

# NORTHERN VIRGINIA SNOW BRIEFING

Metropolitan Washington Council of Governments

**Lauren Mollerup, P.E., CCM**, District Maintenance Engineer

November 10, 2020



## Northern Virginia District Background

- **Fairfax, Loudoun, Prince William, and Arlington\***  
*\* Arlington maintains own network (secondary roads)*
- **Population: 2.2 million**
- **Commuter lots: 24**
- **Bridges/large culverts: 2,000**
- **Traffic signals: 1,400**
- **VDOT employees: 866**



**Total lanes miles: 14,025**

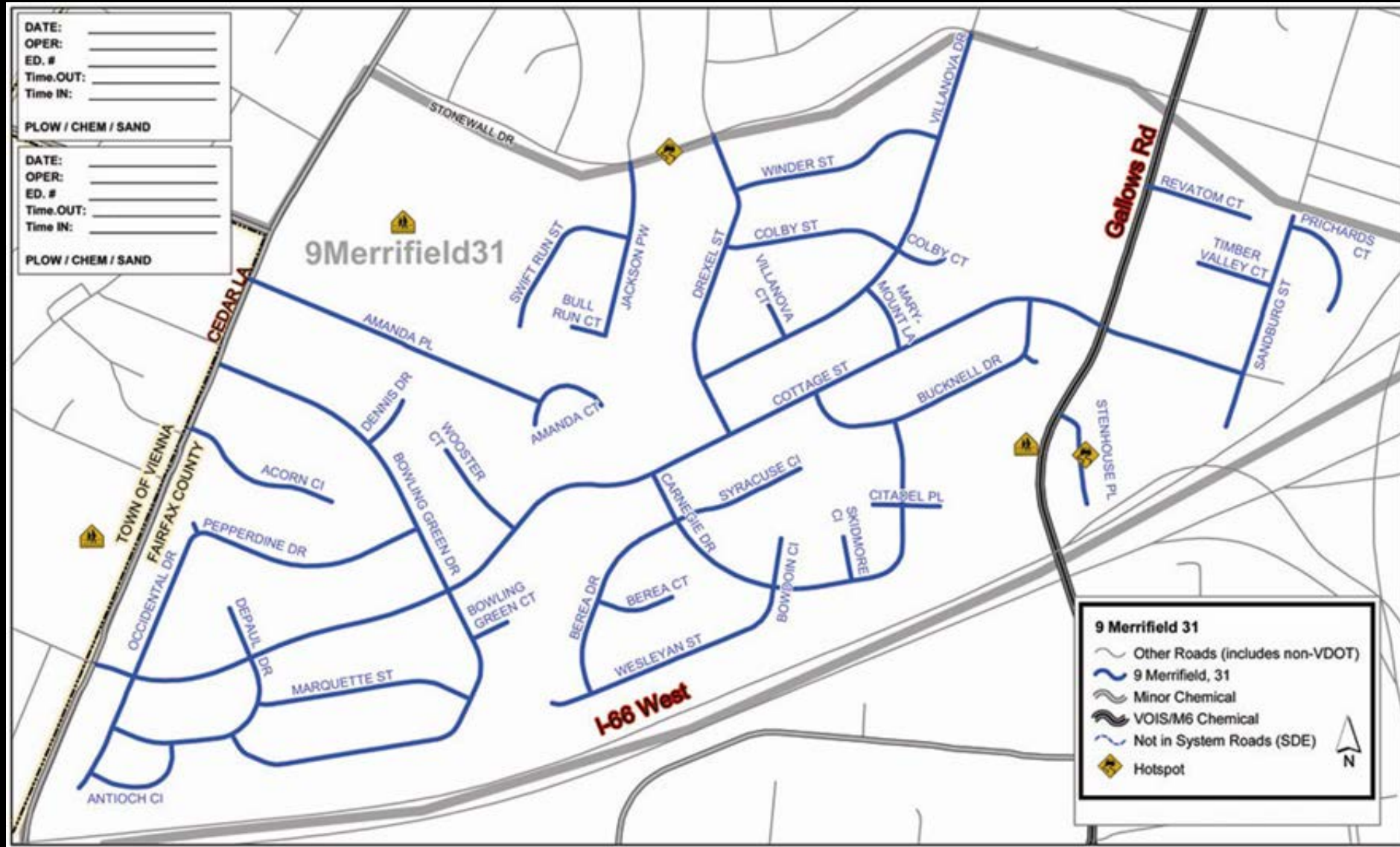
- **Interstate: 802**
- **Primary: 1,781**
- **Secondary: 11,366**
- **Gravel: 286**
- **Frontage: 76**
- **Subdivision streets: 16,862**

