



NORTHERN VIRGINIA SNOW BRIEFING

Metropolitan Washington Council of Governments

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

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Northern Virginia District Background

Fairfax, Loudoun, Prince William, and Arlington*

**Arlington maintains own secondary network*

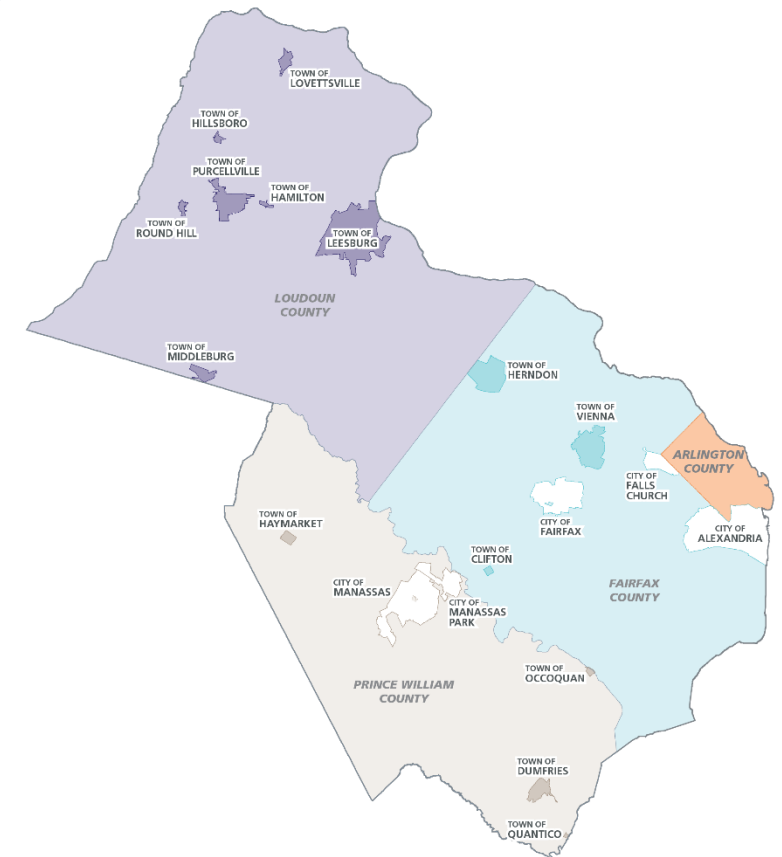
Population: 2.5 million

Commuter lots: 24

Bridges/large culverts: 2,240

Traffic Signals: 1,575

VDOT NOVA employees: 870



Northern Virginia District Lane Miles

Total lane miles: 14,379

Interstate: 853

Primary: 1,721

Secondary: 11,735

Unpaved: 282

Frontage: 69

**Total number of
neighborhood streets: 16,556**



Northern Virginia District Resources

Area Headquarters (AHQ): 18
(Maintenance yards)

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

Materials capacity:

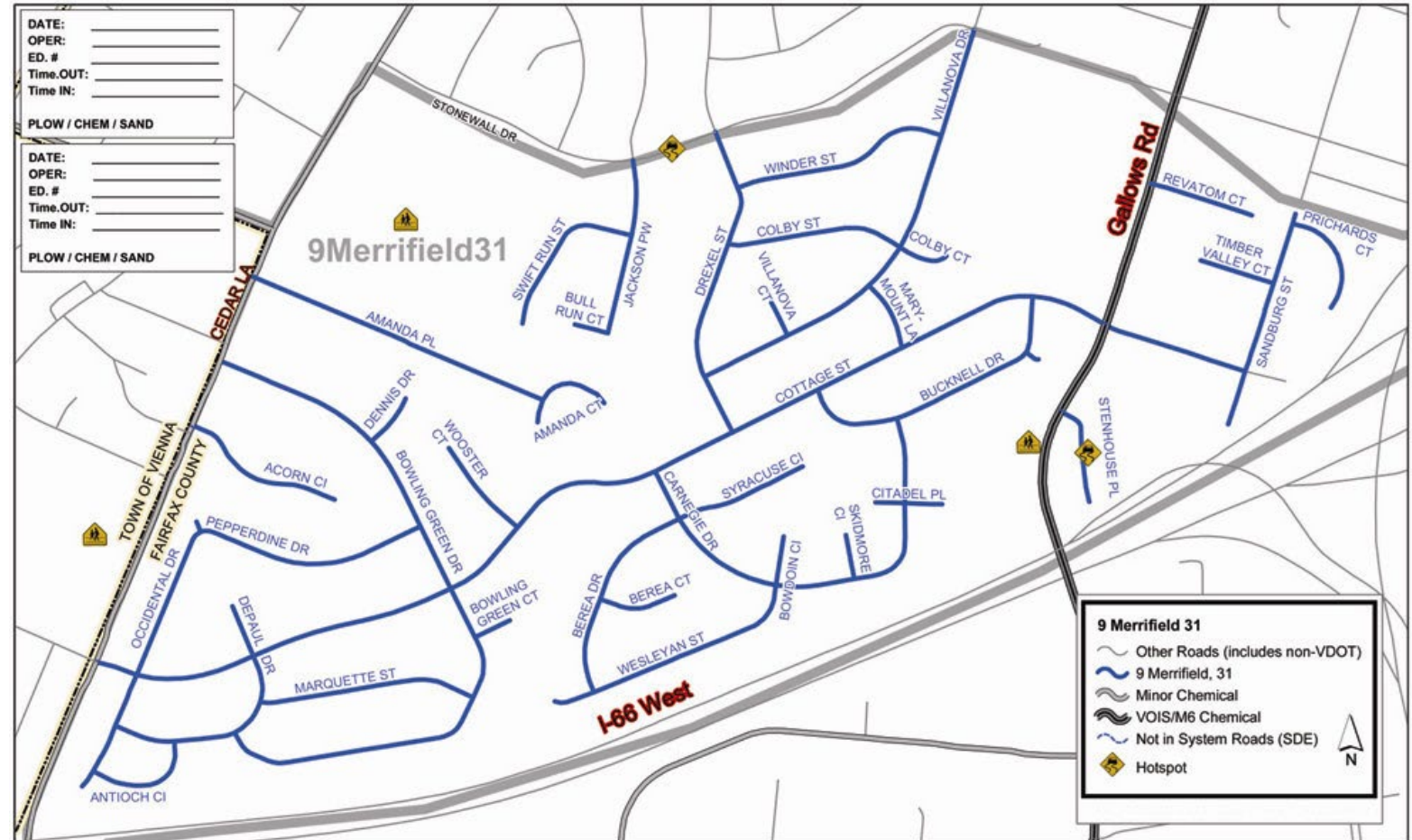
- Salt: 120,000 tons
- Sand: 25,000 tons
- Brine: 250,000 gallons

