

CROW WING COUNTY

January 14, 2021 Snow Event #1 - 2021 - 12



Reported Event Conditions

Date:	1/14/2021
Event No:	#1-2021-12
Begin Time:	1-14-21 6AM
End Time:	1-15-21 6AM
Weather:	Rain/Snow
Precipitation:	.1"/5.5"
Temperature:	2
Wind:	0-15 MPH

Event Costs

Salt	\$71,913
Sand	\$706
Brine	\$4,518
Equipment/Fuel	\$27,938
Personnel Reg.	\$10,406
Personnel OT	\$1,539
Total	\$117,019
Cost Mile	\$209
Season Total:	\$471,462

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

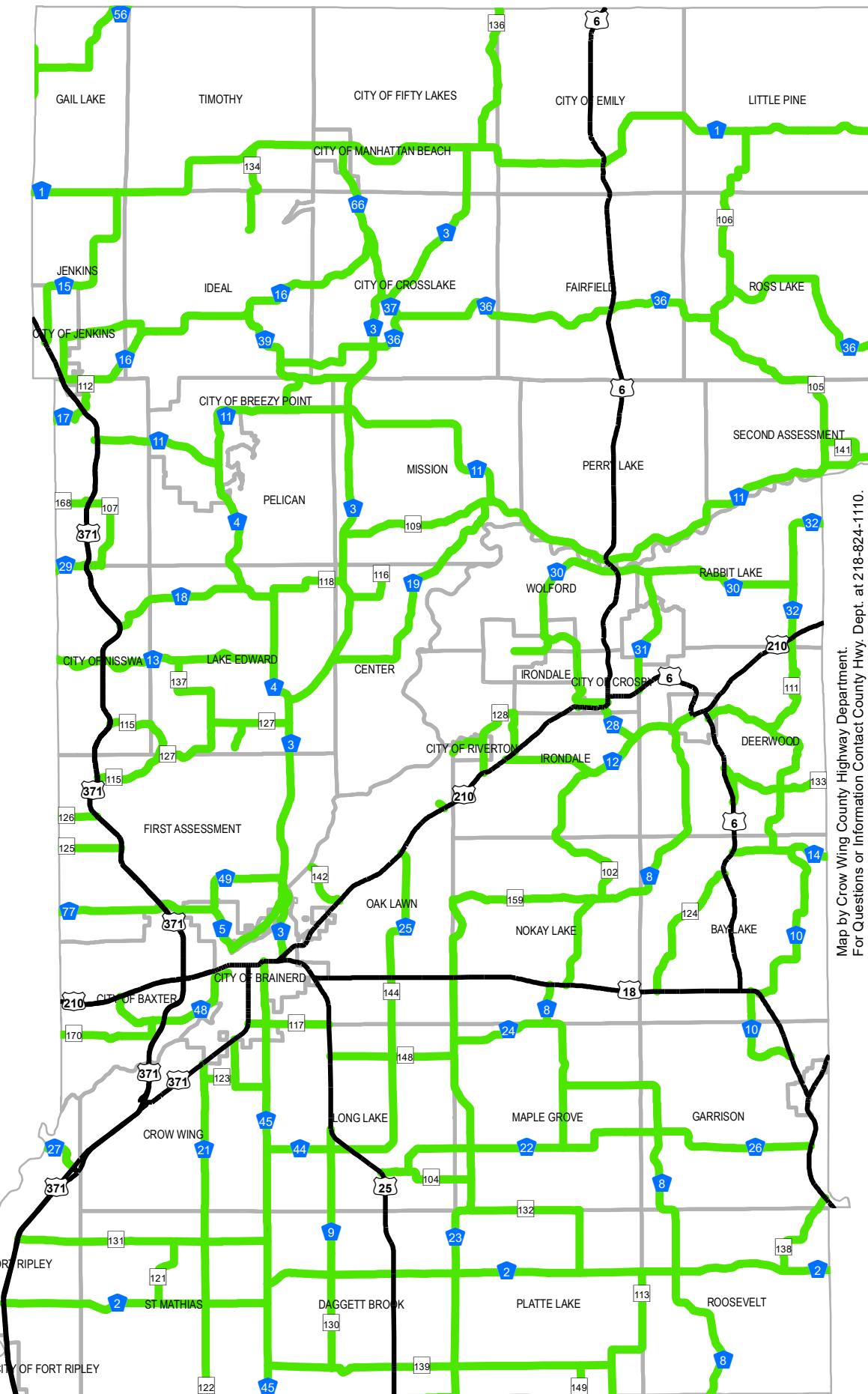
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 1/19/2021



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.

2020/2021 Summary For Snow Event #1 2021 #12

Date 1-14-2021

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
790.25	\$71,913	20.75	\$706	6845	\$4,518	\$77,136	\$27,938	\$10,406.00	\$1,539

Total	\$117,019	19.39 Plow hrs.	\$6,034 per/hr.
		368.50 Man hrs.	\$209 per/CL/mile
			\$4.41 per/household for entire County

Forecast

3-7" of snow forecasted with some freezing rain starting 3:00 a.m. 1-14-21 and continuing until 1:00 p.m. 1-15-21. Winds 0-5 1-14 during the day, increasing to 10-25 late 1-14 and through 1-15.

Pre Plan

Begin plowing around 8:00 a.m. 1-14 and continue into the evening. Resume plowing at 3:00 a.m. 1-15. Apply 300 lbs. of salt on centerlines. Anti ice major intersections to aid in snow not compacting.

Actual Event

Event start: 1-14-21 6:00am

Event ended 1-15-21 6:00am

Comments

Snow fell steadily throughout the day and into the night. Roads cleaned up well and the salt kept melting overnight, helping the roads clean up well. Plows began plowing and continued plowing roads throughout the day on 1-14 until 7:00 p.m. before resuming at 3:00 a.m. 1-15-21. All roads were plowed by 11:00 a.m., except the gravel because we were trying to allow traffic to compact the snow to protect the exposed gravel.

Conditions

Steady snowfall, with minimal winds. Warmer temps allowed salt to work throughout the night. Some areas of refreeze on 1-15 and 1-16.

Road	Road Temp	Date	Time	Air Temp
Cr 3	30	1\14\21	3:00PM	30

Date	High	Low
1/13/2021	40	28
1/14/2021	34	31
1/15/2021	33	21
1/16/2021	23	12
1/17/2021	21	14

Source: weather.com. Monthly Weather. 56401

Summary

Roads cleaned up well with the material, continuous plowing and road temperatures. Our driver's commitment to having the roads in the best shape they could before leaving for rest, really drove the results.

Decisions Made

We decided to concentrate on drive lanes and apply salt at 400 lbs. twice on 1-14 and once on 1-15, which allowed the roads to clean up with out compaction. Decision to anti ice prior to the event was beneficial the plow operators reported.

Lessons Learned

The temps and material rates worked well. There was discussion about turning the application rates down but we experienced refreezing in various areas on 1-15 and numerous areas on 1-16, which leads us to believe the proper amount was used.

Goals Met/Not Met

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.