**18 maintenance headquarters**

- **Arlington: 1**
- **Fairfax: 9**
- **Loudoun: 4**
- **Prince William: 4**



The district is divided into **647 snow maps** to include interstates, primary, and secondary roads.



# 2020-2021 Snow Removal Budget - \$72.3 million



## Materials at start of season:

- Salt: 112,099 tons
- Sand: 19,572 tons
- Brine: 184,018 gallons

## Pieces of equipment:

- 3,500 (*mostly contracted*)

# Planning, Preparations, & Training





- **Forecast reviews** with National Weather Service ([weather.gov/washington/winter](http://weather.gov/washington/winter)) and Iteris
- **Mobilization plan** determined, including if incident command will be activated
- **Message is shared with residencies** including counties and interstates

**VDOT MOBILIZATION PLAN VDOT MOBILIZATION PLAN**  
 Start Time: TBD – End Time: TBD  
 EVENT #16; AU1 # NVSNW1916

Weather Summary:  
 The DME has declared an local emergency at 0:00M on //19.

Fairfax

**FAIRFAX**

**Day Shift Residency Manager**  
 Jerry Himes 571-969-0538

**Night Shift Residency Manager**  
 Paul Matticks - 703-975-5027

Area	Day Shift Mgr.	Mobile	Night Shift Mgr.	Mobile	Snow Room#
102 Merrifield	Melvin Riser	(571)749-8058	Craig Detwiler	(703)638-8795	703-259-2317
103 Chantilly	Justin Springhetti	(571)749-8870	Keith Wester	(703)268-0121	703-259-2317
104 Clifton	Russell Dodson	(571)749-8072	David Klink	(571)749-8045	703-259-2317
105 Van Dorn	Harry Lagree	(703) 774-2803	Howard Stewart	(571) 238-7091	703-259-2317
106 Lorton	Howard Akers	(571)749-8061	Shane White	(703)656-1520	703-259-2317

**NOVA 4:00am Status Report 3/8/19**

**LOUDOUN**

Area	Air Temps	Surface Temps	Precipitation/Accumulation	Current Weather Conditions (Clear/Fair/Poor/Moderate)	# of VDOT Trucks	# of M7B Trucks	Service Contract Trucks	# M7B Loaders/Heavy Equipment	Monitors	SWAS Updated?	TOC/VA-511 Road Closures	Issues/Comments
Interstate Arlington	34-39	34-38	0	Clear	4	2	43	4	1	yes	None	None reported
Fairfax	34	35	0	Cloudy / Rain	31	444	0	8	4	Yes	N/A	N/A
Loudoun	32-35	33-35	0.0 in east 2-inches Hillsboro	Cloudy	14	57	70	2	10	SWAS Updated at 2:00am	None At this time	Icy ing out in western areas
Prince William	33-34	33-37	wet / 0	Cloudy	19	13	0	1	0	yes	0	No issues and on stanby

**PRINCE WILLIAM**

Gainesville AHQ	Kevin Kraus	571-220-5272	Bill Wainow	571-722-4979	571-201-3890
Lake Ridge	Mike Collier	571-749-8056	Bill Cornell	571-571-220-5282	703-590-5131
Manassas AHQ	Glenn Gill	571-221-6074	Darren Dodson	571-220-5278	703-366-2033

**INTERSTATE/ARLINGTON**

**Day Shift Residency Manager Jimmy Coleman (571) 259-5813**

**Night Shift Residency Manager (7 PM - 7 AM)**

Area	Day Shift Mgr.	Mobile	Night Shift Mgr.	Mobile	Snow Room#
401 Arlington	Henry Williams	571-369-8798	Russell Graham	571-748-8823	703-486-3393
402 I-66	John Carter	571-722-5342	Ron Hickman	571-437-2564	703-486-3393
403 I-95	Roy Campbell	571-384-0384	Bill Ludke	571-749-7871	703-486-3393
404 - Beltway (495)	Robert Red	571-238-0347	Stanley Newman	571-220-5315	703-486-3393



