during a snow event.

What We Need Residents and Others to Do

District of Columbia residents, visitors and business owners play a very important role in our response to a snow event.

We are also asking property owners – residential and commercial – to clear their sidewalks within 24 hours after a storm ends. Walking is the primary means of transportation for our children making their way to school, and many adults prefer walking to work and other activities rather than driving.

When a snow storm is underway, go to **snow.dc.gov** to see where the plows are working. Residents will also find safety tips for pedestrians, motorists and cyclists.

The site also explains what happens when a snow emergency is declared and lists the snow emergency routes where parking is prohibited.

Conclusion

Again, I thank you for the opportunity to provide the Committee with testimony on behalf of the DC Snow Team. I want to thank the DPW team as well as our partners in other District agencies for the work completed during the off-season to prepare the 2017 Winter Maintenance Operation for this year's winter season.

This concludes my testimony and I am happy to respond to questions.