Snow Briefing

Winter Season Readiness — Town of Herndon

Department of Public Works & Utilities

Prepared for the Town Council | 2026–2027 Season

LIVE DIFFERENTLY. | Town of Herndon Virginia

Winter Operations

Equipment, staffing, and response priorities for the 2026–2027 season

WINTER OPERATIONS

Snow Fighting Equipment

Snow vehicles planned — 2026–2027 season

TOWN FLEET

2	10-Wheel Dump Trucks
3	6-Wheel Dump Trucks
9	1-Ton Dump Trucks
3	Medium Duty Pickups
1	Loader
1	Backhoe
4	Bobcats
1	Tractor

CONTRACTOR SUPPORT

3	6-Wheel Truck w/ plow & sander
1	Rubber Tire Loader
1	Backhoe
3	Skid Steer/Bobcats
4	ATV/UTV w/ 4’ plow
10	Medium Duty Pickups
6	Blowers

TOTAL AVAILABLE

52

pieces of equipment

24 Town + 28 Contractor

Personnel

Public Works & Utilities - Operations	
Snowplow Operators (CDL)	**37**
Snowplow Operators (Non-CDL)	**5**
Route Inspector	**4**
Administration/Operations	**2**
Equipment Maintenance (Mechanics)	**4**
Command Staff	**4**
Sidewalk Crew (Grounds, Refuse, Facilities)	**20**
Total	**76**

Partner / Mutual Aid Support	
Additional Snowplow Operators (CDL) – Contractor	**3**
Additional Snowplow Operators (Non-CDL) – Contractor	**10**
Sidewalk Crew	**20**
Public Information (Town PIO & HPD PIO)	**2**
Total	**35**

Roadway Clearing Conditions

How field crews classify roadway conditions during snow response

PASSABLE

Conditions which would allow a passenger vehicle to negotiate the travel path using reasonable care. This usually means that the roadway is snow and/or ice covered and reasonably level, with minimum rutting.

BARE PAVEMENT

Conditions in which 75% or more of the travel land surface shows. (Bare pavement may include isolated patches of compacted snow/ice of 1" or less.)

COMPLETED

Conditions which provide bare pavement for all travel and turning lanes, including paved shoulders (where applicable).



Service Priority

1. Pretreat primary and collector and cold spot roads prior to snow event
2. Plow and treat primary and collector roads during snowfall
3. Move to plow and treat residential roadways after snowfall ends
4. Cul-de-sacs and dead-end roadways
5. Clear all roadways to “Completed” condition

12-HOUR SHIFTS / 24 HOURS A DAY

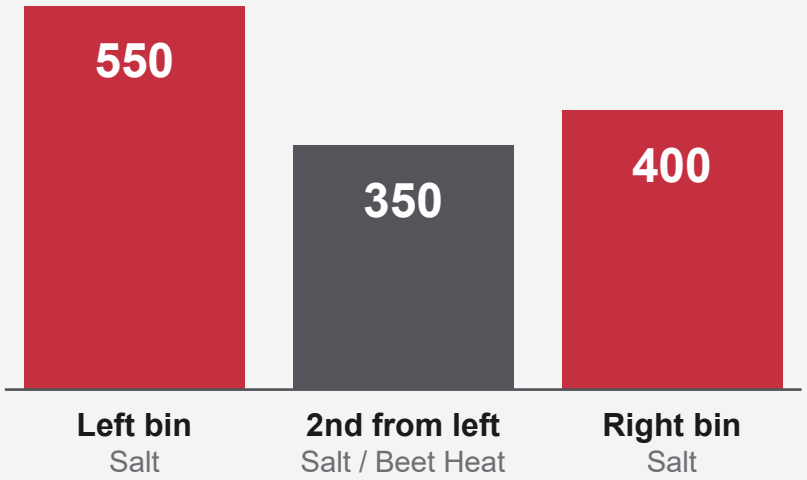
WINTER OPERATIONS

Salt Storage & Roadway Pretreatment

Materials on hand and liquid treatment capacity — 2026–2027 season

SALT IN STORAGE (TONS)

1,300 tons on hand



LIQUID STORAGE

Above-ground tanks (gallons)