## 2020-2021 NOVA Mobilization Levels

Weather Forecast	Mob. Level	Response Plan	SALT Application Rate*	Applied Lane Miles		Equipment Required (based on VDOT single axle truck carrying)				Staffing	Reports
				Area	Miles	Area	Liquid	Salt	Total		
Precipitation: 20% or Greater Accumulation: Ice/Snow Possible Ambient or Pavement Temp: 30-36	Anti Ice	Treatment of Critical Structures & Locations	Application Liquid: 50 gal/mi Application Salt: 325 lbs/ln mi	Area	Miles	Area	Liquid	Salt	Total	State and Hired Anti-Ice Units	
				FFX	1520	FFX	50		50		
				PW	250	PW	13	7	20		
				LDN	700	LDN	30		30		
				INT	400	INT	10	14	24		
DISTRICT	2870	DISTRICT	103	21	124						
Precipitation: 20%-49% or Greater Accumulation: Snow Possible Ambient or Pavement Temp: 30-36	Skeleton Crews	Spot Treatment of Critical Structures & Locations Respond to Icy Conditions as Needed	325 lbs/ln mi	Area	Miles	Area	Liquid	Salt	Total	Maintenance Crews	SWAS updates, HETTS data input
				FFX	1520	FFX		121	121		
				PW	570	PW		14	27		
				LDN	700	LDN		20	20		
				INT	400	INT		24	24		
DISTRICT	3190	DISTRICT		179	192						
Precipitation: 20%-49% or Greater Accumulation: Snow Possible Ambient or Pavement Temp: 30-36	1	Springfield Interchange, Spot Treatment of Other Critical Structures & Locations	325 lbs/ln mi	Area	Miles	Area	Liquid	Salt	Total	Maintenance Crews, Contractors, Limited support staff	SWAS Updates and HETTS time entries within two hours of check-in
				FFX	5857	FFX		492	492		
				PW	570	PW		19	32		
				LDN	700	LDN		89	89		
				INT	900	INT		47	47		
DISTRICT	8027	DISTRICT		647	647						
Precipitation: 50%-100% Chance Accumulation: Up to 1 inch of Snow Ambient or Pavement Temp: 25-29	2	Light Salting Operation; Limited Work in Subdivisions - Includes Cold Spot Treatment in Subdivisions & Gravel Roads	400 lbs/ln mi	Area	Miles	Area	Liquid	Salt	Total	District Monitors, District Support Team	SWAS Updates, Idle Time Alerts, Lost Power Alerts
				FFX	5857	FFX		992	992		
				PW	1223	PW		127	140		
				LDN	1811	LDN		136	136		
				INT	900	INT		94	94		
DISTRICT	9791	DISTRICT		1349	1349						
Precipitation: 50%-100% Accumulation: Up to 2 inches of Snow or 1/10 inch of Ice Ambient or Pavement Temp: 20-24	3	Salting Operation; Potential for Plowing; Includes Cold Spot Treatment in Subdivisions & Gravel Roads	475 lbs/ln mi	Area	Miles	Area	Liquid	Salt	Total	Mechanics on Site - Call Center Open, Snow Rooms Open, VA Traffic	SWAS reports @8am, 2pm, 8pm, 2am, Idle Time Alerts, Lost Power Alerts, Geo Fence Violation Alert, Exception Report
				FFX	8024	FFX		1938	1938		
				PW	3680	PW		339	352		
				LDN	3137	LDN		371	371		
				INT	1894	INT		130	130		
DISTRICT	16735	DISTRICT		2778	2791						
Precipitation: 50%-100% Accumulation: Up to 6 inches of Snow or 1/4 inch of Ice Ambient or Pavement Temp: 15-19	4	Salting/Plow Operation; Includes Plowing Subdivisions & Sanding as Necessary	550 lbs/ln mi	Area	Miles	Area	Liquid	Salt	Total	All of the Above	SWAS reports @8am, 2pm, 8pm, 2am, Idle Time Alerts, Lost Power Alerts, Geo Fence Violation Alert, Exception Report
				FFX	8024	FFX		2220	2220		
				PW	3680	PW		520	525		
				LDN	3137	LDN		511	511		
				INT	1894	INT		241	241		
DISTRICT	16735	DISTRICT		3492	3492						
Precipitation: 50%-100% Accumulation: Up to 6 inches of Snow or 1/4 inch of Ice Ambient or Pavement Temp: 10-14	5	Salting/Heavy Plow Operation; Includes Plowing Subdivisions & Sanding as Necessary ALL RESOURCES ARE DEPLOYED	625 lbs/mi	Area	Miles	Area	Liquid	Salt	Total	All of the Above, Heavy Equipment and Possibly HERT Teams	SWAS reports @8am, 2pm, 8pm, 2am, Idle Time Alerts, Lost Power Alerts, Geo Fence Violation Alert, Exception Report
				FFX	8024	FFX		2341	2341		
				PW	3680	PW		646	659		
				LDN	3137	LDN		580	580		
				INT	1894	INT		422	422		
DISTRICT	16735	DISTRICT		3989	3989						

