



MN2050 | State of the Infrastructure 2015 Survey

Data Book

OCTOBER 2015

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Photo courtesy of TKDA

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Acknowledgments

Wilder Research would like to acknowledge our study partners, MN2050 and MnDOT State Aid, for their continued guidance throughout all phases of this study; their expertise and insight were and continue to be invaluable. Additionally, Wilder Research extends its appreciation to the advisory board for this study, which includes:

Tom Eggum, MN2050
James Grube, Minnesota County Engineers Association
Brad Henry, MN2050
Kelvin Howieson, MnDOT
Malaki Ruranika, MnDOT
Michael Thompson, City Engineers Association of Minnesota

Wilder Research also thanks the City Engineers Association of Minnesota, the Minnesota County Engineers Association, and the League of Minnesota Cities for their organizational cooperation.

Additionally, numerous Wilder Research staff contributed to this study. They are:

Mark Anton
Jennifer Bohlke
Walker Bosch
Benjamin Bushee
Jacqueline Campeau
Marilyn Conrad
Philip Cooper
Dawn Mueller
Dan Swanson

Study methodology

In partnership with MN2050, Wilder Research conducted an online survey for the Minnesota Department of Transportation (MnDOT) that included engineers from 264 jurisdictions across the state of Minnesota, including cities, counties, and two state agencies; Metropolitan Council and MnDOT. The goals of this ‘State of the Infrastructure’ survey are: 1) to learn to what degree city, county, and state agencies are using asset management practices to manage the infrastructure assets in Minnesota, and 2) to build and share collective knowledge regarding the types, condition, and value of infrastructure assets in Minnesota.

This data book includes data from the first survey, which was conducted in spring-summer 2015. This survey will be conducted again in the spring of 2016.

MN2050 (www.mn2050.org), Wilder Research’s partner in this study, is a coalition of partners comprising engineering and infrastructure professional organizations working in the public, private, and educational sectors. MN2050’s mission is to promote infrastructure investment across Minnesota by providing a coordinated voice drawing attention to infrastructure needs and informing citizens and leaders of necessary action steps to ensure appropriate infrastructure in the 21st century.

Survey instrument design

The survey was designed by MN2050 and Wilder Research with input from MnDOT State Aid, and the study’s Advisory Group (a group of civil engineering professionals). The survey includes questions about the use of asset management practices, types of infrastructure managed, and the condition, value, and mapping of each type of infrastructure. The survey was programmed into Wilder Research’s web survey software (Voxco’s Acuity4). A paper-based survey was made available for reference while the engineers prepared the information necessary to complete the survey (a PDF of the paper survey was sent with the email invitation). The survey instrument is included in the Appendix.

Pilot test

The survey instrument was pilot tested with a convenience sample of stakeholders provided by the study’s Advisory Group. The pilot survey was sent to 12 city and county engineers and MnDOT staff; seven completed the pilot survey. From these responses, some changes were made to the web survey to ensure survey clarity and meaningful data collection, though respondents largely noted that the survey was easy to complete and

that it collected important information. The responses from completed pilot surveys were added to responses from the full survey.

Sample

MN2050 and Wilder Research worked with MnDOT State Aid and the League of Minnesota Cities to obtain the names and email addresses of city, county, and state engineers or other representatives that are responsible for asset management in their jurisdiction. Most often, survey respondents were government employees or consultants hired by the jurisdiction. Email addresses for county representatives and contact information for representatives (for cities with populations of 5,000 or greater) were obtained from MnDOT State Aid and from the League of Minnesota Cities (for cities with populations of less than 5,000, which receive State Aid funds administered by MnDOT). It should be noted that while there are 1,157 cities with populations of less than 5,000, the sample file that Wilder Research received from the League of Minnesota Cities only included 269 cities with populations of less than 5,000 due to missing engineer contact information; Wilder Research seeks to obtain a more comprehensive sample of cities with populations less than 5,000 for the next iteration of the survey.

Data collection

Prior to inviting respondents to complete the web survey, MN2050 sent pre-notification emails about the study to those who would receive the survey. The pre-notification email outlined the goals of the survey as well as what information the survey sought to collect. Then, all sampled respondents were sent an email inviting them to participate in the web survey. The invitation included a PDF version of the survey for printing if needed. We emailed the survey to respondents on June 9, 2015. The survey officially closed roughly a month later after two reminder emails were sent to respondents to complete the survey.

The survey was emailed to representatives from 87 counties and 417 cities (148 cities with populations of 5,000 or greater; 269 cities with populations of less than 5,000). Representatives from 64 counties (74% of all counties sampled), 200 cities (47% of all cities sampled), and two state agencies responded to the survey for a total of 266 respondents (53% overall response rate). All completed surveys were checked for accuracy and missing data. See Figure 1 for more information about completed surveys.

1. Sample groups

	Number of jurisdictions of this type that were sampled	Number of jurisdictions that completed the survey	Response rate	Percent of total completes
Cities with less than 5,000 residents ^a	269	96	35%	36%
Cities with 5,000 or more residents ^b	148	104	70%	39%
Counties ^b	87	64	74%	24%
State agencies	2	2	100%	1%
Total	506	266	53%	100%

^a Sample provided by League of Minnesota Cities

^b Sample provided by MnDOT State Aid

How to read the tables in this data book

For every table in this data book that displays ‘State of the Infrastructure’ survey data, results are displayed for sub-groups of respondents based on:

- The sample of survey respondents by jurisdiction—that is, responses from smaller cities (cities with less than 5,000 residents), larger cities (cities with 5,000 or more residents), counties, and state agencies (Metropolitan Council and MnDOT).
- Cities by populations, including: less than 5,000 residents, 5,000-19,999 residents, 20,000-49,999 residents, and 50,000 or more residents. Two cities with a population of slightly less than 5,000 were included in the category of cities with a population of 5,000-19,999 because they receive MnDOT State Aid.
- Counties by geography including the seven-county Twin Cities metro, Greater Minnesota counties with 60,000 or more residents, and Greater Minnesota counties with less than 60,000 residents. Analysis excludes data for Anoka, Scott, and Washington counties in the seven-county Twin Cities metro sub-group due to non-response. Additionally, the subgroup of Greater Minnesota counties with 60,000 or more residents excludes analysis of data from Blue Earth and Saint Louis counties due to non-response.
- Counties and cities by MnDOT district.

See Figure 2 on the next page for an example of the table format that is used for every survey question.

2. Data book template

Question

	Response options					
	Response 1		Response 2		Response 3	
	%	N	%	N	%	N
All survey respondents						
Cities with less than 5,000 residents ^a						
Cities with 5,000 or more residents ^b						
Counties						
State agencies ^c						
Cities by population						
Less than 5,000 residents						
5,000-19,999 residents						
20,000-49,999 residents						
50,000 or more residents						
Counties by geography						
Seven-county Twin Cities metro ^d						
Greater Minnesota counties with 60,000 or more residents ^e						
Greater Minnesota counties with less than 60,000 residents ^f						
Counties and cities by MnDOT district						
District 1						
District 2						
District 3						
District 4						
Metro						
District 6						
District 7						
District 8						

^a These cities do not receive State Aid funds.

^b These cities receive State Aid funds administered by MnDOT.

^c There are two cities with populations slightly under 5,000 that are included because they receive State Aid administered by MnDOT.

^d Includes Carver, Dakota, Hennepin, and Ramsey counties (Anoka, Scott, and Washington counties did not complete a survey)

^e Includes Clay, Crow Wing, Olmsted, Rice, Sherburne, Stearns, and Wright counties (Blue Earth and Saint Louis did not complete a survey)

^f Includes (remaining counties, alphabetically listed)

Data cleaning and analysis

Completed surveys were checked for accuracy and clarity, and to verify that all responses were within range and followed the programmed skip patterns. Data were then analyzed using Statistical Package for the Social Sciences (SPSS) to produce response frequencies, means/medians, and ranges. Cross-tabs were used to analyze responses by respondent subgroups (cities and counties, cities by population, counties by geography, and counties and cities by MnDOT district).

For open-ended questions, categories were developed using grounded coding for analysis of responses. These categories were used to code open-ended responses for analysis in SPSS. The analysis codebook that was used to categorize respondents' comments is included in the Appendix.

Calculations in the summary report

The summary report includes calculations based on responses from survey participants and population data from the U.S. Census Bureau. Per capita calculations of the value of infrastructure asset types were calculated by first calculating the sum of responses from each jurisdiction type, and then dividing that by the sum of the populations of each jurisdiction that answered. Population estimates came from the U.S. Census Bureau's Decennial Census and Population estimates.

An estimate of the gap between annual infrastructure investment needs and available funds was calculated by calculating the sum of the gap in funds provided by survey responses by jurisdiction type and divided each sum by jurisdiction type by the total population of each jurisdiction type. Population estimates for this calculation were taken from the 5-year 2009-2013 American Community Survey estimates.

1. Does your organization use Asset Management practices to operate, maintain, and extend the life of infrastructure assets in [JURISDICTION]?

	Yes		No		Total
	N	%	N	%	N
All survey respondents	184	69%	82	31%	266
Cities with less than 5,000 residents (1)	44	46%	52	54%	96
Cities with 5,000 or more residents (2)	85	82%	19	18%	104
Counties	53	83%	11	17%	64
State agencies (3)	2	100%	0	0%	2
Cities by population					
Less than 5,000 residents	44	46%	52	54%	96
5,000-19,999 residents	47	73%	17	27%	64
20,000-49,999 residents	27	93%	2	7%	29
50,000 or more residents	11	100%	0	0%	11
Counties by geography					
Seven-county Twin Cities metro (4)	4	100%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	7	100%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	42	79%	11	21%	53
Counties and cities by MNDOT district					
District 1	11	58%	8	42%	19
District 2	10	56%	8	44%	18
District 3	24	63%	14	37%	38
District 4	14	61%	9	39%	23
Metro	68	84%	13	16%	81
District 6	21	70%	9	30%	30
District 7	18	58%	13	42%	31
District 8	16	67%	8	33%	24

1A. From [JURISDICTION], who participates at any level in Asset Management? (Check all that apply)

	Engineering personnel		Finance personnel		GIS personnel		Data Processing personnel		Planning personnel		Other personnel		Total
	N	%	N	%	N	%	N	%	N	%	N	%	
All survey respondents	172	96%	112	63%	76	42%	22	12%	47	26%	89	50%	179
Cities with less than 5,000 residents (1)	34	83%	27	66%	2	5%	3	7%	14	34%	31	76%	41
Cities with 5,000 or more residents (2)	83	100%	57	69%	53	64%	11	13%	19	23%	44	53%	83
Counties	53	100%	26	49%	19	36%	6	11%	12	23%	12	23%	53
State agencies (3)	2	100%	2	100%	2	100%	2	100%	2	100%	2	100%	2
Cities by population													
Less than 5,000 residents	34	83%	27	66%	2	5%	3	7%	14	34%	31	76%	41
5,000-19,999 residents	45	100%	34	76%	21	47%	3	7%	12	27%	25	56%	45
20,000-49,999 residents	27	100%	18	67%	22	81%	3	11%	4	15%	13	48%	27
50,000 or more residents	11	100%	5	45%	10	91%	5	45%	3	27%	6	55%	11
Counties by geography													
Seven-county Twin Cities metro (4)	4	100%	3	75%	3	75%	1	25%	2	50%	3	75%	4
Greater MN - Counties with 60,000 or more residents (5)	7	100%	3	43%	1	14%	1	14%	1	14%	3	43%	7
Greater MN - Counties with less than 60,000 residents (6)	42	100%	20	48%	15	36%	4	10%	9	21%	6	14%	42
Counties and cities by MNDOT district													
District 1	11	100%	7	64%	3	27%	3	27%	2	18%	4	36%	11
District 2	9	90%	5	50%	1	10%	1	10%	4	40%	6	60%	10
District 3	22	92%	17	71%	8	33%	0	0%	5	21%	10	42%	24
District 4	14	100%	9	64%	6	43%	2	14%	4	29%	5	36%	14
Metro	68	100%	46	68%	41	60%	9	13%	13	19%	42	62%	68
District 6	17	89%	10	53%	7	37%	3	16%	8	42%	9	47%	19
District 7	15	94%	7	44%	5	31%	0	0%	6	38%	6	38%	16
District 8	14	93%	9	60%	3	20%	2	13%	3	20%	5	33%	15

**1A. - Other. From [JURISDICTION],
who participates at any level in
Asset Management? (Check all that
apply)**

	N	%
Public Works	39	44%
Other	22	25%
Administration	12	13%
Streets	11	12%
Utilities	10	11%
Maintenance	10	11%
City Council/Clerk	8	9%
Parks	5	6%
N of respondents	89	100%

1B. Which department leads Asset Management at [JURISDICTION]?

	Engineering		Finance		GIS		Data Processing		Other (please specify department):		Planning		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	105	59%	21	12%	3	2%	0	0%	49	27%	1	1%	179
Cities with less than 5,000 residents (1)	11	27%	11	27%	0	0%	0	0%	19	46%	0	0%	41
Cities with 5,000 or more residents (2)	52	63%	7	8%	2	2%	0	0%	22	27%	0	0%	83
Counties	42	79%	3	6%	1	2%	0	0%	7	13%	0	0%	53
State agencies (3)	0	0%	0	0%	0	0%	0	0%	1	50%	1	50%	2
Cities by population													
Less than 5,000 residents	11	27%	11	27%	0	0%	0	0%	19	46%	0	0%	41
5,000-19,999 residents	30	67%	3	7%	0	0%	0	0%	12	27%	0	0%	45
20,000-49,999 residents	17	63%	4	15%	1	4%	0	0%	5	19%	0	0%	27
50,000 or more residents	5	45%	0	0%	1	9%	0	0%	5	45%	0	0%	11
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	4	100%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	6	86%	1	14%	0	0%	0	0%	0	0%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	36	86%	2	5%	1	2%	0	0%	3	7%	0	0%	42
Counties and cities by MNDOT district													
District 1	8	73%	0	0%	0	0%	0	0%	3	27%	0	0%	11
District 2	6	60%	0	0%	0	0%	0	0%	4	40%	0	0%	10
District 3	15	62%	4	17%	0	0%	0	0%	5	21%	0	0%	24
District 4	11	79%	0	0%	0	0%	0	0%	3	21%	0	0%	14
Metro	38	56%	7	10%	1	1%	0	0%	22	32%	0	0%	68
District 6	11	58%	4	21%	0	0%	0	0%	4	21%	0	0%	19
District 7	6	38%	3	19%	2	12%	0	0%	5	31%	0	0%	16
District 8	10	67%	3	20%	0	0%	0	0%	2	13%	0	0%	15

1B. Which department leads Asset Management at [JURISDICTION]?

	N	%
Public Works	26	53%
Administration	10	20%
Split up by individual departments	8	16%
Other	7	14%
City Council/Clerk/Manager	5	10%
N of respondents	49	100%

1C. What are the top 1-2 reasons that your jurisdiction practices Asset Management?

	N	%
Budgeting/cost-effectiveness/Capital Improvement Planning	102	65%
Asset preservation/maintain infrastructure/extend life of assets	40	26%
Prioritizing maintenance/efficiency/better maintenance	38	24%
Tracking/mapping/documentation of assets and asset condition	26	17%
Other	17	11%
Planning (non-specific)	12	8%
Audit requirements/reporting	9	6%
Operational needs (non-specific)	6	4%
N of respondents	156	100%

2. Does [JURISDICTION] have an Asset Management Plan?

	Yes, we have completed a plan		We have started a plan, but it is not completed		No, we have not considered or started a plan		No, but we are currently considering implementing a plan		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	34	20%	70	41%	33	20%	32	19%	169
Cities with less than 5,000 residents (1)	2	5%	15	39%	12	32%	9	24%	38
Cities with 5,000 or more residents (2)	22	28%	37	47%	7	9%	13	16%	79
Counties	9	18%	17	34%	14	28%	10	20%	50
State agencies (3)	1	50%	1	50%	0	0%	0	0%	2
Cities by population									
Less than 5,000 residents	2	5%	15	39%	12	32%	9	24%	38
5,000-19,999 residents	13	30%	19	44%	3	7%	8	19%	43
20,000-49,999 residents	7	28%	11	44%	2	8%	5	20%	25
50,000 or more residents	2	18%	7	64%	2	18%	0	0%	11
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	3	75%	1	25%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	3	43%	2	29%	2	29%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	6	15%	12	31%	11	28%	10	26%	39
Counties and cities by MNDOT district									
District 1	1	12%	1	12%	3	38%	3	38%	8
District 2	1	11%	2	22%	5	56%	1	11%	9
District 3	5	22%	6	26%	3	13%	9	39%	23
District 4	1	8%	7	58%	4	33%	0	0%	12
Metro	21	31%	26	39%	10	15%	10	15%	67
District 6	2	11%	10	56%	1	6%	5	28%	18
District 7	1	6%	10	62%	1	6%	4	25%	16
District 8	1	7%	7	50%	6	43%	0	0%	14

3. Does [JURISDICTION] use the GASB34 (Government Accounting Standards Board No. 34) to report infrastructure assets?

	Yes		No		I don't know and/or am not familiar with the GASB34		Total
	N	%	N	%	N	%	N
All survey respondents	161	65%	34	14%	52	21%	247
Cities with less than 5,000 residents (1)	41	46%	23	26%	25	28%	89
Cities with 5,000 or more residents (2)	65	69%	9	10%	20	21%	94
Counties	54	87%	1	2%	7	11%	62
State agencies (3)	1	50%	1	50%	0	0%	2
Cities by population							
Less than 5,000 residents	41	46%	23	26%	25	28%	89
5,000-19,999 residents	37	64%	7	12%	14	24%	58
20,000-49,999 residents	22	85%	1	4%	3	12%	26
50,000 or more residents	6	60%	1	10%	3	30%	10
Counties by geography							
Seven-county Twin Cities metro (4)	3	75%	0	0%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	6	86%	0	0%	1	14%	7
Greater MN - Counties with less than 60,000 residents (6)	45	88%	1	2%	5	10%	51
Counties and cities by MNDOT district							
District 1	10	59%	3	18%	4	24%	17
District 2	9	53%	0	0%	8	47%	17
District 3	24	67%	8	22%	4	11%	36
District 4	17	81%	1	5%	3	14%	21
Metro	50	65%	8	10%	19	25%	77
District 6	17	61%	6	21%	5	18%	28
District 7	18	67%	5	19%	4	15%	27
District 8	15	68%	2	9%	5	23%	22

4. Does [JURISDICTION] use the ISO 55000 (International Organization for Standardization 55000) to provide a lifecycle management of infrastructure assets?

	Yes		No		I don't know and/or am not familiar with the ISO 55000		Total N
	N	%	N	%	N	%	
All survey respondents	5	2%	137	55%	105	43%	247
Cities with less than 5,000 residents (1)	1	1%	52	58%	37	41%	90
Cities with 5,000 or more residents (2)	0	0%	55	59%	39	41%	94
Counties	3	5%	29	48%	29	48%	61
State agencies (3)	1	50%	1	50%	0	0%	2
Cities by population							
Less than 5,000 residents	1	1%	52	58%	37	41%	90
5,000-19,999 residents	0	0%	33	58%	24	42%	57
20,000-49,999 residents	0	0%	17	65%	9	35%	26
50,000 or more residents	0	0%	5	45%	6	55%	11
Counties by geography							
Seven-county Twin Cities metro (4)	0	0%	3	75%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	0	0%	2	29%	5	71%	7
Greater MN - Counties with less than 60,000 residents (6)	3	6%	24	48%	23	46%	50
Counties and cities by MNDOT district							
District 1	0	0%	10	59%	7	41%	17
District 2	1	6%	8	44%	9	50%	18
District 3	1	3%	23	66%	11	31%	35
District 4	0	0%	10	48%	11	52%	21
Metro	0	0%	42	54%	36	46%	78
District 6	0	0%	17	63%	10	37%	27
District 7	1	4%	17	63%	9	33%	27
District 8	1	5%	9	41%	12	55%	22

5. Are you aware of the MAP-21 (Moving Ahead for Progress in the 21st Century) asset management requirements?

	Yes		No		I don't know and/or am not familiar with the MAP-21		Total
	N	%	N	%	N	%	N
All survey respondents	95	38%	88	36%	64	26%	247
Cities with less than 5,000 residents (1)	16	18%	37	42%	36	40%	89
Cities with 5,000 or more residents (2)	41	43%	31	33%	23	24%	95
Counties	37	61%	19	31%	5	8%	61
State agencies (3)	1	50%	1	50%	0	0%	2
Cities by population							
Less than 5,000 residents	16	18%	37	42%	36	40%	89
5,000-19,999 residents	31	53%	13	22%	14	24%	58
20,000-49,999 residents	7	27%	12	46%	7	27%	26
50,000 or more residents	3	27%	6	55%	2	18%	11
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	5	71%	2	29%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	28	56%	17	34%	5	10%	50
Counties and cities by MNDOT district							
District 1	5	29%	6	35%	6	35%	17
District 2	7	39%	5	28%	6	33%	18
District 3	18	50%	13	36%	5	14%	36
District 4	11	52%	5	24%	5	24%	21
Metro	27	35%	25	32%	26	33%	78
District 6	11	41%	12	44%	4	15%	27
District 7	12	46%	9	35%	5	19%	26
District 8	3	14%	12	55%	7	32%	22

6. Does [JURISDICTION] create as-built drawings after infrastructure construction or repair projects?

	Yes, for all construction and repair projects		Yes, for some construction and repair projects		No		Total
	N	%	N	%	N	%	N
All survey respondents	125	51%	105	43%	17	7%	247
Cities with less than 5,000 residents (1)	35	40%	45	52%	7	8%	87
Cities with 5,000 or more residents (2)	76	78%	22	22%	0	0%	98
Counties	13	22%	37	62%	10	17%	60
State agencies (3)	1	50%	1	50%	0	0%	2
Cities by population							
Less than 5,000 residents	35	40%	45	52%	7	8%	87
5,000-19,999 residents	47	78%	13	22%	0	0%	60
20,000-49,999 residents	20	74%	7	26%	0	0%	27
50,000 or more residents	9	82%	2	18%	0	0%	11
Counties by geography							
Seven-county Twin Cities metro (4)	1	25%	3	75%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	3	43%	3	43%	1	14%	7
Greater MN - Counties with less than 60,000 residents (6)	9	18%	31	63%	9	18%	49
Counties and cities by MNDOT district							
District 1	8	47%	8	47%	1	6%	17
District 2	7	39%	8	44%	3	17%	18
District 3	14	38%	20	54%	3	8%	37
District 4	11	52%	6	29%	4	19%	21
Metro	52	65%	26	32%	2	2%	80
District 6	13	48%	13	48%	1	4%	27
District 7	12	50%	11	46%	1	4%	24
District 8	7	33%	12	57%	2	10%	21

7. Does [JURISDICTION] participate in an Asset Management countywide or other consortium?

	Yes		No		Total
	N	%	N	%	N
All survey respondents	26	10%	222	90%	248
Cities with less than 5,000 residents (1)	2	2%	86	98%	88
Cities with 5,000 or more residents (2)	7	7%	91	93%	98
Counties	15	25%	45	75%	60
State agencies (3)	2	100%	0	0%	2
Cities by population					
Less than 5,000 residents	2	2%	86	98%	88
5,000-19,999 residents	2	3%	58	97%	60
20,000-49,999 residents	3	11%	24	89%	27
50,000 or more residents	2	18%	9	82%	11
Counties by geography					
Seven-county Twin Cities metro (4)	1	25%	3	75%	4
Greater MN - Counties with 60,000 or more residents (5)	4	57%	3	43%	7
Greater MN - Counties with less than 60,000 residents (6)	10	20%	39	80%	49
Counties and cities by MNDOT district					
District 1	1	6%	16	94%	17
District 2	2	11%	16	89%	18
District 3	4	11%	33	89%	37
District 4	5	24%	16	76%	21
Metro	6	8%	74	92%	80
District 6	4	15%	23	85%	27
District 7	2	8%	23	92%	25
District 8	0	0%	21	100%	21

8. Which of the following infrastructure assets do you have in [JURISDICTION]? (Check all that apply)

	Roads		Bridges		Transit lines		Traffic fixtures		Buildings		Water supply & distribution pipes		Waste water collection & treatment assets		Storm sewers	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	247	100%	137	55%	13	5%	191	77%	219	88%	179	72%	180	73%	217	88%
Cities with less than 5,000 residents (1)	88	100%	14	16%	1	1%	66	75%	80	91%	80	91%	82	93%	80	91%
Cities with 5,000 or more residents (2)	98	100%	62	63%	7	7%	79	81%	89	91%	94	96%	94	96%	95	97%
Counties	60	100%	60	100%	5	8%	45	75%	48	80%	5	8%	3	5%	40	67%
State agencies (3)	1	50%	1	50%	0	0%	1	50%	2	100%	0	0%	1	50%	2	100%
Cities by population																
Less than 5,000 residents	88	100%	14	16%	1	1%	66	75%	80	91%	80	91%	82	93%	80	91%
5,000-19,999 residents	59	100%	28	47%	1	2%	42	71%	55	93%	58	98%	57	97%	57	97%
20,000-49,999 residents	27	100%	22	81%	4	15%	26	96%	24	89%	26	96%	26	96%	27	100%
50,000 or more residents	12	100%	12	100%	2	17%	11	92%	10	83%	10	83%	11	92%	11	92%
Counties by geography																
Seven-county Twin Cities metro (4)	4	100%	4	100%	1	25%	4	100%	4	100%	1	25%	1	25%	3	75%
Greater MN - Counties with 60,000 or more residents (5)	7	100%	7	100%	0	0%	5	71%	5	71%	0	0%	0	0%	4	57%
Greater MN - Counties with less than 60,000 residents (6)	49	100%	49	100%	4	8%	36	73%	39	80%	4	8%	2	4%	33	67%
Counties and cities by MNDOT district																
District 1	18	100%	9	50%	0	0%	14	78%	16	89%	11	61%	12	67%	16	89%
District 2	17	100%	9	53%	2	12%	13	76%	14	82%	10	59%	10	59%	14	82%
District 3	37	100%	14	38%	0	0%	24	65%	31	84%	25	68%	26	70%	31	84%
District 4	20	100%	14	70%	3	15%	16	80%	18	90%	11	55%	10	50%	16	80%
Metro	81	100%	52	64%	5	6%	66	81%	73	90%	71	88%	70	86%	79	98%
District 6	27	100%	16	59%	1	4%	25	93%	25	93%	20	74%	20	74%	22	81%
District 7	25	100%	11	44%	1	4%	16	64%	20	80%	17	68%	17	68%	19	76%
District 8	21	100%	11	52%	1	5%	16	76%	20	95%	14	67%	14	67%	18	86%

8. Which of the following infrastructure assets do you have in [JURISDICTION]? (Check all that apply)

	Storm ponds		Airports		Ports		Railways		Electrical systems		Solid waste facilities		Natural gas network		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	173	70%	45	18%	4	2%	29	12%	67	27%	40	16%	28	11%	248
Cities with less than 5,000 residents (1)	54	61%	15	17%	0	0%	11	12%	19	22%	11	12%	15	17%	88
Cities with 5,000 or more residents (2)	93	95%	20	20%	3	3%	11	11%	42	43%	8	8%	9	9%	98
Counties	25	42%	10	17%	1	2%	7	12%	6	10%	21	35%	4	7%	60
State agencies (3)	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
Cities by population															
Less than 5,000 residents	54	61%	15	17%	0	0%	11	12%	19	22%	11	12%	15	17%	88
5,000-19,999 residents	55	93%	15	25%	2	3%	4	7%	22	37%	5	8%	4	7%	59
20,000-49,999 residents	27	100%	4	15%	1	4%	4	15%	14	52%	3	11%	5	19%	27
50,000 or more residents	11	92%	1	8%	0	0%	3	25%	6	50%	0	0%	0	0%	12
Counties by geography															
Seven-county Twin Cities metro (4)	3	75%	1	25%	1	25%	1	25%	2	50%	2	50%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	4	57%	0	0%	0	0%	1	14%	0	0%	2	29%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	18	37%	9	18%	0	0%	5	10%	4	8%	17	35%	3	6%	49
Counties and cities by MNDOT district															
District 1	10	56%	5	28%	0	0%	1	6%	3	17%	4	22%	1	6%	18
District 2	7	41%	7	41%	0	0%	2	12%	3	18%	8	47%	2	12%	17
District 3	28	76%	6	16%	0	0%	2	5%	5	14%	4	11%	1	3%	37
District 4	9	45%	8	40%	0	0%	4	20%	4	20%	6	30%	4	20%	20
Metro	76	94%	2	2%	2	2%	11	14%	28	35%	5	6%	11	14%	81
District 6	20	74%	5	19%	2	7%	1	4%	5	19%	6	22%	2	7%	27
District 7	13	52%	6	24%	0	0%	4	16%	10	40%	3	12%	3	12%	25
District 8	9	43%	6	29%	0	0%	4	19%	9	43%	4	19%	4	19%	21

9A. Are there any other types of public infrastructure assets that are managed by [JURISDICTION]?