4,500	Brine
4,500	Brine / Beet Heat
4,500	Calcium Chloride
13,500	**Total liquid storage**

Town-owned brine machine
Brine is produced in-house

PRETREATMENT

Liquids are used to:

1. **Pretreat roads**
   Brine or Beet Heat before the event
2. **Pre-wet salt**
   Treated before loading onto trucks
3. **Treat on the truck**
   From truck tanks / saddle bags

Material use per storm varies with temperature, timing, and precipitation type. During Winter Storm Fern, crews relied mainly on the pretreated salt / Beet Heat mix as temperatures fell; once ice set up, material had limited effect.

Communicating Road Conditions

1

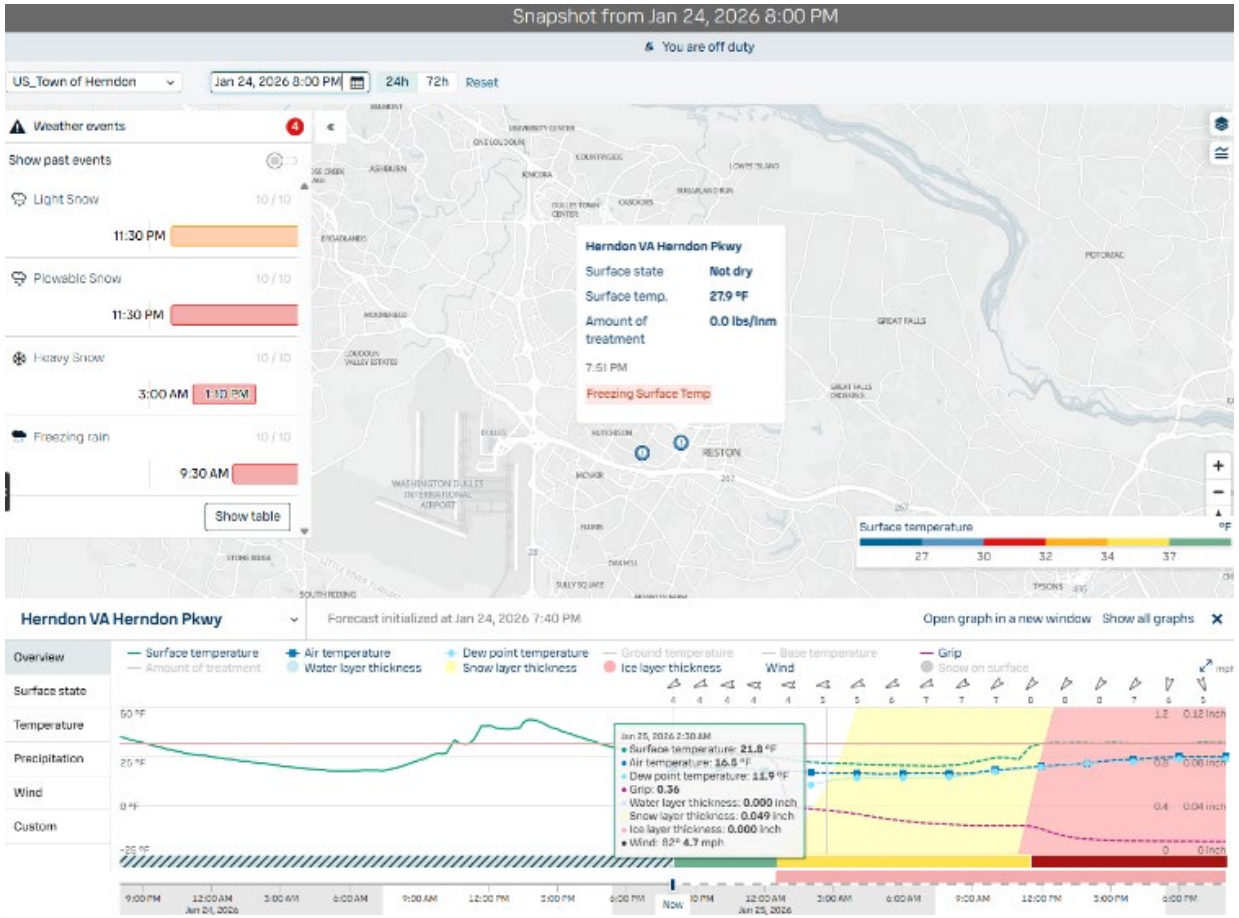
Field crews report in

Crews report road conditions to the command center twice per operational period, based on driver and inspector input. Operations team utilizes various resources along with inspections.