- **Anti-icing treatment most effective during first hour** of weather event
- **Reduces bonding** to asphalt and concrete surfaces
- **Piloting brine treatments during storms** when conditions are favorable

Depending upon the storm and the window of time, we may perform a **partial or full treatment of all bridges, overpasses, elevated surfaces, primary and/or secondary roads.**





**Crews work interstates, major roads and main subdivision roads in priority order.**

**Passable lane goals:**

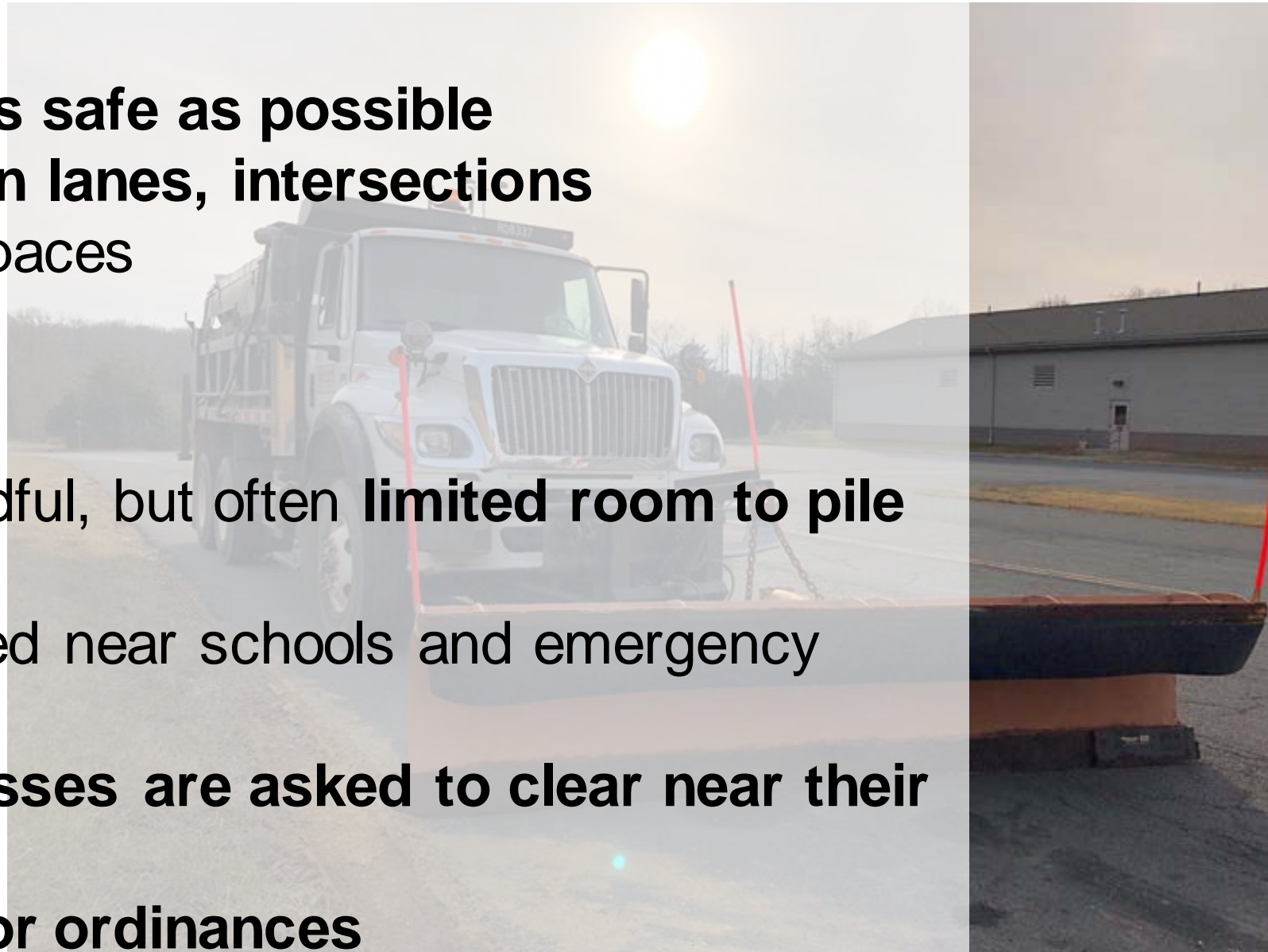
- **2-4" of snow: 24 hours**
- **4-6" of snow: 48 hours**
- **6"+ of snow: 72+ hours**