Pieces of equipment

- 3,500 (mostly contracted)

Snow Map Zones

Northern Virginia District is divided into 650 snow map zones that include interstate, primary, and secondary roads.



Snow Operations Priorities

- **Public Safety**
- **Regional mobility and efficient functioning of entire transportation system**
- **Mitigate economic disruption**
- **Season: Starts in June, concludes in May**



Roles During Snow

- Staff work in 12-hour shifts, 24/7, until demobilization
- All VDOT Northern Virginia employees have a snow assignment, including, but not limited to:
 - Snow plow operators
 - Road monitors
 - Office support
 - AVL team
 - Snow room staff
 - Duty officer/Operations



Historical Winter Weather Data: Snow Totals

Season	IAD	DCA
Average	21.0"	13.7"
2024-25	15.5"	14.9"
2023-24	11.7"	8.0"
2022-23	0.4"	0.4"
2021-22	15.8"	13.2"
2020-21	12.0"	5.4"
2019-20	2.9"	0.6"
2018-19	26.5"	16.9"
2017-18	11.9"	7.8"
2016-17	7.3"	3.4"
2015-16	34.3"	22.2"

LOW

HIGH



Snow Events Steps

- **Weather Monitoring**
- **Resource Coordination (Equipment, Materials, Stakeholders)**
- **Public Messaging**
- **Mobilization**
- **Pretreatment**
- **Operational Response**
- **Demobilization**



Deep Dive: Mobilization Plan

- **Each storm is different, and is treated as such**
- **Mobilization plan is determined at the residency level and includes:**
 - **Mobilization level (number of pieces of equipment)**
 - **Whether neighborhood fleet will be activated**
 - **If pretreatment is possible on interstates, primaries, and high-volume secondaries (not neighborhoods)**
 - **If incident command will be stood up at MPSTOC**
 - **Mobilization timeline**

Mobilization Levels: Based on Forecast Severity

Level	Precip %	Accumulation	Pavement Temp
1	20 - 49%	Snow Possible	30-36°
2	50 - 100%	Up to 1" snow	25-29°
<i>Neighborhood Fleet Activated Beginning at Level 3</i>			
3	50 - 100%	Up to 2" snow or 1/10" ice	20-24°
4	50 - 100%	Up to 6" snow or 1/4" ice	15-19°
5	50 - 100%	More than 6" snow or 1/4" ice	10-14°

Salt Brine Pretreatment

- Salt brine: 77% water, 23% salt
- Applied on interstates, primaries, and high-volume secondaries only, not in neighborhoods
- Must be dry with temps above 20°
- Effective during the first hour of winter event
- We can also perform a partial brine operation



Additional Considerations

Additional Focus

- **Shoulders, ramps, turn lanes, and intersections**
- **12,000 park and ride spaces**

