



**New Version**

**2007-2008**

**SCOTT COUNTY**

**SNOW PLOW ROUTE BOOK**



## 2007-2008 Snow Plow Route Book

Purpose of this book is to provide information to Scott County Highway Department Plow Operators, Supervisors and Managers as well as our Elected Officials on the practices and procedures used to provide Snow and Ice Control services to the citizens of Scott County

The basic principals that guide us in providing Snow and Ice Services to the Citizens of Scott County is driven by the over all County Vision and Mission Statements which state:

***The Vision of Scott County is to be the best public service provider and employer in the business.***

***The Mission of Scott County is to deliver quality public services to all citizens in an effective, professional and efficient manner.***

The Scott County Highway Department is responsible for the planning, design, construction and maintenance of roads, bridges and traffic control devices on the County Highway system. The department works with cities, townships, adjacent counties, Mn/DOT, and Metropolitan Council to develop and maintain the county's highway infrastructure. Snow and Ice control services are part of the infrastructure maintenance responsibility.

The Scott County Board of Commissioners adopted five Strategic Initiatives in September 2004. These strategic initiatives are direction provided by the Board to all County Departments in establishing priorities. The Scott County Highway Department helps meet these strategic initiatives by:

- ***Create Safe, Healthy and Livable Communities***
  - ***maintaining the highway system***
  - ***providing snow and ice control services as needed per event 7 day a week***
  
- ***Develop Strong Public Partnerships and an Active and Informed Population***
  - ***coordinating snow and ice removal with cities and adjacent counties***
  - ***Utilizing Maintenance Agreements for Snow and Ice Control Services*** in areas where Townships and Cities can provide better and more efficient service to the citizens
  
- ***Manage the Challenges and Opportunities Derived from Growth and Development***
  - ***Route design that meets the needs of each segment of highway. High volume roads have less lane miles per truck to provide a higher level of service. Routes are staffed at 3 trucks, 2 trucks or one truck depending on the needs of the route.***
  - ***Resource sharing personnel are used to staff late afternoon shift when weather conditions require extended hours of Snow and Ice Control service***

- ***Sustain the County's Excellent Financial Health and Economic Profile***
  - Use treated salt to improve deicing effectiveness in cold weather and minimize call backs
  - Pre-treat bridge decks and hills to prevent ice from forming
- ***Support the Organizational Culture Which Enhances the County Mission***
  - Sensible Salting Seminar- to enhance County and also City employee awareness of salt use and best practices for Snow and Ice Control
  - Mn/DOT Snow Plow Training to improve operator skills
  - Resource Sharing to not only expand coverage of our system but to enhance employee skills and give greater flexibility to provide service to the citizens

Scott County is committed to providing a safe and efficient transportation system for current and future residents and businesses in a cost-effective manner. The Transportation Plan includes the following goals to carry out this commitment:

1. ***To PRESERVE*** the existing transportation infrastructure, in order to protect the significant investment already made, and reduce unnecessary premature costs of replacing existing facilities.
2. **To MANAGE** the existing transportation system to maximize safety and efficiency.
3. ***To IMPROVE and EXPAND*** the existing transportation system as necessary to meet current and future transportation needs.
4. ***To explore ALTERNATIVE MODES OF TRANSPORTATION*** based on the needs of those who live, work, and travel in Scott County.
5. ***To provide TRANSPORTATION PLANNING that results in a local transportation system that will safely serve the needs of current and future residents and businesses, support the County's development plans, and compliment the regional transportation system.***

Snow and Ice control services are clearly a vital part of the Create Safe and Livable Communities Strategic Initiative and a part of all the five Strategic Initiatives. Snow and Ice Control Services are consistent with Transportation Plan Goal 2; **To MANAGE** the existing transportation system to maximize safety and efficiency.

# CONCEPT OF OPERATIONS

1. Day Shift will have 19 TRUCKS ON 9 ROUTES. There will be typically 2 or 3 trucks for plowing on multilane routes. Late Afternoon Shift (normally used in a snow emergency) will generally be used on High Volume routes CR 42, 21 & 18, 17, 82, 83 & 101 and other routes as needed.
2. Afternoon shift will be staffed by additional available operators. During the normal work day supervisors may use e-mail, desk phone or cell phone to contact these individuals.
3. Callout procedures:
  - For full shift callouts up to two calls will be made to the telephone numbers provided by snow and ice staff. The call out phone numbers will be placed on the call out list. If the supervisor or lead worker placing the call gets no answer it will be noted that a call was placed. Supervisor or Lead Worker will leave a brief message concerning the call out, if no return call is made within 15 minutes the call will be logged as a no answer. If employee answers but is unable to come in it will also be noted and others will be called. If personnel are still needed to cover a shift, the supervisor or lead worker will call qualified back up operators until the shift is appropriately staffed.
  - For emergency callouts, partial shift callouts or callbacks, Supervisors or Lead worker will use the procedure listed above except no message will be left. Supervisor will

continue calling until sufficient personnel are contacted and confirmed to respond to the situation.