	Yes		No		Total
	N	%	N	%	N
All survey respondents	51	21%	197	79%	248
Cities with less than 5,000 residents (1)	5	6%	85	94%	90
Cities with 5,000 or more residents (2)	27	28%	69	72%	96
Counties	18	30%	42	70%	60
State agencies (3)	1	50%	1	50%	2
Cities by population					
Less than 5,000 residents	5	6%	85	94%	90
5,000-19,999 residents	12	20%	47	80%	59
20,000-49,999 residents	12	46%	14	54%	26
50,000 or more residents	3	27%	8	73%	11
Counties by geography					
Seven-county Twin Cities metro (4)	3	75%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	4	57%	3	43%	7
Greater MN - Counties with less than 60,000 residents (6)	11	22%	38	78%	49
Counties and cities by MNDOT district					
District 1	1	6%	17	94%	18
District 2	1	6%	17	94%	18
District 3	9	24%	28	76%	37
District 4	7	35%	13	65%	20
Metro	23	29%	56	71%	79
District 6	4	15%	23	85%	27
District 7	4	15%	22	85%	26
District 8	1	5%	20	95%	21

9B. What other type of public infrastructure assets are included in [JURISDICTION]?

	N	%
Other	33	67%
Parks/Park assets & facilities	25	51%
Trails	12	24%
Fiber Optics	3	6%
N of respondents	49	100%

10B. Are ROADS in [JURISDICTION] mapped?

	Yes, roads are fully mapped		Yes, roads are partially mapped		No, roads are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	206	85%	26	11%	11	5%	243
Cities with less than 5,000 residents (1)	58	67%	21	24%	8	9%	87
Cities with 5,000 or more residents (2)	94	99%	1	1%	0	0%	95
Counties	53	88%	4	7%	3	5%	60
State agencies (3)	1	100%	0	0%	0	0%	1
Cities by population							
Less than 5,000 residents	58	67%	21	24%	8	9%	87
5,000-19,999 residents	57	98%	1	2%	0	0%	58
20,000-49,999 residents	26	100%	0	0%	0	0%	26
50,000 or more residents	11	100%	0	0%	0	0%	11
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	7	100%	0	0%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	42	86%	4	8%	3	6%	49
Counties and cities by MNDOT district							
District 1	12	67%	6	33%	0	0%	18
District 2	15	88%	1	6%	1	6%	17
District 3	28	76%	6	16%	3	8%	37
District 4	17	89%	1	5%	1	5%	19
Metro	75	95%	4	5%	0	0%	79
District 6	24	89%	2	7%	1	4%	27
District 7	19	79%	1	4%	4	17%	24
District 8	15	71%	5	24%	1	5%	21

10C. In what software program are ROADS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	87	38%	47	20%	95	41%	3	1%	232
Cities with less than 5,000 residents (1)	26	33%	30	38%	21	27%	2	3%	79
Cities with 5,000 or more residents (2)	34	36%	9	9%	51	54%	1	1%	95
Counties	26	46%	8	14%	23	40%	0	0%	57
State agencies (3)	1	100%	0	0%	0	0%	0	0%	1
Cities by population									
Less than 5,000 residents	26	33%	30	38%	21	27%	2	3%	79
5,000-19,999 residents	17	29%	9	16%	32	55%	0	0%	58
20,000-49,999 residents	11	42%	0	0%	14	54%	1	4%	26
50,000 or more residents	6	55%	0	0%	5	45%	0	0%	11
Counties by geography									
Seven-county Twin Cities metro (4)	3	75%	0	0%	1	25%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	5	71%	0	0%	2	29%	0	0%	7
Greater MN - Counties with less than 60,000 residents (6)	18	39%	8	17%	20	43%	0	0%	46
Counties and cities by MNDOT district									
District 1	9	50%	7	39%	2	11%	0	0%	18
District 2	3	19%	9	56%	3	19%	1	6%	16
District 3	17	50%	8	24%	9	26%	0	0%	34
District 4	5	28%	6	33%	7	39%	0	0%	18
Metro	31	39%	5	6%	42	53%	1	1%	79
District 6	11	42%	1	4%	13	50%	1	4%	26
District 7	6	30%	5	25%	9	45%	0	0%	20
District 8	4	20%	6	30%	10	50%	0	0%	20

10D., 10E., & 10F. Value and other information about ROADS.

	10D. Do you know the value of ROADS in [JURISDICTION]?								10E. What is the value of all ROADS in your ...		Q10F. Which other information about ROADS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all roads		Yes, we know the value of some but not all roads		No, we do not know the value of any roads		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	44	18%	123	51%	72	30%	239	100%	\$33,772,624,842	34	154	64%	166	69%	173	72%	158	66%	26	11%	32	13%	240	100%
Cities with less than 5,000 residents (1)	4	5%	41	47%	42	48%	87	100%	\$17,782,270	1	42	48%	42	48%	45	52%	41	47%	2	2%	21	24%	87	100%
Cities with 5,000 or more residents (2)	22	24%	51	55%	19	21%	92	100%	\$2,049,286,740	19	75	81%	74	80%	77	83%	75	81%	14	15%	6	6%	93	100%
Counties	17	29%	31	53%	11	19%	59	100%	\$2,345,555,832	13	36	61%	49	83%	50	85%	41	69%	9	15%	5	8%	59	100%
State agencies (3)	1	100%	0	0%	0	0%	1	100%	\$29,360,000,000	1	1	100%	1	100%	1	100%	1	100%	1	100%	0	0%	1	100%
Cities by population																								
Less than 5,000 residents	4	5%	41	47%	42	48%	87	100%	\$17,782,270	1	42	48%	42	48%	45	52%	41	47%	2	2%	21	24%	87	100%
5,000-19,999 residents	10	18%	32	57%	14	25%	56	100%	\$523,935,537	10	45	79%	43	75%	48	84%	47	82%	10	18%	4	7%	57	100%
20,000-49,999 residents	8	32%	14	56%	3	12%	25	100%	\$822,387,000	7	19	76%	20	80%	20	80%	19	76%	3	12%	2	8%	25	100%
50,000 or more residents	4	36%	5	45%	2	18%	11	100%	\$702,964,203	2	11	100%	11	100%	9	82%	9	82%	1	9%	0	0%	11	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	3	75%	1	25%	4	100%	.	0	4	100%	4	100%	4	100%	4	100%	3	75%	0	0%	4	100%
Greater MN - Counties with 60,000 or more residents (5)	2	33%	2	33%	2	33%	6	100%	\$317,735,163	2	4	67%	6	100%	5	83%	6	100%	0	0%	0	0%	6	100%
Greater MN - Counties with less than 60,000 residents (6)	15	31%	26	53%	8	16%	49	100%	\$2,027,820,669	11	28	57%	39	80%	41	84%	31	63%	6	12%	5	10%	49	100%
Counties and cities by MNDOT district																								
District 1	2	11%	11	61%	5	28%	18	100%	\$51,300,000	1	11	61%	10	56%	13	72%	9	50%	2	11%	4	22%	18	100%
District 2	2	12%	9	53%	6	35%	17	100%	\$114,918,410	2	7	41%	11	65%	12	71%	11	65%	1	6%	3	18%	17	100%
District 3	8	23%	19	54%	8	23%	35	100%	\$412,804,883	7	23	66%	22	63%	26	74%	19	54%	5	14%	6	17%	35	100%
District 4	6	33%	7	39%	5	28%	18	100%	\$1,731,782,270	5	11	58%	16	84%	16	84%	14	74%	1	5%	2	11%	19	100%
Metro	16	21%	44	56%	18	23%	78	100%	\$1,721,963,870	13	65	83%	61	78%	65	83%	62	79%	12	15%	3	4%	78	100%
District 6	5	19%	9	33%	13	48%	27	100%	\$322,961,292	3	14	52%	16	59%	17	63%	15	56%	1	4%	5	19%	27	100%
District 7	1	4%	11	46%	12	50%	24	100%	.	0	12	50%	15	62%	12	50%	12	50%	1	4%	5	21%	24	100%
District 8	3	14%	13	62%	5	24%	21	100%	\$56,894,117	2	10	48%	14	67%	11	52%	15	71%	2	10%	4	19%	21	100%

10F. - Other. Which other information about ROADS is included in your asset inventory?

	N	%
Maintenance history/records	12	46%
Other	12	46%
Utilities	3	12%
N of respondents	26	100%

10G. Please indicate any asset management system you use to operate, maintain, and improve ROADS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	52	23%	1	0%	24	11%	2	1%	3	1%	1	0%	66	29%
Cities with less than 5,000 residents (1)	34	44%	0	0%	1	1%	0	0%	0	0%	0	0%	6	8%
Cities with 5,000 or more residents (2)	8	9%	0	0%	21	23%	2	2%	3	3%	1	1%	43	47%
Counties	10	17%	0	0%	2	3%	0	0%	0	0%	0	0%	16	28%
State agencies (3)	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Cities by population														
Less than 5,000 residents	34	44%	0	0%	1	1%	0	0%	0	0%	0	0%	6	8%
5,000-19,999 residents	6	11%	0	0%	9	16%	1	2%	0	0%	0	0%	22	39%
20,000-49,999 residents	2	8%	0	0%	9	36%	1	4%	1	4%	0	0%	15	60%
50,000 or more residents	0	0%	0	0%	3	30%	0	0%	2	20%	1	10%	6	60%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	1	25%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	10	21%	0	0%	1	2%	0	0%	0	0%	0	0%	15	31%
Counties and cities by MNDOT district														
District 1	5	29%	0	0%	0	0%	0	0%	0	0%	0	0%	1	6%
District 2	5	31%	0	0%	0	0%	1	6%	0	0%	0	0%	4	25%
District 3	10	30%	0	0%	2	6%	0	0%	0	0%	0	0%	7	21%
District 4	6	32%	0	0%	0	0%	0	0%	0	0%	0	0%	5	26%
Metro	8	10%	0	0%	19	25%	1	1%	3	4%	0	0%	35	45%
District 6	4	17%	0	0%	1	4%	0	0%	0	0%	1	4%	8	35%
District 7	10	42%	0	0%	2	8%	0	0%	0	0%	0	0%	4	17%
District 8	4	22%	0	0%	0	0%	0	0%	0	0%	0	0%	1	6%

10G. Please indicate any asset management system you use to operate, maintain, and improve ROADS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	33	14%	1	0%	3	1%	2	1%	1	0%	18	8%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	18	20%	1	1%	2	2%	2	2%	0	0%	4	4%	0	0%
Counties	15	26%	0	0%	0	0%	0	0%	0	0%	13	22%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	3	5%	0	0%	1	2%	1	2%	0	0%	1	2%	0	0%
20,000-49,999 residents	9	36%	0	0%	1	4%	1	4%	0	0%	3	12%	0	0%
50,000 or more residents	6	60%	1	10%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	4	67%	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	9	19%	0	0%	0	0%	0	0%	0	0%	12	25%	0	0%
Counties and cities by MNDOT district														
District 1	2	12%	0	0%	0	0%	0	0%	0	0%	1	6%	0	0%
District 2	1	6%	0	0%	0	0%	0	0%	0	0%	3	19%	0	0%
District 3	1	3%	0	0%	1	3%	0	0%	0	0%	2	6%	0	0%
District 4	5	26%	0	0%	0	0%	0	0%	0	0%	4	21%	0	0%
Metro	18	23%	1	1%	2	3%	2	3%	0	0%	2	3%	0	0%
District 6	5	22%	0	0%	0	0%	0	0%	0	0%	2	9%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	2	8%	0	0%
District 8	1	6%	0	0%	0	0%	0	0%	0	0%	1	6%	0	0%

10G. Please indicate any asset management system you use to operate, maintain, and improve ROADS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	3	1%	15	7%	1	0%	102	45%	53	23%	22	10%	228
Cities with less than 5,000 residents (1)	1	1%	0	0%	0	0%	25	32%	18	23%	7	9%	78
Cities with 5,000 or more residents (2)	2	2%	2	2%	1	1%	44	48%	18	20%	7	8%	91
Counties	0	0%	13	22%	0	0%	32	55%	17	29%	7	12%	58
State agencies (3)	0	0%	0	0%	0	0%	1	100%	0	0%	1	100%	1
Cities by population													
Less than 5,000 residents	1	1%	0	0%	0	0%	25	32%	18	23%	7	9%	78
5,000-19,999 residents	1	2%	2	4%	0	0%	29	52%	12	21%	4	7%	56
20,000-49,999 residents	1	4%	0	0%	0	0%	11	44%	4	16%	1	4%	25
50,000 or more residents	0	0%	0	0%	1	10%	4	40%	2	20%	2	20%	10
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	2	50%	0	0%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	0	0%	2	33%	0	0%	3	50%	0	0%	1	17%	6
Greater MN - Counties with less than 60,000 residents (6)	0	0%	11	23%	0	0%	27	56%	17	35%	5	10%	48
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	6	35%	3	18%	0	0%	17
District 2	0	0%	2	12%	0	0%	7	44%	7	44%	2	12%	16
District 3	0	0%	2	6%	0	0%	12	36%	8	24%	2	6%	33
District 4	1	5%	5	26%	0	0%	9	47%	4	21%	2	11%	19
Metro	1	1%	1	1%	1	1%	38	49%	14	18%	7	9%	77
District 6	0	0%	2	9%	0	0%	6	26%	9	39%	0	0%	23
District 7	0	0%	3	12%	0	0%	10	42%	3	12%	5	21%	24
District 8	1	6%	0	0%	0	0%	13	72%	5	28%	3	17%	18

10G. - Other. What other asset management system do you use to operate, maintain, and improve ROADS in [JURISDICTION]?

	N	%
Other	5	28%
CAD/AutoCAD	4	22%
Access database	3	17%
PASER	2	11%
Pontis	1	6%
RTVision	1	6%
Other GIS system	1	6%
Dbase	1	6%
Beehive	1	6%
Element XS	1	6%
Oracle	1	6%
Archibus	1	6%
N of respondents	18	100%

11B. Are BRIDGES in [JURISDICTION] mapped?

	Yes, bridges are fully mapped		Yes, bridges are partially mapped		No, bridges are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	101	79%	11	9%	16	12%	128
Cities with less than 5,000 residents (1)	6	50%	2	17%	4	33%	12
Cities with 5,000 or more residents (2)	45	79%	6	11%	6	11%	57
Counties	49	84%	3	5%	6	10%	58
State agencies (3)	1	100%	0	0%	0	0%	1
Cities by population							
Less than 5,000 residents	6	50%	2	17%	4	33%	12
5,000-19,999 residents	20	77%	3	12%	3	12%	26
20,000-49,999 residents	18	86%	2	10%	1	5%	21
50,000 or more residents	7	70%	1	10%	2	20%	10
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	6	100%	0	0%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	39	81%	3	6%	6	12%	48
Counties and cities by MNDOT district							
District 1	6	67%	2	22%	1	11%	9
District 2	6	75%	1	12%	1	12%	8
District 3	9	82%	0	0%	2	18%	11
District 4	12	86%	1	7%	1	7%	14
Metro	36	73%	6	12%	7	14%	49
District 6	14	93%	0	0%	1	7%	15
District 7	10	91%	0	0%	1	9%	11
District 8	7	70%	1	10%	2	20%	10

11C. In what software program are BRIDGES in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	56	50%	28	25%	28	25%	0	0%	112
Cities with less than 5,000 residents (1)	5	62%	2	25%	1	12%	0	0%	8
Cities with 5,000 or more residents (2)	25	49%	7	14%	19	37%	0	0%	51
Counties	25	48%	19	37%	8	15%	0	0%	52
State agencies (3)	1	100%	0	0%	0	0%	0	0%	1
Cities by population									
Less than 5,000 residents	5	62%	2	25%	1	12%	0	0%	8
5,000-19,999 residents	9	39%	6	26%	8	35%	0	0%	23
20,000-49,999 residents	11	55%	1	5%	8	40%	0	0%	20
50,000 or more residents	5	62%	0	0%	3	38%	0	0%	8
Counties by geography									
Seven-county Twin Cities metro (4)	3	75%	0	0%	1	25%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	6	100%	0	0%	0	0%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	16	38%	19	45%	7	17%	0	0%	42
Counties and cities by MNDOT district									
District 1	4	50%	3	38%	1	12%	0	0%	8
District 2	3	43%	3	43%	1	14%	0	0%	7
District 3	7	78%	1	11%	1	11%	0	0%	9
District 4	5	38%	6	46%	2	15%	0	0%	13
Metro	23	55%	4	10%	15	36%	0	0%	42
District 6	7	50%	4	29%	3	21%	0	0%	14
District 7	6	60%	2	20%	2	20%	0	0%	10
District 8	0	0%	5	62%	3	38%	0	0%	8

11D., 11E., & 11F. Value and other information about BRIDGES.

	11D. Do you know the value of BRIDGES in [JURISDICTION]?								11E. What is the value of all BRIDGES in your [JURISDICTION]?		11F. Which other information about BRIDGES is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all bridges		Yes, we know the value of some but not all bridges		No, we do not know the value of any bridges		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	19	15%	56	44%	53	41%	128	100%	\$6,795,864,702	16	101	79%	103	80%	102	80%	98	77%	9	7%	16	12%	128	100%
Cities with less than 5,000 residents (1)	1	8%	1	8%	10	83%	12	100%	\$6,000,000	1	6	50%	5	42%	4	33%	4	33%	1	8%	4	33%	12	100%
Cities with 5,000 or more residents (2)	4	7%	22	39%	31	54%	57	100%	\$86,237,174	4	43	75%	47	82%	46	81%	43	75%	3	5%	6	11%	57	100%
Counties	13	22%	33	57%	12	21%	58	100%	\$103,627,528	10	51	88%	50	86%	51	88%	50	86%	4	7%	6	10%	58	100%
State agencies (3)	1	100%	0	0%	0	0%	1	100%	\$6,600,000,000	1	1	100%	1	100%	1	100%	1	100%	1	100%	0	0%	1	100%
Cities by population																								
Less than 5,000 residents	1	8%	1	8%	10	83%	12	100%	\$6,000,000	1	6	50%	5	42%	4	33%	4	33%	1	8%	4	33%	12	100%
5,000-19,999 residents	0	0%	14	54%	12	46%	26	100%	.	0	22	85%	22	85%	23	88%	21	81%	1	4%	2	8%	26	100%
20,000-49,999 residents	3	14%	4	19%	14	67%	21	100%	\$14,470,174	3	13	62%	15	71%	15	71%	16	76%	2	10%	4	19%	21	100%
50,000 or more residents	1	10%	4	40%	5	50%	10	100%	\$71,767,000	1	8	80%	10	100%	8	80%	6	60%	0	0%	0	0%	10	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	2	50%	2	50%	4	100%	.	0	4	100%	4	100%	4	100%	4	100%	1	25%	0	0%	4	100%
Greater MN - Counties with 60,000 or more residents (5)	2	33%	3	50%	1	17%	6	100%	\$37,351,096	2	5	83%	5	83%	5	83%	5	83%	0	0%	1	17%	6	100%
Greater MN - Counties with less than 60,000 residents (6)	11	23%	28	58%	9	19%	48	100%	\$66,276,432	8	42	88%	41	85%	42	88%	41	85%	3	6%	5	10%	48	100%
Counties and cities by MNDOT district																								
District 1	1	11%	4	44%	4	44%	9	100%	\$6,600,000	1	9	100%	9	100%	8	89%	9	100%	2	22%	0	0%	9	100%
District 2	2	25%	4	50%	2	25%	8	100%	\$11,056,848	2	8	100%	8	100%	8	100%	8	100%	0	0%	0	0%	8	100%
District 3	3	27%	3	27%	5	45%	11	100%	\$21,783,990	3	6	55%	6	55%	7	64%	6	55%	2	18%	4	36%	11	100%
District 4	3	21%	9	64%	2	14%	14	100%	\$19,500,000	2	13	93%	13	93%	13	93%	13	93%	0	0%	1	7%	14	100%
Metro	4	8%	17	35%	28	57%	49	100%	\$80,237,174	4	37	76%	39	80%	39	80%	35	71%	4	8%	5	10%	49	100%
District 6	3	20%	5	33%	7	47%	15	100%	\$53,434,930	2	12	80%	11	73%	11	73%	10	67%	0	0%	2	13%	15	100%
District 7	1	9%	7	64%	3	27%	11	100%	.	0	7	64%	8	73%	7	64%	8	73%	0	0%	3	27%	11	100%
District 8	1	10%	7	70%	2	20%	10	100%	\$3,251,760	1	8	80%	8	80%	8	80%	8	80%	0	0%	1	10%	10	100%

11F. - Other. Which other information about BRIDGES is included in your asset inventory?

	N	%
Inspection records	5	62%
Other	3	38%
Maintenance history/records	1	12%
N of respondents	8	100%

11G. Please indicate any asset management system you use to operate, maintain, and improve BRIDGES in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	24	19%	0	0%	5	4%	0	0%	0	0%	1	1%	21	17%
Cities with less than 5,000 residents (1)	4	36%	0	0%	0	0%	0	0%	0	0%	0	0%	1	9%
Cities with 5,000 or more residents (2)	11	20%	0	0%	5	9%	0	0%	0	0%	1	2%	15	27%
Counties	9	16%	0	0%	0	0%	0	0%	0	0%	0	0%	5	9%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	4	36%	0	0%	0	0%	0	0%	0	0%	0	0%	1	9%
5,000-19,999 residents	7	27%	0	0%	1	4%	0	0%	0	0%	0	0%	2	8%
20,000-49,999 residents	3	15%	0	0%	2	10%	0	0%	0	0%	0	0%	9	45%
50,000 or more residents	1	10%	0	0%	2	20%	0	0%	0	0%	1	10%	4	40%
Counties by geography														
Seven-county Twin Cities metro (4)	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	2	50%
Greater MN - Counties with 60,000 or more residents (5)	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	7	15%	0	0%	0	0%	0	0%	0	0%	0	0%	3	6%
Counties and cities by MNDOT district														
District 1	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	2	25%	0	0%	0	0%	0	0%	0	0%	0	0%	1	12%
District 3	3	27%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	4	29%	0	0%	0	0%	0	0%	0	0%	0	0%	1	7%
Metro	10	21%	0	0%	5	10%	0	0%	0	0%	0	0%	15	31%
District 6	2	14%	0	0%	0	0%	0	0%	0	0%	1	7%	2	14%
District 7	1	9%	0	0%	0	0%	0	0%	0	0%	0	0%	2	18%
District 8	1	10%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

11G. Please indicate any asset management system you use to operate, maintain, and improve BRIDGES in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	3	2%	0	0%	0	0%	1	1%	0	0%	59	47%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	1	2%	0	0%	0	0%	1	2%	0	0%	18	32%	0	0%
Counties	2	3%	0	0%	0	0%	0	0%	0	0%	40	69%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	5	19%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	1	5%	0	0%	8	40%	0	0%
50,000 or more residents	1	10%	0	0%	0	0%	0	0%	0	0%	5	50%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	1	25%	0	0%	0	0%	0	0%	0	0%	3	75%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	1	17%	0	0%	0	0%	0	0%	0	0%	4	67%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	33	69%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	6	67%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	6	75%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	4	36%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	9	64%	0	0%
Metro	2	4%	0	0%	0	0%	1	2%	0	0%	16	33%	0	0%
District 6	1	7%	0	0%	0	0%	0	0%	0	0%	7	50%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	3	27%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	7	70%	0	0%

11G. Please indicate any asset management system you use to operate, maintain, and improve BRIDGES in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	1	1%	2	2%	2	2%	37	29%	28	22%	9	7%	126
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	4	36%	2	18%	0	0%	11
Cities with 5,000 or more residents (2)	1	2%	0	0%	1	2%	16	29%	14	25%	2	4%	56
Counties	0	0%	2	3%	1	2%	17	29%	12	21%	6	10%	58
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	4	36%	2	18%	0	0%	11
5,000-19,999 residents	0	0%	0	0%	0	0%	7	27%	11	42%	0	0%	26
20,000-49,999 residents	1	5%	0	0%	0	0%	7	35%	2	10%	1	5%	20
50,000 or more residents	0	0%	0	0%	1	10%	2	20%	1	10%	1	10%	10
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	2	50%	0	0%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	1	17%	1	17%	6
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	4%	1	2%	15	31%	11	23%	4	8%	48
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	1	11%	1	11%	0	0%	1	11%	9
District 2	0	0%	1	12%	0	0%	2	25%	3	38%	1	12%	8
District 3	0	0%	1	9%	0	0%	2	18%	5	45%	0	0%	11
District 4	1	7%	0	0%	0	0%	4	29%	3	21%	1	7%	14
Metro	0	0%	0	0%	1	2%	14	29%	8	17%	3	6%	48
District 6	0	0%	0	0%	0	0%	3	21%	4	29%	1	7%	14
District 7	0	0%	0	0%	0	0%	6	55%	3	27%	1	9%	11
District 8	0	0%	0	0%	0	0%	5	50%	2	20%	0	0%	10

11G. - Other. What other asset management system do you use to operate, maintain, and improve BRIDGES in [JURISDICTION]?