Sidewalks

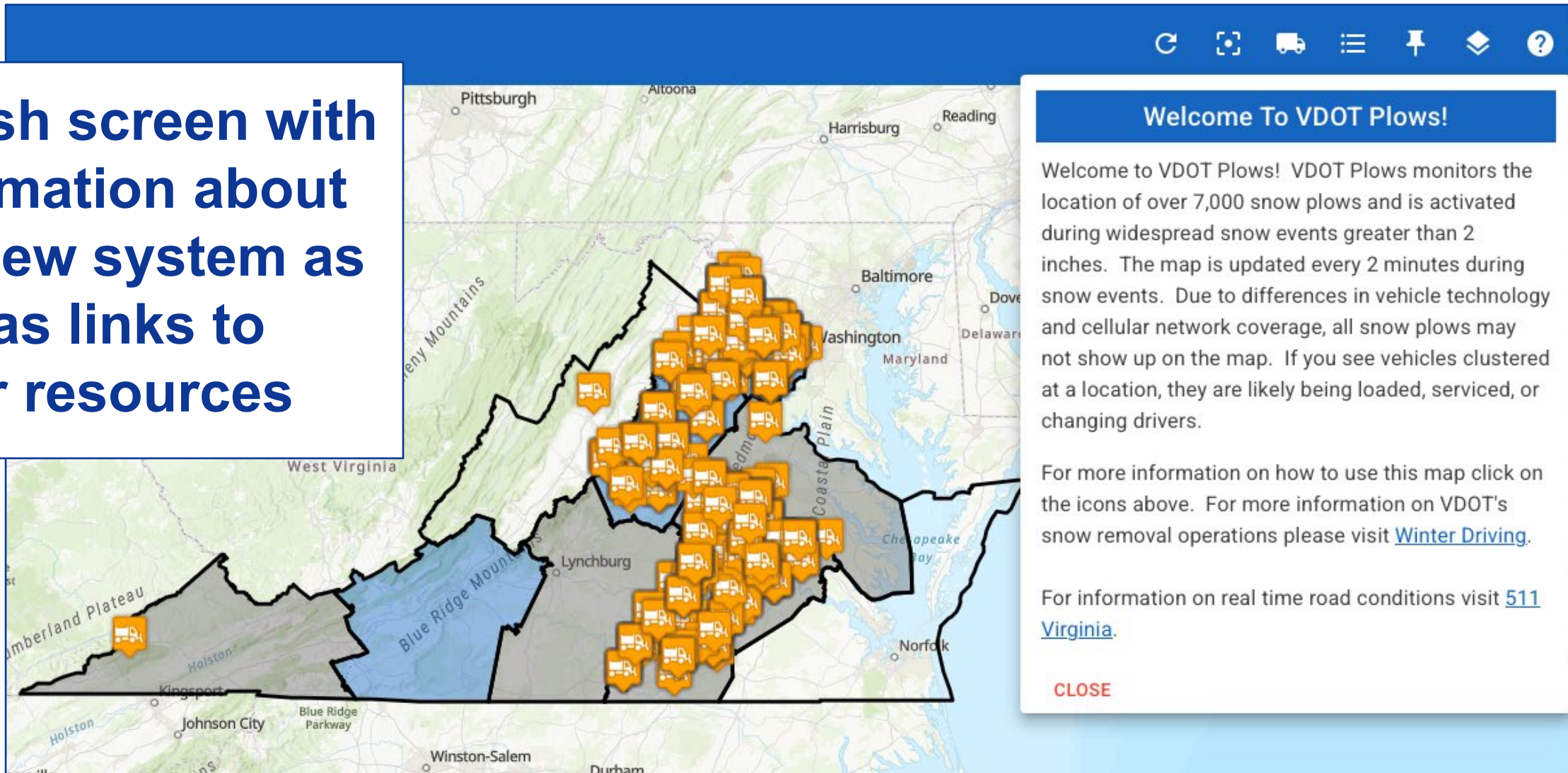
- **Crews asked to be mindful of limited space to pile snow**
- **Special care is given near schools/emergency facilities**
- **Residents/businesses are asked to clear near their property**
- **Check with localities for ordinances**

Updated Snow Plow Tracker: plows.vdot.virginia.gov

- Immediate enhancements made within existing system
- Future procured system on the horizon
- NOVA District breadcrumbs now visible to the public
- Can see last 6 hours of data, internal still shows full event
- Search by address
- Easy to identify when neighborhood fleet is activated
- Active equipment count by district
- Selectable layers for different borders and routes
- Traffic cameras incorporated