4. Normal hours of operation 3:00 AM-3:00 PM. Maximum plowing time per shift is 12 hours unless approved by Operations Engineer for exceptional situations. Operations Supervisors may modify the schedule and initiate callouts for a 2:00AM start under severe storm situations where an extra early hour can make a difference. Late afternoon Shift will typically begin at 3:00 PM and plow until 10:00pm if necessary. Plowing between 10:00pm and 2:00am will be only on an emergency callout basis. Late Afternoon Shift will typically not be used on weekends.
5. Storms expected to exceed two days may require a snow emergency (afternoon shift will be used). We will continue all efforts to keep roads open to the extent that personnel and equipment are available or until bare pavement is achieved.
6. Supervisor Coverage will generally be as follows Monday-Friday: Gene Busacker Midnight to 11:00AM, Ron Robb 10:00 AM till 10:00PM. Weekends will be a separate schedule and will vary by the actual conditions on the roads with one primary supervisor (ON Call) and one backup supervisor on duty as needed. On Call/On Duty Supervisor will carry the **HOT Phone 612-790-0827**. The HOT Phone is the primary method of contacting a Supervisor on weekends and outside normal business hours during the week.
7. Anti Icing
  - Use of deicing liquid prior to predicted snow events will be standard procedure as outlined below. Application rate of 15-25 gallons per lane mile is the target rate for 32-36% solution. PAVEMENT TEMPERATURE MUST BE BELOW 28 degrees to implement anti-icing with liquids.
  - All concrete bridge decks, sharp curves and steep hills in high traffic areas will be treated 12-48 hours prior to an expected or predicted event.

- If liquid applicator is unavailable or cannot complete the required area in the allotted time anti icing may be completed using treated salt spread at 100 lbs per lane mile. Use of solid salt must be no more than 12 hours prior to expected event to be effective.

#### 8. Pre Trip-Post Trip Inspection:

- Check all items in daily checklist-steering, tires, brakes, lights etc. Turn work order in to supervisor for repairs.
- Check cutting edges with go-no go gauges, operators will not begin a shift if any part of the cutting edge on front plow or underbody plow has a no-go point. Exception to this would be a written notation by the supervisor that the cutting edge is OK to use for one more shift. Cutting edges should also be checked for wear at mid shift or after a break for fuel or salt reload. Turn in work order and assist shop in replacement of cutting edges.
- Check wing chains with a full load to ensure they do not hang below the pavement surface or are slack when lowered to the pavement. A loose wing can cause a serious accident.
- A pre event safety and operations meeting will be held by the on duty supervisor prior to trucks departing the shop each and every event and shift. Items discussed will include, pavement temperature, expected snow fall, special plowing directives such as wing and underbody use, soft shoulder conditions and expected storm duration. Attendance at this meeting is mandatory for all operators.

#### 9. Accident Avoidance and Safety (see Appendix B-Safe Driving Policy):

- Always operate at an appropriate speed for the current conditions. In urban areas where buildings are close to the road plowing may need to be at 15 mph or less. Snow

density plays a big part and operator discretion is required. Hitting adjacent buildings or causing property damage can be subject to disciplinary action.

- If plow equipment is malfunctioning call the supervisor or mechanic on duty and advise them of the problem or concern. It is better to bring the plow truck in to the shop for repair if need be for maintenance/repair than to operate a potentially unsafe piece of equipment.
- Use of cell phones while plowing is prohibited. Initiating calls while driving is against County Policy and is not permitted. If making a call is necessary, pull over and stop to make a call. Answering a call should also be done after stopping.
- If an **accident** occurs be familiar with and always follow established County Policy for Vehicle accidents.
  - a. Call your supervisor immediately on the two way radio, If traffic control is needed please state that as well. **Do not move vehicle per DOT regulations.**
  - i. The Supervisor will notify Dispatch (952-445-1411) so a deputy can be sent to the scene. First law enforcement officer to the scene will determine appropriate driver action.
  - b. **If injuries are involved make sure you state this in your call.** Life Safety is priority number one. Supervisors will require operators to be medically checked as soon as possible and immediately if operators have any pain or symptoms of injury. Operators involved in an accident will not be assigned to drive until medically cleared-no exceptions.
  - c. **If there is a fatality Rhonda Laxen-Scott County Risk Manager must be called by the supervisor on duty;** Home 952-445-8559, Office 496-8190.
  - d. **Supervisors will respond to the scene as soon as possible,** the Operations Engineer may also be notified by the supervisor on duty and may be the

one to respond on site in lieu of and at the request of the on duty supervisor.

- e. Federal Motor Carrier rules state that all Commercial Licensees must be tested for alcohol within 2 hours and for drugs within 32 hours of an accident. Supervisors must insure that both the alcohol and drug tests are completed in the allotted time. Supervisors should request a copy of the accident report with PBA readings on site and give the IC their business card for a formal copy of the report.
  
- f. State Patrol may call in a truck enforcement officer to check the truck for defects. If Truck Enforcement directs you to move the truck, do so, follow their direction.
- g. **An Accident report is required by State Law within 24 hours by the operator and a County Accident Incident report is also required.** Always attach a copy of the State report to the County report.

10. Post Storm Activities:

- Clear snow piles in urban areas or at intersections/crossovers, haul snow from parking lots and berm areas.
- Clean Trucks at City of Shakopee automated truck wash.
- Note all equipment repairs and fill out work request, turn in to Operations Supervisor or Shop Lead worker.
- Hold After Storm Review to discuss what went right, what went wrong, and what can be done to improve next time.
- Turn in salt tickets daily.



## Contact List:

- Maintenance Supervisor Gene Busacker W: 952-496-8478, Cell: 952-292-3026, Home: 952-447-3564
- Maintenance Supervisor Ron Robb W: 952-496-8027, Cell:952-292-2344, Home: 952-895-0197
- Lead Worker; Roger Schoenbauer Cell: 952-292-3025, Home: 952-492-6137
- Operations Engineer: Greg Felt W: 952-496-8047, Cell: 952-292-1469, Home: 952-233-1224.
- Shop: Dale Vinkemeier: W: 952-496-8058, Cell 952-292-3949, Home: 507-248-3661
- HOT Phone: ON CALL Supervisor:612-790-0827

