

Northern Virginia WINTER SNOW BRIEFING 2011-2012

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District Maintenance Administrator
December 1, 2011

Snowfall

- 10.1” received
- 67% of average which is 15”

Precipitation (liquid)

- 6.15” received
- Only about 70% of average which is 8.9
- 16th driest on record (since late 1800’s)

Source: National Weather Service

Temperatures

- 1 degree colder than normal
- Consistently below normal in Dec. and Jan.

2010-2011 winter was

- Below average
- Dry
- Cooler

- Commut-a-geddon
- Jan., 26th 2011
- High Impact Event
- Only 3-8" fell in DC Metro



- Only one degree separates a rain event from a freezing rain event. NWS expects more of these hard-to-forecast events this winter.
- In congested northern Virginia, a minor weather event has a high impact

“Stormy, wet winter with above-normal temperatures and a warm to hot summer with seasonal precipitation”

Normal to below normal snowfall is most likely

NBC4's Doug Kammerer predicts 7-13" across the region

WJLA7's Doug Hill predicts 10-15" across the region

Washington Post's Capital Weather Gang predicts
10-14" across region

Weak-Moderate

- La Nina winters like 2010 and 2011

Average Temperature

- Near normal

Snow

- Near to below normal
- Big storm always possible

Precipitation

- Drier than normal
- Enhanced threat of mixed precipitation and icing events

Freezing Rain

- A little icing = big problems
- More challenging to forecast





VDOT is responsible for snow removal on

- 17,679 lane miles
 - Half of which are interstates, and half are local or neighborhood streets
- 16,000 streets



- Monitors continuous forecasts from National Weather Service and Meridian Weather Service (latter on state contract)
- Checks temps on pavement road sensors
- Holds internal conference call to determine mobilization level and plan
- Mobilizes Incident Command team
- Pre-treats bridges, trouble spots on roads

- 3,400 pieces of equipment (VDOT and contractor)
- More than 1,200 trucks are equipped with Automatic Vehicle Locator (AVL) units which VDOT can track
- Pick-up trucks are used for cul-de-sacs and side streets
- Smaller trucks can push up to 18" of snow

18 Maintenance Headquarters:

- 1 in Arlington County
- 9 in Fairfax County
- 4 in Prince William County
- 4 in Loudoun County

- 95% of crews and equipment are contractors
- Training provided annually to contractors and staff
- More than 1,200 vehicles with AVL



- Continue treating roads in advance of storms
 - 300 lane miles on interstates – liquid magnesium chloride
 - 300 lane miles on primary roads – salt brine
- Continue to pre-position trucks in subdivisions
- Continue providing a dozen contracted trucks to State Police for emergencies

- Updated snow maps (600 district-wide)
- Assign at least one truck per snow map
- 600 additional trucks dedicated to subdivisions -1,000 subdivision trucks have been added since 2009
- Ongoing outreach to homeowner associations and citizen groups

- In northern Virginia, snow removal is under way on interstates and in subdivisions at the same time.
- While heavy equipment is working to clear interstates 395, 95, 66 and 495, mid-size trucks are clearing the high volume routes such as Routes 1, 7, 15, 28, 50, Fairfax County Parkway and the Prince William County Parkway.
- At the same time, mid-size trucks and pick up trucks are clearing main thoroughfares in neighborhoods, then residential streets and finally, cul-de-sacs.