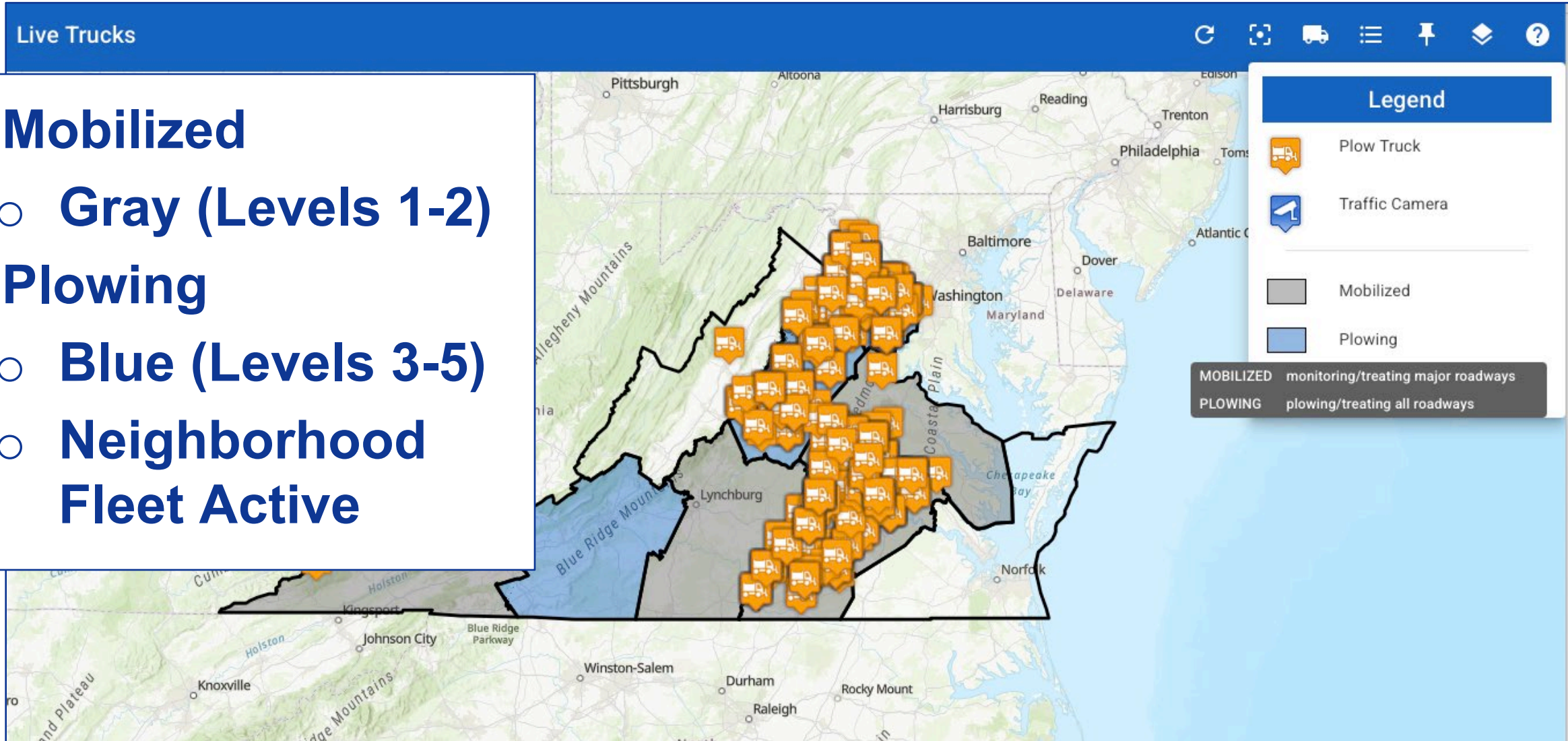
Snow Plow Tracker: plows.vdot.virginia.gov

Splash screen with information about the new system as well as links to other resources



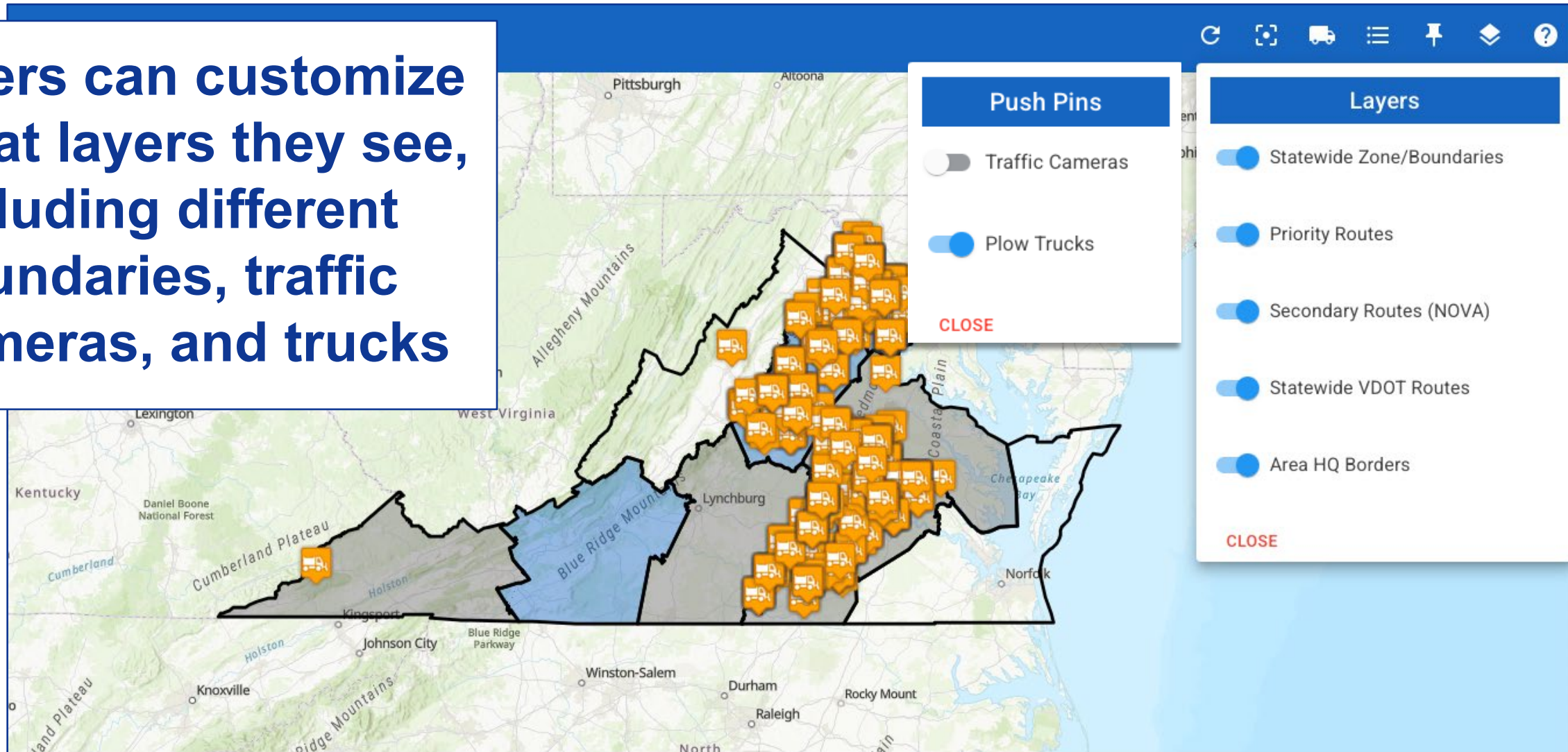
Snow Plow Tracker: plows.vdot.virginia.gov