**SPREAD RATES BASED ON MATERIAL USED AND  
PAVEMENT TEMPERATURE**

<b>Pavement Temp Deg F</b>	<b>Type of Precip</b>	<b>100% Sand Salt, Lbs/2 Lane Mile</b>	<b>50% Sand Salt, Lbs/2 Lane Mile</b>	<b>Treated Salt Lbs/2 Lane Mile</b>	<b>Lightly Treated Salt Lbs/2 Lane Mile</b>
<b>30+</b>	<b>Any Type</b>	<b>200-400lb</b>	<b>400-800</b>	<b>140</b>	<b>180</b>
<b>25-30</b>	<b>Snow Rain</b>	<b>400-500 300-400</b>	<b>800-1000 600-800</b>	<b>250-350 140-200</b>	<b>300-350 200-300</b>
<b>20-25</b>	<b>Snow Rain</b>	<b>500-600 300-400</b>	<b>1000-1200 600-800</b>	<b>350-400 200-300</b>	<b>400-500 250-300</b>
<b>15-20</b>	<b>Any Type</b>	<b>600</b>	<b>1200</b>	<b>400-500</b>	<b>500-550</b>
<b>&lt;15</b>	<b>Any Type</b>	<b>Not effective</b>	<b>Not effective</b>	<b>600+</b>	<b>Not Effective</b>

**Operators may adjust spread rates up to +/- 20% for local conditions.**

## Salt Tracking Sheet 2007-2008

Truck#	Operator	Plow Route	County Road	Lane Mile
2185	Kari	1	2	26.99
2180	Scott	1	27	12.47
		1	29	4.95
		1	46	12.18
		1	56 Gravel	3.02
		1	62	12.99
		1	85 Gravel	4.00
		1	87 Gravel	5.85
		1	86	10.17
		1	Dakota 5	2.03
		1	91	13.75
			Total Mile R-1	108.4
			Lane Mi/Truck	54.2
Truck#	Operator	Plow Route	County Road	Lane Mile
2168	Tom G	2	2	11.79
2167	Brad	2	8	30.18
		2	11	13.74
		2	15	20.11
		2	Gravel 64	8.02
		2	89	12.0
		2	56	7.60
		2	64	12.0
			Total Mile R-2	115.44
			Lane Mi/Truck	57.72
Note: Priority will be given to plowing the Roundabout at CSAH 2 and TH13 in tandem with one Truck from Route 1 if requested by Route 1.				
Truck#	Operator	Plow Route	County Road	Lane Mile
		3	1	5.96
2181	Kevin	3	3	10.58
2164	Leon V	3	5	12.80
		3	6	9.20
		3	7	16.80
		3	51	10.24
		3	53	8.40
		3	59	9.45
		3	60	5.18
		3	64	10.85
		3	66	10.75
		3	76 Gravel	3.88
			Total Mile R-3	114.09
			Lane Mi/Truck	57.045
Truck#	Operator	Plow Route	County Road	Lane Mile
2182	Gary S	4	12	5.20
2179	Andy	4	Dakota 60	4.82
2189	Will	4	21	32.03
		4	81 Gravel	3.10
		4	82	5.22
		4	83	20.86
			Total Mile R-4	71.23
			Lane Mi/Truck	23.7433

Truck#	Operator	Plow Route	County Road	Lane Mile
2176	Mark J	5	10	6.44
2165	Brian	5	23	22.64
		5	27	8.67
		5	68	13.59
		5	81	7.93
		5	87	10.02
		5	91	6.84
			Total Mile R-5	76.13
			Lane Mi/Truck	38.065
Truck#	Operator	Plow Route	County Road	Lane Mile
2177	Tom Lynch	6	2 Gravel	2.01
		6	4	4.02
		6	9	3.11
		6	10	13.01
		6	15	4.0
		6	61	8.97
		6	61 Gravel	6.01
		6	71 Gravel	3.94
		6	79	4.02
			Total Mile R-6	49.09
			Lane Mi/Truck	49.09
Truck#	Operator	Plow Route	County Road	Lane Mile
2174	Randy M	7	16	12.40
2183	Mike C	7	18	10.06
2187	Pete S	7	27	19.21
		7	42	30.94
		7	44	6.23
			Total Mile R-7	78.84
			Lane Mi/Truck	26.28
Truck#	Operator	Plow Route	County Road	Lane Mile
2184	Pete B	8	17	26.49
2186	Pat P	8	69	39.88
		8	101	34.16
			Total Mile R-8	100.53
			Lane Mi/Truck	50.265
Truck#	Operator	Plow Route	County Road	Lane Mile
2169	Roger	9	9	3.11
2178	Jared V	9	10	13.01
		9	15	17.10
		9	16	14.08
		9	14	9.02
		9	70 Gravel	2.01
		9	73 Gravel	2.0
		9	77	1.96
		9	78	7.25
		9	79	15.35
			Total Mile R-9	84.89
			Lane Mi/Truck	28.2967

# **Route #1**

## SCOTT COUNTY SNOW PLOW ROUTE #1

Truck#	Operator	Plow Route	County Road	Lane Mile
2185	Kari	1	2	26.99
2180	Scott	1	27	12.47
		1	29	4.95
		1	46	12.18
		1	56Gravel	3.02
		1	62	12.99
		1	85 Gravel	4.00
		1	87 Gravel	5.85
		1	86	10.17
		1	Dakota 5	2.03
		1	91	13.75
			Total Mile R-1	108.4
			Lane Mi/Truck	54.2

# **Route #2**

## SCOTT COUNTY SNOW PLOW ROUTE #2

Truck#	Operator	Plow Route	County Road	Lane Mile
<b>2168</b>	<b>Tom G</b>	2	2	11.79
<b>2167</b>	<b>Brad</b>	2	8	30.18
		2	11	13.74
		2	15	20.11
		2	Gravel 64	8.02
		2	89	12.0
		2	56	7.60
		2	64	12.0
			Total Mile R-2	115.44
			Lane Mi/Truck	57.72

**Note: Priority will be given to plowing the Roundabout at CSAH 2 and TH13 in tandem with one Truck from Route 1 if requested by Route 1.**

