

CROW WING COUNTY

December 25-28, 2021 Snow Event #14 - 2021 - #7

Reported Event Conditions	
Date:	12/25-28/2021
Event No:	#14-2021-#7
Begin Time:	12-25 6PM
End Time:	12-28 8PM
Weather:	Snow
Precipitation:	24" Snow
Temperature:	26°-15°
Wind:	5 - 40 MPH

Event Costs	
Salt	\$13,559
Sand	\$3,400
Brine	\$1,272
Equipment/Fuel	\$63,330
Personnel Reg.	\$21,393
Personnel OT	\$5,965
Total	\$108,919
Cost Mile	\$194
Season Total:	\$463,932

Priority By Route	
Priority 1	
% Target 1A Met:	0%
% Target 1B Met:	0%
Priority 2	
% Target 2A Met:	1%
% Target 2B Met:	0%
Priority 3	
% Target 3A Met:	5%

— MnDOT Highway

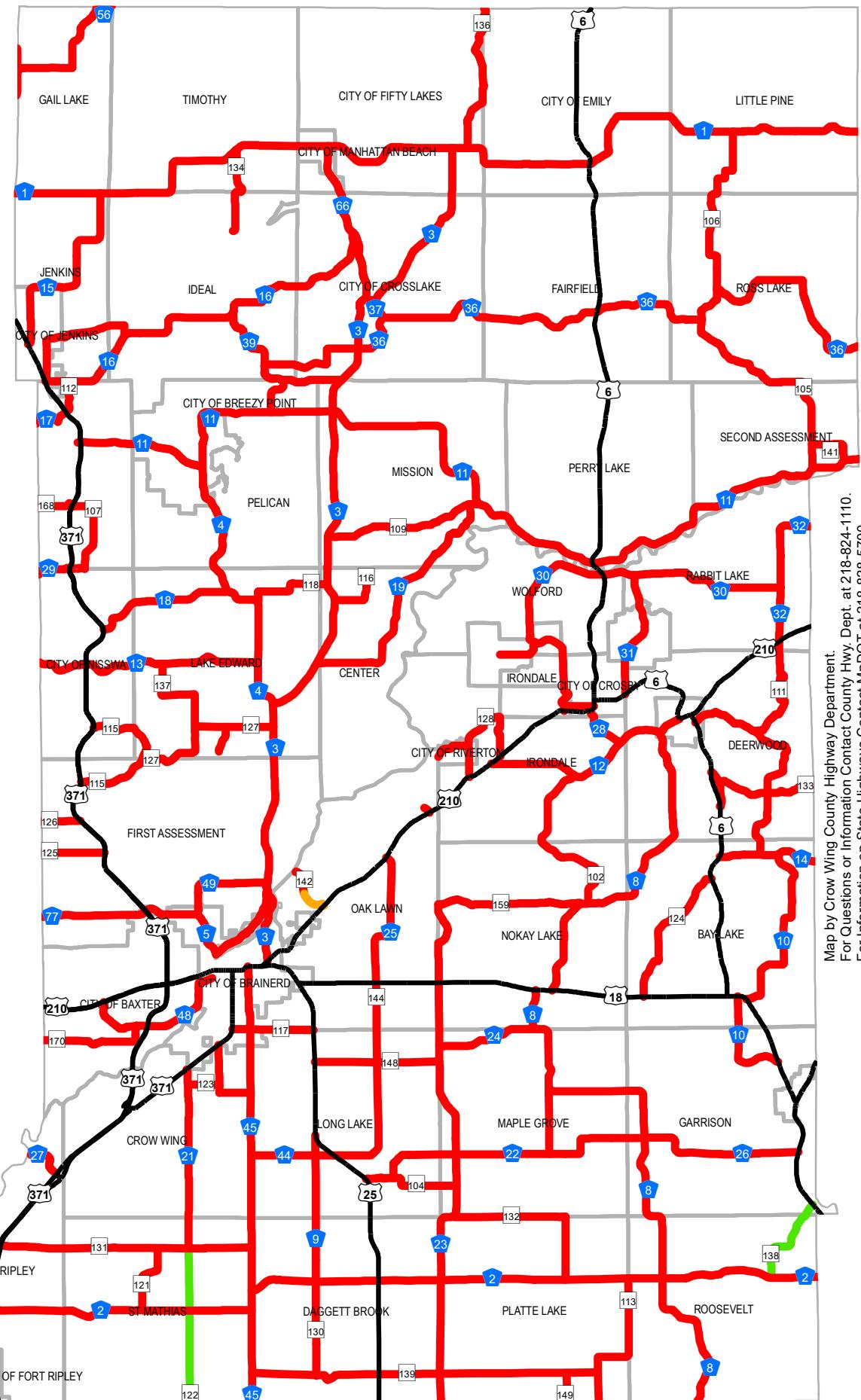
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 1/4/2022