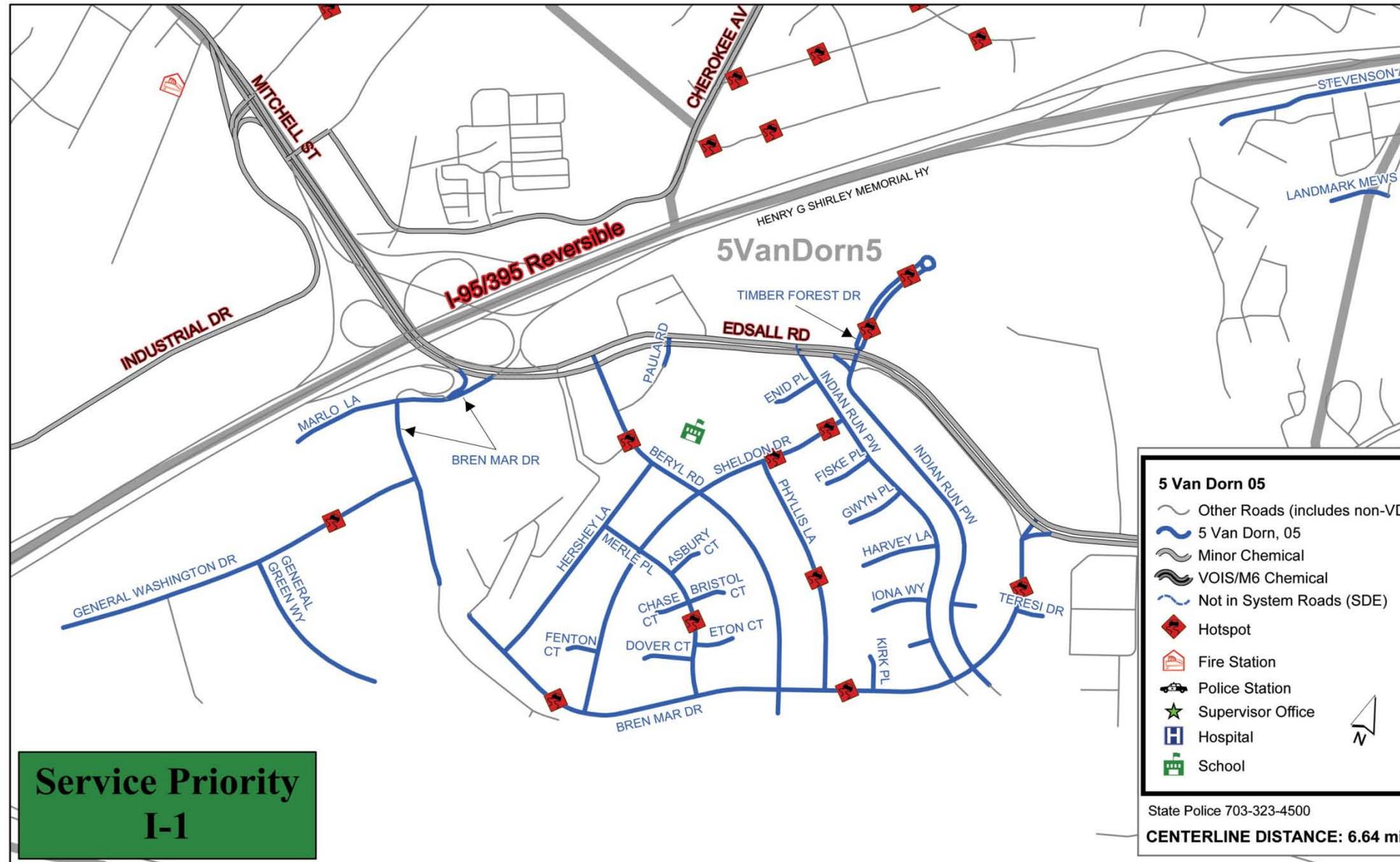
- Trucks are pre-positioned in subdivisions whenever the forecast calls for 2 or more inches of snow
- Main thoroughfares in subdivisions are repeatedly plowed during a storm
- Once storm has stopped and main thoroughfares are clear, crews work on residential streets and cul-de-sacs
- A neighborhood street is passable when a path is drivable by a vehicle with rear wheel drive



- In most storms, one plow pass is made on a subdivision street
- One pass leaves an 8 to 10-foot wide path
- Significant snowfall requires more work with additional passes or heavier equipment



- Local roads organized into about 600 “snow maps” (350 of which are in Fairfax County)
- Typically assigned to plow drivers after main thoroughfares are completed
- Once a minimum of one pass is made on the roads in a map, the plow operator reports back that the route is completed.
- Plow driver moves on to the next map



- Maintenance and office staff serve as monitors to patrol roads, check progress and ensure completion in subdivisions
- Monitors oversee 6-7 snow maps
- One snow map covers about 10 miles. Plow drivers are typically assigned three maps.
- When the first snow map is completed, plow driver moves to second map (unless there is an emergency or other special circumstance)

- VDOT in northern Virginia is testing an AVL program to better monitor trucks.
- More than 500 contractors have enrolled about 1,200 pieces of equipment in the program.
- VDOT pays for the unit in the contractor's vehicle and gives VDOT permission to view the truck on the internet between December and April

Benefits of AVL:

- Find which truck is closest to a problem or emergency for faster service
- More easily determine whether a plow has been on a certain street
- More accurately and quickly research questions related to contractor performance



Public can see status of neighborhood plowing

Virginia.gov Online Services | Commonwealth Sites | Help | Governor

Search Virginia.gov:

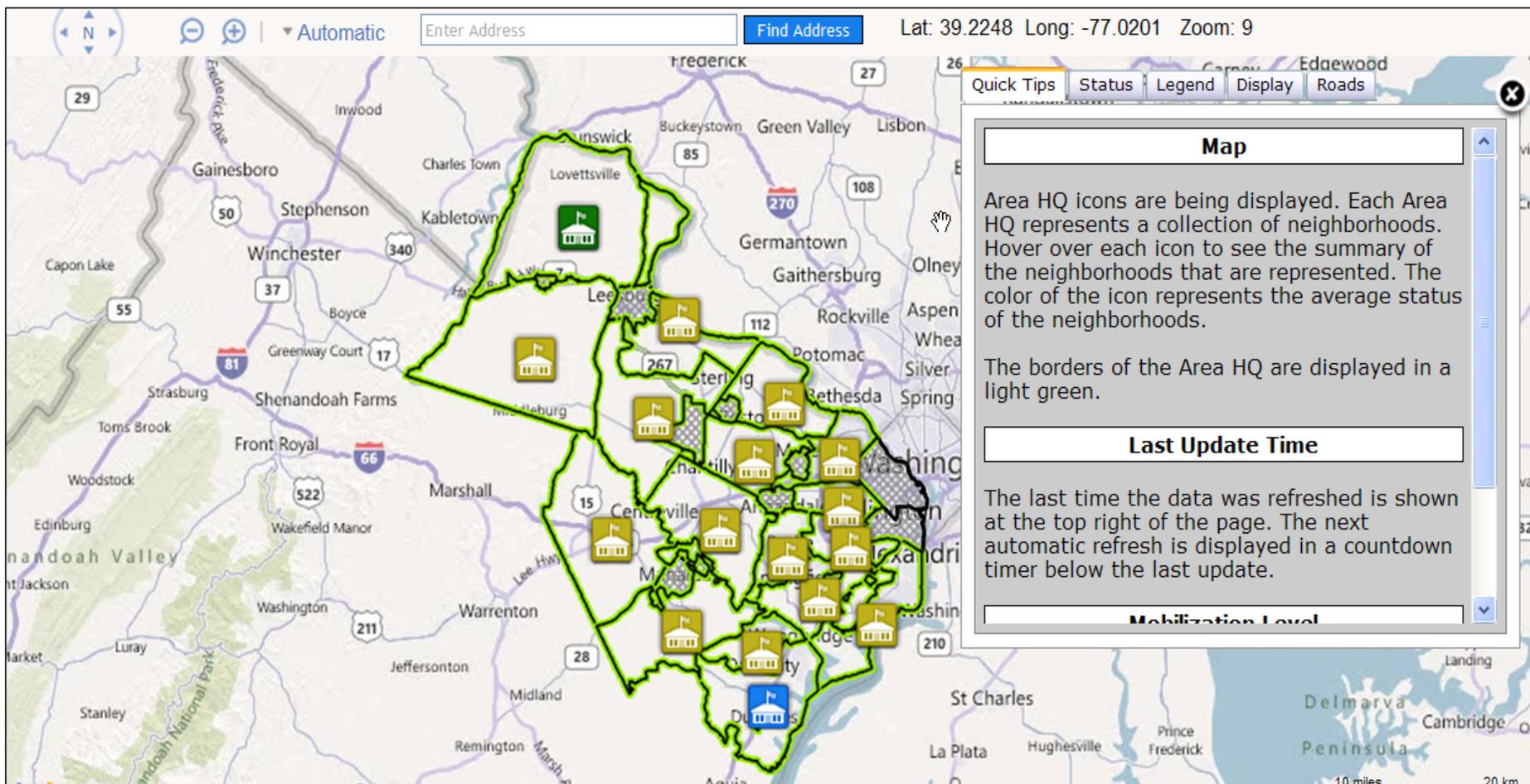


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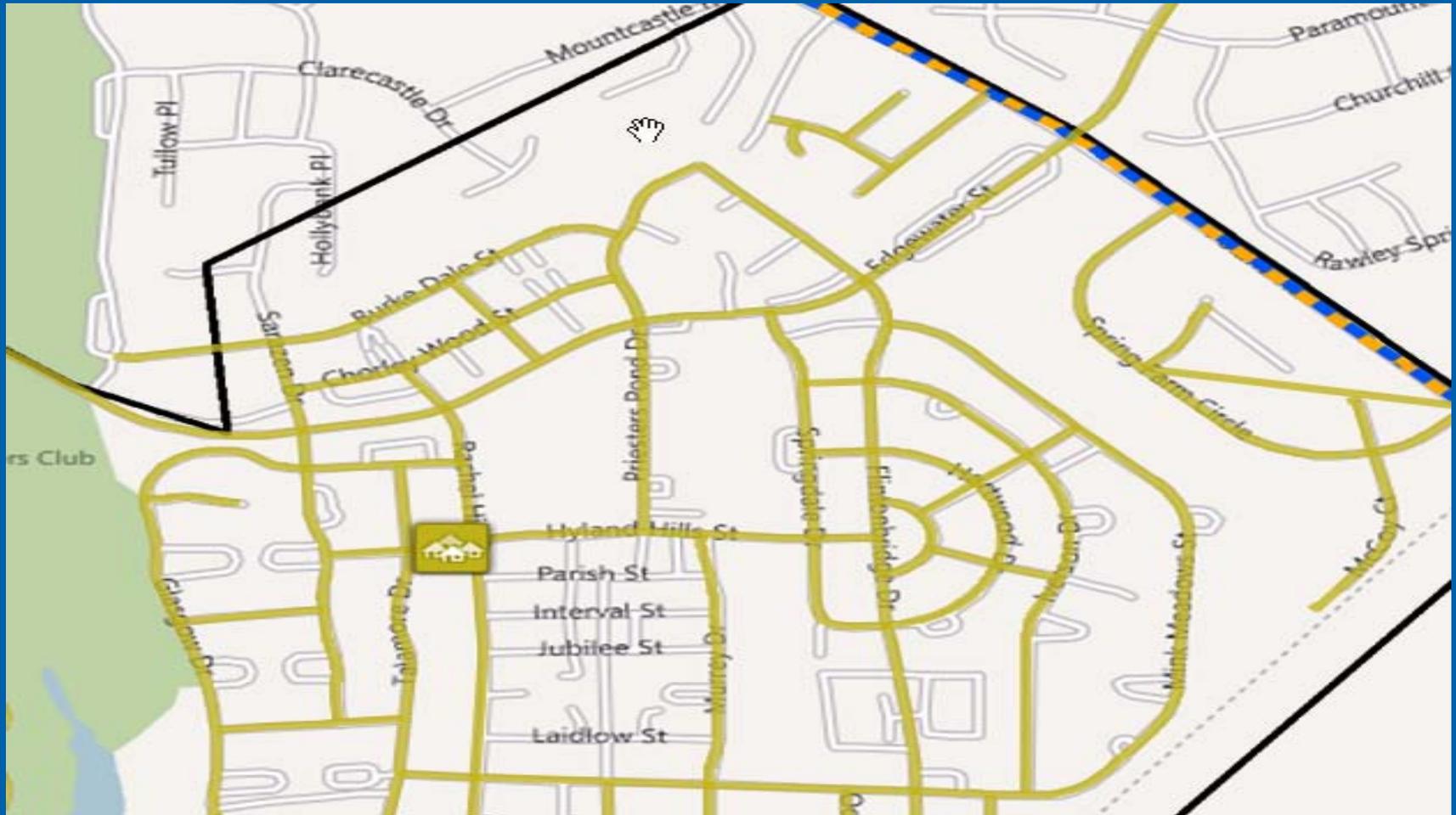
[Mobilization Plan](#) | [Statistics](#) | [Resources](#) | [Contact Us](#) | [Help](#)