	N	%
Other	4	50%
Pontis	3	38%
CAD/AutoCAD	1	12%
N of respondents	8	100%

12B. Are TRANSIT LINES in [JURISDICTION] mapped?

	Yes, transit lines are fully mapped		Yes, transit lines are partially mapped		No, transit lines are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	3	23%	4	31%	6	46%	13
Cities with less than 5,000 residents (1)	0	0%	0	0%	1	100%	1
Cities with 5,000 or more residents (2)	2	29%	2	29%	3	43%	7
Counties	1	20%	2	40%	2	40%	5
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	0	0%	0	0%	1	100%	1
5,000-19,999 residents	0	0%	0	0%	1	100%	1
20,000-49,999 residents	2	50%	1	25%	1	25%	4
50,000 or more residents	0	0%	1	50%	1	50%	2
Counties by geography							
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	50%	2	50%	4
Counties and cities by MNDOT district							
District 1	0	0%	0	0%	0	0%	0
District 2	0	0%	1	50%	1	50%	2
District 3	0	0%	0	0%	0	0%	0
District 4	1	33%	1	33%	1	33%	3
Metro	1	20%	2	40%	2	40%	5
District 6	0	0%	0	0%	1	100%	1
District 7	1	100%	0	0%	0	0%	1
District 8	0	0%	0	0%	1	100%	1

12C. In what software program are TRANSIT LINES in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	4	57%	2	29%	1	14%	0	0%	7
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0
Cities with 5,000 or more residents (2)	4	100%	0	0%	0	0%	0	0%	4
Counties	0	0%	2	67%	1	33%	0	0%	3
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0
20,000-49,999 residents	3	100%	0	0%	0	0%	0	0%	3
50,000 or more residents	1	100%	0	0%	0	0%	0	0%	1
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	100%	0	0%	0	0%	2
Counties and cities by MNDOT district									
District 1	0	0%	0	0%	0	0%	0	0%	0
District 2	0	0%	1	100%	0	0%	0	0%	1
District 3	0	0%	0	0%	0	0%	0	0%	0
District 4	1	50%	1	50%	0	0%	0	0%	2
Metro	2	67%	0	0%	1	33%	0	0%	3
District 6	0	0%	0	0%	0	0%	0	0%	0
District 7	1	100%	0	0%	0	0%	0	0%	1
District 8	0	0%	0	0%	0	0%	0	0%	0

12D., 12E., & 12F. Value and other information about TRANSIT LINES.

	12D. Do you know the value of TRANSIT LINES in [JURISDICTION]?								12E. What is the value of all TRANSIT LINES in your [JURISDICTION]?		Q12F. Which other information about TRANSIT LINES is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all transit lines		Yes, we know the value of some but not all transit ...		No, we do not know the value of any transit lines		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	3	23%	10	77%	13	100%	.	0	2	15%	2	15%	2	15%	2	15%	0	0%	10	77%	13	100%
Cities with less than 5,000 residents (1)	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
Cities with 5,000 or more residents (2)	0	0%	2	29%	5	71%	7	100%	.	0	1	14%	0	0%	0	0%	0	0%	0	0%	6	86%	7	100%
Counties	0	0%	1	20%	4	80%	5	100%	.	0	1	20%	2	40%	2	40%	2	40%	0	0%	3	60%	5	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
5,000-19,999 residents	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
20,000-49,999 residents	0	0%	2	50%	2	50%	4	100%	.	0	1	25%	0	0%	0	0%	0	0%	0	0%	3	75%	4	100%
50,000 or more residents	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	2	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	1	100%	.	0	1	100%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	1	25%	3	75%	4	100%	.	0	0	0%	1	25%	1	25%	1	25%	0	0%	3	75%	4	100%
Counties and cities by MNDOT district																								
District 1	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	2	100%
District 3	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	2	67%	1	33%	3	100%	.	0	0	0%	1	33%	1	33%	1	33%	0	0%	2	67%	3	100%
Metro	0	0%	0	0%	5	100%	5	100%	.	0	1	20%	1	20%	1	20%	1	20%	0	0%	4	80%	5	100%
District 6	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
District 7	0	0%	1	100%	0	0%	1	100%	.	0	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
District 8	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%

12G. Please indicate any asset management system you use to operate, maintain, and improve TRANSIT LINES in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	4	50%	0	0%	0	0%	0	0%	0	0%	0	0%	2	25%
Cities with less than 5,000 residents (1)	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	2	50%
Counties	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
50,000 or more residents	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
District 6	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

12G. Please indicate any asset management system you use to operate, maintain, and improve TRANSIT LINES in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	1	12%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

12G. Please indicate any asset management system you use to operate, maintain, and improve TRANSIT LINES in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	0	0%	0	0%	1	12%	1	12%	0	0%	8
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4
Counties	0	0%	0	0%	0	0%	1	33%	1	33%	0	0%	3
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	1	50%	1	50%	0	0%	2
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 2	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	2
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 4	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	1
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0

13B. Are TRAFFIC FIXTURES in [JURISDICTION] mapped?

	Yes, traffic fixtures are fully mapped		Yes, traffic fixtures are partially mapped		No, traffic fixtures are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	47	26%	39	22%	92	52%	178
Cities with less than 5,000 residents (1)	3	5%	4	7%	54	89%	61
Cities with 5,000 or more residents (2)	30	41%	22	30%	21	29%	73
Counties	14	33%	12	28%	17	40%	43
State agencies (3)	0	0%	1	100%	0	0%	1
Cities by population							
Less than 5,000 residents	3	5%	4	7%	54	89%	61
5,000-19,999 residents	9	22%	11	28%	20	50%	40
20,000-49,999 residents	13	57%	9	39%	1	4%	23
50,000 or more residents	8	80%	2	20%	0	0%	10
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	2	50%	0	0%	2	50%	4
Greater MN - Counties with less than 60,000 residents (6)	8	23%	12	34%	15	43%	35
Counties and cities by MNDOT district							
District 1	2	14%	3	21%	9	64%	14
District 2	4	31%	2	15%	7	54%	13
District 3	4	20%	2	10%	14	70%	20
District 4	4	27%	3	20%	8	53%	15
Metro	25	40%	18	29%	19	31%	62
District 6	5	21%	3	12%	16	67%	24
District 7	2	12%	4	25%	10	62%	16
District 8	1	8%	3	23%	9	69%	13

13C. In what software program are TRAFFIC FIXTURES in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	53	62%	11	13%	18	21%	4	5%	86
Cities with less than 5,000 residents (1)	1	14%	4	57%	1	14%	1	14%	7
Cities with 5,000 or more residents (2)	33	63%	3	6%	14	27%	2	4%	52
Counties	18	69%	4	15%	3	12%	1	4%	26
State agencies (3)	1	100%	0	0%	0	0%	0	0%	1
Cities by population									
Less than 5,000 residents	1	14%	4	57%	1	14%	1	14%	7
5,000-19,999 residents	9	45%	3	15%	8	40%	0	0%	20
20,000-49,999 residents	17	77%	0	0%	3	14%	2	9%	22
50,000 or more residents	7	70%	0	0%	3	30%	0	0%	10
Counties by geography									
Seven-county Twin Cities metro (4)	3	75%	0	0%	1	25%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	2	100%	0	0%	0	0%	0	0%	2
Greater MN - Counties with less than 60,000 residents (6)	13	65%	4	20%	2	10%	1	5%	20
Counties and cities by MNDOT district									
District 1	2	40%	2	40%	0	0%	1	20%	5
District 2	3	50%	2	33%	1	17%	0	0%	6
District 3	3	50%	2	33%	1	17%	0	0%	6
District 4	4	57%	1	14%	2	29%	0	0%	7
Metro	30	70%	1	2%	10	23%	2	5%	43
District 6	5	62%	1	12%	1	12%	1	12%	8
District 7	3	50%	2	33%	1	17%	0	0%	6
District 8	2	50%	0	0%	2	50%	0	0%	4

13D., 13E., & 13F. Value and other information about TRAFFIC FIXTURES.

	13D. Do you know the value of TRAFFIC FIXTURES in [JURISDICTION]?								13E. What is the value of all TRAFFIC FIXTURES in your [JURISDICTION]?		Q13F. Which other information about TRAFFIC FIXTURES is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all traffic fixtures		Yes, we know the value of some but not all traffic fixtures		No, we do not know the value of any traffic fixtures		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	9	5%	58	33%	109	62%	176	100%	\$15,944,950	6	59	33%	81	46%	70	40%	61	34%	10	6%	77	44%	177	100%
Cities with less than 5,000 residents (1)	2	3%	12	20%	45	76%	59	100%	\$75,000	1	7	12%	6	10%	4	7%	2	3%	3	5%	44	73%	60	100%
Cities with 5,000 or more residents (2)	5	7%	24	33%	44	60%	73	100%	\$15,518,500	4	28	38%	43	59%	37	51%	30	41%	4	5%	23	32%	73	100%
Counties	2	5%	21	49%	20	47%	43	100%	\$351,450	1	24	56%	31	72%	28	65%	28	65%	3	7%	10	23%	43	100%
State agencies (3)	0	0%	1	100%	0	0%	1	100%	.	0	0	0%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Cities by population																								
Less than 5,000 residents	2	3%	12	20%	45	76%	59	100%	\$75,000	1	7	12%	6	10%	4	7%	2	3%	3	5%	44	73%	60	100%
5,000-19,999 residents	0	0%	12	30%	28	70%	40	100%	.	0	13	32%	19	48%	17	42%	13	32%	2	5%	17	42%	40	100%
20,000-49,999 residents	3	13%	9	39%	11	48%	23	100%	\$8,730,500	3	9	39%	17	74%	14	61%	13	57%	1	4%	5	22%	23	100%
50,000 or more residents	2	20%	3	30%	5	50%	10	100%	\$6,788,000	1	6	60%	7	70%	6	60%	4	40%	1	10%	1	10%	10	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	2	50%	2	50%	4	100%	.	0	4	100%	4	100%	4	100%	3	75%	0	0%	0	0%	4	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	1	25%	3	75%	4	100%	.	0	0	0%	2	50%	1	25%	2	50%	0	0%	2	50%	4	100%
Greater MN - Counties with less than 60,000 residents (6)	2	6%	18	51%	15	43%	35	100%	\$351,450	1	20	57%	25	71%	23	66%	23	66%	3	9%	8	23%	35	100%
Counties and cities by MNDOT district																								
District 1	0	0%	3	23%	10	77%	13	100%	.	0	4	31%	5	38%	3	23%	4	31%	1	8%	6	46%	13	100%
District 2	0	0%	4	33%	8	67%	12	100%	.	0	4	31%	5	38%	3	23%	3	23%	1	8%	7	54%	13	100%
District 3	2	10%	7	35%	11	55%	20	100%	\$351,450	1	3	15%	5	25%	5	25%	3	15%	1	5%	13	65%	20	100%
District 4	1	7%	6	40%	8	53%	15	100%	\$4,000,000	1	5	33%	8	53%	9	60%	8	53%	0	0%	6	40%	15	100%
Metro	5	8%	20	32%	37	60%	62	100%	\$11,593,500	4	28	45%	34	55%	30	48%	26	42%	5	8%	18	29%	62	100%
District 6	0	0%	8	33%	16	67%	24	100%	.	0	5	21%	9	38%	7	29%	6	25%	1	4%	13	54%	24	100%
District 7	1	6%	4	25%	11	69%	16	100%	.	0	6	38%	7	44%	7	44%	6	38%	0	0%	8	50%	16	100%
District 8	0	0%	5	38%	8	62%	13	100%	.	0	4	31%	7	54%	5	38%	4	31%	1	8%	6	46%	13	100%

13F. - Other. Which other information about TRAFFIC FIXTURES is included in your asset inventory?

	N	%
Other	4	57%
Location	3	43%
N of respondents	7	100%

13G. Please indicate any asset management system you use to operate, maintain, and improve TRAFFIC FIXTURES in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	64	39%	1	1%	14	8%	1	1%	3	2%	1	1%	31	19%
Cities with less than 5,000 residents (1)	32	60%	0	0%	0	0%	0	0%	0	0%	0	0%	1	2%
Cities with 5,000 or more residents (2)	22	31%	0	0%	11	16%	1	1%	3	4%	1	1%	23	33%
Counties	10	24%	0	0%	3	7%	0	0%	0	0%	0	0%	7	17%
State agencies (3)	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	32	60%	0	0%	0	0%	0	0%	0	0%	0	0%	1	2%
5,000-19,999 residents	18	46%	0	0%	1	3%	0	0%	1	3%	0	0%	6	15%
20,000-49,999 residents	3	14%	0	0%	7	32%	1	5%	1	5%	0	0%	13	59%
50,000 or more residents	1	11%	0	0%	3	33%	0	0%	1	11%	1	11%	4	44%
Counties by geography														
Seven-county Twin Cities metro (4)	1	25%	0	0%	1	25%	0	0%	0	0%	0	0%	2	50%
Greater MN - Counties with 60,000 or more residents (5)	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%
Greater MN - Counties with less than 60,000 residents (6)	7	21%	0	0%	2	6%	0	0%	0	0%	0	0%	4	12%
Counties and cities by MNDOT district														
District 1	6	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	6	50%	0	0%	0	0%	0	0%	1	8%	0	0%	1	8%
District 3	9	47%	0	0%	0	0%	0	0%	0	0%	0	0%	2	11%
District 4	6	43%	0	0%	0	0%	0	0%	0	0%	0	0%	2	14%
Metro	16	28%	0	0%	10	17%	1	2%	2	3%	0	0%	20	34%
District 6	10	43%	0	0%	2	9%	0	0%	0	0%	1	4%	3	13%
District 7	8	53%	0	0%	2	13%	0	0%	0	0%	0	0%	3	20%
District 8	3	27%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

13G. Please indicate any asset management system you use to operate, maintain, and improve TRAFFIC FIXTURES in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	7	4%	0	0%	1	1%	1	1%	0	0%	1	1%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	2	3%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
Counties	5	12%	0	0%	0	0%	0	0%	0	0%	1	2%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	1	5%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%
50,000 or more residents	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	3	9%	0	0%	0	0%	0	0%	0	0%	1	3%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	1	7%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	4	7%	0	0%	1	2%	1	2%	0	0%	0	0%	0	0%
District 6	2	9%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

13G. Please indicate any asset management system you use to operate, maintain, and improve TRAFFIC FIXTURES in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	2	1%	15	9%	1	1%	37	22%	34	21%	10	6%	165
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	7	13%	15	28%	0	0%	53
Cities with 5,000 or more residents (2)	1	1%	4	6%	1	1%	21	30%	12	17%	4	6%	70
Counties	1	2%	11	27%	0	0%	9	22%	7	17%	5	12%	41
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	7	13%	15	28%	0	0%	53
5,000-19,999 residents	0	0%	3	8%	0	0%	11	28%	7	18%	3	8%	39
20,000-49,999 residents	1	5%	1	5%	0	0%	7	32%	4	18%	0	0%	22
50,000 or more residents	0	0%	0	0%	1	11%	3	33%	1	11%	1	11%	9
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	2	50%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4
Greater MN - Counties with less than 60,000 residents (6)	1	3%	11	33%	0	0%	7	21%	7	21%	5	15%	33
Counties and cities by MNDOT district													
District 1	0	0%	1	8%	0	0%	1	8%	2	17%	2	17%	12
District 2	1	8%	2	17%	0	0%	2	17%	3	25%	1	8%	12
District 3	0	0%	0	0%	0	0%	3	16%	4	21%	1	5%	19
District 4	1	7%	3	21%	0	0%	3	21%	3	21%	1	7%	14
Metro	0	0%	3	5%	1	2%	18	31%	13	22%	3	5%	58
District 6	0	0%	2	9%	0	0%	3	13%	4	17%	0	0%	23
District 7	0	0%	3	20%	0	0%	3	20%	1	7%	0	0%	15
District 8	0	0%	1	9%	0	0%	4	36%	4	36%	1	9%	11

13G. - Other. What other asset management system do you use to operate, maintain, and improve TRAFFIC FIXTURES in [JURISDICTION]?

	N	%
Other GIS system	2	25%
Other	2	25%
Road Pro	1	12%
Dbase	1	12%
Access database	1	12%
Beehive	1	12%
Element XS	1	12%
Oracle	1	12%
N of respondents	8	100%

14B. Are BUILDINGS in [JURISDICTION] mapped?

	Yes, buildings are fully mapped		Yes, buildings are partially ...		No, buildings are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	59	29%	46	23%	98	48%	203
Cities with less than 5,000 residents (1)	14	19%	15	21%	44	60%	73
Cities with 5,000 or more residents (2)	29	35%	23	28%	31	37%	83
Counties	14	31%	8	18%	23	51%	45
State agencies (3)	2	100%	0	0%	0	0%	2
Cities by population							
Less than 5,000 residents	14	19%	15	21%	44	60%	73
5,000-19,999 residents	15	29%	13	25%	24	46%	52
20,000-49,999 residents	10	45%	7	32%	5	23%	22
50,000 or more residents	4	44%	3	33%	2	22%	9
Counties by geography							
Seven-county Twin Cities metro (4)	3	100%	0	0%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	3	60%	0	0%	2	40%	5
Greater MN - Counties with less than 60,000 residents (6)	8	22%	8	22%	21	57%	37
Counties and cities by MNDOT district							
District 1	3	20%	4	27%	8	53%	15
District 2	3	23%	4	31%	6	46%	13
District 3	5	18%	8	29%	15	54%	28
District 4	4	24%	4	24%	9	53%	17
Metro	28	41%	13	19%	28	41%	69
District 6	7	30%	9	39%	7	30%	23
District 7	5	26%	2	11%	12	63%	19
District 8	2	12%	2	12%	13	76%	17

14C. In what software program are BUILDINGS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	49	47%	18	17%	34	32%	4	4%	105
Cities with less than 5,000 residents (1)	10	34%	10	34%	8	28%	1	3%	29
Cities with 5,000 or more residents (2)	29	56%	2	4%	20	38%	1	2%	52
Counties	10	45%	5	23%	5	23%	2	9%	22
State agencies (3)	0	0%	1	50%	1	50%	0	0%	2
Cities by population									
Less than 5,000 residents	10	34%	10	34%	8	28%	1	3%	29
5,000-19,999 residents	13	46%	2	7%	12	43%	1	4%	28
20,000-49,999 residents	11	65%	0	0%	6	35%	0	0%	17
50,000 or more residents	5	71%	0	0%	2	29%	0	0%	7
Counties by geography									
Seven-county Twin Cities metro (4)	1	33%	0	0%	2	67%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	2	67%	1	33%	0	0%	0	0%	3
Greater MN - Counties with less than 60,000 residents (6)	7	44%	4	25%	3	19%	2	12%	16
Counties and cities by MNDOT district									
District 1	4	57%	1	14%	2	29%	0	0%	7
District 2	2	29%	4	57%	1	14%	0	0%	7
District 3	5	38%	3	23%	5	38%	0	0%	13
District 4	4	50%	3	38%	0	0%	1	12%	8
Metro	22	54%	3	7%	15	37%	1	2%	41
District 6	7	44%	0	0%	7	44%	2	12%	16
District 7	4	57%	2	29%	1	14%	0	0%	7
District 8	1	25%	1	25%	2	50%	0	0%	4

14D., 14E., & 14F. Value and other information about BUILDINGS.

	14D. Do you know the value of BUILDINGS in [JURISDICTION]?								14E. What is the value of all BUILDINGS in your [JURISDICTION]?		Q14F. Which other information about BUILDINGS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all buildings		Yes, we know the value of some but not all buildings		No, we do not know the value of any buildings		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	43	21%	104	51%	56	28%	203	100%	\$3,176,917,137	32	54	27%	100	49%	67	33%	87	43%	7	3%	84	41%	203	100%
Cities with less than 5,000 residents (1)	18	25%	35	48%	20	27%	73	100%	\$304,362,719	13	19	26%	26	36%	17	23%	25	34%	1	1%	38	52%	73	100%
Cities with 5,000 or more residents (2)	14	17%	44	53%	25	30%	83	100%	\$2,041,218,783	10	24	29%	47	57%	31	37%	42	51%	3	4%	29	35%	83	100%
Counties	10	22%	24	53%	11	24%	45	100%	\$331,335,635	8	10	22%	25	56%	17	38%	18	40%	3	7%	17	38%	45	100%
State agencies (3)	1	50%	1	50%	0	0%	2	100%	\$500,000,000	1	1	50%	2	100%	2	100%	2	100%	0	0%	0	0%	2	100%
Cities by population																								
Less than 5,000 residents	18	25%	35	48%	20	27%	73	100%	\$304,362,719	13	19	26%	26	36%	17	23%	25	34%	1	1%	38	52%	73	100%
5,000-19,999 residents	5	10%	30	58%	17	33%	52	100%	\$37,518,934	4	14	27%	29	56%	16	31%	25	48%	1	2%	19	37%	52	100%
20,000-49,999 residents	5	23%	12	55%	5	23%	22	100%	\$211,611,000	4	7	32%	12	55%	10	45%	12	55%	2	9%	7	32%	22	100%
50,000 or more residents	4	44%	2	22%	3	33%	9	100%	\$1,792,088,849	2	3	33%	6	67%	5	56%	5	56%	0	0%	3	33%	9	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	2	67%	1	33%	3	100%	.	0	2	67%	3	100%	3	100%	3	100%	1	33%	0	0%	3	100%
Greater MN - Counties with 60,000 or more residents (5)	2	40%	1	20%	2	40%	5	100%	\$156,369,000	2	0	0%	1	20%	0	0%	0	0%	1	20%	3	60%	5	100%
Greater MN - Counties with less than 60,000 residents (6)	8	22%	21	57%	8	22%	37	100%	\$174,966,635	6	8	22%	21	57%	14	38%	15	41%	1	3%	14	38%	37	100%
Counties and cities by MNDOT district																								
District 1	3	20%	7	47%	5	33%	15	100%	\$25,659,352	3	5	33%	6	40%	4	27%	7	47%	1	7%	7	47%	15	100%
District 2	4	31%	7	54%	2	15%	13	100%	\$280,066,550	4	4	31%	7	54%	4	31%	6	46%	0	0%	6	46%	13	100%
District 3	11	39%	12	43%	5	18%	28	100%	\$65,273,864	10	6	21%	13	46%	9	32%	10	36%	1	4%	10	36%	28	100%
District 4	5	29%	10	59%	2	12%	17	100%	\$108,867,103	3	6	35%	12	71%	8	47%	10	59%	0	0%	4	24%	17	100%
Metro	11	16%	34	49%	24	35%	69	100%	\$1,974,843,783	7	22	32%	35	51%	25	36%	32	46%	4	6%	28	41%	69	100%
District 6	4	17%	15	65%	4	17%	23	100%	\$157,102,285	3	5	22%	10	43%	7	30%	10	43%	1	4%	9	39%	23	100%
District 7	1	5%	11	58%	7	37%	19	100%	.	0	4	21%	10	53%	6	32%	8	42%	0	0%	8	42%	19	100%
District 8	3	18%	7	41%	7	41%	17	100%	\$65,104,200	1	1	6%	5	29%	2	12%	2	12%	0	0%	12	71%	17	100%

14F. - Other. Which other information about BUILDINGS is included in your asset inventory?

