| | BCWMC Stre | | | | | | | | |
|-----------------|---|---|---|---|---|--|---|---|---|
| Municipality | 1. Curb miles maintained | 2. Sweepings per year | 3. Certain areas more frequent | 4. Sweeping on all road surfaces | 4.a. Curbed road database | 5. Sweeping on private roads | 5.a. Private & public road database | 6. Tracking | 7. Data collected |
| Minneapolis | 1,900 | Two comprehensive sweeps in the spring and fall, entertainment and event areas 7 day cycles, chain of lakes, parkways on a 15 day cycle through the summer. Commercial node and AD50 area 30 day cycle, and residential neighborhoods 3-5 times a summer. | Yes due to location to water bodies, economic, commercial activity, and number of people using the area. | Yes | Very few streets without curbs - less than 1 percent. | Perform work only on public streets. Private responsible for their own facility. | Only maintain public roads | Smart spreadsheet and established routes. | As part of their entry the driver notes the number of loads created. We also have a gross amount by what we haul out to secondary processing centers. |
| St Louis Park | 5,000 to 6,000 annually depending on snow cover | Typically early spring, late spring, summer, and fall | We have priority areas that are swept first and they are determined by traffic volumes, street slopes, and proximity to water bodies. | | We sweep all streets and alleys in the city. We do not sweep private, county, or state roads, accept for simple crossings or turnings. | They provide their own sweeping, some private roads may compensate the city for sweeping. | We maintain a database of publically maintained roads. | GPS and hand written notes. | We measure collected volumes, CY, on an annual basis, based on material disposal. |
| Minnetonka | Approximately 495 miles | One citywide sweep in the spring, and one specialized sweeping area in a subwatershed in the fall in Nine Mile Creek Watershed. | One subwatershed area is swept in the fall as part of a water quality improvement project (Nine Mile Creek Watershed). | Yes | Yes | Private streets are not swept or maintained by the city. It is unknown if private streets are swept by the owners as there is no requirement to. | Yes | Sweeping is tracked using GPS devices in the three sweepers. | No |
| Golden Valley | 240 miles per event | 3 full sweeping events, Spring, Summer, and Fall | No, We do start in priority areas that drain directly to the creek. | Yes | All roads are curbed. | Yes. Varies based upon Maintenance agreements or other protocols. | Yes, in GIS. Usually filed with the property/ area's maintenance Agreements | We track material collected and hours in Cartegraph. Our Street Sweepers are also equipped with GPS. Also use sweeping zones. | We track the amount of material (weight) that we collect daily and enter it into Cartegraph. Approximately 2,000 CY of material collected. |
| Hennepin County | We sweep about 60 miles of curb on the county roads | We do a complete sweeping every spring and fall, with spot sweeping done throughout the year as needed. | | Yes we also sweep rural roads that do not have curbs. | Yes | NA | Yes we have a database. | We track our street sweeping by city with logs. | Spring and fall there are weight tickets from the sweepings being disposed of, and for spot sweeping we have a log. See provided logs for 2024 spring and fall sweeping. |
| Plymouth | Approximately 1,200 curb miles | Sweep at least 3 times a year (spring, early summer and late summer/early fall) and try to get a 4th if possible. Sweep main roads that don't have residential properties off of them to collect leaves/debris. We do not sweep roads in residential areas in the fall for leaves, due to storage limitations of that debris. Also do special event/main roads, etc but we didn't account for that. | Yes, we typically sweep some trouble spots after heavier rain events. Most are around Medicine Lake. | Yes | Yes | Yes, maintenance is unknown. | Yes | We have sweeping zones and GPS. The sweeping work labor and time is tracked in our Asset Management system, Cartegraph. | Yes. We take random samples from all sweeping events to determine the composition of the material collected. On average, we take 4-6 random samples for each sweeping event. |
| New Hope | 126 curb miles | | Aside from these city wide contracted sweepings, the city operates one sweeper that sweeps Meadow Lake and Northwood Lake subwatersheds on a routine basis (monthly or more). As for the exact sweeping area for Northwood Lake, we sweep the local roads south of 42nd Ave N, west of Boone Ave N, north of 36th Ave N, and east of Hwy 169. Both 36th Ave N and Boone Ave N are local roads, so those are also hit during these sweepings. | It occurs on all city streets. | | Private streets are the responsibility of the owner to maintain. | Yes, we maintain a database of public vs. private streets. | Tracked with GPS data. There are sweeping zones in the Northwood and Meadow Lake subwatersheds that are swept on a more frequent basis. | No |