- Roadway sensors show temperature, surface coverage, forecasts of temperatures and precipitation
  - 5 on Town Roads
    - Herndon Parkway at Bayshire Ln
    - Herndon Parkway at Grant St
    - Lynn St at Station St
    - 397 Herndon Parkway
    - Van Buren St at Haley Smith Park
  - 5 Regional Sensors
    - Frederick, MD
    - Purcellville, VA
    - Culpeper, VA
    - Marshall, VA
    - Occoquan, VA
- Weather forecasting
  - Norcast provides specific forecasting for Herndon
  - NOAA and Meteorologists to gather general area forecasts

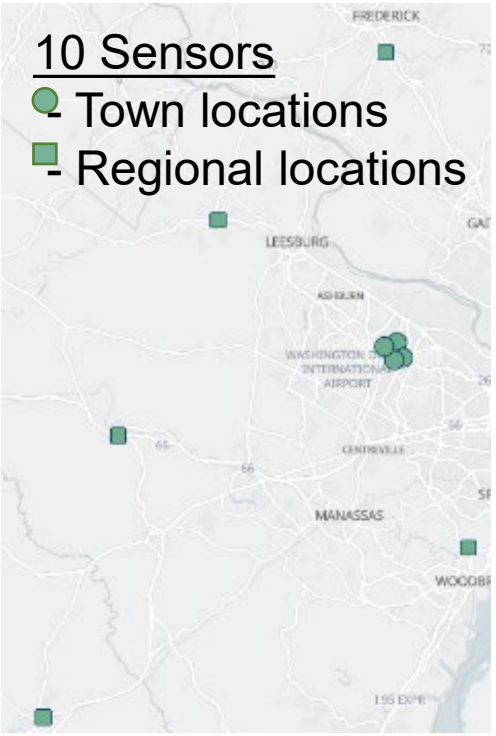
Communicating Road Conditions

2 Vaisala Roadway Sensors









Station name	Timestamp	Surface temp.
Herndon VA Herndon P...	Jan 24, 2026 7:51 PM	27.9 °F
Herndon VA Van Buren ...	Jan 24, 2026 7:53 PM	27.5 °F
Herndon VA Grant @ H...	Jan 24, 2026 7:50 PM	27.1 °F
Herndon VA Herndon P...	Jan 24, 2026 7:50 PM	27.7 °F
Herndon VA Lynn @ Sta...	Jan 24, 2026 7:55 PM	27.7 °F

Screenshot of information available through Vaisala sensors

Communicating Road Conditions

3 Norcast, NOAA, etc.

Norcast provides focused weather information
- Timely updates before and during the weather event
  - To include emails and texts
- Information is specific to Herndon

NOAA and Meteorologist
- Focus information on the general/viewing area
- Used to help formulate schedules and compare all possible predictions





Communicating Road Conditions

4

Vehicles are tracked

Automated Vehicle Location (AVL) tracks and reports individual truck status and overall progress of operations.

- Currently 7 plow trucks have AVL (Samsara), plus 26 other fleet vehicles & 2 pieces of equipment
- 10 more will be installed to capture all primary snow vehicles

5

Resources are repositioned

Command staff move resources or, if applicable, call in additional snow resources.

6

Residents are updated

Public information staff use social media, the Town website, and the Fairfax County's emergency alert system to keep residents informed of progress and instructions.