- **Mobilized**
 - Gray (Levels 1-2)
- **Plowing**
 - Blue (Levels 3-5)
 - Neighborhood Fleet Active



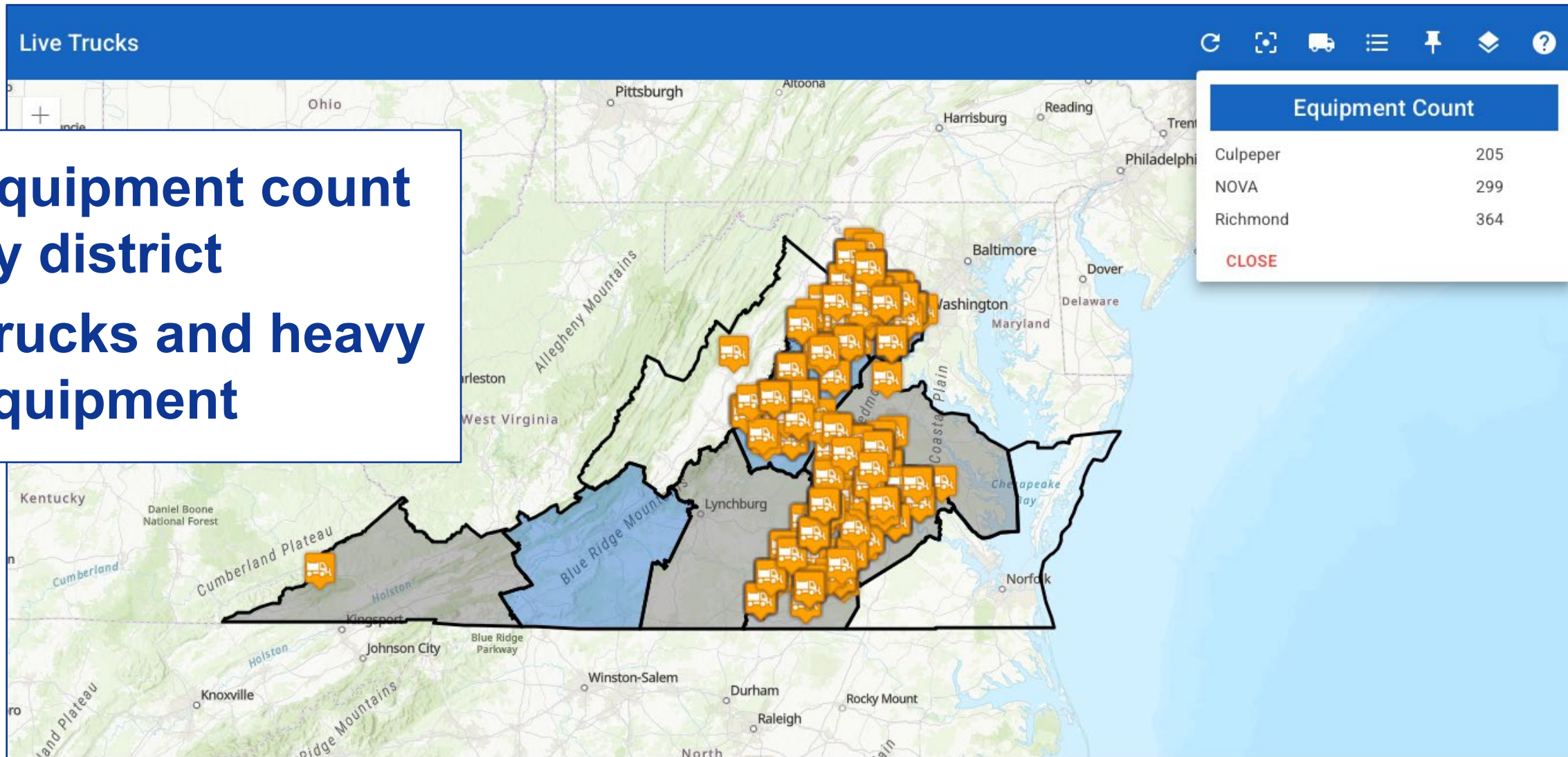
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Users can customize what layers they see, including different boundaries, traffic cameras, and trucks