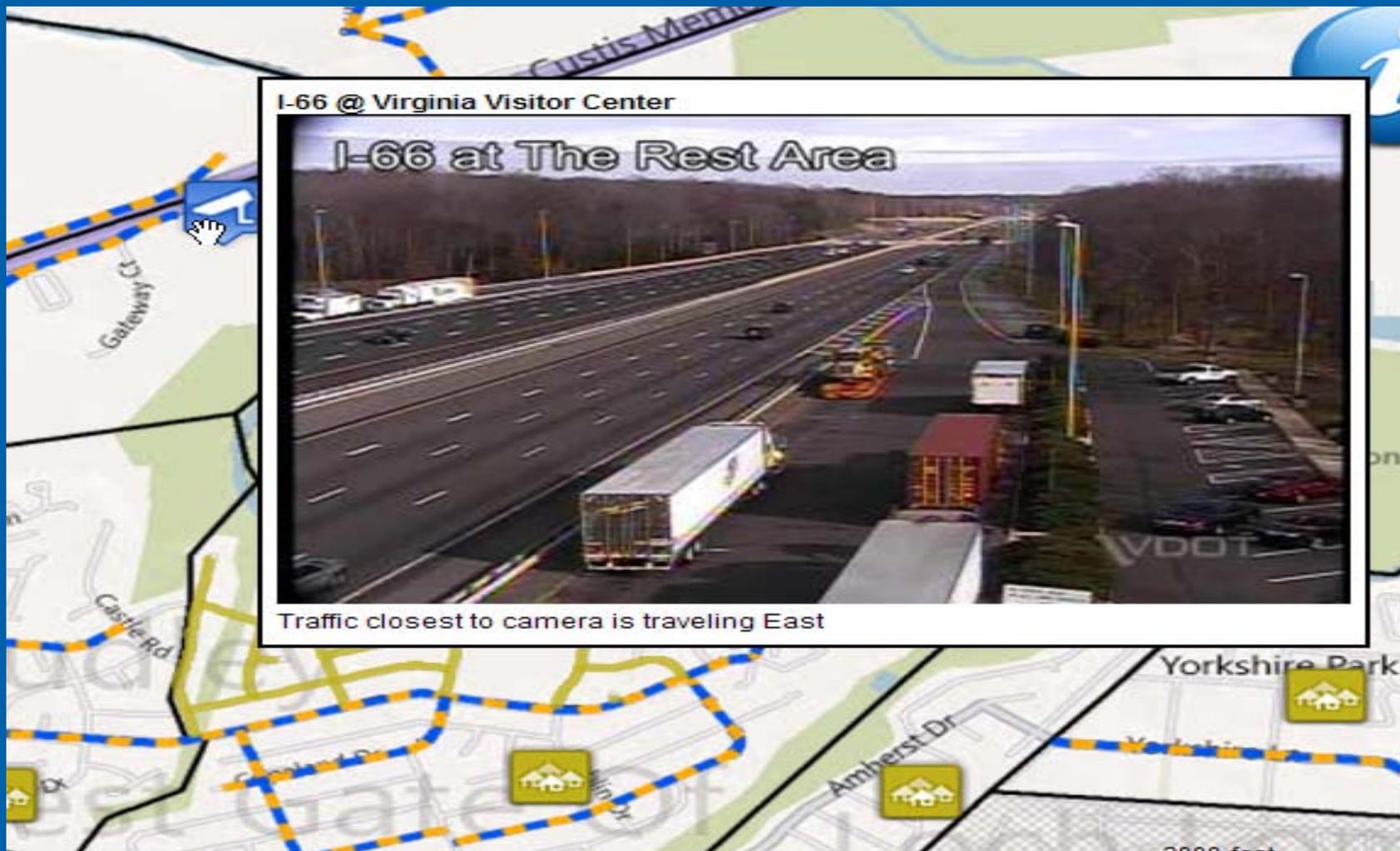
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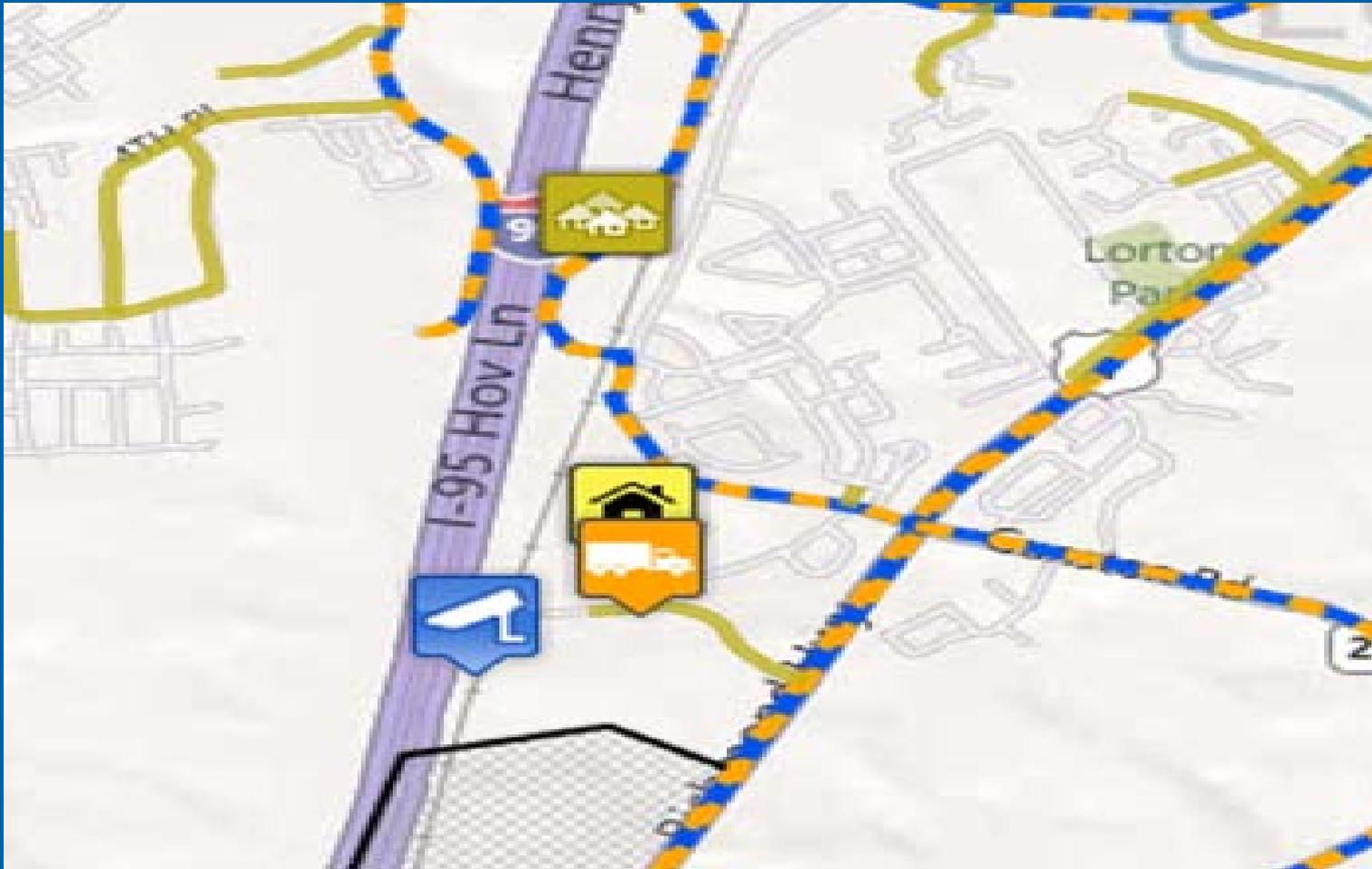
Next Update: 6 Minutes 42 Seconds



Color-coded maps indicate a neighborhood is complete, in progress or not started









How does VDOT know if a subdivision is completed?

Through feedback from monitors, contractors, AVL and citizens



- For a typical 2-4 inch snowfall, goal is to make a pass in all subdivisions within 24 hours of the storm's end.
- For a typical six-inch snowfall, goal is to make a pass in all subdivisions within 48 hours.



- VDOT does not remove snow from sidewalks or trails
- Crews and contractors are asked to be mindful of pushing large amounts of snow onto sidewalk, driveways, etc. and spillover



- When shoveling driveways, leave the last 5 feet of snow at the curb until after the plow has passed
- Shovel to the right facing the road
- Park on the odd numbered side of the street
- Park in a driveway
- Allow room for the plow to come through
- Stay off roads
- Telework

- Call 511 for road conditions
- Visit 511virginia.org for road conditions and traffic cams
- Follow @511northernva on Twitter for road conditions and accidents
- Visit www.YouTube.com/VDOTweb for snow removal tips
- Visit www.VirginiaDOT.org for news and road conditions
- Email novainfo@vdot.virginia.gov or call 1-800-FOR-ROAD to report unplowed roads