Communicating Road Conditions

7 Samsara/AVL

Samsara cameras and GPS tracking

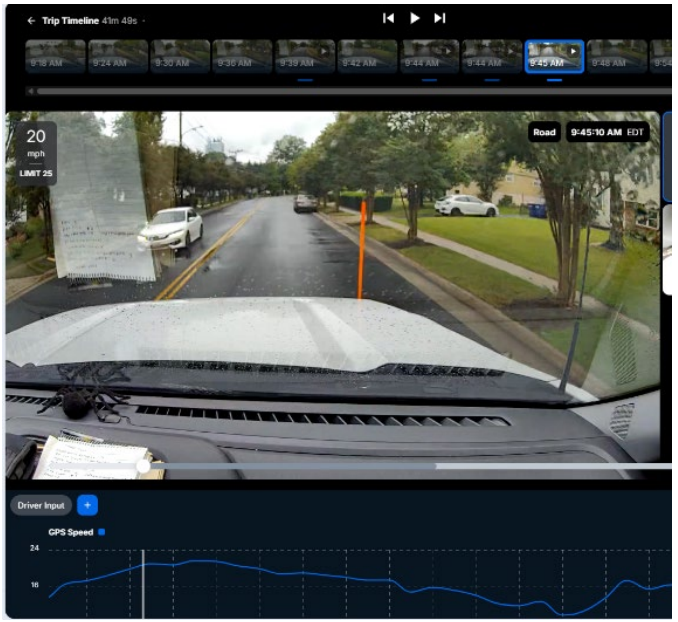
- Provides command center real time tracking/location of vehicles and equipment
- Notifications of incidents such as: harsh braking, sharp turns, inattentive/drowsy driver

In vehicle and handheld radios

- All DPW Operations vehicles have radios mounted in the cab
- Handheld radios used by equipment operators and snow contractor