2021/2022 Summary For Snow Event #14 - 2021 - #7

Date 12-25-28-21

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
149	\$13,559	100	\$3,400	1927	\$1,272	\$18,231	\$63,330	\$21,393.00	\$5,965

Total \$108,919

49.6 Plow hrs.

\$2,198 per/hr.

793 Man hrs.

\$194 per/CL/mile

\$4.11 per/household for entire County

Forecast

2" of snow forecasted to begin falling at 9:00 AM 12-25-21 and continue until 8:00 PM with 5 mph winds. 7" of snow forecasted to begin falling at 5:00 PM 12-26-21 and continue until noon with 10-30 mph winds. 4" of snow forecasted to begin falling at 9:00 AM 12-28-21 and continue until 8:00 PM with 5 mph winds.

Pre Plan

12-25-21 start plowing at 7:00 PM 12-25-21 and apply 400 lbs. of treated salt to intersections only. 12-26-21 start plowing at 3:00 AM 12-27-21 and not apply salt because of blowing snow & temperatures. 12-28-21 start plowing around noon as snow accumulates. No salt due to cold temps and snowfall. Continue plowing until 6:00 PM, rest briefly and return at 3:00 AM 12-29-21.

Actual Event

Event start: 12/25/2021 6:00PM

Event ended 12/28/2021 8:00PM

Comments

Roads cleaned up well with the dry snow 12-25, 12-27 & 12-29. Winds caused some drifting issues on 12-27-21. More snow fell than expected on 12-27-21.

Conditions

12-25-21 2" of dry snow with light winds. 18" of snow on 12-27-21 with strong winds. Flurries lingered into the evening. 4" of snow 12-28-21 with light winds.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	15	12/25/21	11:00am	7
Hwy 25	19	12/25/21	11:00am	9
Hwy 6	13	12/26/21	1:00am	9
Hwy 25	17	12/26/21	1:00am	11
Hwy 6	21	12/26/21	9:00pm	21
Hwy 25	24	12/26/21	9:00pm	22
Hwy 6	11	12/27/21	11:00am	11
Hwy 25	18	12/27/21	11:00am	17
Hwy 6	11	12/28/21	11:00am	11
Hwy 25	14	12/28/21	11:00am	8

Date	High	Low
12/24/2021	42	6
12/25/2021	11	5
12/26/2021	26	21
12/27/2021	26	-9
12/28/2021	12	-15
12/29/2021	4	-12
12/30/2021	16	4
12/31/2021	5	-25
1/1/2022	-4	-30
1/2/2022	3	6

Source: weather.com. Monthly Weather. 56401

Summary

Roads cleaned up well with little salt use on 12-25. The colder temps and wind dried many of the roads and caused others to freeze dry to achieve bare wheel paths. More snow fell on 12-27 than expected, causing massive windrows and snow piles at intersections. Cold temps caused freeze drying on the roads 12-29, except for intersections. Salt/sand mixture applied on 12-30-21 blew off the roads shortly after being applied. Approximately 24" of snow from 12/25 - 12/28.

Decisions Made

Plow 12-25 just before the event ended to get as much snow off the roads as possible with the quickly dropping temps. Start at 3:00 AM on 12-27 to maximize one shift of 16 snowplows for both the morning and evening commutes on 12-27. Strong winds and blowing snow did not allow us to use salt because the salt caught the blowing snow, causing it to build up on the road and not blow across. The roads were freeze drying and not causing a safety concern.

Lessons Learned

Initial plow start times and not using salt because of the cold temps allowed us to reach most of our goals. More snow fell on 12-27 than forecasted. Cold temps helped the roads freeze dry except for intersections. Sand applied blew off the road after it was applied.

Goals Met/Not Met

	Plowing	Goals
Priority 1	Not Met	6 hr.
Priority 2	Not Met	8 hr.
Priority 3	Not Met	10 hr.

	Bare wheel paths	Goals
Priority 1	Not Met	18 Hr.
Priority 2	Not Met	48 hr.