	N	%
Other	3	43%
Location	2	29%
Maintenance history/records	2	29%
N of respondents	7	100%

14G. Please indicate any asset management system you use to operate, maintain, and improve BUILDINGS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	85	46%	0	0%	2	1%	0	0%	2	1%	0	0%	21	11%
Cities with less than 5,000 residents (1)	38	57%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	30	39%	0	0%	2	3%	0	0%	2	3%	0	0%	20	26%
Counties	17	45%	0	0%	0	0%	0	0%	0	0%	0	0%	1	3%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	38	57%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	25	50%	0	0%	0	0%	0	0%	1	2%	0	0%	8	16%
20,000-49,999 residents	5	25%	0	0%	2	10%	0	0%	1	5%	0	0%	9	45%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	50%
Counties by geography														
Seven-county Twin Cities metro (4)	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	15	48%	0	0%	0	0%	0	0%	0	0%	0	0%	1	3%
Counties and cities by MNDOT district														
District 1	6	46%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	6	50%	0	0%	0	0%	0	0%	1	8%	0	0%	0	0%
District 3	17	63%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	5	31%	0	0%	0	0%	0	0%	0	0%	0	0%	1	6%
Metro	26	43%	0	0%	2	3%	0	0%	1	2%	0	0%	15	25%
District 6	9	41%	0	0%	0	0%	0	0%	0	0%	0	0%	4	18%
District 7	11	65%	0	0%	0	0%	0	0%	0	0%	0	0%	1	6%
District 8	5	38%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

14G. Please indicate any asset management system you use to operate, maintain, and improve BUILDINGS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	1	1%	1	1%	1	1%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	1	2%	1	2%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

14G. Please indicate any asset management system you use to operate, maintain, and improve BUILDINGS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	2	1%	0	0%	0	0%	42	23%	51	28%	13	7%	183
Cities with less than 5,000 residents (1)	1	1%	0	0%	0	0%	13	19%	17	25%	1	1%	67
Cities with 5,000 or more residents (2)	1	1%	0	0%	0	0%	22	29%	18	24%	6	8%	76
Counties	0	0%	0	0%	0	0%	6	16%	15	39%	4	11%	38
State agencies (3)	0	0%	0	0%	0	0%	1	50%	1	50%	2	100%	2
Cities by population													
Less than 5,000 residents	1	1%	0	0%	0	0%	13	19%	17	25%	1	1%	67
5,000-19,999 residents	0	0%	0	0%	0	0%	14	28%	14	28%	3	6%	50
20,000-49,999 residents	1	5%	0	0%	0	0%	6	30%	4	20%	1	5%	20
50,000 or more residents	0	0%	0	0%	0	0%	2	33%	0	0%	2	33%	6
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	2	67%	3
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	1	25%	2	50%	4
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	6	19%	14	45%	0	0%	31
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	4	31%	3	23%	0	0%	13
District 2	0	0%	0	0%	0	0%	4	33%	4	33%	1	8%	12
District 3	0	0%	0	0%	0	0%	3	11%	7	26%	1	4%	27
District 4	1	6%	0	0%	0	0%	4	25%	7	44%	0	0%	16
Metro	1	2%	0	0%	0	0%	16	26%	11	18%	7	11%	61
District 6	0	0%	0	0%	0	0%	3	14%	8	36%	2	9%	22
District 7	0	0%	0	0%	0	0%	3	18%	4	24%	0	0%	17
District 8	0	0%	0	0%	0	0%	4	31%	6	46%	0	0%	13

14G. - Other. What other asset management system do you use to operate, maintain, and improve BUILDINGS in [JURISDICTION]?

	N	%
Archibus	3	27%
Other	2	18%
Famis	1	9%
Other GIS system	1	9%
Laserfiche	1	9%
IMaint	1	9%
Element XS	1	9%
Oracle	1	9%
N of respondents	11	100%

15B. Are WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION] mapped?

	Yes, water supply and distribution pipes are fully mapped		Yes, water supply and distribution pipes are partially mapped		No, water supply and distribution pipes are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	125	77%	30	18%	8	5%	163
Cities with less than 5,000 residents (1)	49	66%	19	26%	6	8%	74
Cities with 5,000 or more residents (2)	76	90%	8	10%	0	0%	84
Counties	0	0%	3	60%	2	40%	5
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	49	66%	19	26%	6	8%	74
5,000-19,999 residents	48	89%	6	11%	0	0%	54
20,000-49,999 residents	21	91%	2	9%	0	0%	23
50,000 or more residents	7	100%	0	0%	0	0%	7
Counties by geography							
Seven-county Twin Cities metro (4)	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	50%	2	50%	4
Counties and cities by MNDOT district							
District 1	5	56%	4	44%	0	0%	9
District 2	8	89%	1	11%	0	0%	9
District 3	17	74%	5	22%	1	4%	23
District 4	8	80%	1	10%	1	10%	10
Metro	55	86%	9	14%	0	0%	64
District 6	13	65%	5	25%	2	10%	20
District 7	12	71%	2	12%	3	18%	17
District 8	7	64%	3	27%	1	9%	11

15C. In what software program are WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	54	35%	45	29%	51	33%	5	3%	155
Cities with less than 5,000 residents (1)	16	24%	34	50%	15	22%	3	4%	68
Cities with 5,000 or more residents (2)	38	45%	9	11%	35	42%	2	2%	84
Counties	0	0%	2	67%	1	33%	0	0%	3
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	16	24%	34	50%	15	22%	3	4%	68
5,000-19,999 residents	19	35%	9	17%	26	48%	0	0%	54
20,000-49,999 residents	13	57%	0	0%	8	35%	2	9%	23
50,000 or more residents	6	86%	0	0%	1	14%	0	0%	7
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	100%	0	0%	0	0%	2
Counties and cities by MNDOT district									
District 1	4	44%	4	44%	1	11%	0	0%	9
District 2	1	11%	7	78%	0	0%	1	11%	9
District 3	6	27%	8	36%	7	32%	1	5%	22
District 4	1	11%	6	67%	2	22%	0	0%	9
Metro	29	45%	7	11%	26	41%	2	3%	64
District 6	6	33%	3	17%	8	44%	1	6%	18
District 7	5	36%	6	43%	3	21%	0	0%	14
District 8	2	20%	4	40%	4	40%	0	0%	10

15D., 15E., & 15F. Value and other information about WATER SUPPLY AND DISTRIBUTION PIPES.

	15D. Do you know the value of WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION]?								15E. What is the value of all WATER SUPPLY AND DISTRIBUTION PIPES in your [JURISDICTION]?		Q15F. Which other information about WATER SUPPLY AND DISTRIBUTION PIPES is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all water supply and distribution pipes		Yes, we know the value of some but not all water supply and distribution pipes		No, we do not know the value of any water supply and distribution pipes		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	24	15%	84	52%	55	34%	163	100%	\$366,134,294	17	43	26%	105	64%	120	74%	134	82%	10	6%	28	17%	163	100%
Cities with less than 5,000 residents (1)	6	8%	34	46%	34	46%	74	100%	\$8,009,449	3	15	20%	31	42%	40	54%	53	72%	0	0%	20	27%	74	100%
Cities with 5,000 or more residents (2)	18	21%	48	57%	18	21%	84	100%	\$358,124,845	14	27	32%	70	83%	76	90%	77	92%	10	12%	7	8%	84	100%
Counties	0	0%	2	40%	3	60%	5	100%	.	0	1	20%	4	80%	4	80%	4	80%	0	0%	1	20%	5	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	6	8%	34	46%	34	46%	74	100%	\$8,009,449	3	15	20%	31	42%	40	54%	53	72%	0	0%	20	27%	74	100%
5,000-19,999 residents	12	22%	29	54%	13	24%	54	100%	\$161,982,845	12	18	33%	46	85%	49	91%	50	93%	7	13%	4	7%	54	100%
20,000-49,999 residents	3	13%	16	70%	4	17%	23	100%	\$196,142,000	2	5	22%	17	74%	20	87%	20	87%	3	13%	3	13%	23	100%
50,000 or more residents	3	43%	3	43%	1	14%	7	100%	.	0	4	57%	7	100%	7	100%	7	100%	0	0%	0	0%	7	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	50%	2	50%	4	100%	.	0	1	25%	3	75%	3	75%	3	75%	0	0%	1	25%	4	100%
Counties and cities by MNDOT district																								
District 1	1	11%	3	33%	5	56%	9	100%	.	0	4	44%	5	56%	8	89%	8	89%	0	0%	1	11%	9	100%
District 2	1	11%	4	44%	4	44%	9	100%	\$1,092,000	1	3	33%	6	67%	8	89%	8	89%	0	0%	1	11%	9	100%
District 3	6	26%	9	39%	8	35%	23	100%	\$66,377,901	5	8	35%	13	57%	16	70%	18	78%	0	0%	5	22%	23	100%
District 4	1	10%	4	40%	5	50%	10	100%	\$6,267,449	1	2	20%	7	70%	8	80%	8	80%	0	0%	2	20%	10	100%
Metro	13	20%	37	58%	14	22%	64	100%	\$282,101,187	9	16	25%	47	73%	53	83%	56	88%	7	11%	8	12%	64	100%
District 6	1	5%	11	55%	8	40%	20	100%	.	0	3	15%	8	40%	7	35%	11	55%	3	15%	8	40%	20	100%
District 7	0	0%	8	47%	9	53%	17	100%	.	0	3	18%	10	59%	12	71%	15	88%	0	0%	2	12%	17	100%
District 8	1	9%	8	73%	2	18%	11	100%	\$10,295,757	1	4	36%	9	82%	8	73%	10	91%	0	0%	1	9%	11	100%

15F. - Other. Which other information about WATER SUPPLY AND DISTRIBUTION PIPES is included in your asset inventory?

	N	%
Other	5	50%
Pressure	4	40%
Hydrants	4	40%
Valves	3	30%
Maintenance history/records	2	20%
Water main breaks	1	10%
Location	1	10%
N of respondents	10	100%

15G. Please indicate any asset management system you use to operate, maintain, and improve WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	44	28%	0	0%	13	8%	3	2%	5	3%	1	1%	0	0%
Cities with less than 5,000 residents (1)	28	41%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	13	16%	0	0%	12	15%	2	2%	4	5%	1	1%	0	0%
Counties	3	60%	0	0%	0	0%	1	20%	1	20%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	28	41%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	11	21%	0	0%	4	8%	0	0%	2	4%	0	0%	0	0%
20,000-49,999 residents	2	9%	0	0%	6	27%	2	9%	1	5%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	2	29%	0	0%	1	14%	1	14%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	2	50%	0	0%	0	0%	1	25%	1	25%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	3	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	3	33%	0	0%	0	0%	0	0%	2	22%	0	0%	0	0%
District 3	6	27%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%
District 4	3	33%	0	0%	0	0%	1	11%	0	0%	0	0%	0	0%
Metro	13	21%	0	0%	10	16%	2	3%	3	5%	1	2%	0	0%
District 6	6	35%	0	0%	1	6%	0	0%	0	0%	0	0%	0	0%
District 7	8	47%	0	0%	1	6%	0	0%	0	0%	0	0%	0	0%
District 8	2	18%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

15G. Please indicate any asset management system you use to operate, maintain, and improve WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	49	31%	1	1%	2	1%	2	1%	0	0%	0	0%	1	1%
Cities with less than 5,000 residents (1)	7	10%	0	0%	1	1%	0	0%	0	0%	0	0%	1	1%
Cities with 5,000 or more residents (2)	42	51%	1	1%	1	1%	2	2%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	7	10%	0	0%	1	1%	0	0%	0	0%	0	0%	1	1%
5,000-19,999 residents	22	42%	0	0%	1	2%	1	2%	0	0%	0	0%	0	0%
20,000-49,999 residents	15	68%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%
50,000 or more residents	5	71%	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	2	22%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	4	18%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%
District 4	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	31	50%	1	2%	1	2%	2	3%	0	0%	0	0%	0	0%
District 6	7	41%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	3	18%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	1	9%	0	0%	0	0%	0	0%	0	0%	0	0%	1	9%

15G. Please indicate any asset management system you use to operate, maintain, and improve WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	1	1%	0	0%	0	0%	57	37%	31	20%	9	6%	156
Cities with less than 5,000 residents (1)	1	1%	0	0%	0	0%	22	32%	18	26%	7	10%	69
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	34	41%	12	15%	2	2%	82
Counties	0	0%	0	0%	0	0%	1	20%	1	20%	0	0%	5
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	1	1%	0	0%	0	0%	22	32%	18	26%	7	10%	69
5,000-19,999 residents	0	0%	0	0%	0	0%	24	45%	7	13%	2	4%	53
20,000-49,999 residents	0	0%	0	0%	0	0%	7	32%	3	14%	0	0%	22
50,000 or more residents	0	0%	0	0%	0	0%	3	43%	2	29%	0	0%	7
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	1	25%	1	25%	0	0%	4
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	3	33%	2	22%	0	0%	9
District 2	0	0%	0	0%	0	0%	3	33%	3	33%	1	11%	9
District 3	0	0%	0	0%	0	0%	9	41%	6	27%	1	5%	22
District 4	0	0%	0	0%	0	0%	3	33%	3	33%	0	0%	9
Metro	1	2%	0	0%	0	0%	24	39%	9	15%	2	3%	62
District 6	0	0%	0	0%	0	0%	3	18%	3	18%	1	6%	17
District 7	0	0%	0	0%	0	0%	5	29%	1	6%	3	18%	17
District 8	0	0%	0	0%	0	0%	7	64%	4	36%	1	9%	11

15G. - Other. What other asset management system do you use to operate, maintain, and improve WATER SUPPLY AND DISTRIBUTION PIPES in [JURISDICTION]?

	N	%
Other	3	38%
CAD/AutoCAD	2	25%
Arc View	1	12%
Beehive	1	12%
Element XS	1	12%
N of respondents	8	100%

16B. Are WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION] mapped?

	Yes, waste water collection and treatment assets are fully mapped		Yes, waste water collection and treatment assets are partially mapped		No, waste water collection and treatment assets are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	116	72%	40	25%	5	3%	161
Cities with less than 5,000 residents (1)	44	59%	25	34%	5	7%	74
Cities with 5,000 or more residents (2)	71	86%	12	14%	0	0%	83
Counties	0	0%	3	100%	0	0%	3
State agencies (3)	1	100%	0	0%	0	0%	1
Cities by population							
Less than 5,000 residents	44	59%	25	34%	5	7%	74
5,000-19,999 residents	44	85%	8	15%	0	0%	52
20,000-49,999 residents	20	87%	3	13%	0	0%	23
50,000 or more residents	7	88%	1	12%	0	0%	8
Counties by geography							
Seven-county Twin Cities metro (4)	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	100%	0	0%	2
Counties and cities by MNDOT district							
District 1	6	60%	4	40%	0	0%	10
District 2	6	67%	3	33%	0	0%	9
District 3	16	70%	6	26%	1	4%	23
District 4	7	78%	2	22%	0	0%	9
Metro	50	81%	12	19%	0	0%	62
District 6	12	60%	7	35%	1	5%	20
District 7	11	69%	3	19%	2	12%	16
District 8	7	64%	3	27%	1	9%	11

16C. In what software program are WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	58	37%	44	28%	48	31%	6	4%	156
Cities with less than 5,000 residents (1)	18	26%	33	48%	14	20%	4	6%	69
Cities with 5,000 or more residents (2)	40	48%	10	12%	31	37%	2	2%	83
Counties	0	0%	1	33%	2	67%	0	0%	3
State agencies (3)	0	0%	0	0%	1	100%	0	0%	1
Cities by population									
Less than 5,000 residents	18	26%	33	48%	14	20%	4	6%	69
5,000-19,999 residents	18	35%	10	19%	23	44%	1	2%	52
20,000-49,999 residents	15	65%	0	0%	7	30%	1	4%	23
50,000 or more residents	7	88%	0	0%	1	12%	0	0%	8
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	1	50%	1	50%	0	0%	2
Counties and cities by MNDOT district									
District 1	4	40%	5	50%	1	10%	0	0%	10
District 2	1	11%	6	67%	1	11%	1	11%	9
District 3	7	32%	8	36%	6	27%	1	5%	22
District 4	1	11%	6	67%	2	22%	0	0%	9
Metro	31	50%	6	10%	24	39%	1	2%	62
District 6	6	32%	3	16%	7	37%	3	16%	19
District 7	6	43%	6	43%	2	14%	0	0%	14
District 8	2	20%	4	40%	4	40%	0	0%	10

16D., 16E., & 16F. Value and other information about WASTE WATER COLLECTION AND TREATMENT ASSETS.

	16D. Do you know the value of WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION]?									16E. What is the value of all WASTE WATER COLLECTION AND TREATMENT ASSETS in your [JURISDICTION]?		Q16F. Which other information about WASTE WATER COLLECTION AND TREATMENT ASSETS is included in your asset inventory? (Check all that apply)												
	Yes, we know the value of all waste water collection and treatment assets		Yes, we know the value of some but not all waste water collection and treatment assets		No, we do not know the value of any waste water collection and treatment assets		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	22	14%	85	53%	54	34%	161	100%	\$7,114,500,140	15	70	43%	108	67%	122	76%	133	83%	8	5%	25	16%	161	100%
Cities with less than 5,000 residents (1)	4	5%	36	49%	34	46%	74	100%	\$7,259,911	1	20	27%	35	47%	45	61%	53	72%	1	1%	18	24%	74	100%
Cities with 5,000 or more residents (2)	17	20%	47	57%	19	23%	83	100%	\$607,240,229	13	49	59%	70	84%	75	90%	77	93%	6	7%	6	7%	83	100%
Counties	0	0%	2	67%	1	33%	3	100%	.	0	0	0%	2	67%	1	33%	2	67%	0	0%	1	33%	3	100%
State agencies (3)	1	100%	0	0%	0	0%	1	100%	\$6,500,000,000	1	1	100%	1	100%	1	100%	1	100%	1	100%	0	0%	1	100%
Cities by population																								
Less than 5,000 residents	4	5%	36	49%	34	46%	74	100%	\$7,259,911	1	20	27%	35	47%	45	61%	53	72%	1	1%	18	24%	74	100%
5,000-19,999 residents	8	15%	30	58%	14	27%	52	100%	\$142,448,229	8	27	52%	44	85%	47	90%	48	92%	4	8%	4	8%	52	100%
20,000-49,999 residents	5	22%	14	61%	4	17%	23	100%	\$182,792,000	4	16	70%	18	78%	20	87%	21	91%	2	9%	2	9%	23	100%
50,000 or more residents	4	50%	3	38%	1	12%	8	100%	\$282,000,000	1	6	75%	8	100%	8	100%	8	100%	0	0%	0	0%	8	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	1	100%	0	0%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	100%	0	0%	2	100%	.	0	0	0%	1	50%	1	50%	1	50%	0	0%	1	50%	2	100%
Counties and cities by MNDOT district																								
District 1	1	10%	3	30%	6	60%	10	100%	.	0	4	40%	5	50%	8	80%	9	90%	0	0%	1	10%	10	100%
District 2	0	0%	6	67%	3	33%	9	100%	.	0	2	22%	5	56%	7	78%	7	78%	1	11%	2	22%	9	100%
District 3	4	17%	12	52%	7	30%	23	100%	\$53,013,150	3	10	43%	14	61%	15	65%	16	70%	1	4%	6	26%	23	100%
District 4	2	22%	4	44%	3	33%	9	100%	\$100,259,911	2	2	22%	8	89%	9	100%	9	100%	0	0%	0	0%	9	100%
Metro	12	19%	35	56%	15	24%	62	100%	\$410,139,166	8	31	50%	48	77%	53	85%	56	90%	5	8%	6	10%	62	100%
District 6	1	5%	10	50%	9	45%	20	100%	.	0	9	45%	9	45%	10	50%	12	60%	0	0%	7	35%	20	100%
District 7	0	0%	7	44%	9	56%	16	100%	.	0	5	31%	9	56%	11	69%	14	88%	0	0%	2	12%	16	100%
District 8	1	9%	8	73%	2	18%	11	100%	\$51,087,913	1	6	55%	9	82%	8	73%	9	82%	0	0%	1	9%	11	100%

16F. - Other. Which other information about WASTE WATER COLLECTION AND TREATMENT ASSETS is included in your asset inventory?

	N	%
Other	5	71%
Flow direction	1	14%
Location	1	14%
Maintenance history/records	1	14%
N of respondents	7	100%

16G. Please indicate any asset management system you use to operate, maintain, and improve WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	47	30%	0	0%	14	9%	4	3%	4	3%	2	1%	50	31%
Cities with less than 5,000 residents (1)	31	43%	0	0%	1	1%	0	0%	0	0%	0	0%	6	8%
Cities with 5,000 or more residents (2)	15	18%	0	0%	13	16%	3	4%	3	4%	2	2%	43	52%
Counties	1	33%	0	0%	0	0%	1	33%	1	33%	0	0%	1	33%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	31	43%	0	0%	1	1%	0	0%	0	0%	0	0%	6	8%
5,000-19,999 residents	12	23%	0	0%	4	8%	1	2%	2	4%	0	0%	22	42%
20,000-49,999 residents	3	13%	0	0%	8	35%	1	4%	1	4%	0	0%	15	65%
50,000 or more residents	0	0%	0	0%	1	12%	1	12%	0	0%	2	25%	6	75%
Counties by geography														
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	1	50%	1	50%	0	0%	1	50%
Counties and cities by MNDOT district														
District 1	4	40%	0	0%	0	0%	0	0%	0	0%	0	0%	1	10%
District 2	3	33%	0	0%	0	0%	0	0%	2	22%	0	0%	1	11%
District 3	9	39%	0	0%	1	4%	0	0%	0	0%	0	0%	3	13%
District 4	3	33%	0	0%	0	0%	1	11%	0	0%	0	0%	1	11%
Metro	12	19%	0	0%	11	18%	3	5%	2	3%	1	2%	31	50%
District 6	7	39%	0	0%	1	6%	0	0%	0	0%	1	6%	8	44%
District 7	7	44%	0	0%	1	6%	0	0%	0	0%	0	0%	3	19%
District 8	2	18%	0	0%	0	0%	0	0%	0	0%	0	0%	2	18%

16G. Please indicate any asset management system you use to operate, maintain, and improve WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	1	1%	1	1%	2	1%	2	1%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	1	1%	1	1%	1	1%	2	2%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	1	2%	1	2%	0	0%	0	0%	0	0%
20,000-49,999 residents	1	4%	0	0%	0	0%	1	4%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	1	12%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	1	4%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	1	2%	1	2%	1	2%	2	3%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

16G. Please indicate any asset management system you use to operate, maintain, and improve WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	1	1%	0	0%	0	0%	56	35%	37	23%	11	7%	159
Cities with less than 5,000 residents (1)	1	1%	0	0%	0	0%	23	32%	18	25%	7	10%	72
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	32	39%	17	20%	3	4%	83
Counties	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%	3
State agencies (3)	0	0%	0	0%	0	0%	1	100%	1	100%	1	100%	1
Cities by population													
Less than 5,000 residents	1	1%	0	0%	0	0%	23	32%	18	25%	7	10%	72
5,000-19,999 residents	0	0%	0	0%	0	0%	22	42%	10	19%	2	4%	52
20,000-49,999 residents	0	0%	0	0%	0	0%	7	30%	5	22%	0	0%	23
50,000 or more residents	0	0%	0	0%	0	0%	3	38%	2	25%	1	12%	8
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%	2
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	4	40%	2	20%	0	0%	10
District 2	0	0%	0	0%	0	0%	2	22%	3	33%	1	11%	9
District 3	0	0%	0	0%	0	0%	8	35%	6	26%	1	4%	23
District 4	0	0%	0	0%	0	0%	3	33%	3	33%	0	0%	9
Metro	1	2%	0	0%	0	0%	24	39%	12	19%	3	5%	62
District 6	0	0%	0	0%	0	0%	3	17%	4	22%	1	6%	18
District 7	0	0%	0	0%	0	0%	5	31%	2	12%	3	19%	16
District 8	0	0%	0	0%	0	0%	6	55%	4	36%	1	9%	11

16G. - Other. What other asset management system do you use to operate, maintain, and improve WASTE WATER COLLECTION AND TREATMENT ASSETS in [JURISDICTION]?

	N	%
CAD/AutoCAD	2	25%
Oracle	2	25%
Arc View	1	12%
Beehive	1	12%
Element XS	1	12%
Other	1	12%
N of respondents	8	100%

17B. Are STORM SEWERS in [JURISDICTION] mapped?

	Yes, storm sewers are fully mapped		Yes, storm sewers are partially mapped		No, storm sewers are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	100	51%	62	31%	36	18%	198
Cities with less than 5,000 residents (1)	31	42%	28	38%	15	20%	74
Cities with 5,000 or more residents (2)	66	80%	17	20%	0	0%	83
Counties	2	5%	16	41%	21	54%	39
State agencies (3)	1	50%	1	50%	0	0%	2
Cities by population							
Less than 5,000 residents	31	42%	28	38%	15	20%	74
5,000-19,999 residents	40	77%	12	23%	0	0%	52
20,000-49,999 residents	19	83%	4	17%	0	0%	23
50,000 or more residents	7	88%	1	12%	0	0%	8
Counties by geography							
Seven-county Twin Cities metro (4)	0	0%	3	100%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	1	25%	2	50%	1	25%	4
Greater MN - Counties with less than 60,000 residents (6)	1	3%	11	34%	20	62%	32
Counties and cities by MNDOT district							
District 1	5	36%	6	43%	3	21%	14
District 2	6	46%	2	15%	5	38%	13
District 3	14	48%	7	24%	8	28%	29
District 4	5	33%	6	40%	4	27%	15
Metro	47	67%	22	31%	1	1%	70
District 6	9	43%	7	33%	5	24%	21
District 7	10	53%	5	26%	4	21%	19
District 8	3	20%	6	40%	6	40%	15

17C. In what software program are STORM SEWERS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	60	37%	51	31%	46	28%	5	3%	162
Cities with less than 5,000 residents (1)	13	22%	32	54%	12	20%	2	3%	59
Cities with 5,000 or more residents (2)	39	47%	9	11%	33	40%	2	2%	83
Counties	6	33%	10	56%	1	6%	1	6%	18
State agencies (3)	2	100%	0	0%	0	0%	0	0%	2
Cities by population									
Less than 5,000 residents	13	22%	32	54%	12	20%	2	3%	59
5,000-19,999 residents	19	37%	9	17%	23	44%	1	2%	52
20,000-49,999 residents	14	61%	0	0%	8	35%	1	4%	23
50,000 or more residents	6	75%	0	0%	2	25%	0	0%	8
Counties by geography									
Seven-county Twin Cities metro (4)	2	67%	0	0%	1	33%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	2	67%	1	33%	0	0%	0	0%	3
Greater MN - Counties with less than 60,000 residents (6)	2	17%	9	75%	0	0%	1	8%	12
Counties and cities by MNDOT district									
District 1	2	18%	8	73%	1	9%	0	0%	11
District 2	3	38%	4	50%	0	0%	1	12%	8
District 3	6	29%	9	43%	5	24%	1	5%	21
District 4	1	9%	9	82%	1	9%	0	0%	11
Metro	35	51%	7	10%	26	38%	1	1%	69
District 6	5	31%	3	19%	7	44%	1	6%	16
District 7	4	27%	7	47%	3	20%	1	7%	15
District 8	2	22%	4	44%	3	33%	0	0%	9

17D., 17E., & 17F. Value and other information about STORM SEWERS.