# **Route #3**



## SCOTT COUNTY SNOW PLOW ROUTE #3

Truck#	Operator	Plow Route	County Road	Lane Mile
		3	1	5.96
<b>2181</b>	<b>Kevin</b>	3	3	10.58
<b>2164</b>	<b>Leon V</b>	3	5	12.80
		3	6	9.20
		3	7	16.80
		3	51	10.24
		3	53	8.40
		3	59	9.45
		3	60	5.18
		3	64	10.85
		3	66	10.75
		3	76 Gravel	3.88
			Total Mile R-3	114.09
			Lane Mi/Truck	57.045

# **Route #4**

## SCOTT COUNTY SNOW PLOW ROUTE #4

Truck#	Operator	Plow Route	County Road	Lane Mile
<b>2182</b>	<b>Gary S</b>	4	12	5.20
<b>2179</b>	<b>Andy</b>	4	Dakota 60	4.82
<b>2189</b>	<b>Will</b>	4	21	32.03
		4	81 Gravel	3.10
		4	82	5.22
		4	83	20.86
			Total Mile R-4	71.23
			Lane Mi/Truck	23.7433

# **Route #5**

## SCOTT COUNTY SNOW PLOW ROUTE #5

Truck#	Operator	Plow Route	County Road	Lane Mile
2176	Mark J	5	10	6.44
2165	Brian	5	23	22.64
		5	27	8.67
		5	68	13.59
		5	81	7.93
		5	87	10.02
		5	91	6.84
			Total Mile R-5	76.13
			Lane Mi/Truck	38.065

# **Route #6**

## SCOTT COUNTY SNOW PLOW ROUTE #6

Truck#	Operator	Plow Route	County Road	Lane Mile
2177	Tom Lynch	6	2 Gravel	2.01
		6	4	4.02
		6	9	3.11
		6	10	13.01
		6	15	4.0
		6	61	8.97
		6	61 Gravel	6.01
		6	71 Gravel	3.94
		6	79	4.02
			Total Mile R-6	49.09
			Lane Mi/Truck	49.09

# **Route #7**



### SCOTT COUNTY SNOW PLOW ROUTE #7

Truck#	Operator	Plow Route	County Road	Lane Mile
2174	Randy M	7	16	12.40
2183	Mike C	7	18	10.06
2187	Pete Shutrop	7	27	19.21
		7	42	30.94
		7	44	6.23
			Total Mile R-7	78.84
			Lane Mi/Truck	26.28

# **Route #8**

**SCOTT COUNTY SNOW PLOW ROUTE #8**

Truck#	Operator	Plow Route	County Road	Lane Mile
2184	Pete B	8	17	26.49
2186	Pat P	8	69	39.88
		8	101	34.16
			Total Mile R-8	100.53
			Lane Mi/Truck	50.265

# **Route #9**

## SCOTT COUNTY SNOW PLOW ROUTE #9

Truck#	Operator	Plow Route	County Road	Lane Mile
<b>2169</b>	<b>Roger</b>	9	9	3.11
<b>2178</b>	<b>Jared V</b>	9	10	13.01
		9	15	17.10
		9	16	14.08
		9	14	9.02
		9	70 Gravel	2.01
		9	73 Gravel	2.0
		9	77	1.96
		9	78	7.25
		9	79	15.35
			Total Mile R-9	84.89
			Lane Mi/Truck	28.2967

# **APPENDIX A**



**SNOWPLOWING AND BEST  
MANAGEMENT PRACTICES**

**2007-2008**



## **SNOW PLOWING AND BEST MANAGEMENT PRACTICES**

BY

SCOTT COUNTY PUBLIC WORK STAFF

Compiled by Gene Busacker

Pre-Operations Supervisor

### **Fall Road Inspection**

Each driver inspects the roads that he or she will be plowing in the upcoming snow season.

1. Make sure all man-holes and water shutoff valves are flush with the blacktop surface.
2. Make sure all curbs are marked at the beginning and end with post or carsonites so you will know where the curb is, and not run into it damaging the plow
3. Make sure all shoulders are in good shape, with no drop-offs that could cause you to lose control of the truck, or hook the toe of the wing causing damage to the wing, truck, or the general public. If you see something that you feel needs to be fixed, tell your supervisor and he'll make sure it is taken care of.
4. Make a mental note to your self where power lines, and telephone lines cross the roads. Are they high enough to pass under with the box up to spread salt with out hitting them with the cab shield or box? Remember if we get an ice storm the weight of the ice will lower the wires. If not sure tell your supervisor and ask for help.
5. Make sure you don't have any tree limbs hanging over the road way that the box could hit.
6. If you go under a bridge on your route remember to lower the box.
7. Remember where all guard-railing and drop drain basins are. Make sure the guard rails are marked and there is nothing to catch around the catch basin when you go over it with the wing. Be aware of field and farm entrances, If they are high they can catch the wing causing damage to the wing or loss control of the truck.
8. Make notes if your road is going to be under construction and not completed by winter. Are there going to be jersey barriers on the shoulders or down the middle of the road for traffic control. What shape are the shoulders going to be? Is there going to be curbing? If there is new curb are they going to pave both layers or just one? If they only put down one layer there will be about two inches of cement sticking above the blacktop the whole length of the curb, which will hit your plow causing damage to the plow or lost control of the truck.

### **PRETRIP**

1. Check all your cutting edges on the plow and underbelly with a gauge that is in each truck daily.
2. Check chain on the wing post so the toe of the wing is about one half to one inch above the ground. Check this after you have a load of salt on the truck. If you don't have your chain set right the wing will dig into the gravel shoulder causing loss of gravel or causing lost control of the truck.
3. Check and understand the operation of the sander controls. Follow your application sheet when applying salt. If something is not working right, write it up and give it to the shop foreman.
4. Check all lights, and flashing lights that they are working right.
5. At the end of the shift report any problems by writing the up on the inspection sheet and turn into the shop foreman. Also fuel truck up.



