



# COG WINTER WEATHER MEETING

Maryland Department of Transportation

State Highway Administration

Office of Maintenance

November 10, 2021



# ASSETS

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- 28 Maintenance Shops in 7 Districts
- 17,389 Lane Miles
- 5,206 Centerline Miles
- 32.8 Billion Annual Vehicle Miles of Travel
- Annual Average Daily Traffic
  - 50,000+: 2,743 Lane Miles (16%)
  - 10,000-49,999: 7,384 Lane Miles (42%)
  - <9,999: 7,262 Lane Miles (42%)



# RESOURCES

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- ~1,100 Maintenance Shop Employees
  - ~740 Field Employees
  - ~110 Managers
  - ~200 Administrative Staff and Mechanics
  - ~50 Winter Volunteers
- ~600 MDOT SHA Dump Trucks
- ~2,000 Hired Equipment Contractors
- \$76 Million Winter Budget
- ~400,000 tons Salt
- ~1.7 million gallons Salt Brine

# YEAR-ROUND WINTER PLANNING

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# WINTER PREP – SUMMER

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



# WINTER PREP – FALL

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- 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

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- 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

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- 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





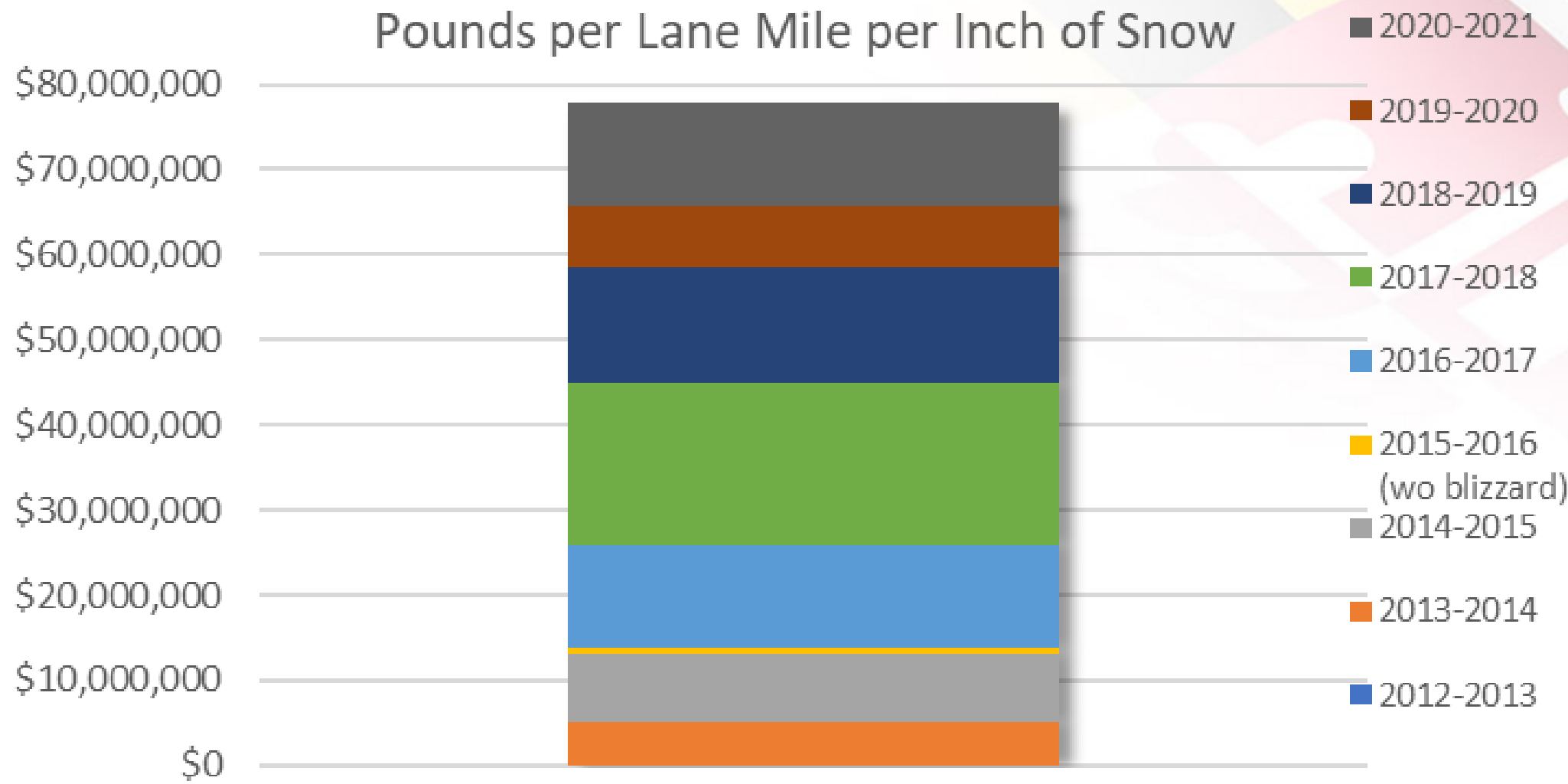
# TOP ACCOMPLISHMENTS

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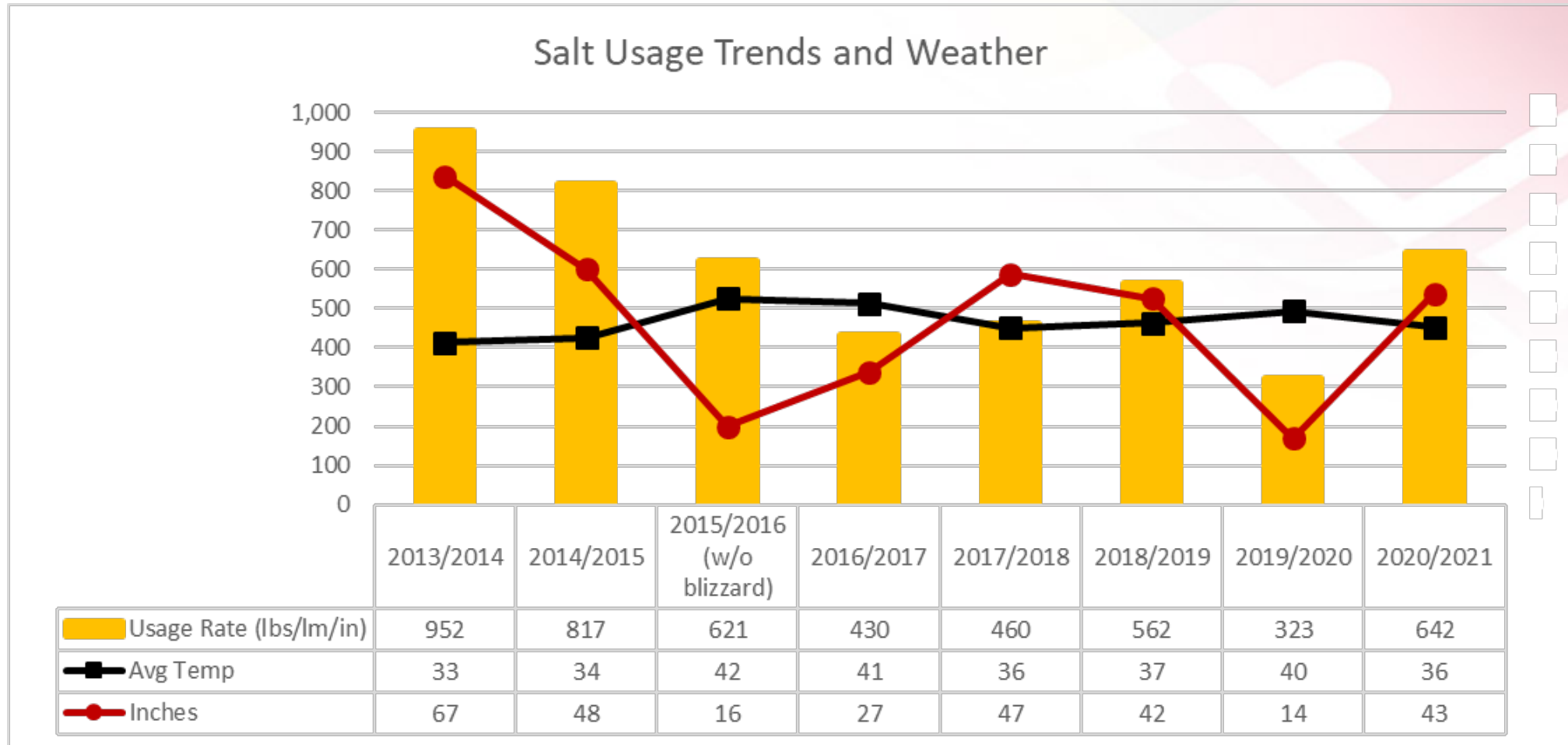
- Continued Focus on Salt Reduction the past 8 Winter Seasons
- Average 2 Hours to Bare Pavement the past 8 Winter Seasons