	17D. Do you know the value of STORM SEWERS in [JURISDICTION]?								17E. What is the value of all STORM SEWERS in your [JURISDICTION]?		Q17F. Which other information about STORM SEWERS is included in your asset inventory? (Check all that apply)														
	Yes, we know the value of all storm sewers		Yes, we know the value of some but not all storm sewers		No, we do not know the value of any storm sewers		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total		
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	16	8%	84	42%	98	49%	198	100%	\$299,124,395	11	57	29%	98	49%	130	65%	144	72%	7	4%	48	24%	199	100%	
Cities with less than 5,000 residents (1)	3	4%	27	37%	43	59%	73	100%	.	0	15	20%	22	30%	38	51%	49	66%	0	0%	23	31%	74	100%	
Cities with 5,000 or more residents (2)	13	15%	48	57%	23	27%	84	100%	\$299,124,395	11	35	42%	63	75%	74	88%	76	90%	6	7%	7	8%	84	100%	
Counties	0	0%	8	21%	31	79%	39	100%	.	0	6	15%	13	33%	17	44%	18	46%	0	0%	17	44%	39	100%	
State agencies (3)	0	0%	1	50%	1	50%	2	100%	.	0	1	50%	0	0%	1	50%	1	50%	1	50%	1	50%	2	100%	
Cities by population																									
Less than 5,000 residents	3	4%	27	37%	43	59%	73	100%	.	0	15	20%	22	30%	38	51%	49	66%	0	0%	23	31%	74	100%	
5,000-19,999 residents	6	12%	29	56%	17	33%	52	100%	\$52,238,395	6	20	38%	37	71%	46	88%	47	90%	5	10%	4	8%	52	100%	
20,000-49,999 residents	4	17%	15	62%	5	21%	24	100%	\$146,886,000	4	10	42%	18	75%	20	83%	21	88%	1	4%	3	12%	24	100%	
50,000 or more residents	3	38%	4	50%	1	12%	8	100%	\$100,000,000	1	5	62%	8	100%	8	100%	8	100%	0	0%	0	0%	8	100%	
Counties by geography																									
Seven-county Twin Cities metro (4)	0	0%	1	33%	2	67%	3	100%	.	0	2	67%	0	0%	3	100%	3	100%	0	0%	0	0%	3	100%	
Greater MN - Counties with 60,000 or more residents (5)	0	0%	1	25%	3	75%	4	100%	.	0	0	0%	0	0%	0	0%	1	25%	0	0%	3	75%	4	100%	
Greater MN - Counties with less than 60,000 residents (6)	0	0%	6	19%	26	81%	32	100%	.	0	4	12%	13	41%	14	44%	14	44%	0	0%	14	44%	32	100%	
Counties and cities by MNDOT district																									
District 1	1	7%	4	29%	9	64%	14	100%	.	0	4	29%	6	43%	10	71%	9	64%	0	0%	4	29%	14	100%	
District 2	0	0%	2	15%	11	85%	13	100%	.	0	1	8%	3	23%	6	46%	8	62%	0	0%	5	38%	13	100%	
District 3	4	14%	10	34%	15	52%	29	100%	\$27,601,359	3	9	31%	12	41%	13	45%	16	55%	2	7%	10	34%	29	100%	
District 4	1	7%	4	27%	10	67%	15	100%	\$40,000,000	1	3	20%	8	53%	10	67%	11	73%	0	0%	4	27%	15	100%	
Metro	9	13%	40	56%	22	31%	71	100%	\$231,523,036	7	26	37%	45	63%	58	82%	63	89%	4	6%	8	11%	71	100%	
District 6	1	5%	8	40%	11	55%	20	100%	.	0	6	29%	7	33%	9	43%	12	57%	0	0%	8	38%	21	100%	
District 7	0	0%	7	37%	12	63%	19	100%	.	0	4	21%	10	53%	14	74%	15	79%	0	0%	3	16%	19	100%	
District 8	0	0%	8	53%	7	47%	15	100%	.	0	3	20%	7	47%	9	60%	9	60%	0	0%	5	33%	15	100%	

17F. - Other. Which other information about STORM SEWERS is included in your asset inventory?

	N	%
Other	5	71%
Flow direction	2	29%
Maintenance history/records	2	29%
Location	1	14%
Inspection records	1	14%
N of respondents	7	100%

17G. Please indicate any asset management system you use to operate, maintain, and improve STORM SEWERS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	62	33%	0	0%	15	8%	1	1%	5	3%	2	1%	54	29%
Cities with less than 5,000 residents (1)	33	47%	0	0%	1	1%	0	0%	0	0%	0	0%	6	9%
Cities with 5,000 or more residents (2)	14	17%	0	0%	14	17%	1	1%	4	5%	2	2%	45	54%
Counties	15	48%	0	0%	0	0%	0	0%	1	3%	0	0%	3	10%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	33	47%	0	0%	1	1%	0	0%	0	0%	0	0%	6	9%
5,000-19,999 residents	12	23%	0	0%	4	8%	0	0%	2	4%	0	0%	22	42%
20,000-49,999 residents	2	8%	0	0%	9	38%	1	4%	1	4%	0	0%	16	67%
50,000 or more residents	0	0%	0	0%	1	12%	0	0%	1	12%	2	25%	7	88%
Counties by geography														
Seven-county Twin Cities metro (4)	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Greater MN - Counties with 60,000 or more residents (5)	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Greater MN - Counties with less than 60,000 residents (6)	13	52%	0	0%	0	0%	0	0%	1	4%	0	0%	1	4%
Counties and cities by MNDOT district														
District 1	7	54%	0	0%	0	0%	0	0%	1	8%	0	0%	1	8%
District 2	5	45%	0	0%	0	0%	0	0%	1	9%	0	0%	0	0%
District 3	11	41%	0	0%	1	4%	0	0%	0	0%	0	0%	5	19%
District 4	4	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%
Metro	16	23%	0	0%	12	17%	1	1%	3	4%	1	1%	35	49%
District 6	7	35%	0	0%	1	5%	0	0%	0	0%	1	5%	8	40%
District 7	8	47%	0	0%	1	6%	0	0%	0	0%	0	0%	3	18%
District 8	4	29%	0	0%	0	0%	0	0%	0	0%	0	0%	1	7%

17G. Please indicate any asset management system you use to operate, maintain, and improve STORM SEWERS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	2	1%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
Counties	2	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	1	4%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	1	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	1	8%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	1	1%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

17G. Please indicate any asset management system you use to operate, maintain, and improve STORM SEWERS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	2	1%	0	0%	0	0%	55	30%	38	20%	13	7%	186
Cities with less than 5,000 residents (1)	2	3%	0	0%	0	0%	19	27%	17	24%	6	9%	70
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	30	36%	14	17%	5	6%	84
Counties	0	0%	0	0%	0	0%	6	19%	7	23%	1	3%	31
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Cities by population													
Less than 5,000 residents	2	3%	0	0%	0	0%	19	27%	17	24%	6	9%	70
5,000-19,999 residents	0	0%	0	0%	0	0%	20	38%	9	17%	3	6%	52
20,000-49,999 residents	0	0%	0	0%	0	0%	6	25%	3	12%	1	4%	24
50,000 or more residents	0	0%	0	0%	0	0%	4	50%	2	25%	1	12%	8
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%	3
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	6	24%	6	24%	1	4%	25
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	3	23%	2	15%	0	0%	13
District 2	0	0%	0	0%	0	0%	2	18%	4	36%	1	9%	11
District 3	0	0%	0	0%	0	0%	7	26%	7	26%	1	4%	27
District 4	0	0%	0	0%	0	0%	4	33%	3	25%	1	8%	12
Metro	1	1%	0	0%	0	0%	22	31%	11	15%	5	7%	71
District 6	0	0%	0	0%	0	0%	4	20%	4	20%	1	5%	20
District 7	0	0%	0	0%	0	0%	7	41%	1	6%	2	12%	17
District 8	1	7%	0	0%	0	0%	6	43%	6	43%	1	7%	14

17G. - Other. What other asset management system do you use to operate, maintain, and improve STORM SEWERS in [JURISDICTION]?

	N	%
Other	4	33%
CAD/AutoCAD	3	25%
SWAMP	1	8%
Other GIS system	1	8%
Arc View	1	8%
Beehive	1	8%
Element XS	1	8%
Oracle	1	8%
N of respondents	12	100%

18B. Are STORM PONDS in [JURISDICTION] mapped?

	Yes, storm ponds are fully mapped		Yes, storm ponds are partially mapped		No, storm ponds are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	88	56%	44	28%	26	16%	158
Cities with less than 5,000 residents (1)	25	50%	16	32%	9	18%	50
Cities with 5,000 or more residents (2)	59	71%	22	27%	2	2%	83
Counties	4	17%	5	21%	15	62%	24
State agencies (3)	0	0%	1	100%	0	0%	1
Cities by population							
Less than 5,000 residents	25	50%	16	32%	9	18%	50
5,000-19,999 residents	33	65%	16	31%	2	4%	51
20,000-49,999 residents	19	79%	5	21%	0	0%	24
50,000 or more residents	7	88%	1	12%	0	0%	8
Counties by geography							
Seven-county Twin Cities metro (4)	1	33%	2	67%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	2	50%	1	25%	1	25%	4
Greater MN - Counties with less than 60,000 residents (6)	1	6%	2	12%	14	82%	17
Counties and cities by MNDOT district							
District 1	4	44%	0	0%	5	56%	9
District 2	4	57%	0	0%	3	43%	7
District 3	12	46%	7	27%	7	27%	26
District 4	5	62%	0	0%	3	38%	8
Metro	47	69%	20	29%	1	1%	68
District 6	7	37%	7	37%	5	26%	19
District 7	7	54%	4	31%	2	15%	13
District 8	2	29%	5	71%	0	0%	7

18C. In what software program are STORM PONDS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	65	49%	25	19%	38	29%	4	3%	132
Cities with less than 5,000 residents (1)	13	32%	17	41%	9	22%	2	5%	41
Cities with 5,000 or more residents (2)	46	57%	7	9%	26	32%	2	2%	81
Counties	5	56%	1	11%	3	33%	0	0%	9
State agencies (3)	1	100%	0	0%	0	0%	0	0%	1
Cities by population									
Less than 5,000 residents	13	32%	17	41%	9	22%	2	5%	41
5,000-19,999 residents	24	49%	7	14%	17	35%	1	2%	49
20,000-49,999 residents	16	67%	0	0%	7	29%	1	4%	24
50,000 or more residents	6	75%	0	0%	2	25%	0	0%	8
Counties by geography									
Seven-county Twin Cities metro (4)	2	67%	0	0%	1	33%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	1	33%	1	33%	1	33%	0	0%	3
Greater MN - Counties with less than 60,000 residents (6)	2	67%	0	0%	1	33%	0	0%	3
Counties and cities by MNDOT district									
District 1	2	50%	1	25%	1	25%	0	0%	4
District 2	2	50%	2	50%	0	0%	0	0%	4
District 3	7	37%	7	37%	5	26%	0	0%	19
District 4	1	20%	2	40%	1	20%	1	20%	5
Metro	42	63%	5	7%	19	28%	1	1%	67
District 6	4	29%	2	14%	6	43%	2	14%	14
District 7	4	36%	4	36%	3	27%	0	0%	11
District 8	2	29%	2	29%	3	43%	0	0%	7

18D., 18E., & 18F. Value and other information about STORM PONDS.

	18D. Do you know the value of STORM PONDS in [JURISDICTION]?								18E. What is the value of all STORM PONDS in your [JURISDICTION]?		Q18F. Which other information about STORM PONDS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all storm ponds		Yes, we know the value of some but not all storm ponds		No, we do not know the value of any storm ponds		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	8	5%	42	27%	107	68%	157	100%	\$6,175,000	6	46	29%	73	46%	48	30%	94	59%	9	6%	54	34%	158	100%
Cities with less than 5,000 residents (1)	3	6%	9	18%	37	76%	49	100%	\$200,000	1	8	16%	20	40%	14	28%	23	46%	1	2%	22	44%	50	100%
Cities with 5,000 or more residents (2)	4	5%	31	37%	48	58%	83	100%	\$5,950,000	4	37	45%	47	57%	32	39%	63	76%	7	8%	17	20%	83	100%
Counties	1	4%	1	4%	22	92%	24	100%	\$25,000	1	0	0%	6	25%	2	8%	7	29%	1	4%	15	62%	24	100%
State agencies (3)	0	0%	1	100%	0	0%	1	100%	.	0	1	100%	0	0%	0	0%	1	100%	0	0%	0	0%	1	100%
Cities by population																								
Less than 5,000 residents	3	6%	9	18%	37	76%	49	100%	\$200,000	1	8	16%	20	40%	14	28%	23	46%	1	2%	22	44%	50	100%
5,000-19,999 residents	3	6%	15	29%	33	65%	51	100%	\$5,450,000	3	18	35%	28	55%	18	35%	36	71%	6	12%	12	24%	51	100%
20,000-49,999 residents	0	0%	13	54%	11	46%	24	100%	.	0	11	46%	12	50%	9	38%	19	79%	1	4%	5	21%	24	100%
50,000 or more residents	1	12%	3	38%	4	50%	8	100%	\$500,000	1	8	100%	7	88%	5	62%	8	100%	0	0%	0	0%	8	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	3	100%	3	100%	.	0	0	0%	1	33%	1	33%	2	67%	0	0%	1	33%	3	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	4	100%	4	100%	.	0	0	0%	0	0%	0	0%	0	0%	1	25%	3	75%	4	100%
Greater MN - Counties with less than 60,000 residents (6)	1	6%	1	6%	15	88%	17	100%	\$25,000	1	0	0%	5	29%	1	6%	5	29%	0	0%	11	65%	17	100%
Counties and cities by MNDOT district																								
District 1	1	11%	2	22%	6	67%	9	100%	.	0	2	22%	4	44%	4	44%	4	44%	0	0%	5	56%	9	100%
District 2	0	0%	0	0%	7	100%	7	100%	.	0	1	14%	2	29%	2	29%	3	43%	0	0%	4	57%	7	100%
District 3	4	15%	2	8%	20	77%	26	100%	\$5,425,000	4	7	27%	11	42%	7	27%	10	38%	2	8%	15	58%	26	100%
District 4	0	0%	3	38%	5	62%	8	100%	.	0	3	38%	6	75%	4	50%	6	75%	0	0%	1	12%	8	100%
Metro	2	3%	21	31%	44	66%	67	100%	\$750,000	2	28	41%	35	51%	23	34%	48	71%	5	7%	15	22%	68	100%
District 6	1	5%	3	16%	15	79%	19	100%	.	0	2	11%	4	21%	1	5%	7	37%	1	5%	11	58%	19	100%
District 7	0	0%	5	38%	8	62%	13	100%	.	0	1	8%	8	62%	5	38%	10	77%	1	8%	2	15%	13	100%
District 8	0	0%	5	71%	2	29%	7	100%	.	0	1	14%	3	43%	2	29%	5	71%	0	0%	1	14%	7	100%

18F. - Other. Which other information about STORM PONDS is included in your asset inventory?

	N	%
Other	5	56%
Maintenance history/records	3	33%
Location	2	22%
Inspection records	1	11%
N of respondents	9	100%

18G. Please indicate any asset management system you use to operate, maintain, and improve STORM PONDS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	51	35%	0	0%	12	8%	1	1%	3	2%	1	1%	54	37%
Cities with less than 5,000 residents (1)	26	58%	0	0%	1	2%	0	0%	0	0%	0	0%	5	11%
Cities with 5,000 or more residents (2)	14	17%	0	0%	11	14%	1	1%	3	4%	1	1%	47	58%
Counties	11	61%	0	0%	0	0%	0	0%	0	0%	0	0%	2	11%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	26	58%	0	0%	1	2%	0	0%	0	0%	0	0%	5	11%
5,000-19,999 residents	12	24%	0	0%	4	8%	0	0%	2	4%	0	0%	22	44%
20,000-49,999 residents	2	9%	0	0%	6	26%	1	4%	0	0%	0	0%	18	78%
50,000 or more residents	0	0%	0	0%	1	12%	0	0%	1	12%	1	12%	7	88%
Counties by geography														
Seven-county Twin Cities metro (4)	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Greater MN - Counties with 60,000 or more residents (5)	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Greater MN - Counties with less than 60,000 residents (6)	8	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	1	20%	0	0%	0	0%	0	0%	1	20%	0	0%	1	20%
District 2	4	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	11	48%	0	0%	1	4%	0	0%	0	0%	0	0%	4	17%
District 4	2	29%	0	0%	0	0%	0	0%	0	0%	0	0%	1	14%
Metro	14	21%	0	0%	10	15%	1	2%	2	3%	1	2%	38	58%
District 6	10	59%	0	0%	1	6%	0	0%	0	0%	0	0%	7	41%
District 7	7	54%	0	0%	0	0%	0	0%	0	0%	0	0%	2	15%
District 8	2	29%	0	0%	0	0%	0	0%	0	0%	0	0%	1	14%

18G. Please indicate any asset management system you use to operate, maintain, and improve STORM PONDS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	1	1%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	1	1%	1	1%	0	0%	0	0%	0	0%
Counties	1	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	1	4%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	1	2%	0	0%	1	2%	1	2%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

18G. Please indicate any asset management system you use to operate, maintain, and improve STORM PONDS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	1	1%	0	0%	0	0%	40	28%	20	14%	10	7%	145
Cities with less than 5,000 residents (1)	1	2%	0	0%	0	0%	11	24%	4	9%	3	7%	45
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	28	35%	13	16%	6	7%	81
Counties	0	0%	0	0%	0	0%	1	6%	3	17%	0	0%	18
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Cities by population													
Less than 5,000 residents	1	2%	0	0%	0	0%	11	24%	4	9%	3	7%	45
5,000-19,999 residents	0	0%	0	0%	0	0%	19	38%	9	18%	3	6%	50
20,000-49,999 residents	0	0%	0	0%	0	0%	5	22%	2	9%	2	9%	23
50,000 or more residents	0	0%	0	0%	0	0%	4	50%	2	25%	1	12%	8
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	1	8%	3	25%	0	0%	12
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	2	40%	1	20%	0	0%	5
District 2	0	0%	0	0%	0	0%	0	0%	1	17%	1	17%	6
District 3	0	0%	0	0%	0	0%	8	35%	1	4%	1	4%	23
District 4	0	0%	0	0%	0	0%	2	29%	3	43%	0	0%	7
Metro	1	2%	0	0%	0	0%	20	30%	9	14%	5	8%	66
District 6	0	0%	0	0%	0	0%	2	12%	2	12%	0	0%	17
District 7	0	0%	0	0%	0	0%	3	23%	1	8%	1	8%	13
District 8	0	0%	0	0%	0	0%	3	43%	2	29%	1	14%	7

18G. - Other. What other asset management system do you use to operate, maintain, and improve STORM PONDS in [JURISDICTION]?

	N	%
Other	3	30%
SWAMP	2	20%
Other GIS system	1	10%
Arc View	1	10%
Beehive	1	10%
Element XS	1	10%
CAD/AutoCAD	1	10%
Oracle	1	10%
N of respondents	10	100%

19B. Are AIRPORTS in [JURISDICTION] mapped?

	Yes, airports are fully mapped		Yes, airports are partially mapped		No, airports are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	33	82%	5	12%	2	5%	40
Cities with less than 5,000 residents (1)	11	85%	1	8%	1	8%	13
Cities with 5,000 or more residents (2)	15	88%	1	6%	1	6%	17
Counties	7	70%	3	30%	0	0%	10
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	11	85%	1	8%	1	8%	13
5,000-19,999 residents	10	83%	1	8%	1	8%	12
20,000-49,999 residents	4	100%	0	0%	0	0%	4
50,000 or more residents	1	100%	0	0%	0	0%	1
Counties by geography							
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	6	67%	3	33%	0	0%	9
Counties and cities by MNDOT district							
District 1	3	75%	1	25%	0	0%	4
District 2	4	67%	2	33%	0	0%	6
District 3	4	80%	1	20%	0	0%	5
District 4	5	71%	1	14%	1	14%	7
Metro	1	50%	0	0%	1	50%	2
District 6	5	100%	0	0%	0	0%	5
District 7	6	100%	0	0%	0	0%	6
District 8	5	100%	0	0%	0	0%	5

19C. In what software program are AIRPORTS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	10	26%	14	37%	13	34%	1	3%	38
Cities with less than 5,000 residents (1)	3	25%	6	50%	3	25%	0	0%	12
Cities with 5,000 or more residents (2)	3	19%	5	31%	7	44%	1	6%	16
Counties	4	40%	3	30%	3	30%	0	0%	10
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	3	25%	6	50%	3	25%	0	0%	12
5,000-19,999 residents	2	18%	4	36%	4	36%	1	9%	11
20,000-49,999 residents	1	25%	0	0%	3	75%	0	0%	4
50,000 or more residents	0	0%	1	100%	0	0%	0	0%	1
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	4	44%	3	33%	2	22%	0	0%	9
Counties and cities by MNDOT district									
District 1	3	75%	1	25%	0	0%	0	0%	4
District 2	3	50%	3	50%	0	0%	0	0%	6
District 3	1	20%	1	20%	3	60%	0	0%	5
District 4	1	17%	3	50%	2	33%	0	0%	6
Metro	0	0%	0	0%	1	100%	0	0%	1
District 6	0	0%	1	20%	3	60%	1	20%	5
District 7	2	33%	2	33%	2	33%	0	0%	6
District 8	0	0%	3	60%	2	40%	0	0%	5

19D., 19E., & 19F. Value and other information about AIRPORTS.

	19D. Do you know the value of AIRPORTS in [JURISDICTION]?								19E. What is the value of all AIRPORTS in your [JURISDICTION]?		Q19F. Which other information about AIRPORTS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all airports		Yes, we know the value of some but not all airports		No, we do not know the value of any airports		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	5	12%	20	50%	15	38%	40	100%	\$28,673,500	4	20	50%	28	70%	24	60%	30	75%	0	0%	8	20%	40	100%
Cities with less than 5,000 residents (1)	1	8%	6	46%	6	46%	13	100%	\$6,161,500	1	5	38%	8	62%	7	54%	7	54%	0	0%	4	31%	13	100%
Cities with 5,000 or more residents (2)	3	18%	9	53%	5	29%	17	100%	\$22,512,000	3	11	65%	13	76%	11	65%	15	88%	0	0%	2	12%	17	100%
Counties	1	10%	5	50%	4	40%	10	100%	.	0	4	40%	7	70%	6	60%	8	80%	0	0%	2	20%	10	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	1	8%	6	46%	6	46%	13	100%	\$6,161,500	1	5	38%	8	62%	7	54%	7	54%	0	0%	4	31%	13	100%
5,000-19,999 residents	2	17%	7	58%	3	25%	12	100%	\$13,512,000	2	9	75%	10	83%	9	75%	11	92%	0	0%	1	8%	12	100%
20,000-49,999 residents	1	25%	1	25%	2	50%	4	100%	\$9,000,000	1	1	25%	2	50%	1	25%	3	75%	0	0%	1	25%	4	100%
50,000 or more residents	0	0%	1	100%	0	0%	1	100%	.	0	1	100%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	1	11%	5	56%	3	33%	9	100%	.	0	4	44%	6	67%	5	56%	7	78%	0	0%	2	22%	9	100%
Counties and cities by MNDOT district																								
District 1	0	0%	2	50%	2	50%	4	100%	.	0	2	50%	3	75%	2	50%	3	75%	0	0%	1	25%	4	100%
District 2	0	0%	3	50%	3	50%	6	100%	.	0	1	17%	2	33%	2	33%	3	50%	0	0%	3	50%	6	100%
District 3	2	40%	3	60%	0	0%	5	100%	\$13,161,500	2	3	60%	4	80%	4	80%	3	60%	0	0%	1	20%	5	100%
District 4	1	14%	4	57%	2	29%	7	100%	\$9,000,000	1	5	71%	7	100%	6	86%	6	86%	0	0%	0	0%	7	100%
Metro	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	1	50%	1	50%	1	50%	0	0%	1	50%	2	100%
District 6	1	20%	1	20%	3	60%	5	100%	.	0	2	40%	4	80%	2	40%	4	80%	0	0%	1	20%	5	100%
District 7	0	0%	3	50%	3	50%	6	100%	.	0	3	50%	3	50%	3	50%	5	83%	0	0%	1	17%	6	100%
District 8	1	20%	4	80%	0	0%	5	100%	\$6,512,000	1	4	80%	4	80%	4	80%	5	100%	0	0%	0	0%	5	100%

19G. Please indicate any asset management system you use to operate, maintain, and improve AIRPORTS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	6	19%	0	0%	0	0%	0	0%	0	0%	0	0%	7	22%
Cities with less than 5,000 residents (1)	3	25%	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%
Cities with 5,000 or more residents (2)	1	7%	0	0%	0	0%	0	0%	0	0%	0	0%	4	29%
Counties	2	33%	0	0%	0	0%	0	0%	0	0%	0	0%	2	33%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	3	25%	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%
5,000-19,999 residents	1	9%	0	0%	0	0%	0	0%	0	0%	0	0%	2	18%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	2	33%	0	0%	0	0%	0	0%	0	0%	0	0%	2	33%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	2	40%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	2	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	17%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
District 7	2	33%	0	0%	0	0%	0	0%	0	0%	0	0%	3	50%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

19G. Please indicate any asset management system you use to operate, maintain, and improve AIRPORTS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

19G. Please indicate any asset management system you use to operate, maintain, and improve AIRPORTS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	0	0%	0	0%	14	44%	8	25%	4	12%	32
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	4	33%	2	17%	3	25%	12
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	9	64%	3	21%	1	7%	14
Counties	0	0%	0	0%	0	0%	1	17%	3	50%	0	0%	6
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	4	33%	2	17%	3	25%	12
5,000-19,999 residents	0	0%	0	0%	0	0%	8	73%	3	27%	1	9%	11
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
50,000 or more residents	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	1
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	1	17%	3	50%	0	0%	6
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	1	50%	1	50%	0	0%	2
District 2	0	0%	0	0%	0	0%	1	20%	2	40%	1	20%	5
District 3	0	0%	0	0%	0	0%	3	60%	1	20%	1	20%	5
District 4	0	0%	0	0%	0	0%	2	33%	2	33%	0	0%	6
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 6	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	3
District 7	0	0%	0	0%	0	0%	2	33%	0	0%	1	17%	6
District 8	0	0%	0	0%	0	0%	4	80%	2	40%	1	20%	5

19G. - Other. What other asset management system do you use to operate, maintain, and improve AIRPORTS in [JURISDICTION]?