6. Weather conditions, temperature, length of storm, if we are going to spot salt, or salt all the way, will be discussed at the tail gate meeting prior to leaving the shop at the beginning of the shift.
7. Report any and all leaks and check all fluid levels.
8. Keep your cab, organized, clear of trash and bottles.
9. Make sure all mirrors are cleaned and adjusted for your sight line.

### **PLOWING**

1. The safest plowing speed is five to twenty five miles per hour. This will depend on the type of snow, wet and heavy, or light and dry, ice, wind, or if plowing by fences, buildings, etc.
2. When plowing use all the plows you have. 1-way, underbelly, and wing unless told not to by supervisor.
3. Put the point of one-way on the center line of the road and plow out the lane. If you meet oncoming traffic go to the right to be sure you're not crossing the centerline with your plow. On the way back you will be able to catch these spots. Also you will be putting down salt in the lane you are plowing according to the salt application sheet that you have in the truck.
4. Be very aware of people using sidewalks, or shoulders of the roads when it is still dark, that you don't hit them with the wing or with the snow or slush coming off your plows.
5. Slow down when going by mailboxes. Snow will take a box down more than any other cause. Which means you will most likely be putting it back up.
6. Watch for cars coming when going through intersections and going past driveways. Slow down so you don't throw snow onto the windshield, or them sliding out in front of you causing an accident.
7. Be aware of your surroundings at all time.
8. Be aware of dogs or other pets running out of driveways, and ditches to chase the truck.
9. Be aware of kids waiting for busses Watch that they move back from the road so you don't hit them with snow. SLOW Down.
10. Watch out for snow forts which small kids like to make in snow drifts in the ditch.
11. Clean up your intersections as you plow your roads.
12. Always. Always finish one road at a time. Never plow half a road and leave the other half unplowed. People will think the road is plowed and suddenly find them selves on an unplowed road and risk hitting the ditch, or another car or truck.
13. Always plow your route by turning to the right (EXAMPLE\_ On your routes you will most likely have one or two main roads with lesser traveled roads going off to one side or the other. Make one complete round on the main route. Start your second round on the main route. When you come to one of your cross roads turn to the right and plow and salt it. When you return to the main route continue on till complete. When you are done the main route should have two rounds on it, the rest should have one full pass.
14. When plowing small drifts go at a slow speed. If you don't that little drift will throw your truck into the other lane of traffic or all the way across the road into the opposite ditch.  
SLOW DOWN
15. When removing slush from the roadways, use your underbody blade. If you hit a patch of hard pack snow it will slide over it. If you use your one way plow it could bounce you into the other lane or all the way across the road into the ditch.
16. When plowing and you get to the end of your road make sure all plows, one ways, wing, underbody are raised off the ground before you back up.

17. When coming to the end of a road, plow around the radius. (example) County Road twenty three ends at Rice County eighty six. Follow the radius around from twenty three onto eighty six. Once around start to raise your one-way and wing and then raise your under body feathering out the snow leaving no large piles of snow on the road way or shoulder. Check for traffic before backing up to other side of intersection, lower and set wing, one way, and under body. Follow radius around back onto twenty three and resume plowing.
18. We never quit until we are all done with all the roads, help your route partner, then others who need help.
19. Refrain from using cell phones when driving.
20. Get out of your truck once every hour or so to walk around stretch, wake up, check your cutting edges, loss bolts, wing chain, etc.

## 21. Winging

1. ALWAYS check the chain on the wing post to make sure the cutting edge on the wing is off the pavement by about a half a inch. This will help prevent the wing from digging into unfrozen shoulders, falling into holes along the shoulder, or hooking under blacktop driveways. All of these will cost the county money either in repairs to the truck or fixing up private driveways.
2. When you put your wing down, lower it all the way down to the ground, or pavement, then raise the toe or the end of the wing up until you feel the weight of the wing tip the truck a little sideways. If you do this and the chain is set right on the wing post you should be leaving about an inch of snow on the shoulder. That's what you want, the gravel on the shoulder will stay were it's suppose to be, On The Shoulder.
3. The idea of winging is to get rid of the snow ridge left between the road surface and the shoulder. If left this will catch snow and build into drifts if the wind is blowing. And it gives drivers a chance to recover if they drive off the pavement.
4. When winging back on a road that has curb keep your wing two to three inches above the top of the curb. This will prevent the wing from tearing up sod boulevards, and hitting sprinkler heads. Again if we tear up the sod and throw it onto the sidewalks guess who fixes it. That's right You Do.
5. When winging out in the country you will have to wing around mailboxes. When doing this go Slow and remember, with a one way plow on the truck when you go around the box the plow will be over the centerline. Make sure that no cars are coming toward you, if there is slow down or stop until the oncoming lane is clear. Also before you swing out be sure you check your mirror's that you don't have a car or truck following you and decides to pass you when you swing out.
6. When plowing or winging if the wind is blowing you will experience what we call a white out. This is when a cloud of snow blows over the windshield and you see nothing but white. When this happens you may also experience what they call vertigo. You will lose all sense of direction. When this happens and it will, SLOW WAY DOWN or STOP. When doing this try to keep both hand on the steering wheel and try not to turn. It seems when this happens a person likes to drift to the left over the center line. So be aware of this.
7. When winging you will come across piles of snow on the shoulders that home owners have pushed across the road and left on the shoulder. Slow down when removing these from the shoulder. If hit to fast you will damage the wing or loss control of your truck going into the oncoming lane of traffic.