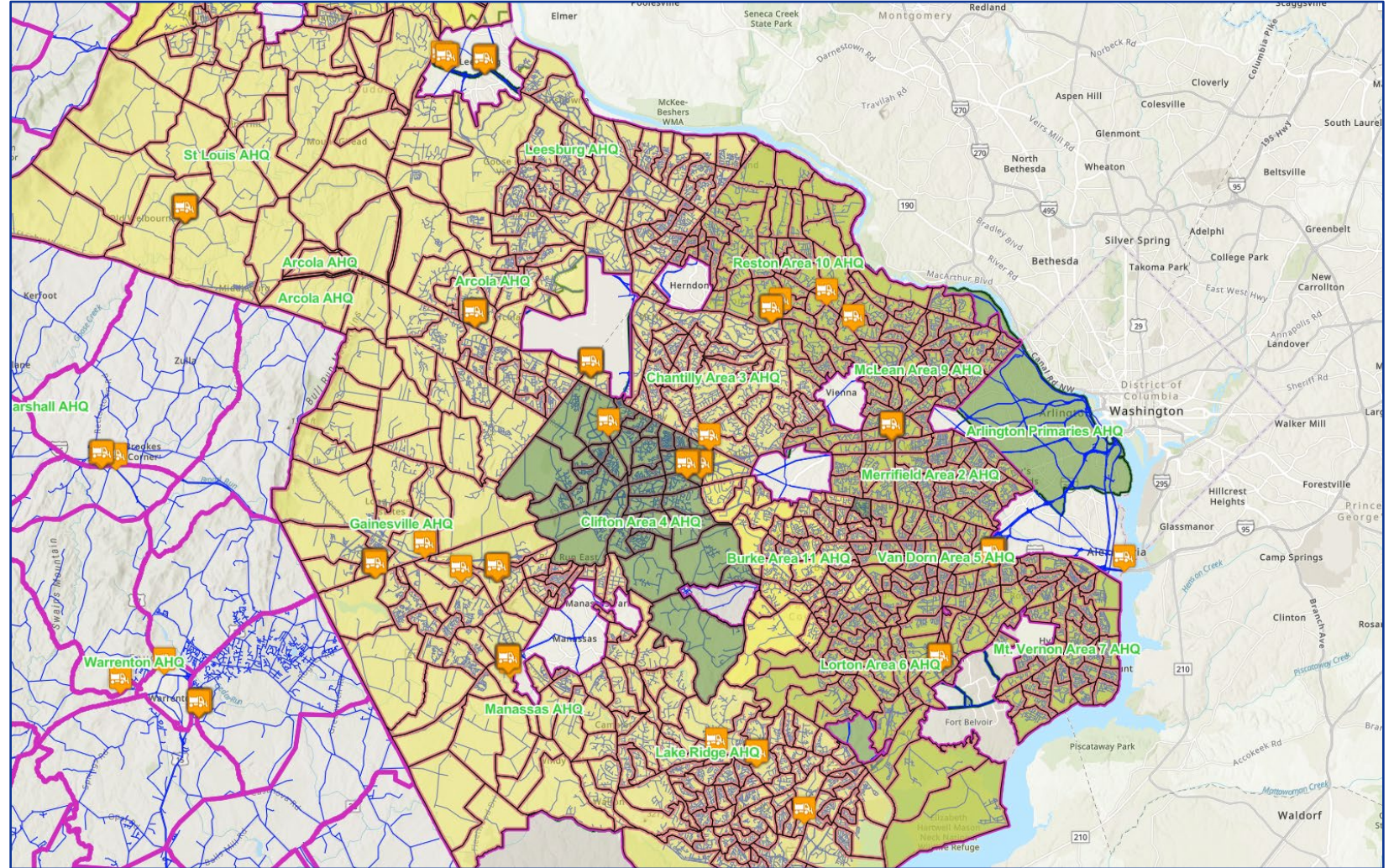
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- Equipment count by district
- Trucks and heavy equipment