	N	%
Other	2	67%
Other GIS system	1	33%
N of respondents	3	100%

20B. Are PORTS in [JURISDICTION] mapped?

	Yes, ports are fully mapped		Yes, ports are partially mapped		No, ports are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	2	50%	1	25%	1	25%	4
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0
Cities with 5,000 or more residents (2)	1	33%	1	33%	1	33%	3
Counties	1	100%	0	0%	0	0%	1
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	0	0%	0	0%	0	0%	0
5,000-19,999 residents	0	0%	1	50%	1	50%	2
20,000-49,999 residents	1	100%	0	0%	0	0%	1
50,000 or more residents	0	0%	0	0%	0	0%	0
Counties by geography							
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0
Counties and cities by MNDOT district							
District 1	0	0%	0	0%	0	0%	0
District 2	0	0%	0	0%	0	0%	0
District 3	0	0%	0	0%	0	0%	0
District 4	0	0%	0	0%	0	0%	0
Metro	2	100%	0	0%	0	0%	2
District 6	0	0%	1	50%	1	50%	2
District 7	0	0%	0	0%	0	0%	0
District 8	0	0%	0	0%	0	0%	0

20C. In what software program are PORTS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	1	33%	1	33%	1	33%	3
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0
Cities with 5,000 or more residents (2)	0	0%	1	50%	0	0%	1	50%	2
Counties	0	0%	0	0%	1	100%	0	0%	1
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0
5,000-19,999 residents	0	0%	1	100%	0	0%	0	0%	1
20,000-49,999 residents	0	0%	0	0%	0	0%	1	100%	1
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0
Counties and cities by MNDOT district									
District 1	0	0%	0	0%	0	0%	0	0%	0
District 2	0	0%	0	0%	0	0%	0	0%	0
District 3	0	0%	0	0%	0	0%	0	0%	0
District 4	0	0%	0	0%	0	0%	0	0%	0
Metro	0	0%	0	0%	1	50%	1	50%	2
District 6	0	0%	1	100%	0	0%	0	0%	1
District 7	0	0%	0	0%	0	0%	0	0%	0
District 8	0	0%	0	0%	0	0%	0	0%	0

20D., 20E., & 20F. Value and other information about PORTS.

	20D. Do you know the value of PORTS in [JURISDICTION]?								20E. What is the value of all PORTS in your [JURISDICTION]?		20F. Which other information about PORTS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all ports		Yes, we know the value of some but not all ports		No, we do not know the value of any ports		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	4	100%	4	100%	.	0	1	25%	1	25%	2	50%	2	50%	0	0%	2	50%	4	100%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	3	100%	3	100%	.	0	1	33%	0	0%	1	33%	1	33%	0	0%	2	67%	3	100%
Counties	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	2	100%
20,000-49,999 residents	0	0%	0	0%	1	100%	1	100%	.	0	1	100%	0	0%	1	100%	1	100%	0	0%	0	0%	1	100%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district																								
District 1	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	2	100%	2	100%	.	0	1	50%	1	50%	2	100%	2	100%	0	0%	0	0%	2	100%
District 6	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	2	100%
District 7	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

20G. Please indicate any asset management system you use to operate, maintain, and improve PORTS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

20G. Please indicate any asset management system you use to operate, maintain, and improve PORTS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

20G. Please indicate any asset management system you use to operate, maintain, and improve PORTS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0

21B. Are RAILWAYS in [JURISDICTION] mapped?

	Yes, railways are fully mapped		Yes, railways are partially mapped		No, railways are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	13	48%	8	30%	6	22%	27
Cities with less than 5,000 residents (1)	3	30%	3	30%	4	40%	10
Cities with 5,000 or more residents (2)	8	80%	1	10%	1	10%	10
Counties	2	29%	4	57%	1	14%	7
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	3	30%	3	30%	4	40%	10
5,000-19,999 residents	2	50%	1	25%	1	25%	4
20,000-49,999 residents	4	100%	0	0%	0	0%	4
50,000 or more residents	2	100%	0	0%	0	0%	2
Counties by geography							
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	1	100%	1
Greater MN - Counties with less than 60,000 residents (6)	1	20%	4	80%	0	0%	5
Counties and cities by MNDOT district							
District 1	1	100%	0	0%	0	0%	1
District 2	0	0%	2	100%	0	0%	2
District 3	0	0%	0	0%	1	100%	1
District 4	1	25%	3	75%	0	0%	4
Metro	8	80%	0	0%	2	20%	10
District 6	0	0%	1	100%	0	0%	1
District 7	1	25%	1	25%	2	50%	4
District 8	2	50%	1	25%	1	25%	4

21C. In what software program are RAILWAYS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	8	38%	5	24%	7	33%	1	5%	21
Cities with less than 5,000 residents (1)	1	17%	2	33%	2	33%	1	17%	6
Cities with 5,000 or more residents (2)	6	67%	1	11%	2	22%	0	0%	9
Counties	1	17%	2	33%	3	50%	0	0%	6
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	1	17%	2	33%	2	33%	1	17%	6
5,000-19,999 residents	1	33%	1	33%	1	33%	0	0%	3
20,000-49,999 residents	3	75%	0	0%	1	25%	0	0%	4
50,000 or more residents	2	100%	0	0%	0	0%	0	0%	2
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	1	20%	2	40%	2	40%	0	0%	5
Counties and cities by MNDOT district									
District 1	1	100%	0	0%	0	0%	0	0%	1
District 2	0	0%	0	0%	2	100%	0	0%	2
District 3	0	0%	0	0%	0	0%	0	0%	0
District 4	1	25%	3	75%	0	0%	0	0%	4
Metro	5	62%	0	0%	3	38%	0	0%	8
District 6	0	0%	0	0%	0	0%	1	100%	1
District 7	0	0%	1	50%	1	50%	0	0%	2
District 8	1	33%	1	33%	1	33%	0	0%	3

21D., 21E., & 21F. Value and other information about RAILWAYS.

	21D. Do you know the value of RAILWAYS in [JURISDICTION]?								21E. What is the value of all RAILWAYS in your [JURISDICTION]?		Q21F. Which other information about RAILWAYS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all railways		Yes, we know the value of some but not all railways		No, we do not know the value of any railways		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	1	4%	1	4%	25	93%	27	100%	\$26,500,000	1	1	4%	1	4%	2	7%	1	4%	0	0%	25	93%	27	100%
Cities with less than 5,000 residents (1)	0	0%	0	0%	10	100%	10	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	10	100%	10	100%
Cities with 5,000 or more residents (2)	0	0%	1	10%	9	90%	10	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	10	100%	10	100%
Counties	1	14%	0	0%	6	86%	7	100%	\$26,500,000	1	1	14%	1	14%	2	29%	1	14%	0	0%	5	71%	7	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	0	0%	0	0%	10	100%	10	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	10	100%	10	100%
5,000-19,999 residents	0	0%	1	25%	3	75%	4	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	4	100%
20,000-49,999 residents	0	0%	0	0%	4	100%	4	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	4	100%
50,000 or more residents	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%	2	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	1	100%	.	0	1	100%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
Greater MN - Counties with less than 60,000 residents (6)	1	20%	0	0%	4	80%	5	100%	\$26,500,000	1	0	0%	0	0%	1	20%	0	0%	0	0%	4	80%	5	100%
Counties and cities by MNDOT district																								
District 1	1	100%	0	0%	0	0%	1	100%	\$26,500,000	1	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
District 2	0	0%	0	0%	2	100%	2	100%	.	0	0	0%	0	0%	1	50%	0	0%	0	0%	1	50%	2	100%
District 3	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
District 4	0	0%	0	0%	4	100%	4	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	4	100%
Metro	0	0%	0	0%	10	100%	10	100%	.	0	1	10%	1	10%	1	10%	1	10%	0	0%	9	90%	10	100%
District 6	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
District 7	0	0%	0	0%	4	100%	4	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	4	100%
District 8	0	0%	1	25%	3	75%	4	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	4	100%

21G. Please indicate any asset management system you use to operate, maintain, and improve RAILWAYS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	15	83%	0	0%	0	0%	0	0%	1	6%	0	0%	2	11%
Cities with less than 5,000 residents (1)	7	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	6	75%	0	0%	0	0%	0	0%	1	12%	0	0%	2	25%
Counties	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	7	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	2	50%	0	0%	0	0%	0	0%	1	25%	0	0%	2	50%
50,000 or more residents	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	3	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	6	75%	0	0%	0	0%	0	0%	1	12%	0	0%	2	25%
District 6	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	3	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

21G. Please indicate any asset management system you use to operate, maintain, and improve RAILWAYS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	1	6%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

21G. Please indicate any asset management system you use to operate, maintain, and improve RAILWAYS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	1	6%	0	0%	0	0%	0	0%	0	0%	18
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	7
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	8
Counties	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	3
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	7
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	3
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 2	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	1
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	8
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1

22B. Are ELECTRICAL SYSTEMS in [JURISDICTION] mapped?

	Yes, electrical systems are fully mapped		Yes, electrical systems are partially mapped		No, electrical systems are not mapped		Total N
	N	%	N	%	N	%	
All survey respondents	29	48%	18	30%	13	22%	60
Cities with less than 5,000 residents (1)	9	50%	2	11%	7	39%	18
Cities with 5,000 or more residents (2)	18	50%	13	36%	5	14%	36
Counties	2	33%	3	50%	1	17%	6
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	9	50%	2	11%	7	39%	18
5,000-19,999 residents	11	55%	7	35%	2	10%	20
20,000-49,999 residents	4	33%	5	42%	3	25%	12
50,000 or more residents	3	75%	1	25%	0	0%	4
Counties by geography							
Seven-county Twin Cities metro (4)	1	50%	1	50%	0	0%	2
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	1	25%	2	50%	1	25%	4
Counties and cities by MNDOT district							
District 1	2	67%	1	33%	0	0%	3
District 2	2	67%	1	33%	0	0%	3
District 3	3	75%	0	0%	1	25%	4
District 4	2	50%	1	25%	1	25%	4
Metro	9	39%	8	35%	6	26%	23
District 6	2	40%	2	40%	1	20%	5
District 7	6	60%	3	30%	1	10%	10
District 8	3	38%	2	25%	3	38%	8

22C. In what software program are ELECTRICAL SYSTEMS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	13	28%	16	34%	15	32%	3	6%	47
Cities with less than 5,000 residents (1)	2	18%	6	55%	3	27%	0	0%	11
Cities with 5,000 or more residents (2)	9	29%	9	29%	11	35%	2	6%	31
Counties	2	40%	1	20%	1	20%	1	20%	5
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	2	18%	6	55%	3	27%	0	0%	11
5,000-19,999 residents	3	17%	8	44%	6	33%	1	6%	18
20,000-49,999 residents	4	44%	1	11%	3	33%	1	11%	9
50,000 or more residents	2	50%	0	0%	2	50%	0	0%	4
Counties by geography									
Seven-county Twin Cities metro (4)	1	50%	0	0%	1	50%	0	0%	2
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	1	33%	1	33%	0	0%	1	33%	3
Counties and cities by MNDOT district									
District 1	1	33%	0	0%	1	33%	1	33%	3
District 2	1	33%	2	67%	0	0%	0	0%	3
District 3	1	33%	1	33%	1	33%	0	0%	3
District 4	0	0%	2	67%	1	33%	0	0%	3
Metro	6	35%	4	24%	6	35%	1	6%	17
District 6	1	25%	1	25%	1	25%	1	25%	4
District 7	3	33%	4	44%	2	22%	0	0%	9
District 8	0	0%	2	40%	3	60%	0	0%	5

22D., 22E., & 22F. Value and other information about ELECTRICAL SYSTEMS.

	22D. Do you know the value of ELECTRICAL SYSTEMS in [JURISDICTION]?								22E. What is the value of all ELECTRICAL SYSTEMS in your [JURISDICTION]?		22F. Which other information about ELECTRICAL SYSTEMS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all electrical systems		Yes, we know the value of some but not all electrical systems		No, we do not know the value of any electrical systems		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	5	9%	22	38%	31	53%	58	100%	\$85,981,522	3	20	34%	31	53%	40	68%	38	64%	1	2%	18	31%	59	100%
Cities with less than 5,000 residents (1)	0	0%	5	28%	13	72%	18	100%	.	0	6	33%	6	33%	10	56%	10	56%	0	0%	8	44%	18	100%
Cities with 5,000 or more residents (2)	4	11%	15	43%	16	46%	35	100%	\$85,981,522	3	12	34%	22	63%	26	74%	25	71%	1	3%	8	23%	35	100%
Counties	1	20%	2	40%	2	40%	5	100%	.	0	2	33%	3	50%	4	67%	3	50%	0	0%	2	33%	6	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	0	0%	5	28%	13	72%	18	100%	.	0	6	33%	6	33%	10	56%	10	56%	0	0%	8	44%	18	100%
5,000-19,999 residents	3	15%	9	45%	8	40%	20	100%	\$85,981,522	3	9	45%	14	70%	16	80%	16	80%	1	5%	4	20%	20	100%
20,000-49,999 residents	0	0%	4	36%	7	64%	11	100%	.	0	1	9%	4	36%	7	64%	7	64%	0	0%	4	36%	11	100%
50,000 or more residents	1	25%	2	50%	1	25%	4	100%	.	0	2	50%	4	100%	3	75%	2	50%	0	0%	0	0%	4	100%
Counties by geography																								
Seven-county Twin Cities metro (4)	1	50%	1	50%	0	0%	2	100%	.	0	2	100%	2	100%	2	100%	2	100%	0	0%	0	0%	2	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	1	33%	2	67%	3	100%	.	0	0	0%	1	25%	2	50%	1	25%	0	0%	2	50%	4	100%
Counties and cities by MNDOT district																								
District 1	0	0%	1	33%	2	67%	3	100%	.	0	2	67%	2	67%	2	67%	2	67%	0	0%	1	33%	3	100%
District 2	0	0%	3	100%	0	0%	3	100%	.	0	2	67%	2	67%	3	100%	2	67%	0	0%	0	0%	3	100%
District 3	1	25%	1	25%	2	50%	4	100%	\$17,456,097	1	2	50%	2	50%	3	75%	3	75%	0	0%	1	25%	4	100%
District 4	0	0%	1	33%	2	67%	3	100%	.	0	2	50%	3	75%	3	75%	3	75%	0	0%	1	25%	4	100%
Metro	3	13%	6	26%	14	61%	23	100%	\$40,000,000	1	5	22%	11	48%	13	57%	12	52%	1	4%	9	39%	23	100%
District 6	0	0%	1	25%	3	75%	4	100%	.	0	1	25%	2	50%	2	50%	2	50%	0	0%	2	50%	4	100%
District 7	0	0%	5	50%	5	50%	10	100%	.	0	3	30%	3	30%	8	80%	8	80%	0	0%	2	20%	10	100%
District 8	1	12%	4	50%	3	38%	8	100%	\$28,525,425	1	3	38%	6	75%	6	75%	6	75%	0	0%	2	25%	8	100%

22F. - Other. Which other information about ELECTRICAL SYSTEMS is included in your asset inventory?

	N	%
Other	1	100%
N of respondents	1	100%

22G. Please indicate any asset management system you use to operate, maintain, and improve ELECTRICAL SYSTEMS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	14	27%	0	0%	1	2%	1	2%	2	4%	0	0%	16	31%
Cities with less than 5,000 residents (1)	5	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	7%
Cities with 5,000 or more residents (2)	8	24%	0	0%	1	3%	1	3%	2	6%	0	0%	15	44%
Counties	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	5	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	7%
5,000-19,999 residents	5	25%	0	0%	0	0%	1	5%	0	0%	0	0%	6	30%
20,000-49,999 residents	3	30%	0	0%	1	10%	0	0%	1	10%	0	0%	7	70%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%	2	50%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%
District 3	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%
District 4	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Metro	6	33%	0	0%	1	6%	0	0%	2	11%	0	0%	8	44%
District 6	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	3	60%
District 7	3	30%	0	0%	0	0%	0	0%	0	0%	0	0%	3	30%
District 8	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

22G. Please indicate any asset management system you use to operate, maintain, and improve ELECTRICAL SYSTEMS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	1	2%	0	0%	1	2%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	1	10%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	1	6%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

22G. Please indicate any asset management system you use to operate, maintain, and improve ELECTRICAL SYSTEMS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	1	2%	0	0%	18	35%	11	21%	6	12%	52
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	4	27%	4	27%	3	20%	15
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	14	41%	7	21%	2	6%	34
Counties	0	0%	1	33%	0	0%	0	0%	0	0%	1	33%	3
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	4	27%	4	27%	3	20%	15
5,000-19,999 residents	0	0%	0	0%	0	0%	11	55%	5	25%	1	5%	20
20,000-49,999 residents	0	0%	0	0%	0	0%	1	10%	1	10%	0	0%	10
50,000 or more residents	0	0%	0	0%	0	0%	2	50%	1	25%	1	25%	4
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	1	50%	0	0%	0	0%	0	0%	0	0%	2
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	2	100%	0	0%	0	0%	2
District 2	0	0%	1	33%	0	0%	1	33%	1	33%	0	0%	3
District 3	0	0%	0	0%	0	0%	1	25%	1	25%	0	0%	4
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
Metro	0	0%	0	0%	0	0%	5	28%	4	22%	2	11%	18
District 6	0	0%	0	0%	0	0%	1	20%	1	20%	0	0%	5
District 7	0	0%	0	0%	0	0%	4	40%	1	10%	3	30%	10
District 8	0	0%	0	0%	0	0%	4	57%	3	43%	1	14%	7

22G. - Other. What other asset management system do you use to operate, maintain, and improve ELECTRICAL SYSTEMS in [JURISDICTION]?

	N	%
CAD/AutoCAD	2	67%
Other	2	67%
N of respondents	3	100%

23B. Are SOLID WASTE FACILITIES in [JURISDICTION] mapped?

	Yes, solid waste facilities are fully mapped		Yes, solid waste facilities are partially mapped		No, solid waste facilities are not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	11	29%	11	29%	16	42%	38
Cities with less than 5,000 residents (1)	3	30%	2	20%	5	50%	10
Cities with 5,000 or more residents (2)	2	25%	1	12%	5	62%	8
Counties	6	30%	8	40%	6	30%	20
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	3	30%	2	20%	5	50%	10
5,000-19,999 residents	1	20%	1	20%	3	60%	5
20,000-49,999 residents	1	33%	0	0%	2	67%	3
50,000 or more residents	0	0%	0	0%	0	0%	0
Counties by geography							
Seven-county Twin Cities metro (4)	0	0%	2	100%	0	0%	2
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	1	100%	1
Greater MN - Counties with less than 60,000 residents (6)	6	35%	6	35%	5	29%	17
Counties and cities by MNDOT district							
District 1	2	50%	1	25%	1	25%	4
District 2	4	50%	2	25%	2	25%	8
District 3	0	0%	2	67%	1	33%	3
District 4	2	33%	1	17%	3	50%	6
Metro	1	20%	2	40%	2	40%	5
District 6	0	0%	1	17%	5	83%	6
District 7	2	67%	0	0%	1	33%	3
District 8	0	0%	2	67%	1	33%	3

23C. In what software program are SOLID WASTE FACILITIES in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	10	45%	5	23%	6	27%	1	5%	22
Cities with less than 5,000 residents (1)	2	40%	1	20%	2	40%	0	0%	5
Cities with 5,000 or more residents (2)	2	67%	0	0%	1	33%	0	0%	3
Counties	6	43%	4	29%	3	21%	1	7%	14
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	2	40%	1	20%	2	40%	0	0%	5
5,000-19,999 residents	1	50%	0	0%	1	50%	0	0%	2
20,000-49,999 residents	1	100%	0	0%	0	0%	0	0%	1
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0
Counties by geography									
Seven-county Twin Cities metro (4)	1	50%	0	0%	1	50%	0	0%	2
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	5	42%	4	33%	2	17%	1	8%	12
Counties and cities by MNDOT district									
District 1	1	33%	2	67%	0	0%	0	0%	3
District 2	2	33%	2	33%	2	33%	0	0%	6
District 3	2	100%	0	0%	0	0%	0	0%	2
District 4	2	67%	1	33%	0	0%	0	0%	3
Metro	1	33%	0	0%	2	67%	0	0%	3
District 6	1	100%	0	0%	0	0%	0	0%	1
District 7	1	50%	0	0%	1	50%	0	0%	2
District 8	0	0%	0	0%	1	50%	1	50%	2

23D., 23E., & 23F. Value and other information about SOLID WASTE FACILITIES.

	23D. Do you know the value of SOLID WASTE FACILITIES in [JURISDICTION]?								23E. What is the value of all SOLID WASTE FACILITIES in your [JURISDICTION]?		23F. Which other information about SOLID WASTE FACILITIES is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of all solid waste facilities		Yes, we know the value of some but not all solid waste facilities		No, we do not know the values of any solid waste facilities		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	2	6%	8	22%	26	72%	36	100%	\$4,010,020	2	8	22%	14	39%	9	25%	11	31%	2	6%	17	47%	36	100%
Cities with less than 5,000 residents (1)	0	0%	0	0%	9	100%	9	100%	.	0	1	11%	2	22%	1	11%	1	11%	0	0%	7	78%	9	100%
Cities with 5,000 or more residents (2)	1	12%	2	25%	5	62%	8	100%	\$1,000,000	1	3	38%	4	50%	2	25%	2	25%	1	12%	3	38%	8	100%
Counties	1	5%	6	32%	12	63%	19	100%	\$3,010,020	1	4	21%	8	42%	6	32%	8	42%	1	5%	7	37%	19	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	0	0%	0	0%	9	100%	9	100%	.	0	1	11%	2	22%	1	11%	1	11%	0	0%	7	78%	9	100%
5,000-19,999 residents	0	0%	2	40%	3	60%	5	100%	.	0	2	40%	3	60%	1	20%	1	20%	0	0%	2	40%	5	100%
20,000-49,999 residents	1	33%	0	0%	2	67%	3	100%	\$1,000,000	1	1	33%	1	33%	1	33%	1	33%	1	33%	1	33%	3	100%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	1	100%	0	0%	1	100%	.	0	1	100%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	1	100%	0	0%	1	100%	.	0	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	1	100%
Greater MN - Counties with less than 60,000 residents (6)	1	6%	4	24%	12	71%	17	100%	\$3,010,020	1	3	18%	6	35%	5	29%	7	41%	1	6%	7	41%	17	100%
Counties and cities by MNDOT district																								
District 1	0	0%	0	0%	4	100%	4	100%	.	0	0	0%	1	25%	0	0%	1	25%	0	0%	3	75%	4	100%
District 2	1	12%	2	25%	5	62%	8	100%	\$3,010,020	1	1	12%	2	25%	2	25%	4	50%	0	0%	4	50%	8	100%
District 3	0	0%	1	33%	2	67%	3	100%	.	0	0	0%	1	33%	1	33%	0	0%	0	0%	1	33%	3	100%
District 4	1	17%	2	33%	3	50%	6	100%	\$1,000,000	1	3	50%	3	50%	3	50%	3	50%	0	0%	3	50%	6	100%
Metro	0	0%	1	25%	3	75%	4	100%	.	0	2	50%	2	50%	1	25%	1	25%	1	25%	1	25%	4	100%
District 6	0	0%	1	20%	4	80%	5	100%	.	0	0	0%	2	40%	0	0%	0	0%	0	0%	3	60%	5	100%
District 7	0	0%	0	0%	3	100%	3	100%	.	0	2	67%	2	67%	2	67%	2	67%	0	0%	1	33%	3	100%
District 8	0	0%	1	33%	2	67%	3	100%	.	0	0	0%	1	33%	0	0%	0	0%	1	33%	1	33%	3	100%

23F. - Other. Which other information about SOLID WASTE FACILITIES is included in your asset inventory?