8. Be aware of fire hydrants, and utility pedestals in the boulevards between the curb line and sidewalk.
9. When benching back snow banks. Work your way to the edge of the shoulder very slowly. Make one pass with the wing on the ground, another pass with the wing about three feet off the ground. By doing this you will be able to push some snow beyond the edge of the shoulder line. Remember to go slow and not to go beyond the edge of the shoulder or you will be stuck.

### **Plowing Gravel Roads**

These are plowed, and winged the same as the pavements except for the following.

1. Never plow with you one way until the road is frozen enough to prevent the plow from digging into the road bed, this will result in damage to the truck, plow, and OPERATOR. You need a week of cold weather to achieve this. Use your under body to plow and use the wing.
2. We use rock chips instead of salt on all gravel roads. In case of an ice storm, the gravel roads will have more ice on them than the pavements. When this happens we will run the grader down the center of the road to rough up the surface which will help the trucks stay on the road better. We would mix the rock chips with sand to help hold the chips on the roadway. The chips in turn help break up the ice when traffic drives over it.
3. When winging gravel roads make sure you hold the wing up about a half an inch, so you don't dig in, or plow off the gravel.

### **Sander Operation**

1. Go over your salt spread sheet that is in your plow book. It will tell you the pounds of salt that you should be putting down per lane mile in different weather conditions. This will also be discussed at the tailgate meetings prior to you starting your shift by the supervisor.
2. Understand the operation of your sander. If you have questions ask one of the mechanics or supervisor. They will explain any questions that you may have.
3. When plowing you will be putting down a light bead of salt as you go the whole length of the road. You will have to make adjustments with changing weather conditions. Sometimes more salt, sometimes less salt, but you want the road black as soon as possible with as little salt as possible. If you are not sure ask your supervisor or one of the other drivers to see what they are doing.
4. When applying rock chips to gravel roads make sure your tailgate is locked close from the shop to where ever your going to prevent chips from running out of the sander onto paved roads or the shop driveway. This is a waste of chips and money.
5. Don't overload your truck with salt or rock chips.

### **Plow with a V-Plow**

1. Never drive straight into a drift thinking you are going to drive right thought. Go for the lower side of the drift. You have to keep the cut wider than the truck or grader. Make a push to the left back up, than to the right back up, than one down the center. Keep repeating until your thought the drift. With a truck you want a speed of about ten miles an hour when you hit the drift. Leave off the throttle, or push in the clutch just before you hit the drift. This will prevent the drive wheels from spinning which will make ice, and will help keep you straight in the cut.
2. With the grader the best gear is fourth, and again push in the clutch so you hit the

drift free wheeling for the same reasons as mentioned above.

You will also have to chain up your back tires for better traction.

3. Watch for bumpers, and license plates if your working in a big drift. There could be a car covered by the drift.
4. Make sure your V plow is chained at the right height. One to two inches off the Road top is about where you want it. When you go into the drift the plow will be pushed down somewhat and this will keep you from gouging out the gravel or pavement surfaces.

### **Snow Blower**

The blower is mounted on a cat loader. The Blower has its own power plant of about two hundred horsepower. You can move a lot of snow in a short time. Or do a lot of damage. When blowing snow drifts after the V plows have opened them keep the cutting edge off the road bed one to two inches. Be very aware of where you are blowing the snow. This machine is capable of throwing snow into power lines which, if your on a gravel road their will be some rocks coming out with the snow. These will break highline insulators in a heart beat. It will knock down fences, and be careful if livestock is near where your working so you don't hit them.

When loading snow in the surrounding towns make sure the truck you are loading is in front of you. NOT at your side. The reason for this is because you will be constantly moving the discharge chute to fill the whole truck. If you do this with the truck at your side, you may over shoot the box and shoot snow and ice into on coming traffic. This is a very powerful machine. In very bad snow storms it can be a life saver. And for cleaning up curb lines in town after a heavy snowfall it can save a lot of money making a big job a lot smaller. It can load a tandem truck with a full load of snow in fifteen to twenty seconds. But if your not careful it can cause a lot of damage

### **Pushing Snow Back With a Loader**

When pushing back snow banks along the road ways, you have to be sure that you have the proper signing in place. If you don't know ask your supervisor. You will also need flag people to control traffic. When pushing back never go into the ditch more that half way down the in slope with the front wheels of the loader, or you will be stuck. You have to watch your flag people when ever you are moving the loader. You will be cross ways in the road way so traffic control is of the most importance. You also want to be careful you don't cut any guy wires, holding power post up, or push snow over land- owners fences, or damage utility pedestals, or run over or damage culvert ends or aprons. Again if you have any question about road right of way or anything else contact your supervisor.

### **Footnote**

Scott County has gained a reputation as having one of the best snow removal programs in the area. This is done by a group of very dedicated people who pride themselves as being the best in the business. If you follow the advice that is printed above, which was taken from this whole group of people, you too can become as professional as these folks. Remember be SAFE, DRIVE STRIGHT, USE SALT WISELY and have FUN.

# **APPENDIX B**

## SAFE DRIVING POLICY

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**SAFETY PROGRAM****AUTHORITY:** Res. 91063; 2004-022**EFFECTIVE:** 06-04-91, 08-05-91**REVISED:** 03-23-04

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**POLICY:**

Through this policy Scott County seeks to reduce the risks of injury, damage, costs, expenses, and needless pain and suffering resulting from vehicle accidents and improper use. In addition, this policy defines standards for vehicle operation.

**PURPOSE:**

The purpose of this policy is to ensure the safety of individuals who drive vehicles for the purpose of County business and to safeguard the public. This policy is also intended to provide guidance on the proper use of County owned vehicles and personal vehicles used in conducting County business.