| Robbinsdale | Roughly 100 miles. We have 52 miles of local roads and most of it has curb on both sides of the street. | Streets – These are swept 2 times in the spring, then approx. once each month after that until freeze. Usually twice in the fall. So, depending on spring melt, April-November, 7 to 9 times annually. | Yes, heavy traffic areas, mostly State Aid roads and streets near the lakes. | Unknown | Unknown | Yes, unknown | Unknown | No zones. GPS tracked and hand written on maps. Each map is filed when complete. | No |
| Crysal | | | | | | | | | |
| Medicine Lake | | 1 time in the spring; 1 time in the fall | | | | | | | |
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| et Sweeping Survey Responses | | | | | | | | |
|---|---|---|--|---|--|---|--|---|
| 8. Testing swept material | 9. Sweeping in TMDL | 10. Annual staff hours | 11. Annual expenses | 12. Type and number of sweepers | 13. Barriers | 14. MPCA Street Sweeping calculator | 15. Cost share options | 16. Additional comments |
| Yes, two studies with the U of M in the past five years and an overall analytical in the early 2000s. | Yes | 20,000 hours | \$8.4 million | 11 mechanical, 5 regenerative and two small vacuums for bike lanes. | On-street parking and sweeping transfer points for handling materials. | Yes just bring it online. | | |
| We have tested in the past but it's not a routine practice. | Yes | 2,241 hours | \$200,000 | We have two mechanical sweepers. We also hire additional sweepers in the spring to sweep the entire city within a few days. | Typically seasonal conditions in the fall and spring, can't sweep the ice. | We use the MPCA calculator for addressing our TMDL requirements. | To offset existing costs. | |
| Since 2011, sweeping materials have been tested two times. | We reference a couple targeted areas in our TMDL plan, not yet implemented. | Approximately 1,230 staff hours are used for the spring sweep each year (205 shift hours, 6 people on the sweeping crew). 2024 was the first year of the specialized fall sweeping area, and used 72 staff hours (12 shift hours, 6 people on sweeping crew). | Not tracked. | Three Elgin Pelican mechanical sweepers are used. | No significant barriers during sweeping operations. Frequency of sweeping is limited by available staff. | No, we do not currently use these tools. | We might use the funds to hire a contractor to peform additional street sweeping in priority areas. As current staff are at capacity, any significant additional sweeping would need to be contracted out. | |
| Not currently, but intend to once we receive our new street sweeper. | Yes | 685 | \$197,000 | Mechanical Sweepers, Toolcats, loaders, trackless, dump trucks, a total of 12 pieces of equipment are used. | Weather, staff time and budget. | No, we are aware of tool, hoping to integrate into future operations | To hire additional staff | |
| No | Our current sweeping program was in place at the time of all of the TMDL studies. We have considered adding additional sweepings as a way to make progress on our WLAs. | Our spring sweeping takes about 5 weeks with 6 pick up brooms, and 3 kick-off brooms. Fall sweep takes less time because we do the outsides curb and gutter. Second shift will go and do the other sweeping in the watersheds. Minneapolis sweeps it's own roads. We coordinate with the other cities when they do their sidewalks so we don't have to do it twice. We don't run non-stop in the summer. | | Mechanical | On-street parking | A few staff do, we did some extra sweepings this past summer and plan to give the calculator a try for the first time. | | |
| Yes, please see attached spreadsheet with documentation of all sweeping analysis to date. | Yes | Est. 2,000 | Approximately \$250k | 2 mechanical pelicans, 1 regenerative Tymco | Garbage cans placed in the streets. We try to schedule not to sweep in garbage zones for that day. | Yes we are familiar with the workshop and tool. We have yet to use them on a city wide basis but plan to in the future. | The funds would be used to purchase additional sweeping equipment. | |
