# Snow & Ice Policy

2022/2023

## What you need to know!

- It ain't easy!
- It ain't quick!
- It is worth it!
- Keep it Simple!
- Make it a living document!
- Find your key players!

### How do you make a policy?

- Talk to everyone, your best performers, your worst performers, your leaders, ride in their plows, look at your gps
- Find out what you can measure, centerline miles, lane miles, storm events, tons of material, hours worked
- Start measuring what your not measuring, pavement temp, number of storms, how long you worked, total snowfall.
- Take pictures
- Write Down what worked and didn't work
- Talk to each other
- Repeat!

### Purpose

- To Provide CONSISTENT service.
- To Provide CLEAR goals.
- To Provide QUALITY training.

## Definitions

- Pavement Temperature the actual temperature of the Road, this is what determines what works.
- Salt Sodium Chloride, melts snow & ice, works great to 15°F, but we will use it down to 5.
- Sand Melts NOTHING, abrasive provides traction for about 3 passing cars.

- Brine liquid salt, that we spray on the roads prior to a storm event up to 48 hrs in advance at 60 gallons/lane mile, will use down to 5F.
- SuperMax brine mixed with beet juice, that we spray on roads prior to a storm event up to 5 days in advance at 25 gallons/ lane mile, will use down to -15F.
- We are no longer using Super Max

## Definitions

- Weather Service Contracted Weather Channel.
- Curb to Curb short way of saying all of the pavement.
- Underbody Plows plows under the frame dump truck typically used for snows less than 6" in depth.
- Front Plows plows mounted on the front of the truck typically used for snows greater than 6", can have trip edges.
- Benching is the act of clearing snow away from the edge of the road to provide room for additional snow.

## Definitions

- Level of Service This is the goal pavement condition for a type of road after a certain amount of time has passed after a storm event.
- This is a mental picture you should have of what the different kinds of roads will look like on your route after a certain number of shifts.
- Example = Gravel Road has been opened by the end of the shift.

## Level of Service Definitions

#### **Bare Pavement**



#### **Bare Wheel Paths**



### Mains

are any of the following:

Multi-lane Roads Have more than 5,000 VPD Main Through Route

Level of Service

Bare Pavement 48 hours (2 Day Shifts)

Treatment

Salt/Brine entire lane/Plow



## Level of Service Definitions

#### Passable



#### What is it?



### Secondaries

Are any of the following: Chip Seal Roads Interior Subdivision Roads Paved Roads that Aren't Through

#### Level of Service

Bare Wheel Paths 48 hrs (2 Day Shifts)

Treatment

Plow



### Hot Spots

Are any of the following:

Roundabouts, Bridge Decks, Curves, Hills, Intersections, Drifting Areas, Flooding Areas, In front of Schools, Hospitals, Police Stations, Fire Stations, and Highway Garages

Level of Service

Passable

48 hrs (2 Day Shifts)

Treatment

Salt/Brine/Plow/Sand



### Gravel

Are Gravel!

Level of Service

Passable 8 hrs (1 Day Shift)

Treatment

Plow Sand if necessary to find road



### End of Roads

Are any of the following:

Cul-de-Sacs Turn Arounds Dead Ends

Level of Service

Passable 48 hrs (2 Day Shifts)

Treatment

Plow



## Additions

#### **Sidewalks**

- Adjacent to Road or off roadway multi-use Paths
- Level of Service is Bare Pavement in 1 week (ADA)
- Plow

#### Inlets

- Inlets, drain decks, storm drains
- Level of Service is open in 1 week.

## When Does Level of Service Start?

#### **During Storm**

- Plowing everything once in and once out, trying to keep every road open.
- Plows will be down, but you might not run material, that is the Supervisors call.
- Only in declared State of Emergencies are we working 15 hrs.
- Goal is to be everywhere once in and once out in 4 hours.

#### **After Storm**

- Level of Service Starts the moment the Storm ends.
- Plowing, material per Supervision.
- 12 Hours Max, if someone finishes before everyone else they help out.

## CAN WE GO HOME NOW?

#### 8 Hours

- Mains are Bare Wheel Paths
- Hot Spots are Passable
- Secondaries are Passable
- Gravel Roads are Passable
- End of Roads are Passable

#### **12 Hours**

- Mains are Passable
- Hot Spots are Passable
- Secondaries are Passable
- Gravel Roads are Passable
- End of Roads are Passable

## CAN WE GO HOME NOW?

#### **Sundays & Holidays**

- Mains are Passable
- Hot Spots are Passable
- Secondaries are Passable
- Gravel Roads are Passable
- End of Roads are Passable

#### Nights

- Mains are Passable
- Hot Spots are Passable

## Brining is Anti-Icing

#### Where?

- Mains
- Round-a-bouts
- Bridge Decks
- Schools
- Fire Stations
- Hospitals
- Highway Garages
- Hills
- Curves
- Intersections

#### What do I do?

- Put the plow down
- Look in the mirror
- Is it working?
- Yes Keep on Trucking
- No Salt or Sand

## Subdivisions

#### **Secondaries**

- Entrance Plowing pull clear through the approach then back up and make the pass in.
- Extra Wide Roads Make Second pass if there are homes on it and more than 3' from curb
- Normal Roads Keep Trucking
- Hot Spots

#### **End of Roads**

 Cul-de-Sacs get plowed backwards and cleaned out later with pickups, superduties, backhoes, and payloaders

## What If?

- There's a White Out Pull Off Road and radio your Supervisor
- An Accident not involving you call 911.
- An Accident involving you Call your Supervisor
- There's a car parked in the road

   plow around it, note address
   for Supervisor

- You damaged a mailbox Let your Supervisor know
- Someone asks you to plow their drive NO!
- We use someone's drive as a turn around – Turnaround with the plow down.

## Radios

- In the yard loading Talk around
- Plowing Highway
- If everyone shouldn't hear it you shouldn't say it!

• Why?

- We need to communicate!
  - Who's listening?
    - Supervisor
    - Plowing Partner
    - Other Garages
    - Management
    - EMA
    - Sheriff's Department

### Calibration

Why?

Using the right tool the right way tends to get the job done, better, quicker, and cheaper.

And we're all taxpayers.



What's the pavement condition on this road?

Bare Pavement Bare Wheel Paths Passable Running Water I'm Done!



It's Been 8 hrs plowing and this road is a Secondary Road, what do you do?

Plow Down Salt Sand

I'm Done!



What's the pavement condition on this road?

Bare Pavement Bare Wheel Paths Passable Running Water I'm Done!



This is a Brining Route Road, what do you do as a plow driver?

Plow Down Salt Sand Plow and Salt Plow and Sand Go get a donut I'm Done!



### Things to Remember

Snow on the Road plow down!

If it's a Brining Route Road check with the plow before Salt or Sanding.

Always assume they don't see you!

We're not done until our garage is done.

