



**MINNESOTA POLLUTION  
CONTROL AGENCY**

## Minnesota Municipal Street Sweeping Survey

The MPCA is currently working with U of M researchers to develop a method for crediting street sweeping. To help us better understand the street sweeping capabilities and limitations of municipalities and ultimately develop a credit that municipalities can use, we are conducting a survey of sweeping practices. Your participation will greatly benefit development of this credit. Thank you!

What municipality are you responding for?

77 (100.0%)

What is your role in that municipality (e.g., Director of Public Works, Engineer, etc.)?

77 (100.0%)

Does your municipality operate a street sweeping program?

75 (97.4%) Yes

2 (2.6%) No

### Information for crediting

Which of the following do you sweep (select all that apply)?

65 (87.8%) Arterial municipal roads

69 (93.2%) Collector municipal roads

73 (98.6%) Local municipal roads

33 (44.6%) Alleys

68 (91.9%) Parking lots

36 (48.6%) Bike lanes and/or trails

11 (14.9%) Non-municipal roads

Other: (please describe)

7 (100.0%)

What type of equipment do you use? (if you don't use that type of equipment, leave it blank) If different equipment is used for different road types (e.g., arterial, collector, local, other), please specify road type.

Mechanical brush  
sweeper, **specify road type:** 55 (100.0%)

Mechanical brush  
sweeper, with vacuum  
assist, **specify road type:** 20 (100.0%)

Regenerative air  
sweeper, with  
mechanical brush,  
**specify road type:** 27 (100.0%)

Leaf vacuum, **specify road type:** 11 (100.0%)

Other: please specify  
equipment type and  
road type 17 (100.0%)

For each road type listed below, what is your sweeping schedule/frequency? select the most applicable answer for each category?

|           | Daily    | Weekly   | Monthly   | Every<br>other<br>month | Quarterly<br>or 3<br>times a<br>year | Once a<br>year | Other fre<br>quency |
|-----------|----------|----------|-----------|-------------------------|--------------------------------------|----------------|---------------------|
| Arterial  | 2 (2.9%) | 2 (2.9%) | 8 (11.8%) | 6 (8.8%)                | 27 (39.7%)                           | 7 (10.3%)      | 16 (23.5%)          |
| Collector | 1 (1.4%) | 1 (1.4%) | 9 (12.7%) | 5 (7.0%)                | 30 (42.3%)                           | 7 (9.9%)       | 18 (25.4%)          |
| Local     | 1 (1.4%) | 1 (1.4%) | 8 (10.8%) | 4 (5.4%)                | 27 (36.5%)                           | 8 (10.8%)      | 25 (33.8%)          |

Arterial: Other frequency

16 (100.0%)

Collector: Other frequency

18 (100.0%)

Local: Other frequency

24 (100.0%)

For each of the following road types, what is the primary factor that determines street sweeping frequency?

|           | Snowmelt   | Spring<br>vegetation<br>drop | Fall leaves | Aesthetics<br>/trash | Resources<br>/budget | Other<br>factors |
|-----------|------------|------------------------------|-------------|----------------------|----------------------|------------------|
| Arterial  | 16 (23.9%) | 5 (7.5%)                     | 8 (11.9%)   | 13 (19.4%)           | 12 (17.9%)           | 13 (19.4%)       |
| Collector | 16 (22.9%) | 4 (5.7%)                     | 12 (17.1%)  | 11 (15.7%)           | 14 (20.0%)           | 13 (18.6%)       |
| Local     | 12 (16.4%) | 5 (6.8%)                     | 16 (21.9%)  | 13 (17.8%)           | 15 (20.5%)           | 12 (16.4%)       |

Arterial: Other factors

12 (100.0%)

Collector: Other factors

12 (100.0%)

Local: Other factors

11 (100.0%)

Do you use parking enforcement to get a full curb-to-curb sweeping?

45 (60.0%) No

19 (25.3%) Yes

11 (14.7%) Yes, but only on certain streets

Please specify which types of streets:

11 (100.0%)

## Information for developing and applying credits:

Do you track street sweeping information (e.g., frequency, street type, curb absence/presence, and parking conditions)?

- 41 (54.7%) Yes, currently tracked
- 27 (36.0%) No, but could be done
- 7 (9.3%) No, would be difficult to do

Can material collected be related to a specific set geographic area (e.g., does each hopper load come from a known route or are routes geotagged)?

- 49 (66.2%) No
- 25 (33.8%) Yes (either currently tracked or could be tracked).

Please describe how you track or could track:

23 (100.0%)

Is the volume and/or mass of swept material determined in some way?

- 22 (29.3%) No
- 53 (70.7%) Yes

If the material is measured, how is it measured? (check all that apply)

- 10 (19.6%) Measured wet weight
- 19 (37.3%) Measured volume
- 4 (7.8%) Estimated weight (how is this determined)
- 25 (49.0%) Estimated volume (how is this determined)

Other method of measuring:

20 (100.0%)

Do you have the ability to estimate moisture content of swept material?

- 3 (5.7%) Yes
- 50 (94.3%) No

Please describe how you measure moisture content:

2 (100.0%)

If no, please specify the most important reason:

27 (56.3%) Lack of equipment

3 (6.3%) Lack of training

18 (37.5%) Lack of staff resources

Other reason:

4 (100.0%)

Have the collected materials undergone any of the following laboratory analysis?

|   | Yes        | No         |
|---|------------|------------|
| Analysis for phosphorus and/or nitrogen | 17 (23.9%) | 54 (76.1%) |
| Physical characteristics of sediment    | 13 (18.3%) | 58 (81.7%) |

Please describe the analysis you do:

10 (100.0%)

Do you calculate phosphorus removal for street sweeping?

67 (90.5%) No

7 (9.5%) Yes

Please select the method used:

1 (16.7%) Model

2 (33.3%) Measure

3 (50.0%) Estimate

Please describe how you estimate:

3 (100.0%)

Assuming a method for crediting street sweeping is developed and can be implemented by municipalities, how likely is your municipality to participate in the crediting program?

42 (56.8%) Very Likely

16 (21.6%) Somewhat likely

14 (18.9%) No opinion either way

1 (1.4%) Somewhat unlikely

1 (1.4%) Very unlikely

What is the main reason for your response?

59 (100.0%)

What barriers do you see to participate in a crediting system (e.g., administrative burden, cost, disposal of collected materials)?

2 (100.0%)

Would you consider developing a street sweeping program if a credit was developed?

2 (66.7%) Yes

0 (0.0%) No

1 (33.3%) Not sure

Comments:

1 (100.0%)

Optional Contact information:

Name, email and phone number: (contact information is helpful for us to follow up, if necessary)

67 (100.0%)

Would you like to receive updates on this project?

65 (90.3%) Yes (please be sure we have your email above)

7 (9.7%) No thanks

Thank you for your help!