| No | No | Based on the equipment hours we average 300-350 hours per year on our city owned sweeper. During the contracted spring and fall sweepings there is 320 sweeper hours, and 320 maintenance worker hours following those sweepers with a dump truck. | The city owned sweeper operation cost is roughly \$30,000 annually. Labor expenses will range between \$12,000-\$15,000 annually. The contracted city wide sweepings and disposal costs are approximately \$50,000. Total cost estimate for all sweepings is \$92,000-95,000. | The city owns one dustless vacuum sweeper that is used by city staff throughout the year. Multiple mechanical sweepers are used during the two contracted city wide sweepings in the spring and fall. | Staff availability and budget | Familiar but not implemented in the city program. | Funds would be put towards equipment and repair costs. Maintenance of the sweeper is really expensive and required to keep it on the road as often as we do. | |
| No | Unknown | 600+ hours | Labor (\$51,000) Equipment (\$17,000) Disposal (\$15,000) | 1 mechanical sweeper | Staffing (it is hard to dedicate one person to this all the time as we have other work demands), on street parking is also a challenge for us. Screening and disposal is time consuming and expensive. (We just ordered a screener so this might get better?) | No | Potentially renting a sweeper to improve time spent on sweeping but then it takes another person to do so. Hiring a hauler to dispose of sweeping material versus hauling it ourselves. | |
| | | | | | | | | |
| | | | | | | | | Sweeping performed through contract by the City of Plymouth. |



| Municipality | 17. MPCA Smart Salt Assessment and Smart Salt Certified | 18. Deicing materials | 19. Equally deice roads | 20. Other deiced surfaces | | | | |
|-----------------|--|--|---|---|--|--|--|--|
| Minneapolis | Yes and yes | Rock salt, Mgcl enfussed rock salt and brine. | Downtown is the high level of material use because of the number of turning, stopping, bike, and ped movements. Arterial is the next level as our service goal is travel lanes bare and parking to snow pack. Residential is to snow pack with hill, curves and control points treated. | Police and PW facilities plowed and trea using small vehiles or equipment for sidewalks and parking lots. | | | | |
| St Louis Park | Yes | Brine and salt, we do not use sand. | No, trunk roads get brined, salt is generally limited to steep slopes and intersections. We do not salt walks and trails. | We only treat city parking lots that an considered critical infrastructure. | | | | |
| Minnetonka | Yes and Yes, individuals within Public Works are certified, currently through 2026. | Untreated rock salt, brine, calcium chloride additives. | Collector roads: mostly bare pavement, residential streets: center of street bare pavement, cul-de-sacs: plowed but minimal salt use. Curves and hills: bare pavement. | Yes, Parking lots: treated with salt as nee Sidewalks and trails: no deicing chemical used. Will apply sand as needed if sev icing conditions. | | | | |
| Golden Valley | Yes and yes | Salt, Brine, and BEET HEET. | We have one road identified as bare pavement, all other roads are plowed and treated with the mains being checked twice. Our goal on residential roads is a bare strip on the crown, goal on mains is bare wheel path. | City hall and Fire station parking lots a sidewalks, parking lot main drive lanes salted with the dump trucks, sidewalks salted as needed. | | | | |
| Hennepin County | Yes, all of our plow drivers are smart salt certified. | Rock salt , brine and potassium acetate. | Yes | Just County roadways | | | | |
| Plymouth | Yes, we have been previously Smart Salt certified and will be working on recertification. | Rock salt and brine. Apex used below 15 degrees. | Intersections, bridge decks, and icy trouble spots are de- iced more frequently. Also, mains and secondary roads are de-iced more frequently. Residential roads are not typically de-iced besides salting during full city plow. | Only major facilities owned by the City stations, community center, city hall | | | | |
| New Hope | We are aware of the smart salt assessment tool. Our individual staff members have completed smart salt training, but we are not a certified organization. | Rock salt and brine. | The city does not have a bare pavement policy. Salting is typically limited to hills and intersections, but that can change depending on weather conditions. The city also uses brine for anti-icing ahead of the storm on main roads. | The city manages deicing on city parking | | | | |
| Robbinsdale | Yes. Individuals are Smart Salt certified but not all of them. The entire organization is not Smart Salt certified. | Rock salt and brine. | State aid roads and roads with difficult topography see more treatment than the rest. | Parking lots and some sidewalks, use as salt as possible, some times no salt is u | | | | |
| Crysal | | | | | | | | |
| Medicine Lake | | | | | | | | |