Vehicle accidents are costly, but more importantly, they may result in unnecessary injury. It is the driver's responsibility to operate the vehicle in a safe manner and to drive defensively to prevent injuries and property damage. Scott County endorses all applicable state motor vehicle regulations relating to driver responsibility. The County, as employer, expects each driver to drive in a safe and courteous manner pursuant to the safety rules defined herein. The attitude you take when behind the wheel is the single most important factor in driving safety. The County Risk Manager and the Accident Review Team together with managers, supervisors, employees, and volunteers are responsible for general administration of this policy.

**SCOPE:**

A collaborative effort is required to obtain and maintain an environment conducive to safe-driving. To accomplish and promote safe driving practices in the conduct of County business, the following responsibilities, accountabilities, and expectations are established:

***Important Note*** – Employees with a commercial driver's license, who work in a department governed by state and/or federal regulations, should see their supervisor if they have questions regarding this policy. In the case of a discrepancy, state and federal regulations supercede this policy.

**County Risk Manager**

The Risk Manager is responsible for oversight and guidance on safe driving issues. Specifically, the Risk Manager shall:

- Prepare specific plan objectives & strategies and audit loss control performance.
- Ensure Defensive Driver Training and refresher courses are made available for vehicle operators as defined by policy.

- Provide continuing awareness and education on this topic.
- Coordinate accident investigation and distribution of reports.
- Determine preventability of all vehicle accidents in conjunction with the Accident Review Team.
- Analyze vehicle accidents for causes.
- Maintain relevant vehicle insurance and fleet safety cost analysis reports.
- Report relevant program information to the County Board.
- Review Driver's License Records as needed and report results to the appropriate supervisor.
- Assist supervisors as needed to ensure records provide documentation of safety-related maintenance of vehicles to comply with all governmental regulations.
- Study hazards existing in any part of the fleet operation and formulate practical plans for their control or elimination.

#### Accident Review Team (ART)

The ART is responsible for reviewing accidents to determine preventability. The ART will review information provided in the Accident/Incident Report by the employee, the supervisor investigating the accident and any other pertinent reports such as policy reports. Criteria contained in the attached Addendum B will be used as part of the review. Based on the findings of the ART, the Risk Manager will review an employee's driving record to determine if a pattern of unsafe or irresponsible driving exists. The Risk Manager will make recommendations to the supervisor for corrective and/or disciplinary action as appropriate. Additionally, the ART shall:

- Review accidents and the County's overall driver safety record to recommend changes to policy or practice.
- Recommend further action such as training, equipment changes, etc. to enhance the safe operation of fleet vehicles, and/or personal vehicles used on County business.
- Review all other issues that arise with respect to compliance with this policy.

*Please see Addendum B which provides a full outline of the ART's accident review and analysis procedures.*

#### Driving Guidelines and Reporting Requirements

1. The Driver shall operate the vehicle safely and responsibly at all times. Standards established in the current Minnesota Driver's Manual prepared by the MN Department of Public Safety shall be followed.
2. Those who drive for County business are expected to maintain a safe driving record. Any employee/volunteer who has a driver's license revoked or suspended shall ***immediately discontinue operation of the County vehicle*** and notify his/her supervisor. Failure to do so may result in disciplinary action, including termination of employment.
3. Personal vehicles used for County business\* must accommodate the needs of transport related to the essential duties of the position.

4. All vehicle accidents occurring when using County vehicles, regardless of severity, must be reported to the police and to Risk Management. Accidents are to be reported immediately (from the scene, during the same day, or as soon as practicable if immediate or same day reporting is not possible). Accidents in personal vehicles while on County business **must** follow these same accident procedures. Accidents involving the employee's personal injury must be reported to Risk Management for Workers' Compensation purposes. Failing to stop after an accident and/or failure to report an accident to the Police or Risk Management may result in disciplinary action, including termination of employment.
5. Drivers shall report all ticket violations received during the operation of a County vehicle, or while driving a personal vehicle on company business, to their supervisor within 72 hours.
6. Driver's License Records will be obtained on all drivers prior to employment and at least every three years after that. A driving record that fails to meet the criteria stated in this policy, or is considered to be in violation of the intent of this policy, will result in a loss of the privilege of driving for County business. The County will review driver's license records more frequently if warranted.

*\* County business is defined as driving at the direction, or for the benefit, of the employer. In the case of employees using their own vehicles, it does not include normal commuting to and from work.*

#### Driver Safety Rules

1. The use of alcohol and/or drugs is prohibited when operating a County vehicle or a personal vehicle being used for County business. Doing so is sufficient cause for discipline, including termination of employment.
2. When driving, cell phone use, the use of other electronic devices, and/or activities that distract from driving shall be kept to a minimum. Drivers need to be aware when such activities are creating a distraction from safe driving and adjust their usage accordingly, including pulling off the road if needed. Whenever possible, drivers shall complete cell phone calls while the vehicle is parked and/or use the phone in a "hands free" mode via a headset or speaker. While driving, attention to the road and safety shall always take precedence over conducting business.
3. No driver shall operate a vehicle for the purpose of County business when his/her ability to do so safely has been impaired by illness, fatigue, injury, or prescription medication. The County reserves the right to require a physical examination including vision tests if a question of fitness to drive arises.
4. All drivers operating and passengers riding in County vehicles or in personal vehicles being used for County business **must** wear seat belts (it is the law), even if air bags are available.
5. Unauthorized personnel are not allowed to ride in County vehicles. Passengers are generally limited to those individuals who need to ride in the vehicle to conduct employer business, such as other employees, clients, and the like.