## Additional priorities:

- Getting the roadways **as safe as possible**
- **Shoulders, ramps, turn lanes, intersections**
- **12,000** park-and-ride spaces

## Sidewalks and Trails

- Crews asked to be mindful, but often **limited room to pile snow from roads**
- Special care is requested near schools and emergency facilities
- **Residents and businesses are asked to clear near their property**
- Check with **localities for ordinances**



# VDEQ Salt Management Strategy (SaMS)

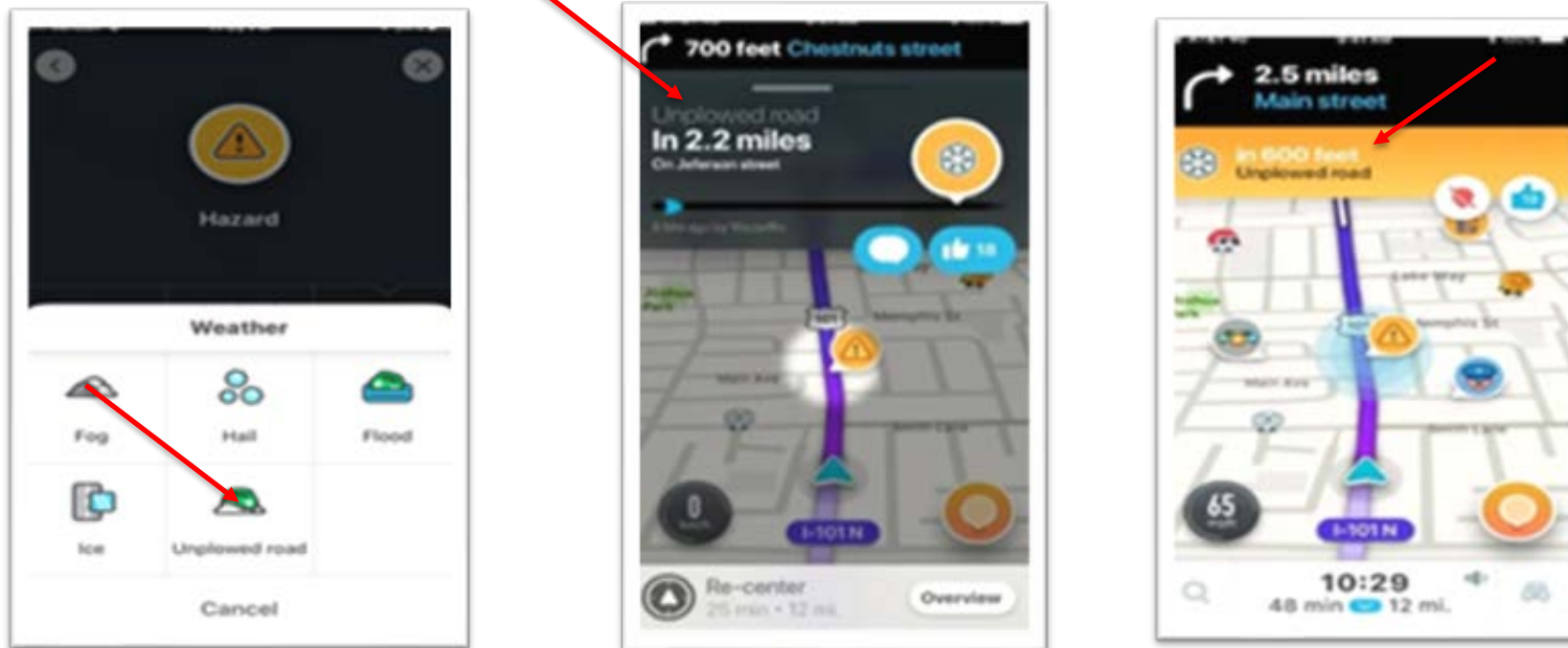
- Since Jan. 2018, VDOT has participated in the Salt Management Strategy (SaMS) development coordinated by the Virginia Department of Environmental Quality (VDEQ)
- Stakeholders working to balance public safety and impacts of salt use
- Aims to raise awareness of salt use; share how individuals, businesses, and organizations can participate; and provide voluntary guidance for potential monitoring and research
- Plan will be under development through 2020/21.
- Details: [www.deq.virginia.gov/sams](http://www.deq.virginia.gov/sams)



