### 24<sup>TH</sup> REGION LOCAL ROAD CONFERENCE

#### **SNOW & ICE MANAGEMENT**

BY

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SUPERINTENDENT

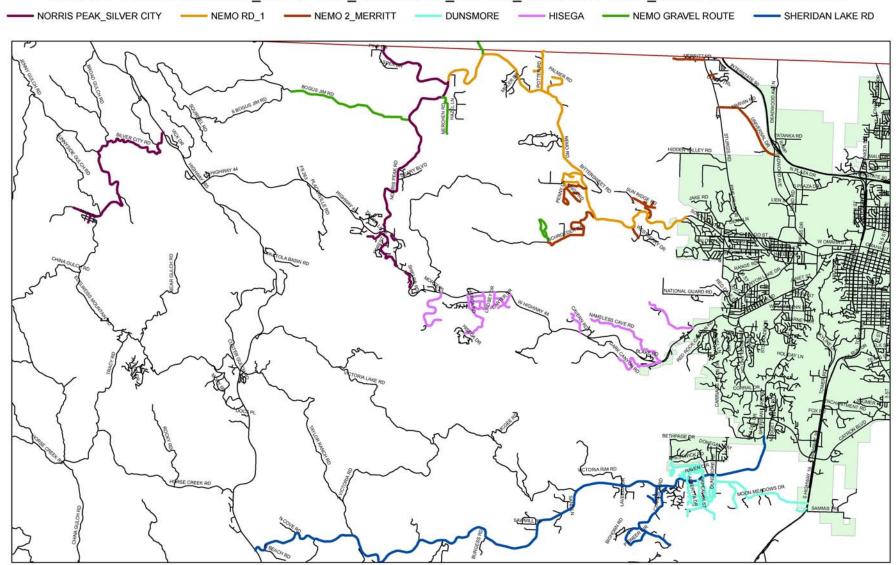
# PENNINGTON COUNTY HIGHWAY DEPARTMENT SNOW/ICE REMOVAL LOGISTICS

- Four divisions covering 841.72 miles
  - 336.13 Miles of asphalt concrete roads
  - -2.43 Miles of portland concrete cement roads
  - -503.16 Miles of gravel roads

- 45 Employees
- Equipment:
  - 21 Trucks with plows and sanders
  - 10 Motor graders
  - 5 Oshkosh plows with wings and sanders
  - 5 Loaders
  - 3 Oshkosh snow blowers
- Utilize three SDDOT salt/sand storage locations and loaders.
- Start snow removal at 4 am and/or 1 pm to accommodate school bus routes

#### **SNOW ROUTES EXAMPLE**

NORRIS PEAK/SILVER CITY\_NEMO 1 & 2\_DUNSMORE\_HISEGA\_SHERIDAN LAKE\_SNOW ROUTES 2009-2010



#### SALT/SAND MIXTURE

- Typical Mixture:
  - 17% Salt by weight per ton of sand
  - Sand/Aggregate costs\$12.35 per ton
  - Salt \$75.00 per ton @ 17% \$12.75 per ton
  - Mixing cost\$ 2.10 per ton
  - Total cost of salt/sand mixture \$27.20 per ton

## PENNINGTON COUNTY HIGHWAY DEPARTMENT SNOW/ICE REMOVAL COSTS

- 2004 \$462,483.36
- 2005 \$522,417.06
- 2006 \$601,957.28
- 2007 \$601, 782.42
- 2008 \$827,323.09
- 2009 \$616,978.73 Year to date
- \$603,192.64 Average per year cost

#### 2004-2008 AVERAGE COSTS

- Rapid City Division 250.54 Miles
  - \$394,568.32 per year

\$1,574.87 Per mile cost

- Hill City Division 107.37 Miles
  - \$114,334.49 per year

\$1,064.86 Per mile cost

- New Underwood Division 196.32 Miles
  - \$38,411.22 per year

\$195.65 Per mile cost

- Wall Division 287.49 Miles
  - \$55,878.60 per year

\$194.36 Per mile cost

### PENNINGTON COUNTY HIGHWAY DEPARTMENT SNOW REMOVAL POLICY KEY POINTS

• Sanding will commence during normal working hours unless notified by the sheriff or other law enforcement officials that conditions are such that we are asked to commence sanding immediately.

• The priority of which roads are plowed, and in what sequence, is left up to the Highway Superintendent and/or designees from each division, taking into account the reported amounts, type, and areas where the snow falls. Generally, priorities will be all hard surfaced roads. Gravel roads with residences will be the next priority with the main Farm to Market routes having preference in this category, while dead end roads will be last in this category.

 Any stalled or stranded vehicles (attended or unattended) that interfere with snow and ice removal, sanding, salting, or placing of other abrasives will be towed. Stalled or stranded vehicles that impede the passage of snow removal equipment or present a hazard to traffic will first be moved to the side of the road by the highway department and then towed. The county shall not be liable for any damage to stalled or stranded vehicles left on the traveled portion of the roadway or other obstructions which interfere with snow and ice removal, sanding, salting, or placing of other abrasives. Vehicle owners shall be responsible for all costs associated with moving, towing and storage of the vehicles.

- The County shall not pay for damaged mailboxes unless actual contact is made by a snow removal unit. Residents should mark mailboxes in drift prone areas to help maintenance workers avoid them.
   Claims for damaged mailboxes are to be submitted to the Pennington County Highway Department within 48 hours to be considered for payment.
- The County shall not pay for damaged fences unless actual contact is made by the snow removal unit. Claims for damaged fences are to be submitted to the Pennington County Highway Department within 30 days to be considered for payment.



The last five trucks purchased by Pennington County have the Kabota Quick Attach System. This system allows the trucks to be utilized as a plow and sander, dump truck or 5<sup>th</sup> wheel tractor.



























































