	N	%
Other	1	100%
N of respondents	1	100%

23G. Please indicate any asset management system you use to operate, maintain, and improve SOLID WASTE FACILITIES in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	10	37%	0	0%	0	0%	0	0%	0	0%	0	0%	4	15%
Cities with less than 5,000 residents (1)	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%
Cities with 5,000 or more residents (2)	3	43%	0	0%	0	0%	0	0%	0	0%	0	0%	1	14%
Counties	6	40%	0	0%	0	0%	0	0%	0	0%	0	0%	2	13%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%
5,000-19,999 residents	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	6	46%	0	0%	0	0%	0	0%	0	0%	0	0%	2	15%
Counties and cities by MNDOT district														
District 1	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	2	50%
District 3	3	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	2	67%
District 8	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

23G. Please indicate any asset management system you use to operate, maintain, and improve SOLID WASTE FACILITIES in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

23G. Please indicate any asset management system you use to operate, maintain, and improve SOLID WASTE FACILITIES in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	2	7%	0	0%	0	0%	5	19%	9	33%	2	7%	27
Cities with less than 5,000 residents (1)	1	20%	0	0%	0	0%	0	0%	2	40%	0	0%	5
Cities with 5,000 or more residents (2)	1	14%	0	0%	0	0%	2	29%	2	29%	0	0%	7
Counties	0	0%	0	0%	0	0%	3	20%	5	33%	2	13%	15
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	1	20%	0	0%	0	0%	0	0%	2	40%	0	0%	5
5,000-19,999 residents	0	0%	0	0%	0	0%	2	50%	2	50%	0	0%	4
20,000-49,999 residents	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	3
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	3	23%	5	38%	0	0%	13
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%	2
District 2	0	0%	0	0%	0	0%	2	50%	2	50%	0	0%	4
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
District 4	1	20%	0	0%	0	0%	1	20%	3	60%	0	0%	5
Metro	1	25%	0	0%	0	0%	0	0%	0	0%	1	25%	4
District 6	0	0%	0	0%	0	0%	0	0%	2	67%	1	33%	3
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
District 8	0	0%	0	0%	0	0%	2	67%	1	33%	0	0%	3

24B. Are NATURAL GAS NETWORKS in [JURISDICTION] mapped?

	Yes, the natural gas network is fully mapped		Yes, the natural gas network is partially mapped		No, the natural gas network is not mapped		Total
	N	%	N	%	N	%	N
All survey respondents	7	27%	4	15%	15	58%	26
Cities with less than 5,000 residents (1)	4	31%	1	8%	8	62%	13
Cities with 5,000 or more residents (2)	2	22%	1	11%	6	67%	9
Counties	1	25%	2	50%	1	25%	4
State agencies (3)	0	0%	0	0%	0	0%	0
Cities by population							
Less than 5,000 residents	4	31%	1	8%	8	62%	13
5,000-19,999 residents	1	25%	1	25%	2	50%	4
20,000-49,999 residents	1	20%	0	0%	4	80%	5
50,000 or more residents	0	0%	0	0%	0	0%	0
Counties by geography							
Seven-county Twin Cities metro (4)	1	100%	0	0%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	67%	1	33%	3
Counties and cities by MNDOT district							
District 1	0	0%	0	0%	1	100%	1
District 2	1	50%	1	50%	0	0%	2
District 3	0	0%	0	0%	0	0%	0
District 4	1	25%	2	50%	1	25%	4
Metro	2	18%	0	0%	9	82%	11
District 6	2	100%	0	0%	0	0%	2
District 7	0	0%	0	0%	3	100%	3
District 8	1	33%	1	33%	1	33%	3

24C. In what software program are NATURAL GAS NETWORKS in [JURISDICTION] mapped?

	GIS only		CAD only		Both GIS and CAD		Neither of the above		Total
	N	%	N	%	N	%	N	%	N
All survey respondents	3	27%	4	36%	3	27%	1	9%	11
Cities with less than 5,000 residents (1)	1	20%	3	60%	0	0%	1	20%	5
Cities with 5,000 or more residents (2)	2	67%	0	0%	1	33%	0	0%	3
Counties	0	0%	1	33%	2	67%	0	0%	3
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0
Cities by population									
Less than 5,000 residents	1	20%	3	60%	0	0%	1	20%	5
5,000-19,999 residents	1	50%	0	0%	1	50%	0	0%	2
20,000-49,999 residents	1	100%	0	0%	0	0%	0	0%	1
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0
Counties by geography									
Seven-county Twin Cities metro (4)	0	0%	0	0%	1	100%	0	0%	1
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	1	50%	1	50%	0	0%	2
Counties and cities by MNDOT district									
District 1	0	0%	0	0%	0	0%	0	0%	0
District 2	0	0%	1	50%	1	50%	0	0%	2
District 3	0	0%	0	0%	0	0%	0	0%	0
District 4	0	0%	3	100%	0	0%	0	0%	3
Metro	1	50%	0	0%	1	50%	0	0%	2
District 6	2	100%	0	0%	0	0%	0	0%	2
District 7	0	0%	0	0%	0	0%	0	0%	0
District 8	0	0%	0	0%	1	50%	1	50%	2

24D., 24E., & 24F. Value and other information about NATURAL GAS NETWORKS.

	24D. Do you know the value of NATURAL GAS NETWORKS in [JURISDICTION]?								24E. What is the value of all NATURAL GAS NETWORKS in your [JURISDICTION]?		24F. Which other information about NATURAL GAS NETWORKS is included in your asset inventory? (Check all that apply)													
	Yes, we know the value of the entire natural gas network		Yes, we know the value of some but not the entire natural gas network		No, we do not know the value of the natural gas network		Total		Value (sum)	N	Condition		Age		Material		Size		Other information		None selected		Total	
	N	%	N	%	N	%	N	%			N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	3	12%	4	17%	17	71%	24	100%	\$15,075,909	3	3	12%	7	28%	7	28%	8	32%	2	8%	14	56%	25	100%
Cities with less than 5,000 residents (1)	2	17%	2	17%	8	67%	12	100%	\$11,300,919	2	2	17%	3	25%	4	33%	4	33%	1	8%	7	58%	12	100%
Cities with 5,000 or more residents (2)	1	11%	0	0%	8	89%	9	100%	\$3,774,990	1	1	11%	1	11%	1	11%	2	22%	1	11%	6	67%	9	100%
Counties	0	0%	2	67%	1	33%	3	100%	.	0	0	0%	3	75%	2	50%	2	50%	0	0%	1	25%	4	100%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population																								
Less than 5,000 residents	2	17%	2	17%	8	67%	12	100%	\$11,300,919	2	2	17%	3	25%	4	33%	4	33%	1	8%	7	58%	12	100%
5,000-19,999 residents	1	25%	0	0%	3	75%	4	100%	\$3,774,990	1	1	25%	1	25%	1	25%	2	50%	0	0%	2	50%	4	100%
20,000-49,999 residents	0	0%	0	0%	5	100%	5	100%	.	0	0	0%	0	0%	0	0%	0	0%	1	20%	4	80%	5	100%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography																								
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	1	100%	1	100%	1	100%	0	0%	0	0%	1	100%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	2	67%	1	33%	3	100%	.	0	0	0%	2	67%	1	33%	1	33%	0	0%	1	33%	3	100%
Counties and cities by MNDOT district																								
District 1	0	0%	0	0%	1	100%	1	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%
District 2	0	0%	2	100%	0	0%	2	100%	.	0	0	0%	1	50%	1	50%	1	50%	0	0%	0	0%	2	100%
District 3	0	0%	0	0%	0	0%	0	0%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	2	50%	1	25%	1	25%	4	100%	\$11,300,919	2	1	25%	3	75%	3	75%	3	75%	0	0%	1	25%	4	100%
Metro	1	11%	0	0%	8	89%	9	100%	\$3,774,990	1	1	10%	2	20%	2	20%	2	20%	2	20%	6	60%	10	100%
District 6	0	0%	1	50%	1	50%	2	100%	.	0	1	50%	1	50%	1	50%	1	50%	0	0%	1	50%	2	100%
District 7	0	0%	0	0%	3	100%	3	100%	.	0	0	0%	0	0%	0	0%	0	0%	0	0%	3	100%	3	100%
District 8	0	0%	0	0%	3	100%	3	100%	.	0	0	0%	0	0%	0	0%	1	33%	0	0%	2	67%	3	100%

24G. Please indicate any asset management system you use to operate, maintain, and improve NATURAL GAS NETWORKS in [JURISDICTION].

	No asset management system		Agile Assets		Cartegraph		City Services		CityWorks		Element FX		ESRI GIS database	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	12	67%	0	0%	0	0%	0	0%	1	6%	0	0%	1	6%
Cities with less than 5,000 residents (1)	6	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	5	71%	0	0%	0	0%	0	0%	0	0%	0	0%	1	14%
Counties	1	50%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	6	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%
20,000-49,999 residents	3	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	1	50%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	6	75%	0	0%	0	0%	0	0%	0	0%	0	0%	1	12%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

24G. Please indicate any asset management system you use to operate, maintain, and improve NATURAL GAS NETWORKS in [JURISDICTION].

	Icon		Infor EAM		InfraSeek		MapFeeder		Maximo		MnDOT SIMS		Mpower Innovations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
All survey respondents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Cities by population														
Less than 5,000 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties by geography														
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Counties and cities by MNDOT district														
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
District 8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

24G. Please indicate any asset management system you use to operate, maintain, and improve NATURAL GAS NETWORKS in [JURISDICTION].

	PubWorks		Simple Signs		VueWorks		MS Excel		Pencil and paper		Other system		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	0	0%	0	0%	0	0%	2	11%	2	11%	1	6%	18
Cities with less than 5,000 residents (1)	0	0%	0	0%	0	0%	1	11%	1	11%	1	11%	9
Cities with 5,000 or more residents (2)	0	0%	0	0%	0	0%	0	0%	1	14%	0	0%	7
Counties	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	2
State agencies (3)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Cities by population													
Less than 5,000 residents	0	0%	0	0%	0	0%	1	11%	1	11%	1	11%	9
5,000-19,999 residents	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%	4
20,000-49,999 residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3
50,000 or more residents	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Counties by geography													
Seven-county Twin Cities metro (4)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with 60,000 or more residents (5)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
Greater MN - Counties with less than 60,000 residents (6)	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	2
Counties and cities by MNDOT district													
District 1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
District 2	0	0%	0	0%	0	0%	1	50%	1	50%	0	0%	2
District 3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 4	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	2
Metro	0	0%	0	0%	0	0%	0	0%	0	0%	1	12%	8
District 6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0
District 7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2
District 8	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%	3

26A1. How important is the ease of using the system when deciding which asset management system(s) to use?

	Extremely important		Somewhat Important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	197	89%	24	11%	0	0%	221
Cities with less than 5,000 residents (1)	63	85%	11	15%	0	0%	74
Cities with 5,000 or more residents (2)	78	89%	10	11%	0	0%	88
Counties	54	95%	3	5%	0	0%	57
State agencies (3)	2	100%	0	0%	0	0%	2
Cities by population							
Less than 5,000 residents	63	85%	11	15%	0	0%	74
5,000-19,999 residents	48	87%	7	13%	0	0%	55
20,000-49,999 residents	22	92%	2	8%	0	0%	24
50,000 or more residents	8	89%	1	11%	0	0%	9
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	5	83%	1	17%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	45	96%	2	4%	0	0%	47
Counties and cities by MNDOT district							
District 1	14	88%	2	12%	0	0%	16
District 2	14	93%	1	7%	0	0%	15
District 3	29	91%	3	9%	0	0%	32
District 4	16	84%	3	16%	0	0%	19
Metro	66	92%	6	8%	0	0%	72
District 6	19	83%	4	17%	0	0%	23
District 7	21	84%	4	16%	0	0%	25
District 8	16	94%	1	6%	0	0%	17

26A2. How important is the cost of the system when deciding which asset management system(s) to use?

	Extremely important		Somewhat Important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	135	62%	79	36%	4	2%	218
Cities with less than 5,000 residents (1)	57	77%	17	23%	0	0%	74
Cities with 5,000 or more residents (2)	46	53%	38	44%	3	3%	87
Counties	32	58%	22	40%	1	2%	55
State agencies (3)	0	0%	2	100%	0	0%	2
Cities by population							
Less than 5,000 residents	57	77%	17	23%	0	0%	74
5,000-19,999 residents	31	56%	21	38%	3	5%	55
20,000-49,999 residents	13	57%	10	43%	0	0%	23
50,000 or more residents	2	22%	7	78%	0	0%	9
Counties by geography							
Seven-county Twin Cities metro (4)	2	67%	1	33%	0	0%	3
Greater MN - Counties with 60,000 or more residents (5)	3	50%	3	50%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	27	59%	18	39%	1	2%	46
Counties and cities by MNDOT district							
District 1	9	56%	7	44%	0	0%	16
District 2	12	80%	3	20%	0	0%	15
District 3	21	66%	8	25%	3	9%	32
District 4	9	50%	9	50%	0	0%	18
Metro	43	61%	27	39%	0	0%	70
District 6	13	57%	10	43%	0	0%	23
District 7	16	64%	9	36%	0	0%	25
District 8	12	71%	4	24%	1	6%	17

26A3. How important is the ability of the system to handle multiple asset types when deciding which asset management system(s) to use?

	Extremely important		Somewhat important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	120	55%	92	42%	8	4%	220
Cities with less than 5,000 residents (1)	30	41%	40	55%	3	4%	73
Cities with 5,000 or more residents (2)	62	70%	26	30%	0	0%	88
Counties	26	46%	26	46%	5	9%	57
State agencies (3)	2	100%	0	0%	0	0%	2
Cities by population							
Less than 5,000 residents	30	41%	40	55%	3	4%	73
5,000-19,999 residents	37	67%	18	33%	0	0%	55
20,000-49,999 residents	18	75%	6	25%	0	0%	24
50,000 or more residents	7	78%	2	22%	0	0%	9
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	2	33%	4	67%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	20	43%	22	47%	5	11%	47
Counties and cities by MNDOT district							
District 1	7	44%	9	56%	0	0%	16
District 2	7	47%	7	47%	1	7%	15
District 3	15	47%	17	53%	0	0%	32
District 4	6	32%	11	58%	2	11%	19
Metro	49	68%	22	31%	1	1%	72
District 6	12	52%	10	43%	1	4%	23
District 7	14	56%	9	36%	2	8%	25
District 8	8	50%	7	44%	1	6%	16

26A4. How important is the length of time necessary to set up the system when deciding which asset management system(s) to use?

	Extremely important		Somewhat Important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	93	42%	122	55%	7	3%	222
Cities with less than 5,000 residents (1)	26	35%	45	61%	3	4%	74
Cities with 5,000 or more residents (2)	36	41%	49	56%	3	3%	88
Counties	31	53%	26	45%	1	2%	58
State agencies (3)	0	0%	2	100%	0	0%	2
Cities by population							
Less than 5,000 residents	26	35%	45	61%	3	4%	74
5,000-19,999 residents	21	38%	32	58%	2	4%	55
20,000-49,999 residents	11	46%	13	54%	0	0%	24
50,000 or more residents	4	44%	4	44%	1	11%	9
Counties by geography							
Seven-county Twin Cities metro (4)	1	25%	3	75%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	4	67%	2	33%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	26	54%	21	44%	1	2%	48
Counties and cities by MNDOT district							
District 1	5	31%	9	56%	2	12%	16
District 2	7	47%	7	47%	1	7%	15
District 3	15	45%	17	52%	1	3%	33
District 4	7	37%	12	63%	0	0%	19
Metro	26	36%	44	61%	2	3%	72
District 6	12	52%	11	48%	0	0%	23
District 7	12	48%	13	52%	0	0%	25
District 8	9	53%	7	41%	1	6%	17

26A5. How important is whether the system requires the assistance of an outside consultant to implement and/or use when deciding which asset management system(s) to use?

	Extremely important		Somewhat Important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	81	37%	119	54%	20	9%	220
Cities with less than 5,000 residents (1)	32	44%	37	51%	4	5%	73
Cities with 5,000 or more residents (2)	25	28%	49	56%	14	16%	88
Counties	24	42%	31	54%	2	4%	57
State agencies (3)	0	0%	2	100%	0	0%	2
Cities by population							
Less than 5,000 residents	32	44%	37	51%	4	5%	73
5,000-19,999 residents	17	31%	25	45%	13	24%	55
20,000-49,999 residents	6	25%	18	75%	0	0%	24
50,000 or more residents	2	22%	6	67%	1	11%	9
Counties by geography							
Seven-county Twin Cities metro (4)	2	50%	1	25%	1	25%	4
Greater MN - Counties with 60,000 or more residents (5)	3	50%	3	50%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	19	40%	27	57%	1	2%	47
Counties and cities by MNDOT district							
District 1	5	31%	9	56%	2	12%	16
District 2	8	53%	7	47%	0	0%	15
District 3	19	59%	10	31%	3	9%	32
District 4	6	32%	12	63%	1	5%	19
Metro	20	28%	42	58%	10	14%	72
District 6	8	35%	13	57%	2	9%	23
District 7	7	28%	17	68%	1	4%	25
District 8	8	50%	7	44%	1	6%	16

26A6. How important is having adequate staff skills and capacity to implement and use the system when deciding which asset management system(s) to use?

	Extremely important		Somewhat important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	163	74%	56	25%	2	1%	221
Cities with less than 5,000 residents (1)	50	68%	22	30%	1	1%	73
Cities with 5,000 or more residents (2)	64	73%	24	27%	0	0%	88
Counties	47	81%	10	17%	1	2%	58
State agencies (3)	2	100%	0	0%	0	0%	2
Cities by population							
Less than 5,000 residents	50	68%	22	30%	1	1%	73
5,000-19,999 residents	36	65%	19	35%	0	0%	55
20,000-49,999 residents	20	83%	4	17%	0	0%	24
50,000 or more residents	8	89%	1	11%	0	0%	9
Counties by geography							
Seven-county Twin Cities metro (4)	4	100%	0	0%	0	0%	4
Greater MN - Counties with 60,000 or more residents (5)	4	67%	2	33%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	39	81%	8	17%	1	2%	48
Counties and cities by MNDOT district							
District 1	13	81%	3	19%	0	0%	16
District 2	11	73%	4	27%	0	0%	15
District 3	25	76%	8	24%	0	0%	33
District 4	13	68%	5	26%	1	5%	19
Metro	56	78%	15	21%	1	1%	72
District 6	13	57%	10	43%	0	0%	23
District 7	19	76%	6	24%	0	0%	25
District 8	11	69%	5	31%	0	0%	16

26A7. How important is the ability for the system to interact with other databases when deciding which asset management system(s) to use?

	Extremely important		Somewhat Important		Not at all important		Total
	N	%	N	%	N	%	N
All survey respondents	93	43%	110	51%	13	6%	216
Cities with less than 5,000 residents (1)	20	27%	46	63%	7	10%	73
Cities with 5,000 or more residents (2)	44	50%	40	45%	4	5%	88
Counties	27	51%	24	45%	2	4%	53
State agencies (3)	2	100%	0	0%	0	0%	2
Cities by population							
Less than 5,000 residents	20	27%	46	63%	7	10%	73
5,000-19,999 residents	22	40%	30	55%	3	5%	55
20,000-49,999 residents	14	58%	9	38%	1	4%	24
50,000 or more residents	8	89%	1	11%	0	0%	9
Counties by geography							
Seven-county Twin Cities metro (4)	2	100%	0	0%	0	0%	2
Greater MN - Counties with 60,000 or more residents (5)	5	83%	1	17%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	20	44%	23	51%	2	4%	45
Counties and cities by MNDOT district							
District 1	4	27%	9	60%	2	13%	15
District 2	5	33%	10	67%	0	0%	15
District 3	16	50%	14	44%	2	6%	32
District 4	6	32%	11	58%	2	11%	19
Metro	33	47%	35	50%	2	3%	70
District 6	10	43%	12	52%	1	4%	23
District 7	13	52%	9	36%	3	12%	25
District 8	4	27%	10	67%	1	7%	15

26B. On a scale of 1-5, with '1' being not very effective and '5' being very effective, how would you rate your agency's Asset Management practices overall?

	1 - Not very effective		2		3		4		5 - Very effective		Total
	N	%	N	%	N	%	N	%	N	%	N
All survey respondents	29	13%	57	26%	96	43%	34	15%	6	3%	222
Cities with less than 5,000 residents (1)	18	23%	27	35%	28	36%	5	6%	0	0%	78
Cities with 5,000 or more residents (2)	6	7%	14	16%	42	48%	21	24%	5	6%	88
Counties	5	9%	16	30%	25	46%	7	13%	1	2%	54
State agencies (3)	0	0%	0	0%	1	50%	1	50%	0	0%	2
Cities by population											
Less than 5,000 residents	18	23%	27	35%	28	36%	5	6%	0	0%	78
5,000-19,999 residents	5	9%	12	22%	24	44%	9	16%	5	9%	55
20,000-49,999 residents	1	4%	2	8%	13	54%	8	33%	0	0%	24
50,000 or more residents	0	0%	0	0%	5	56%	4	44%	0	0%	9
Counties by geography											
Seven-county Twin Cities metro (4)	0	0%	1	50%	1	50%	0	0%	0	0%	2
Greater MN - Counties with 60,000 or more residents (5)	0	0%	1	17%	4	67%	1	17%	0	0%	6
Greater MN - Counties with less than 60,000 residents (6)	5	11%	14	30%	20	43%	6	13%	1	2%	46
Counties and cities by MNDOT district											
District 1	4	27%	4	27%	6	40%	1	7%	0	0%	15
District 2	2	12%	4	24%	9	53%	2	12%	0	0%	17
District 3	7	21%	8	24%	12	36%	4	12%	2	6%	33
District 4	4	20%	2	10%	11	55%	2	10%	1	5%	20
Metro	6	9%	12	17%	30	43%	20	29%	2	3%	70
District 6	1	4%	7	30%	13	57%	2	9%	0	0%	23
District 7	4	16%	9	36%	10	40%	2	8%	0	0%	25
District 8	1	6%	11	65%	4	24%	0	0%	1	6%	17

27. Is there anything that we didn't ask about in this survey that you think is critical for implementing and using Asset Management?

	N	%
Other	13	42%
Nothing/None/No	8	26%
Challenges with cost/lack of resources	5	16%
Connect capital to maintenance operations	5	16%
Coordinate/share information/data	4	13%
Challenges with staffing	2	6%
N of respondents	31	100%

29A. What is the gap between your annual infrastructure investment needs and your available funds?

	Sum	N
All survey respondents	\$449,143,000	137
Cities with less than 5,000 residents (1)	\$28,775,000	51
Cities with 5,000 or more residents (2)	\$243,618,000	49
Counties	\$176,750,000	36
State agencies (3)	\$0	1
Cities by population		
Less than 5,000 residents	\$28,775,000	51
5,000-19,999 residents	\$39,968,000	34
20,000-49,999 residents	\$25,650,000	10
50,000 or more residents	\$178,000,000	5
Counties by geography		
Seven-county Twin Cities metro (4)	\$11,000,000	1
Greater MN - Counties with 60,000 or more residents (5)	\$47,000,000	5
Greater MN - Counties with less than 60,000 residents (6)	\$118,750,000	30
Counties and cities by MNDOT district		
District 1	\$14,125,000	9
District 2	\$43,900,000	10
District 3	\$26,550,000	22
District 4	\$44,550,000	12
Metro	\$124,078,000	37
District 6	\$148,850,000	15
District 7	\$30,400,000	21
District 8	\$16,690,000	10

Asset Management Tools and Systems Used by Small Cities

	Roads	Bridges	Transit lines	Traffic fixtures	Buildings	Drinking water	Waste water	Storm sewer	Storm ponds	Airports	Ports	Railways	Electrical	Solid waste	Natural gas	Unduplicated N of jurisdictions
No asset management system	34	4	1	32	38	28	31	33	26	3	0	7	5	1	6	55
MS Excel	25	4	0	7	13	22	23	19	11	4	0	0	4	0	1	32
Pencil and paper	18	2	0	15	17	18	18	17	4	2	0	0	4	2	1	26
ESRI GIS database	6	1	0	1	0	0	6	6	5	1	0	0	1	1	0	9
Icon	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Other system	1	0	0	0	0	3	1	1	0	1	0	0	0	0	0	5
Unknown 'other' system	3	0	0	0	0	1	3	1	0	1	0	0	2	0	1	4
CAD/AutoCAD	2	0	0	0	0	2	2	2	1	0	0	0	1	0	0	2
Other GIS system	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	2
PubWorks	1	0	0	0	1	1	1	2	1	0	0	0	0	1	0	2
Arc View	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1
Cartograph	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1
InfraSeek	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
MPower Innovations	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
PASER	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Access database	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agile Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Archibus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beehive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CityWorks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dbase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Element FX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Element XS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Famis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IMaint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Infor EAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laserfiche	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MapFeeder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MnDOT SIMS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oracle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Road Pro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RTVision	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simple Signs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VueWorks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	93	11	1	55	70	86	88	84	51	13	0	7	17	5	9	149

Asset Management Tools and Systems Used by Large Cities

	Roads	Bridges	Transit lines	Traffic fixtures	Buildings	Drinking water	Waste water	Storm sewer	Storm ponds	Airports	Ports	Railways	Electrical	Solid waste	Natural gas	Unduplicated N of jurisdictions
ESRI GIS database	43	15	2	23	20	0	43	45	47	4	0	2	15	1	1	54
MS Excel	44	16	0	21	22	34	32	30	28	9	0	0	14	2	0	54
Icon	18	1	0	2	0	42	1	0	0	0	0	0	0	0	0	51
No asset management system	8	11	2	22	30	13	15	14	14	1	2	6	8	3	5	41
Pencil and paper	18	14	0	12	18	12	17	14	13	3	0	0	7	2	1	34
Cartegraph	21	5	0	11	2	12	13	14	11	0	0	0	1	0	0	22
MnDOT SIMS	4	18	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Other system	1	2	0	1	1	0	0	2	2	1	0	0	2	0	0	8
CityWorks	3	0	0	3	2	4	3	4	3	0	0	1	2	0	0	7
City Services	2	0	0	1	0	2	3	1	1	0	0	0	1	0	0	5
Simple Signs	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
MapFeeder	2	1	0	1	1	2	2	1	1	0	0	0	1	0	0	3
Access database	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
CAD/AutoCAD	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Element FX	1	1	0	1	0	1	2	2	1	0	0	0	0	0	0	2
InfraSeek	2	0	0	1	1	1	1	1	1	0	0	0	0	0	0	2
PubWorks	2	1	0	1	1	0	0	0	0	0	0	0	0	1	0	2
SWAMP	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
Archibus	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Beehive	1	0	0	1	0	1	1	1	1	0	0	0	0	0	0	1
Element XS	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0	1
Famis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
IMaint	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Infor EAM	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Laserfiche	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Oracle	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	1
PASER	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Unknown 'other' system	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
VueWorks	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Agile Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arc View	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dbase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MPower Innovations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other GIS system	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Road Pro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RTVision	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	180	86	4	109	103	126	136	132	127	18	2	9	52	9	7	325