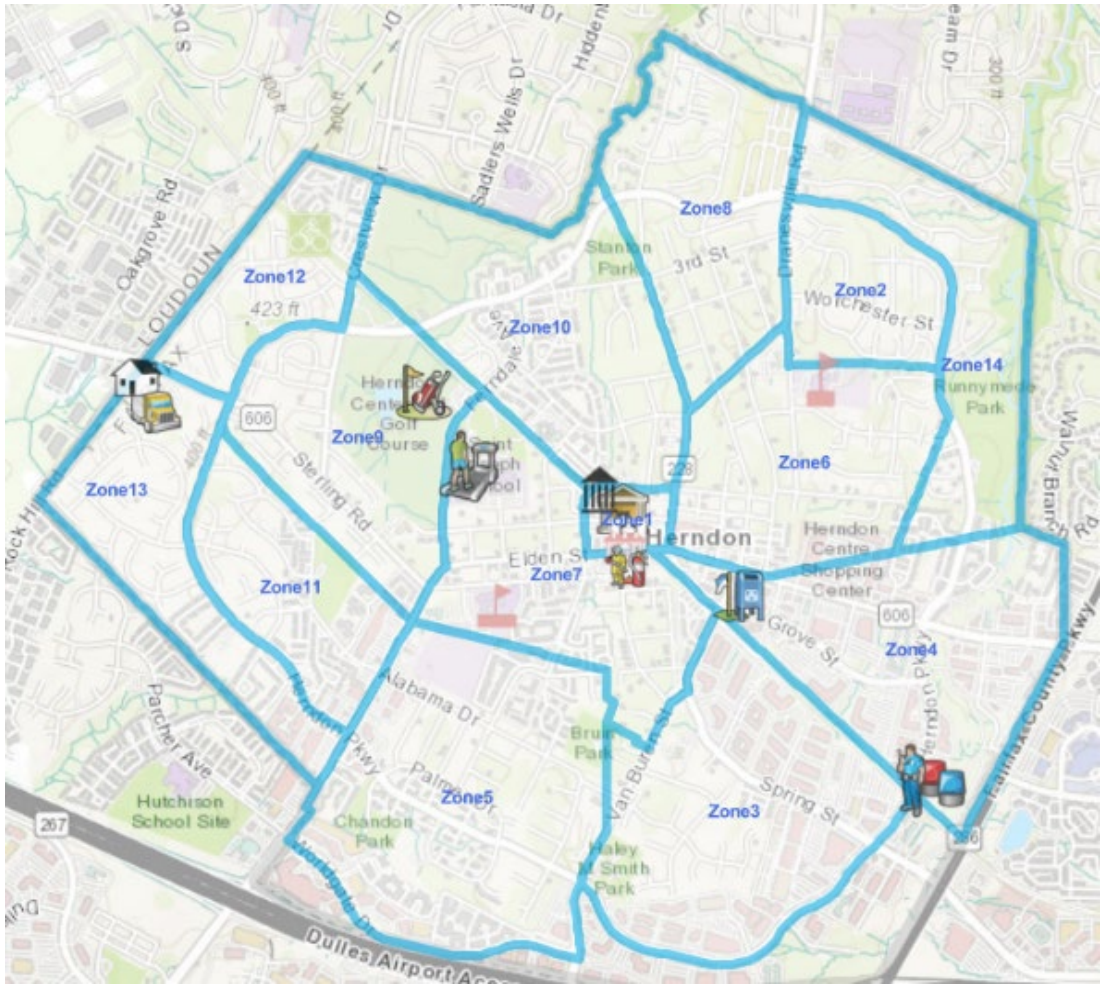


Communicating Road Conditions

8 Snow Zones

Create manageable size zones for snow removal
- Size creates similar sized residential areas
- Zone number is not used as priority or order; simply the area

Zones allow Command Staff to assign teams to a zone
- Team typically consists of 2 trucks
- Team reports starting and completing the zone
- Contractor medium duty trucks typically used in zones ahead of or along with town staff
    - Will be used for parking lots this year

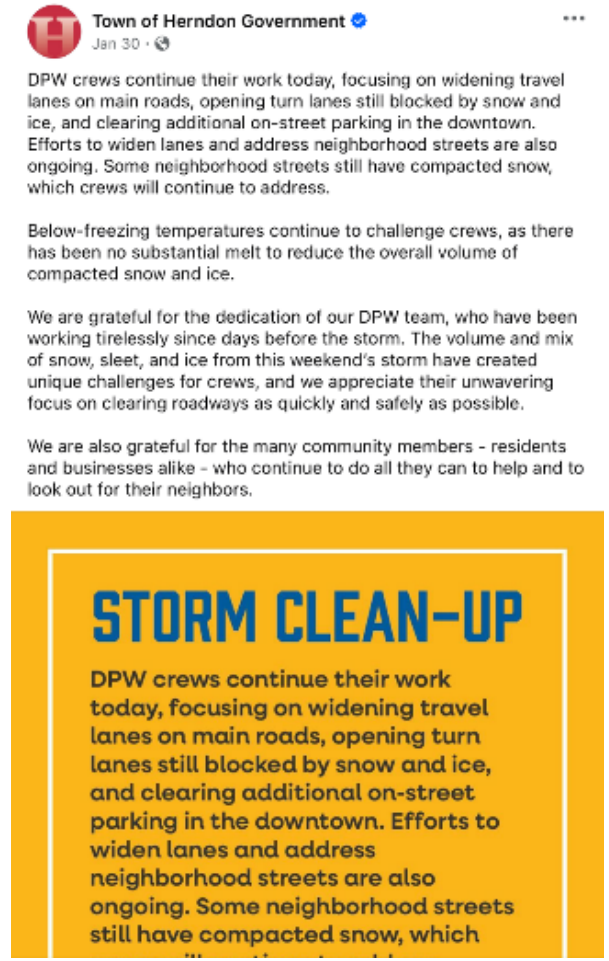


Communicating Road Conditions

9 Social Media







Important Reminders

Remove vehicles from roadways and cul-de-sacs.

