# COG WINTER WEATHER MEETING

Maryland Department of Transportation

State Highway Administration

Office of Maintenance

November 7, 2019

#### YEAR-ROUND WINTER PLANNING





# WINTER PREP – SUMMER

- Update Statewide Salt Management Plan
- Finalize New Salt Contracts with DGS
- Repair/Replace Salt Structures
- Repair/Replace Brine Tanks and Components
- Repair/Replace Brine Makers
- Restock Inventory for Winter Equipment Needs



# WINTER PREP – FALL

- Prepare/Finalize Hired Equipment Contracts
- Develop/Finalize Route Plans
- Re-Stock Material Supplies Salt, Brine, Plow Blades, etc.
- Prepare State Equipment
- Host Hired Equipment Meetings
- Inspect and Calibrate Equipment State and Hired
- Host Internal Town Meetings
- Complete Snow College for New Hires
- Complete Practice Runs and Route Inspections



# WINTER EVENTS

- Monitor Weather
- Participate in Statewide Calls
- Apply Salt Brine as Warranted
- Prepare District/Statewide Plans
- Act on Plans
- Monitor Weather and Pavement Temperatures/Conditions
- Adjust Plans Appropriately
- Clean-Up
- Re-Stock Material Supplies Salt, Brine, Plow Blades, etc.
- Inspect and Repair Equipment
- Make Roadway Repairs Potholes
- Repeat!



# WINTER CLEAN-UP – SPRING

- Assess and Repair Salt Structures
- Re-Stock Salt Supply
- Clean, Inspect, and Repair All Equipment
- Clean Brine Makers and Saddle Tanks
- Assess and Repair/Replace Brine Tanks and Components
- Assess and Repair/Replace Brine Makers
- Perform Route Inspections and Make Roadway Repairs
- Analyze Data captured from Watersheds and Stream Monitoring



## TOP ACCOMPLISHMENTS

- Continued Salt Reduction Savings the past 6 Winter Seasons
- Average 2.3 Hours to Bare Pavement the past 6 Winter Seasons
- Partnered with MDE in crafting the next generation MS4 Permit









# SALT USAGE TRENDS/WEATHER



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## BARE PAVEMENT

![](_page_9_Figure_1.jpeg)

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# SOMEWHAT NEW THIS WINTER

- New Plow Blades
- Loader Scales
- Additional Contract Anti-Icing Equipment
- Expanded Direct Liquid Application Routes
- Additional Brine Making and Storage Capacity
- MARWIS
- S.T.O.R.M. App

![](_page_10_Picture_8.jpeg)

#### BRINE OPERATION

#### New Brine Maker

![](_page_11_Picture_2.jpeg)

Brine Tanks

![](_page_11_Picture_4.jpeg)

#### Brine Application

![](_page_11_Picture_6.jpeg)

![](_page_11_Picture_7.jpeg)

#### MARWIS

![](_page_12_Picture_1.jpeg)

![](_page_12_Figure_2.jpeg)

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#### S.T.O.R.M. APP

![](_page_13_Picture_1.jpeg)

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#### S.T.O.R.M. – PUBLIC

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![](_page_14_Figure_1.jpeg)

![](_page_14_Picture_2.jpeg)

## S.T.O.R.M. – PUBLIC

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![](_page_15_Picture_2.jpeg)

# S.T.O.R.M. – INTERNAL

MDOT SHA Winter Road Ready 2 MDOT SHA Winter Operati... File Fifit View Favorites Tools, Held MDOT SHA Winter Operations Dashboard . . . 4 1 of 50 ▷ Dry 115⊘ to activate) Chemical Wet/Snow/Ice Active Snow Ops Vehicles All Active Vehicles (not including CHART) 41⊘ 960 of Fairfax, VITA, Esri,  $0 \otimes$ D5\_54\_DT85158DJ (10/12/2018, 9:15 AM) Incident Events debris on roadway @ 1-95 SOUTH AT EXIT 53 I 395 CAL RIPKEN WAY 1-68 at US 219 (SB). (Updated: 10/12/2018, 9:25 AM) D2\_21\_DT82084DJH (10/12/2018, 9:16 AM) MARYLAND DEPARTMENT OF TRANSPORTATION accident @ MD 258 AT MD 4. (Updated: 10/12/2018, 9:25 AM) 1-68 at WV Line Marys: incident @ MD 249 NORTH/SOUTH AT DRAYDEN RD, (Updated: D3\_34\_DT83107DJ (10/12/2018, 9:17 AM) 10/12/2018, 9:25 AM) US-50 at Table Rock Rd severe weather @ US 50 EAST/WEST AT MP 33 (BAY BRIDGE)PHASE D6\_62\_DT02758F6 (10/12/2018, 9:17 AM) 1 WIND WARNINGS. (Updated: 10/12/2018, 9:25 AM) 06 MD-135 at Salt Dome Billimore City, incident @1-695 INNER LOOP/OUTER LOOP AT MP 49.3 (FRANCIS SCOTT KEY) BRIDGE PHASE 1 WIND WARNINGS. (Updated: 10/12/2018, 9:25 AM) D5\_52\_DT85237DJ (10/12/2018, 9:17 AM Incidents

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