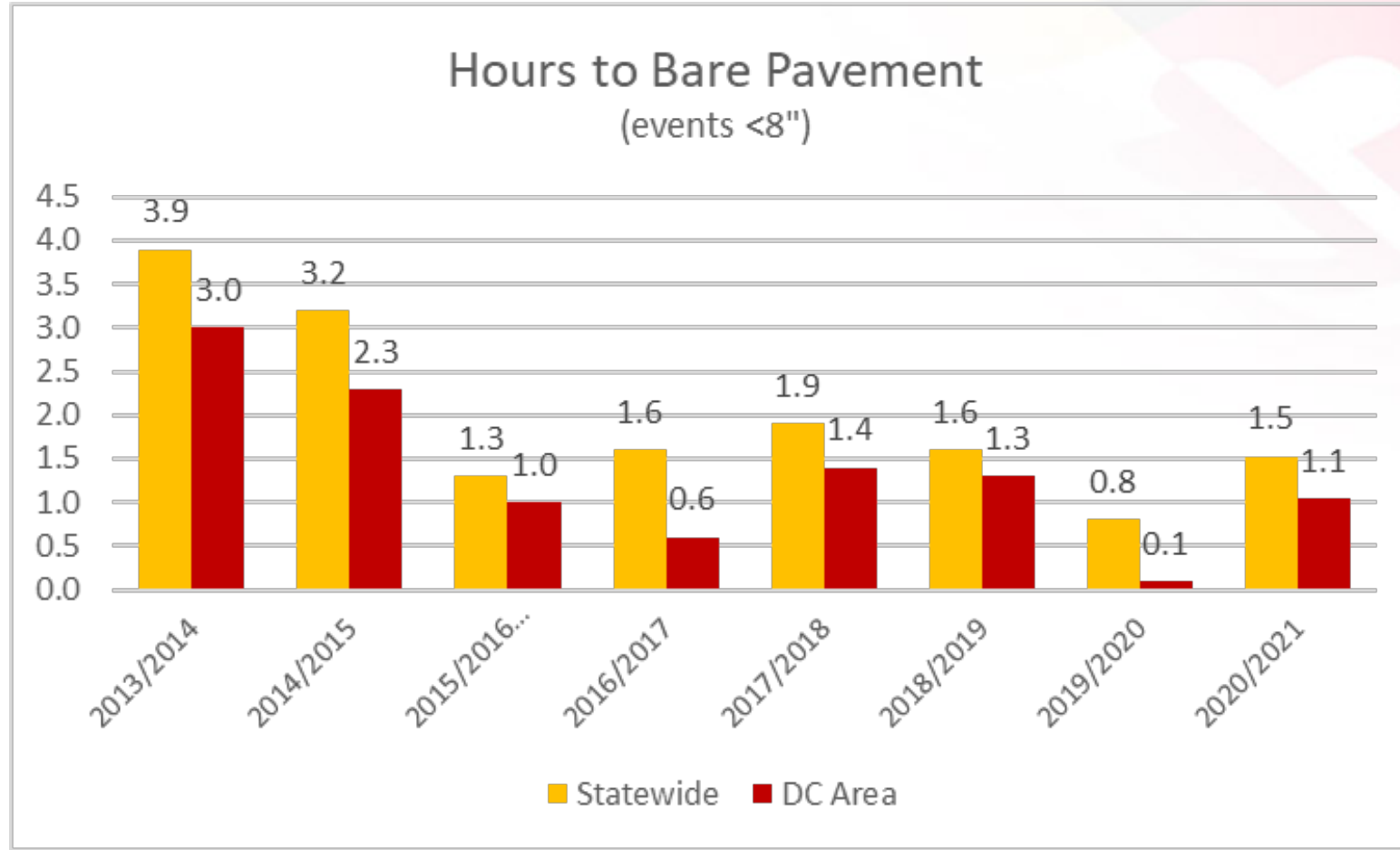
## Savings by Reducing Pounds per Lane Mile per Inch of Snow