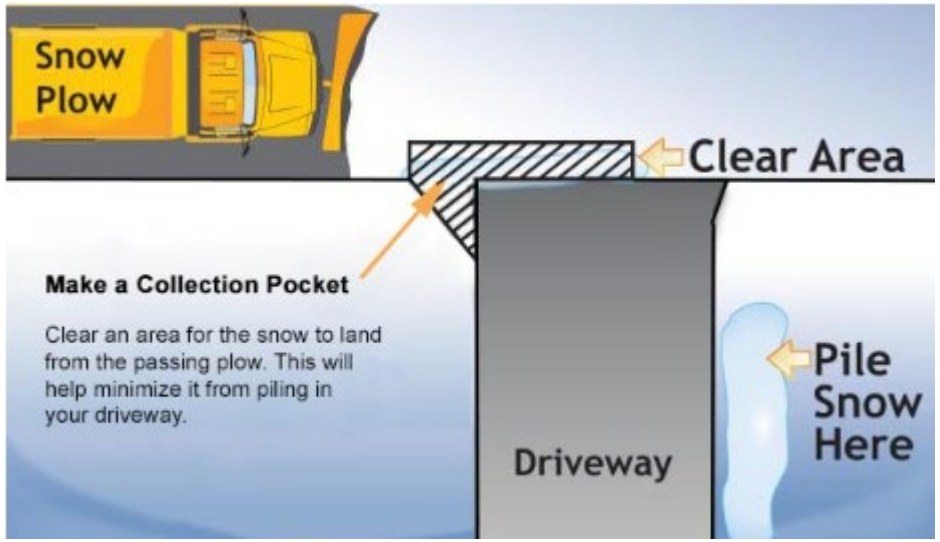
Whenever possible, park in driveways or designated off-street areas. This allows snowplow operators to clear streets more effectively and helps restore safe travel conditions sooner.

Stay informed using available technology.

Monitor Town updates through the Public Works website, Town social media channels, and local news outlets for real-time information on road conditions, snow emergency declarations, and service updates.

Driveway snow placement is unavoidable.

Snowplows must push snow to the right side of the roadway. As a result, snow may accumulate in front of driveways. Crews cannot prevent this while maintaining roadway safety.



Important Reminders (continued)

Do not stop or approach plow operators.
For your safety and theirs, please do not flag down operators or block their path. If you have concerns or service requests, contact the Public Works Department directly.

Keep children and pets away from the roadway during plowing.
Snowplows have limited visibility. Keeping the roadway clear ensures everyone's safety.

Avoid plowing snow into the street.
If contractors clearing private parking lots plow snow into the roadway, this creates hazards and will require crews to return and re-clear the roadway, delaying service to other neighborhoods.

Clear sidewalks and walkways adjacent to your property.
Residents and businesses are encouraged to help keep pedestrian paths safe after snowfall.

Avoid shoveling snow back into the street.
This creates hazards and will require crews to return and re-clear the roadway, delaying snow removal of other areas in town.

Core Services

Maintaining essential Town services during winter weather events

Core Role in Winter Operations

Our primary focus during snow emergencies is on solid waste, recycling, litter control, and environmental protection operations. Our work ensures minimal disruption to critical Town services, including:

- Regular trash and recycling collection services.
- Snow-related litter cleanup operations.
- Environmental enforcement and inspection of storm drains.

Inclement Weather Guidelines

In severe weather conditions, residents should be aware that all scheduled curbside regular trash, recycling, and yard waste collections may be delayed or suspended due to road or weather-related conditions, or to ensure the safety of staff and residents.

- Ensure proper placement of collection carts to prevent damage. Avoid placing items in snow-covered areas to minimize hazards or obstruction of snowplows.
- Secure your collection container lids and bins in the event of strong winds and rainy weather.

CORE SERVICES

Snow Collection Plan: Trash First, No Saturday Collection

NORMAL SCHEDULE

Mon	Tue	Wed	Thu	Fri
Recycling	Recycling	Trash	Trash	Trash

If the storm causes…	Collection response
Recycling day canceled (Mon or Tue)	No make-up day. Residents hold recycling until the next regular recycling day. Trash routes are unaffected.
Trash day canceled (Wed–Fri)	Missed route runs the next weekday and later trash routes slide one day. Friday's route rolls to Monday and Monday recycling is suspended. Example: Wed canceled → Wed route Thu, Thu route Fri, Fri route Mon.
Multiple days canceled	Trash catches up first. Recycling stays suspended until trash is current, then resumes on its next regular day.

Ground rules

- One stream per day, never both
- Trash has priority over recycling
- Plowing comes first; collection follows
- Go/no-go by 3 PM the day before
- Residents leave carts out, clear of snowbanks
- Notice via website, social media, and alerts

TOWN OF Herndon

LIVE DIFFERENTLY.