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BCWMC Chloride Su 21. Data collected reated Yes in our MS4 permit information for We track plow routes and measure the brine and are salt usage for the trucks that use brine and salt. Yes. For each snow event, the salt controllers on the trucks collect data for miles traveled, hours needed. cals are used, salt spreading distance, lbs salt applied, blast, average salt rate (lbs/mi), prewet distance and severe prewet gallons (if truck is outfitted with brine pump). and Yes, we track this in a spreadsheet every year. es are 2022-23 1025 tons of salt, 74,845 gallons of brine, ks are 2023-24 231 tons of salt, 59,372 gallons of brine Yes Yes, we track salt and brine usage for all snow ty (fire events. If this data is needed for a specific reason, all) please ask We track the total tonnage of deicing material ing lots. applied. as little Yes used. ----

| rvey Reponses | | | | | | | | |
|---|---|---|---|----|--|--|--|--|
| 22. Chloride BMPs | 23. Street sweeping for chloride management | 23.a. Operations and experiences | 24. Material storage and disposal | 25 | | | | |
| Training all users in smart salting techniques, snow plow operator training, and tracking material use by buckets of material used for each truck. | If we have a dry winter period we will sweeps and if get a report of excess materials usage we will sweep if weather premits. | Since it is dry sweeping dust is created and some materials do not lift as easily. | Transfer to our yard than when resources are available we transfer it as ground cover to a demolition landfill. | | | | | |
| Calibrate machines, brine when we can, limit use or use admixtures when really cold, salt storage and material transfer practices. | We typically clean up spills on roadways as feasible. | It is difficult to effectively sweep when snow and icey conditions exist. | Sweeping tailings are stored at our storage facility and dispose of when staff ability allows. | | | | | |
| Council Policy Number 11.17 Snow and Ice Control of Municipal Streets, Trails, and Sidewalks https://www.minnetonkamn.gov/home/showpublished document/11003/638422195115770000#page=192 | No | | N/A | | | | | |
| Mechanical removal of snow first then apply chemical on second pass, anti-icing, liquid deicing, 20-30 gal/ton prewet rates, follow the application rate chart in the snow and ice control handbook, | Sometimes. Excess salt is swept up after storm events on sidewalks and parking lots. | If a truck spills some over the tailgate and leaves a pile, we will scoop or sweep it up. Also, we have swept up extra salt on the sidewalks when weather is not expected for a while. | Transported to our storage yard and stock piled on site, we dispose of this material mixed with other fill annually. | | | | | |
| Pre treat roads bridges and hills with brine. Stay at 200 Ibs per lane mile. | No | | Vonco landfill | | | | | |
| | | Yes, this is one of the main goals of the first spring sweep. For our first sweep we do two shifts for 3 weeks straight to get the most amount of sweeping done in the shortest amount of time. | Our sweepings are temporarily stored at our maintenance facility. The sweepings are screened in the fall. Waste is disposed of at Dem-Con | | | | | |
| The city recently purchased new plow trucks with brining capabilities, and a brine production system was recently installed in the Public Works addition in 2024. We anti-ice main roads with brine ahead of the storm, which leads to better mechanical removal while plowing. Routinely recalibrate equipment to verify proper application. | The city uses street sweeping if there was an equipment issue, and excess salt was applied or spilled from the box on the plow truck. | Due to snow and ice build up in curblines, we are typically unable to sweep curb to curb during the winter. The vacuum sweepers do not work well if there is moisture or ice on the road. Moisture causes filter issues, and sweeping up salt on a more routine basis would increase corrosion on the equipment. | Since our sweeper is a dustless vacuum style machine the conditions have to be dry with no ice curb to curb. We do have a lined hopper to help with the early spring sweeps but salt destroys equipment so we rarely complete winter sweeping. Fall sweepings are brought to the Maple Grove Compost Site. Spring and summer sweepings are brought to Superior Sand and Gravel/Crow Pit in Greenfield, MN. | | | | | |
| Smart salt training for operators, using brine for prewetting and anti-icing, keeping salt covered in a salt shed, using treated salt for low temperatures | No. How do you protect your sweeper from getting eaten by salt. If there is a large pile left behind we clean it by machine first then sweep the rest by hand. | | Stored in the yard, screened and hauled to Vonco for disposal. | | | | | |
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