# SALT USAGE TRENDS/WEATHER



# BARE PAVEMENT





# WINTER TECHNOLOGY

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- Loader Scales
- Additional Contract Anti-Icing Equipment
- Expanded Direct Liquid Application Routes
- Slide-In Tanks
- Additional Brine Making and Storage Capacity
- MARWIS
- Dual Wing Plows
- Barcode Scanner – Asset Panda
- S.T.O.R.M. App
- Research Project – Alternate Sources of Water for Making Brine



# BARCODE SCANNER – ASSET PANDA



login.assetpanda.com/equipment

2520 of 3000 Upgrade

Notifications (0) Groups Tools Support

Events Pay Item Shops Districts Equipment Calendar Reports

Equipment Actions Add New

<input type="checkbox"/>	Barcode ID	Equipment Configuration	Company Name	VIN or Serial #	Contractor Email	District	Shop	Event	Status
<input type="checkbox"/>	00-001			kjoiuatnkm08	prichardson@m...	Test District	Erin L Dey		Available
<input type="checkbox"/>	00-002			ads5t46bsd	prichardson@m...	Test District	Erin L Dey		Available
<input type="checkbox"/>	00-003	26 - Liquid Appl...		1111	prichardson@m...	Test District	Erin L Dey		Available
<input type="checkbox"/>	00-004			qadqgtqarvc54		Test District	Erin L Dey		Available
<input type="checkbox"/>	11-001					1	Cambridge		Available
<input type="checkbox"/>	11-002					1	Cambridge		Available
<input type="checkbox"/>	11-003					1	Cambridge		Available
<input type="checkbox"/>	11-004					1	Cambridge		Available
<input type="checkbox"/>	11-005					1	Cambridge		Available

Powered by Asset Panda

Agent Offline



# WINTER DURING COVID - CONTRACTORS

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- Appointments for Contract Paperwork Submittal
- Staggered Equipment Inspections
- Pre-Winter Meeting
  - PowerPoint Presentation via link
- Not Permitted in MDOT SHA Buildings
  - Spot-a-Pot?
- Outside Check-In/Check-Out
  - Drive-up windows
  - AVL distribution for season



# DC AREA MANAGEMENT – MDOT SHA

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## Montgomery County

- Greg Edwards, ADE-M
  - 301.513.7331
- Josh Stonesifer, RME Gaithersburg
  - 301.948.2477
- Sidney Proctor, RME Fairland
  - 301.572.5166

## Prince George's County

- Justin Sosebee, ADE-M
  - 301.513.7320
- Rick Shagogue, RME Laurel
  - 301.776.7619
- Ernie Johnson, RME Marlboro
  - 301.952.0555



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