

# CROW WING COUNTY

## December 21, 2021 Snow Event #13 - 2021 - #6



## Reported Event Conditions

Date: 12/21/2021  
Event No: #13-2021-#6  
Begin Time: 12-21 5AM  
End Time: 12-21 10AM  
Weather: Snow  
Precipitation: 4" Snow  
Temperature: 17\2  
Wind: 5 MPH

## Event Costs

Salt	\$21,886
Sand	\$0
Brine	\$1,917
Equipment/Fuel	\$21,995
Personnel Reg.	\$7,197
Personnel OT	\$1,497
Total	\$54,491
Cost Mile	\$97
Season Total:	\$377,467

## Priority By Route

## Priority 1

% Target 1A Met: 100%

## Priority 2

% Target 2A Met: 100%  
% Target 2B Met: 100%

### Priority 3

% Target 3A Met: 100%

— MnDOT Highway

## Route Priority

- 1 (ADT>5000)
- 2 (500>ADT<5000)
- 3 (ADT<500)

## Route Target

The map shows the 100th Anniversary Scenic Byway route 2, starting at St. Mathias and ending at Roosevelt. The route is marked with a blue line and the number 2. Key locations include the CITY OF FORT RIPLEY, DAGGETT BROOK, PLATTE LAKE, and ROOSEVELT. Other route numbers shown are 121, 130, 139, and 113. A legend indicates three levels of target achievement: 'Target Achieved' (green), 'Target Partly Achieved' (orange), and 'Target Not Achieved' (red). The map also shows a grey line representing the byway's path through the landscape.

Report Date: 12/23/2021

Map by Crow Wing County Highway Department.  
For Questions or Information Contact County Hwy. Dept. at 218-824-1110.  
For Information on State Highways Contact MnDOT at 218-828-5700.

## 2021/2022 Summary For Snow Event #13 - 2021 - #6

12/21/2021

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
240.5	\$21,886	0	\$0	2904	\$1,917	\$23,802	\$21,995	\$7,197.00	\$1,497

**Total** \$54,491

16.03 Plow hrs.

\$3,399 per/hr.

256.50 Man hrs.

\$97 per/CL/mile

\$2.06 per/household for entire County

### Forecast

3-4" of snow forecasted to began falling at 3:00 am on 12-21-21 and continue until 10:00 am 12-21-21. Winds 5-10 mph with colder temps.

### Pre Plan

Begin plowing at 7:00 am, concentrating on drive lanes and only applying salt at intersections until the snow stops. After the snow stops the plows will start plowing priority 1 roads and apply 500-600 lbs. of treated salt on centerlines.

### Actual Event

Event start: 12-21-21 5:00AM

Event ended 12-21-21 10AM

### Comments

We observed some early compaction. The salt on the road prior to the event and much wetter snow than forecasted contributed to this.

### Conditions

Cold. 3" of mildly wet snow.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	12	12/21/21	5:00AM	6
Hwy 25	14	12/21/21	5:00AM	8
Hwy 6	5	12/22/21	9:00AM	0
Hwy 25	10	12/22/21	9:00AM	5

Date	High	Low
12/20/2021	16	1
12/21/2021	17	2
12/22/2021	23	-12
12/23/2021	32	22

Source: weather.com. Monthly Weather. 56401

### Summary

Roads cleaned up well. The plows began plowing drive lanes at 7:00 am 12-21. Around 10:00 am, when the snow ended, the snowplows turned around and started plowing priority 1 roads. This pushed getting to the priority 2 and 3 roads until the afternoon. Salt quickly melted the centerlines and we achieved our goals quickly on all priority 1 roads on 12-21 and on the priority 2 roads by 12-22. The very cold temps overnight on 12-21 helped some roads freeze dry and allow the ice and compacted snow to break up.

### Decisions Made

Start plowing priority 1 drive lanes at 7:00 am when the snowfall reached 2". Turn around and plow and apply 500 lbs. of treated salt on centerlines as soon as the event ended.

### Lessons Learned

Early plowing and best practices guideline salt application rates worked well to achieve out target goals.

<b>Goals Met/Not Met</b>		
	Plowing	Goals
Priority 1	Met	6 hr.
Priority 2	Met	8 hr.
Priority 3	Met	10 hr.

	Bare wheel paths	Goals
Priority 1	Met	18 Hr.
Priority 2	Met	48 hr.