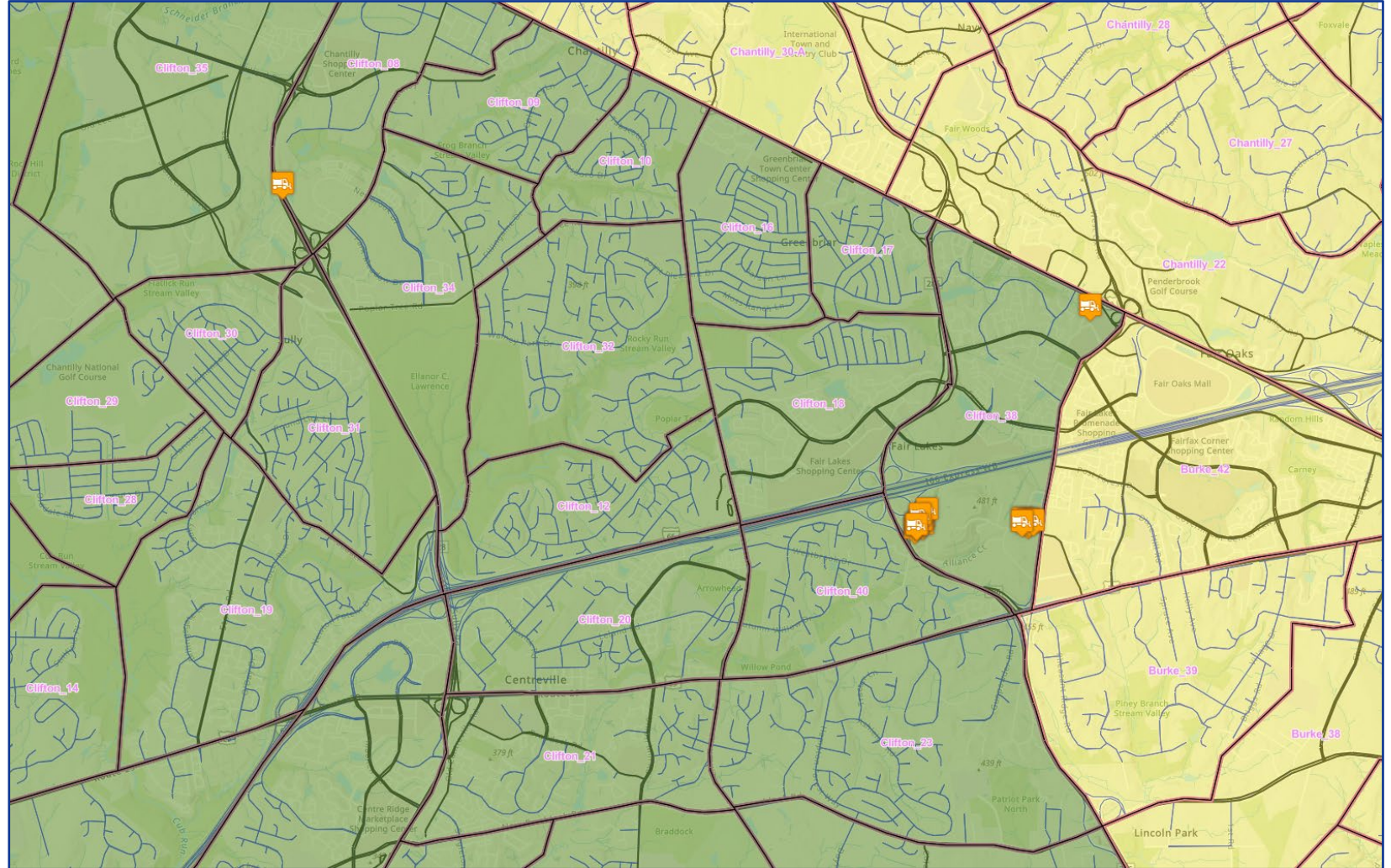
Snow Plow Tracker: plows.vdot.virginia.gov

- **Yellow:**
Deployed,
zone awaiting
activation
- **Green:**
Deployed,
zone in
progress