# Partnership with Waze

VDOT's Office of Strategic Innovation is working to evaluate the use of crowdsourced data during snow events, specifically using features available through Waze.

In Northern Virginia, VDOT plans to work with several targeted neighborhoods this winter on a hyperlocal pilot to monitor and document local observations via Waze, and evaluate how best this information can be incorporated into operations monitoring.



WE ARE PRACTICING  
**SOCIAL DISTANCING**

Please report your road issue via  
**800-FOR-ROAD** or  
**[my.vdot.virginia.gov](https://my.vdot.virginia.gov)**.

Thanks for giving crews **S P A C E**.



# Work During COVID-19

- Safety is always top priority
- Close monitoring and adjustments to minimize impacts to employees and customers
- Focused on the customers we serve, our workforce and maintaining access to critical supplies needed to help keep Virginia moving
- Visitors by appointment (no walk-ins) for permits and public needs
- Social distancing required in all work environments
- Employees must telework when/if able; leverage technology and alternatives to in-person meetings
- Enhanced cleaning of vehicles/facilities
- Employee procedures in event of personal exposure or symptoms

More at [virginiadot.org/newsroom/covid-19](https://virginiadot.org/newsroom/covid-19)





# VDOT COVID-19 Winter Weather Operations

- The safety of the traveling public and of the agency's employees and partners is always top priority.
- To help protect agency employees and partners, we are implementing new Virginia Department of Health COVID-19 safety protocols for equipment operator transfers.
- Procedures and training have been updated to conduct winter operations with minimal contact or contactless interactions through all stages.
- While these additional precautions may increase the driver exchange timeline, crews will continue to work around the clock, as needed, in response to snow and ice events aligned with current practice.

# Current Local Traffic Trends

- Traffic volume trajectory has plateaued since uptick in early summer
- Interstates at ~92% daily volume level, except I-66 inside the Beltway (~60%)
- Primary roads at 75-85% daily volume level compared to pre-COVID
- Least volume growth on roads servicing highest federal employment areas
- Observing weekday PM peak traffic higher than AM peak, suggesting trips/errands after teleworking/virtual learning.
- Signal Operations Center (SOC) continues to monitor/adjust signal timing, particularly evening peak growth.

# Stay Informed



- [virginiadot.org/novaemergency](http://virginiadot.org/novaemergency)  
One-stop shop for links to news releases, Twitter feed, status updates, VDOT Plows, customer service, FAQs and other resources



- [@vadotnova](https://twitter.com/vadotnova) for updates



- [511virginia.org](http://511virginia.org) for road conditions and traffic cameras



VDOT Plows

- [vdotplows.org](http://vdotplows.org) for status of subdivisions once 2" have fallen



**QUESTIONS?**