6. Children age 12 and under must ride buckled-up in the rear seat of the vehicle. Child safety seats, booster seats, or safety belts shall be used appropriate to the child's age and size.
7. Drivers are responsible for the security of the vehicle assigned to them. The vehicle engine must be shut off, ignition keys removed, and vehicle doors locked whenever the vehicle is left unattended.
8. Employees shall only operate those vehicles for which they are licensed, trained and authorized. All laws pertaining to vehicle operation and maintenance shall be followed and obeyed. Employees shall also be familiar with department and County policies and procedures for safe vehicle operation.
9. Commercial Drivers Licenses (CDL's) have specific requirements. Employees required to have CDL's for their employment shall meet all Federal and State requirements and shall follow department programs and procedures established for this level of licensure.
10. Copies of the Vehicle Registration and Insurance Card shall be kept in the vehicle at all times.
11. Radar Detectors are strictly prohibited in County Vehicles. Drivers are to drive at the speed of traffic but never to exceed the posted speed limit.
12. Smoking is prohibited in County vehicles.

#### Defensive Driving Training

In order to drive for the purpose of County business, the Driver shall attend Defensive Driving Training within six months of employment and attend Defensive Driving Refresher Training every three years.

#### Driver Criteria

1. Employees/Volunteers must have a valid and current driver's license to operate a County vehicle or to operate a personal vehicle on County business. In addition, employees/volunteers shall provide verification of personal liability automobile insurance if operating a personal vehicle on County business.
2. Drivers shall be at least 18 years of age.
3. Employees/Volunteers are expected to drive in a safe and responsible manner and to maintain a good driving record.
4. Criteria that may indicate an unacceptable record includes, but is not limited to:
  - Convicted of a felony.
  - Convicted of the sale or use of drugs.
  - Convicted of an alcohol or drug-related driving offense.
  - Suspension or revocation of a driver's license.

- Convicted of three or more speeding violations or one or more other serious traffic violations.
- Three or more moving violations\* in a year.
- Three or more chargeable accidents within one year. Chargeable means that the driver is determined to be the primary cause of the accident through speeding, inattention, etc. Contributing factors, such as weather or mechanical problems, will be taken into consideration.
- Any combination of multiple accidents and/or moving violations.

\* Violations include any ticket, charge, or other law enforcement proceeding relating to these.

#### Accident Procedures

In an attempt to minimize the results of an accident, the driver must prevent further damages or injuries and obtain all pertinent information and report it as instructed below:

1. Call for medical aid if necessary.
2. Call the police. All accidents, regardless of severity, must be reported to the police. If the driver cannot get to a phone, s/he should request another motorist to call police.
3. Record names and addresses of drivers, witnesses, and occupants of the other vehicles and any medical personnel who may arrive at the scene.
4. Complete a Vehicle Accident/Incident Report. Pertinent information to obtain includes: license number of other drivers; insurance company names and policy numbers of other vehicles; make, model, year, and vehicle license number of other vehicles; date and time of accident; names/addresses of any witnesses; and overall road and weather conditions.
5. Do not discuss the accident with anyone at the scene except the police. Do not accept any responsibility for the accident. Don't argue with anyone.
6. Provide the other party with your name, address, driver's license number, and insurance information.
7. Immediately report the accident to your supervisor. Provide a copy of the official accident report and/or the Scott County Accident Incident Report to Risk Management as soon as possible.

The ART will conduct a formal accident review on each accident to determine cause and if/how the accident might have been prevented.

#### Vehicle Maintenance

Proper vehicle maintenance is a basic element of any vehicle safety program, not only to ensure a safe, road worthy vehicle, but also to avoid costly repair expenses and unexpected breakdowns.

1. The driver shall conduct a vehicle safety inspection before/after operating the vehicle and document findings as is required by law or department practice.
2. The driver shall notify his/her supervisor of known safety, maintenance, or hazardous conditions of any particular County-owned vehicle.
3. Routine inspections, maintenance, safety checks, and rotations shall be done on all County-owned vehicles per the Highway Shop's maintenance schedule.
4. The vehicle shall be cleaned (*interior and exterior*) regularly to help maintain its appearance and condition.

#### Use of Personal Automobiles for County Business

Those employees who use their personal vehicle for County business will be reimbursed for vehicle expenses through the County's Mileage Reimbursement Policy. Reimbursed mileage is defined as mileage driven over and above the employee's normal commuting mileage.

The County's non-owned auto insurance provides secondary liability coverage to the employee/volunteer's insurance when a personal vehicle is being used for County business. In the event of an accident the employee/volunteer's insurance shall be primary.

#### SUPERVISOR RESPONSIBILITY

Supervisors, department managers and division directors are expected to administer this policy as directed. Any questions, need for further direction, or clarification can be directed to the Risk Manager.

#### EMPLOYEE RESPONSIBILITY

Employees are expected to adhere to this policy and keep safety first in all driving situations.

The general public purpose of the policies adopted and enacted by Scott County is to facilitate activities that benefit the community as a body and at the same time, are directly related to the functions of the county. The safe use of vehicles contributes directly to the efficiency and cost-effectiveness of government operations. The improvement of government operations has a public purpose whether through the enhancement of public service provision, the adoption of more efficient technology or technique, collective legislative action, or the reduction in local government expenditures and/or liabilities.

# HAZMAT EMERGENCY CONTACTS

<b>Scott County Sheriff Dispatch</b>		<b>911</b>
		<b>952-445-1411</b>
		<b>952-496-8311</b>
<b>Scott County Public Works Director</b>		<b>952-496-8346</b>
<b>Scott County Engineer</b>		<b>952-496-8026</b>
<b>Scott County Supervisors</b>		
<b>Greg Felt</b>	<b>Cell #952-292-1469</b>	<b>952-496-8047</b>
<b>Gene Busacker</b>	<b>Cell #952-292-3026</b>	<b>952-496-8478</b>
<b>Ron Robb</b>	<b>Cell #952-292-2344</b>	<b>952-496-8027</b>
<b>Minnesota Duty Officer</b>		<b>651-649-5451</b>
		<b>1-800-422-0798</b>
<b>Scott County Environmental Health Department</b>		<b>952-496-8177</b>
<b>Scott County Emergency Management Director</b>		<b>952-496-8381</b>