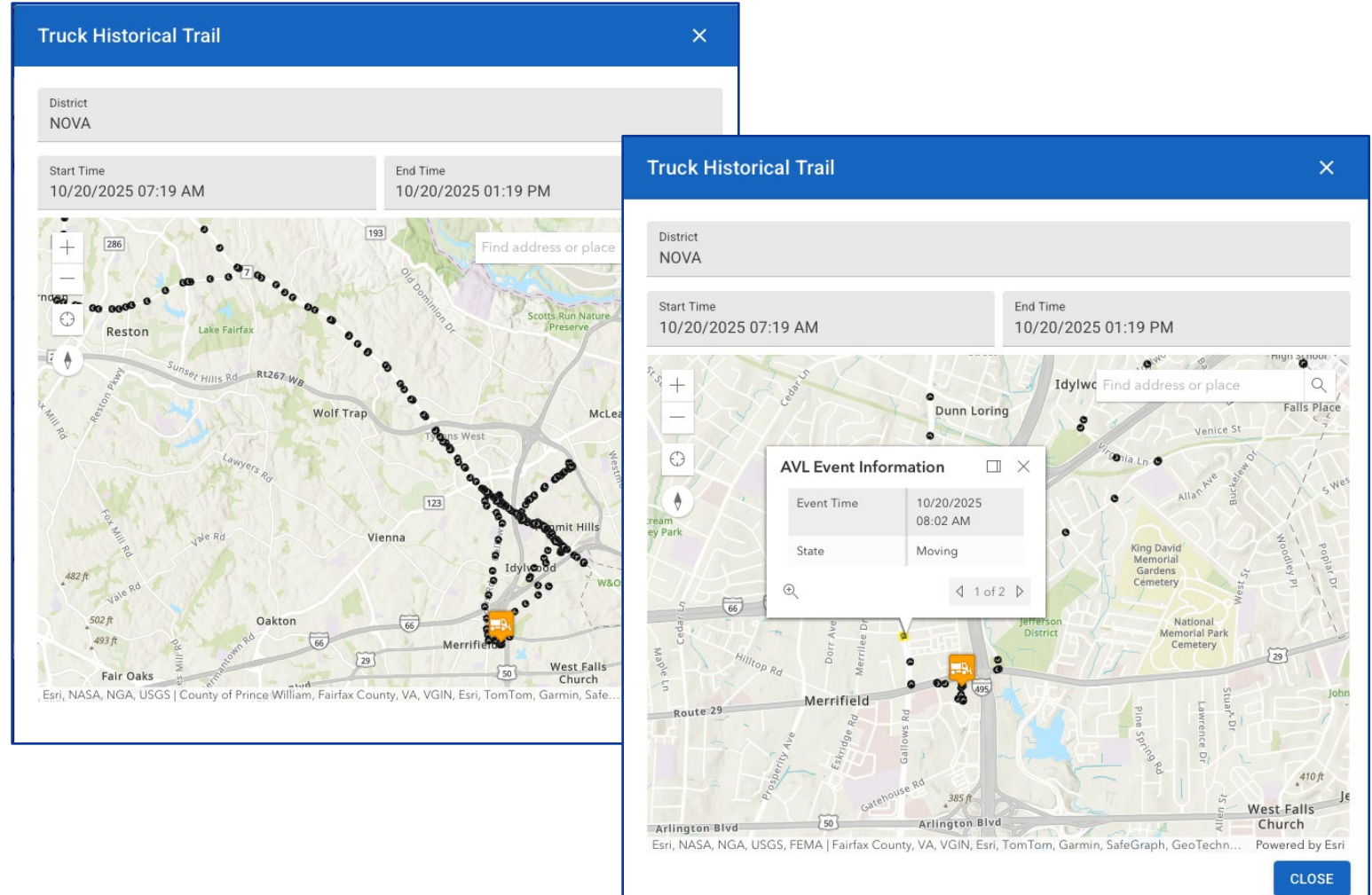
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- NOVA map divided into 650 zone maps
- The public can click on the truck in any zone for breadcrumbs history



Snow Plow Tracker: plows.vdot.virginia.gov

- Last six hours of data public
- Residents can click on data point breadcrumbs for time stamps



Resources for Residents

Find out if VDOT maintains your road: bit.ly/novastreetstest

511 Virginia: 511.vdot.virginia.gov

Customer Service Center


- <https://my.vdot.virginia.gov>
- 800-FOR-ROAD (800-367-7623)

VDOT Winter Weather Page:
<https://vdot.virginia.gov/snow>



How to Stay Informed

- **Subscribe to updates by emailing novapublicaffairs@vdot.virginia.gov**
- **NOVA District social media**
 - **X/Twitter (@vadotnova)**
 - **Reddit (@vadotnova)**
 - **Facebook (VDOT NOVA District Group)**
 - **Nextdoor**



VDOT
NORTHERN VIRGINIA DISTRICT
**WINTER
WEATHER
UPDATE**

MONDAY, JANUARY 6 - PLEASE DO NOT TRAVEL

VDOT Northern Virginia District crews are working hard to treat roads as heavy snowfall continues to fall across the area much of today.

Residents are asked not to travel today so our crews can continue to work to make our area roadways passable. Please keep in mind there will be a multi-day response to this storm with freezing temperatures in the forecast the remainder of the week.

What's The Latest

- A Winter Storm Warning is still in effect for VDOT's Northern Virginia District and much of Virginia. Snowfall amounts of 5-10+ inches are currently forecast by the National Weather Service. Snowfall amount potential can be found on their winter weather page. Please monitor forecasts closely for updates.
- Northern Virginia District Crews are now in push mode across area roads and will be making numerous passes as heavy snow continues. VDOT Northern Virginia has approximately 3,000 pieces of equipment at our disposal for this storm.
- Do not travel today unless absolutely necessary as dangerous driving conditions exist. If you must go out, make sure your vehicle is equipped with emergency supplies and give space to first responders and VDOT crews while they are out treating area roads. Familiarize yourself with these winter driving tips.

Questions and Answers