Asset Management Tools and Systems Used by Counties

	Roads	Bridges	Transit lines	Traffic fixtures	Buildings	Drinking water	Waste water	Storm sewer	Storm ponds	Airports	Ports	Railways	Electrical	Solid waste	Natural gas	Unduplicated N of jurisdictions
MnDOT SIMS	13	40	1	1	0	0	0	0	0	0	0	1	1	0	0	41
MS Excel	32	17	1	9	6	1	0	6	1	1	0	0	0	3	1	33
No asset management system	10	9	1	10	17	3	1	15	11	2	0	2	1	6	1	28
Pencil and paper	17	12	1	7	15	1	1	7	3	3	0	0	0	5	0	24
ESRI GIS database	16	5	0	7	1	0	1	3	2	2	0	0	0	2	0	19
Simple Signs	13	2	0	11	0	0	0	0	0	0	0	1	1	0	0	18
Icon	15	2	0	5	0	0	0	2	1	0	0	0	0	0	0	15
Unknown 'other' system	1	1	0	1	2	0	0	0	0	0	0	0	1	2	0	5
Other system	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	4
Cartegraph	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
CAD/AutoCAD	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Other GIS system	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Pontis	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Access database	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Archibus	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
City Services	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
CityWorks	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
Dbase	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
PubWorks	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Road Pro	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
RTVision	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
VueWorks	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Agile Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arc View	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beehive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Element FX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Element XS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Famis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IMaint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Infor EAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
InfraSeek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laserfiche	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MapFeeder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MPower Innovations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oracle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PASER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	126	94	4	60	43	7	5	35	18	8	0	4	4	18	3	205

Asset Management Tools and Systems Used by State Agencies (MNDOT And Met Council)

	Roads	Bridges	Transit lines	Traffic fixtures	Buildings	Drinking water	Waste water	Storm sewer	Storm ponds	Airports	Ports	Railways	Electrical	Solid waste	Natural gas	Unduplicated N of jurisdictions
MS Excel	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
Agile Assets	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Archibus	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
ESRI GIS database	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Maximo	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
MnDOT SIMS	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Oracle	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Other system	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1
Pencil and paper	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Pontis	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Access database	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arc View	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beehive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAD/AutoCAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cartegraph	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
City Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CityWorks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dbase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Element FX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Element XS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Famis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Icon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IMaint	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Infor EAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
InfraSeek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laserfiche	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MapFeeder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MPower Innovations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No asset management system	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other GIS system	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PASER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PubWorks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Road Pro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RTVission	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simple Signs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown 'other' system	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VueWorks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	2	0	2	5	0	3	1	1	0	0	0	0	0	0	11

Asset Management Tools and Systems Used by Cities, Counties, And State Agencies

	Roads	Bridges	Transit lines	Traffic fixtures	Buildings	Drinking water	Waste water	Storm sewer	Storm ponds	Airports	Ports	Railways	Electrical	Solid waste	Natural gas	Unduplicated N of jurisdictions
No asset management system	52	24	4	64	85	44	47	62	51	6	2	15	14	10	12	124
MS Excel	102	37	1	37	42	57	56	55	40	14	0	0	18	5	2	121
Pencil and paper	53	28	1	34	51	31	37	38	20	8	0	0	11	9	2	85
ESRI GIS database	66	21	2	31	21	0	50	54	54	7	0	2	16	4	1	83
Icon	33	3	0	7	0	49	1	2	1	0	0	0	0	0	0	73
MnDOT SIMS	18	59	1	1	0	0	0	0	0	0	0	1	1	0	0	61
Cartegraph	24	5	0	14	2	13	14	15	12	0	0	0	1	0	0	26
Simple Signs	15	2	0	15	0	0	0	0	0	0	0	1	1	0	0	22
Other system	5	4	0	2	2	3	1	4	3	2	0	0	2	0	0	18
Unknown 'other' system	4	1	0	2	2	1	3	1	0	1	0	0	3	2	1	10
CityWorks	3	0	0	3	2	5	4	5	3	0	0	1	2	0	1	8
CAD/AutoCAD	4	1	0	0	0	2	2	3	1	0	0	0	2	0	0	6
City Services	2	0	0	1	0	3	4	1	1	0	0	0	1	0	0	6
PubWorks	3	1	0	2	2	1	1	2	1	0	0	0	0	2	0	5
Other GIS system	1	0	0	2	1	0	0	1	1	1	0	0	0	0	0	4
Access database	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
Archibus	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
InfraSeek	3	0	0	1	1	2	2	1	1	0	0	0	0	0	0	3
MapFeeder	2	1	0	1	1	2	2	1	1	0	0	0	1	0	0	3
Pontis	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Element FX	1	1	0	1	0	1	2	2	1	0	0	0	0	0	0	2
Oracle	1	0	0	1	1	0	2	1	1	0	0	0	0	0	0	2
PASER	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
SWAMP	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
VueWorks	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Agile Assets	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Arc View	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1
Beehive	1	0	0	1	0	1	1	1	1	0	0	0	0	0	0	1
Dbase	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Element XS	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0	1
Famis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
IMaint	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Infor EAM	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Laserfiche	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Maximo	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
MPower Innovations	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Road Pro	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
RTVision	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	407	193	9	226	221	219	232	252	197	39	2	20	73	32	19	690

Appendix

Survey instrument

MN2050

State of the Infrastructure survey

Email invitation

Hi, [NAME] –

In partnership with the Minnesota Department of Transportation and the City and County Engineer Associations, Minnesota 2050 (MN2050) gathering information about public infrastructure assets, statewide.

The information you provide in this survey regarding the ways in which you manage assets in [JURISDICTION] is critical for understanding current and future infrastructure asset management needs in Minnesota. To answer questions in the survey, you will need information pertaining to:

- Which departments are involved in Asset Management in [JURISDICTION]
- Asset Management software used in [JURISDICTION]
- Whether public infrastructure assets in [JURISDICTION] are mapped, valued, and inventoried

If you are not the right person to answer questions about infrastructure asset management in [JURISDICTION], please forward this email to the right person if you know who it is, or contact Ryan Evans (info below) if you are not sure who the right person is to take this survey for [JURISDICTION]. We only want one completed survey per jurisdiction.

Click here to complete the survey: (insert URL here). Please complete the survey by Tuesday, June 23.

MN2050 (MN2050.org) is a coalition of partners comprising engineering and infrastructure professional organizations working in the public, private, and educational sectors and striving to provide Minnesota citizens with dependable infrastructure that meets the needs of the 21st century. The mission of MN2050 is to educate Minnesota citizens about the importance of investing in public infrastructure. Among the goals of MN2050 is gaining up-to-date knowledge from professionals regarding the public infrastructure assets throughout Minnesota.

If you have any questions regarding this survey, please contact Ryan Evans at ryan.evans@wilder.org or 651.280.2677.

For cities (greater than 5k)

Klayton Eckles

City of Woodbury

City Engineers Association of Minnesota president

For counties
John Welle
Aitkin County
Minnesota County Engineers Association president

For cities (less than 5k)
Tom Eggum
MN2050

Survey introduction

Thank you in advance for completing this survey. If you are completing this survey, you should have a working understanding of how public infrastructure assets are managed in [JURISDICTION]. The intent of this survey is to learn how agencies are managing their assets; however, many agencies in Minnesota effectively manage their public infrastructure assets without a formal asset management plan or using asset management software.

If you are not the right person to answer questions about infrastructure asset management in [JURISDICTION], please forward the email with the survey invitation and link to the right person if you know who it is, or contact Ryan Evans from Wilder Research at ryan.evans@wilder.org if you are not sure who the right person is to take this survey for [JURISDICTION]. We only want one completed survey per jurisdiction.

For this survey, “public infrastructure assets” refers to roads, bridges, transit lines, traffic fixtures, buildings, water pipes, sanitary sewers, storm sewers, storm ponds, airports, ports, railways, electrical systems, solid waste facilities, and natural gas networks.

For this survey, Asset Management is a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on engineering and economic analysis based upon quality and quantitative information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost.

An Asset Management Plan (AMP) is a strategy developed to cost-effectively manage all of an agency’s infrastructure to an agreed level of performance over the life cycle of the assets.

Because our mission is to educate the public, aggregated results of this survey will be made available on the MN2050 website. We also will use survey results in a research project involving MnDOT, MN2050, the University of Minnesota, and interested state agencies.

You can stop the survey and start again at any time. By clicking on the link your email it will pick up right where you left off.

If you have any questions regarding this survey, please contact Ryan Evans at ryan.evans@wilder.org or 651.280.2677. If you are having technical problems with this web survey, please contact Dan Swanson at dan.swanson@wilder.org or 651-280-2712.

Please only use the buttons below to move through the survey, not your browser's Forward or Back buttons.

INFRASTRUCTURE MANAGEMENT OVERVIEW

1. Does your organization use Asset Management practices to operate, maintain, and extend the life of infrastructure assets in [JURISDICTION]?

For this survey, Asset Management is a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on engineering and economic analysis based upon quality and quantitative information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost.

- ¹ Yes
² No (SKIP TO Q3)

- 1A. From [JURISDICTION], who participates at any level in Asset Management? Mark all that apply.

- ¹ Engineering personnel
² Finance personnel
³ GIS personnel
⁴ Data Processing personnel
⁵ Planning personnel
⁶ Other personnel – please specify department: _____

- 1B. Which department leads Asset Management at [JURISDICTION]?

- ¹ Engineering
² Finance
³ GIS
⁴ Data Processing
⁵ Planning
⁶ Other – please specify department: _____

- 1C. What are the top 1-2 reasons that your jurisdiction practices Asset Management?

2. Does [JURISDICTION] have an Asset Management Plan?

- ¹ Yes, we have completed a plan
² We have started a plan, but it is not completed
³ No, but we are currently looking considering implementing a plan
⁴ No, we have not considered or started a plan

3. Does [JURISDICTION] use the GASB34 (Government Accounting Standards Board No. 34) to report infrastructure assets?
- ¹ Yes
- ² No (At survey completion, provide this link: <http://www.gasb.org/st/summary/gstsm34.html>)
- ⁻⁸ I don't know and/or am not familiar with the GASB34
4. Does [JURISDICTION] use the ISO 55000 (International Organization for Standardization 55000) to provide a lifecycle management of infrastructure assets?
- ¹ Yes
- ² No (At survey completion, provide this link:
http://www.iso.org/iso/catalogue_detail?csnumber=55088)
- ⁻⁸ I don't know and/or am not familiar with the ISO 55000
5. Are you aware of the MAP-21 asset management requirements? MAP-21 stands for "Moving Ahead for Progress in the 21st Century," and refers to the Federal Highway System requirement for each state to develop a risk-based asset management plan for improvement of state assets and infrastructure system.
- ¹ Yes
- ² No (At survey completion, provide this link:
<http://www.fhwa.dot.gov/map21/qandas/qaassetmgmt.cfm>)
- ⁻⁸ I don't know and/or am not familiar with the MAP-21
6. Does [JURISDICTION] create as-built drawings after infrastructure construction or repair projects?
- ¹ Yes, for **all** construction and repair projects
- ² Yes, for **some** construction and repair projects
- ³ No
7. Does [JURISDICTION] participate in an Asset Management countywide or other consortium?
- ¹ Yes
- ² No

INDIVIDUAL ASSET INVENTORY TYPES

8. Which of the following infrastructure assets do you have in [JURISDICTION]?

Please select all that apply.

- ¹ Roads
- ² Bridges
- ³ Transit lines
- ⁴ Traffic fixtures (signs, signals, lights, etc.)
- ⁵ Buildings
- ⁶ Water supply and distribution pipes (water pipes)
- ⁷ Waste water collection and treatment (sanitary sewers)
- ⁸ Storm sewers
- ⁹ Storm ponds
- ¹⁰ Airports
- ¹¹ Ports (i.e., for watercraft)
- ¹² Railways (for freight or transit)
- ¹³ Electrical systems
- ¹⁴ Solid waste facilities
- ¹⁵ Natural gas network

9A. Are there any other types of public infrastructure assets that are managed by [JURISDICTION]?

- ¹ Yes
- ² No (SKIP TO Q10B)

9B. What other type of public infrastructure assets are included in [JURISDICTION]? Please specify: _____

NOTE: The following series of questions (i.e., Q10B-10G) are asked for each asset type selected in Q8. For instance, if a respondent selects "Bridges" in Q8, Q11B will read: "Are bridges in [JURISDICTION] mapped?"

Roads

This section of the survey focuses on roads in [JURISDICTION].

Mapped

10B. Are roads in [JURISDICTION] mapped?

- ¹ Yes, roads are **fully** mapped
- ² Yes, roads are **partially** mapped
- ³ No, roads are not mapped (SKIP TO Q10D)

10C. In what software program are roads in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

10D. Do you know the value of roads in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** roads
- ² Yes, we know the value of **some but not all** roads (SKIP TO Q10F)
- ³ No, we do not know the value of any roads (SKIP TO Q10F)

10E. What is the value of all roads in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

10F. Which other information about roads is included in your asset inventory? Mark all that apply.

- ¹ Condition of roads in our jurisdiction
- ² Age of roads in our jurisdiction
- ³ Material of roads in our jurisdiction
- ⁴ Size of roads in our jurisdiction
- ⁵ Our inventory includes other information about roads. Please specify: _____

System

10G. Please indicate any asset management system you use to operate, maintain, and improve roads in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for roads in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Bridges

This section of the survey focuses on bridges in [JURISDICTION].

Mapped

11B. Are bridges in [JURISDICTION] mapped?

- ¹ Yes, bridges are **fully** mapped
- ² Yes, bridges are **partially** mapped
- ³ No, bridges are not mapped (SKIP TO Q11D)

11C. In what software program are bridges in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

11D. Do you know the value of bridges in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** bridges
- ² Yes, we know the value of **some but not all** bridges (SKIP TO Q11F)
- ³ No, we do not know the value of any bridges (SKIP TO Q11F)

11E. What is the value of all bridges in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

11F. Which other information about bridges is included in your asset inventory? Mark all that apply.

- ¹ Condition of bridges in our jurisdiction
- ² Age of bridges in our jurisdiction
- ³ Material of bridges in our jurisdiction
- ⁴ Size of bridges in our jurisdiction
- ⁵ Our inventory includes other information about bridges. Please specify: _____

System

11G. Please indicate any asset management system you use to operate, maintain, and improve bridges in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for bridges in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services

- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Transit lines

This section of the survey focuses on transit lines in [JURISDICTION].

Mapped

12B. Are transit lines in [JURISDICTION] mapped?

- ¹ Yes, transit lines are **fully** mapped
- ² Yes, transit lines are **partially** mapped
- ³ No, transit lines are not mapped (SKIP TO Q12D)

12C. In what software program are transit lines in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

12D. Do you know the value of transit lines in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** transit lines
- ² Yes, we know the value of **some but not all** transit lines (SKIP TO Q12F)
- ³ No, we do not know the value of any transit lines (SKIP TO Q12F)

11E. What is the value of all transit lines in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

12F. Which other information about transit lines is included in your asset inventory? Mark all that apply.

- ¹ Condition of transit lines in our jurisdiction
- ² Age of transit lines in our jurisdiction
- ³ Material of transit lines in our jurisdiction
- ⁴ Size of transit lines in our jurisdiction
- ⁵ Our inventory includes other information about transit lines. Please specify: _____

System

12G. Please indicate any asset management system you use to operate, maintain, and improve transit lines in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for transit lines in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Traffic fixtures

This section of the survey focuses on traffic fixtures in [JURISDICTION].

Mapped

13B. Are traffic fixtures in [JURISDICTION] mapped?

- ¹ Yes, traffic fixtures are **fully** mapped
- ² Yes, traffic fixtures are **partially** mapped
- ³ No, traffic fixtures are not mapped (SKIP TO Q13D)

13C. In what software program are traffic fixtures in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

13D. Do you know the value of traffic fixtures in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** traffic fixtures
- ² Yes, we know the value of **some but not all** traffic fixtures (SKIP TO Q13F)
- ³ No, we do not know the value of any traffic fixtures (SKIP TO Q13F)

13E. What is the value of all traffic fixtures in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

13F. Which other information about traffic fixtures is included in your asset inventory? Mark all that apply.

- ¹ Condition of traffic fixtures in our jurisdiction
- ² Age of traffic fixtures in our jurisdiction
- ³ Material of traffic fixtures in our jurisdiction
- ⁴ Size of traffic fixtures in our jurisdiction
- ⁵ Our inventory includes other information about traffic fixtures. Please specify: _____

System

13G. Please indicate any asset management system you use to operate, maintain, and improve traffic fixtures in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for traffic fixtures in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations

- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Buildings

This section of the survey focuses on buildings in [JURISDICTION].

Mapped

14B. Are buildings in [JURISDICTION] mapped?

- ¹ Yes, buildings are **fully** mapped
- ² Yes, buildings are **partially** mapped
- ³ No, buildings are not mapped (SKIP TO Q14D)

14C. In what software program are buildings in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

14D. Do you know the value of buildings in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** buildings
- ² Yes, we know the value of **some but not all** buildings (SKIP TO Q14F)
- ³ No, we do not know the value of any buildings (SKIP TO Q14F)

14E. What is the value of all buildings in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

14F. Which other information about buildings is included in your asset inventory? Mark all that apply.

- ¹ Condition of buildings in our jurisdiction
- ² Age of buildings in our jurisdiction
- ³ Material of buildings in our jurisdiction
- ⁴ Size of buildings in our jurisdiction
- ⁵ Our inventory includes other information about buildings. Please specify: _____

System

14G. Please indicate any asset management system you use to operate, maintain, and improve buildings in [JURISDICTION]. Mark all that apply.

- ¹ We are not using any asset management system for buildings in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Water supply and distribution pipes

This section of the survey focuses on water supply and distribution pipes in [JURISDICTION].

Mapped

15B. Are water supply and distribution pipes in [JURISDICTION] mapped?

- ¹ Yes, water supply and distribution pipes are **fully** mapped
- ² Yes, water supply and distribution pipes are **partially** mapped
- ³ No, water supply and distribution pipes are not mapped (SKIP TO Q15D)

15C. In what software program are water supply and distribution pipes in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

15D. Do you know the value of water supply and distribution pipes in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** water supply and distribution pipes
- ² Yes, we know the value of **some but not all** water supply and distribution pipes (SKIP TO Q15F)
- ³ No, we do not know the value of any water supply and distribution pipes (SKIP TO Q15F)

15E. What is the value of all water supply and distribution pipes in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

15F. Which other information about water supply and distribution pipes is included in your asset inventory? Mark all that apply.

- ¹ Condition of water supply and distribution pipes in our jurisdiction
- ² Age of water supply and distribution pipes in our jurisdiction
- ³ Material of water supply and distribution pipes in our jurisdiction
- ⁴ Size of water supply and distribution pipes in our jurisdiction
- ⁵ Our inventory includes other information about water supply and distribution pipes. Please specify: _____

System

15G. Please indicate any asset management system you use to operate, maintain, and improve water supply and distribution pipes in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for water supply and distribution pipes in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations

- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Waste water and treatment assets

This section of the survey focuses on waste water and treatment assets in [JURISDICTION].

Mapped

16B. Are waste water and treatment assets in [JURISDICTION] mapped?

- ¹ Yes, waste water and treatment assets are **fully** mapped
- ² Yes, waste water and treatment assets are **partially** mapped
- ³ No, waste water and treatment assets are not mapped (SKIP TO Q16D)

16C. In what software program are waste water and treatment assets in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

16D. Do you know the value of waste water and treatment assets in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** waste water and treatment assets
- ² Yes, we know the value of **some but not all** waste water and treatment assets (SKIP TO Q16F)
- ³ No, we do not know the value of any waste water and treatment assets (SKIP TO Q16F)

16E. What is the value of all waste water and treatment assets in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

16F. Which other information about waste water and treatment assets is included in your asset inventory? Mark all that apply.

- ¹ Condition of waste water and treatment assets in our jurisdiction
- ² Age of waste water and treatment assets in our jurisdiction
- ³ Material of waste water and treatment assets in our jurisdiction

- ⁴ Size of waste water and treatment assets in our jurisdiction
- ⁵ Our inventory includes other information about waste water and treatment assets. Please specify: _____

System

16G. Please indicate any asset management system you use to operate, maintain, and improve waste water and treatment assets in [JURISDICTION]. Mark all that apply.

- ¹ We are not using any asset management system for waste water and treatment assets in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Storm sewers

This section of the survey focuses on storm sewers in [JURISDICTION].

Mapped

17B. Are storm sewers in [JURISDICTION] mapped?

- ¹ Yes, storm sewers are **fully** mapped
- ² Yes, storm sewers are **partially** mapped
- ³ No, storm sewers are not mapped (SKIP TO Q17D)

17C. In what software program are storm sewers in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

17D. Do you know the value of storm sewers in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** storm sewers
- ² Yes, we know the value of **some but not all** storm sewers (SKIP TO Q17F)
- ³ No, we do not know the value of any storm sewers (SKIP TO Q17F)

17E. What is the value of all storm sewers in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

17F. Which other information about storm sewers is included in your asset inventory? Mark all that apply.

- ¹ Condition of storm sewers in our jurisdiction
- ² Age of storm sewers in our jurisdiction
- ³ Material of storm sewers in our jurisdiction
- ⁴ Size of storm sewers in our jurisdiction
- ⁵ Our inventory includes other information about storm sewers. Please specify: _____

System

17G. Please indicate any asset management system you use to operate, maintain, and improve storm sewers in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for storm sewers in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel

²⁰ Pencil and paper

²¹ We are using an asset management system not listed here. Please specify: _____

Storm ponds

This section of the survey focuses on storm ponds in [JURISDICTION].

Mapped

18B. Are storm ponds in [JURISDICTION] mapped?

¹ Yes, storm ponds are **fully** mapped

² Yes, storm ponds are **partially** mapped

³ No, storm ponds are not mapped (SKIP TO Q18D)

18C. In what software program are storm ponds in [JURISDICTION] mapped?

¹ GIS (Geographic Information System software)

² CAD (Computer-aided design software)

Value

18D. Do you know the value of storm ponds in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

¹ Yes, we know the value of **all** storm ponds

² Yes, we know the value of **some but not all** storm ponds (SKIP TO Q18F)

³ No, we do not know the value of any storm ponds (SKIP TO Q18F)

18E. What is the value of all storm ponds in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

18F. Which other information about storm ponds is included in your asset inventory? Mark all that apply.

¹ Condition of storm ponds in our jurisdiction

² Age of storm ponds in our jurisdiction

³ Material of storm ponds in our jurisdiction

⁴ Size of storm ponds in our jurisdiction

⁵ Our inventory includes other information about storm ponds. Please specify: _____

System

18G. Please indicate any asset management system you use to operate, maintain, and improve storm ponds in [JURISDICTION]. Mark all that apply.

- ¹ We are not using any asset management system for storm ponds in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Airports

This section of the survey focuses on airports in [JURISDICTION].

Mapped

19B. Are airports in [JURISDICTION] mapped?

- ¹ Yes, airports are **fully** mapped
- ² Yes, airports are **partially** mapped
- ³ No, airports are not mapped (SKIP TO Q19D)

19C. In what software program are airports in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

19D. Do you know the value of airports in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** airports

- ² Yes, we know the value of **some but not all** airports (SKIP TO Q19F)
³ No, we do not know the value of any airports (SKIP TO Q19F)

19E. What is the value of all airports in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

19F. Which other information about airports is included in your asset inventory? Mark all that apply.

- ¹ Condition of airports in our jurisdiction
² Age of airports in our jurisdiction
³ Material of airports in our jurisdiction
⁴ Size of airports in our jurisdiction
⁵ Our inventory includes other information about airports. Please specify: _____

System

19G. Please indicate any asset management system you use to operate, maintain, and improve airports in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for airports in [JURISDICTION].
² Agile Assets
³ Cartegraph
⁴ City Services
⁵ CityWorks
⁶ Element FX
⁷ ESRI GIS database
⁸ Icon
¹⁰ Infor EAM
¹¹ InfraSeek
¹² MapFeeder
¹³ Maximo
¹⁴ MnDOT SIMS
¹⁵ Mpower Innovations
¹⁶ PubWorks
¹⁷ Simple Signs
¹⁸ VueWorks
¹⁹ MS Excel
²⁰ Pencil and paper
²¹ We are using an asset management system not listed here. Please specify: _____

Ports

This section of the survey focuses on ports in [JURISDICTION].

Mapped

20B. Are ports in [JURISDICTION] mapped?

- ¹ Yes, ports are **fully** mapped
- ² Yes, ports are **partially** mapped
- ³ No, ports are not mapped (SKIP TO Q20D)

20C. In what software program are ports in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

20D. Do you know the value of ports in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** ports
- ² Yes, we know the value of **some but not all** ports (SKIP TO Q20F)
- ³ No, we do not know the value of any ports (SKIP TO Q20F)

20E. What is the value of all ports in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

20F. Which other information about ports is included in your asset inventory? Mark all that apply.

- ¹ Condition of ports in our jurisdiction
- ² Age of ports in our jurisdiction
- ³ Material of ports in our jurisdiction
- ⁴ Size of ports in our jurisdiction
- ⁵ Our inventory includes other information about ports. Please specify: _____

System

20G. Please indicate any asset management system you use to operate, maintain, and improve ports in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for ports in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services

- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Railways

This section of the survey focuses on railways in [JURISDICTION].

Mapped

21B. Are railways in [JURISDICTION] mapped?

- ¹ Yes, railways are **fully** mapped
- ² Yes, railways are **partially** mapped
- ³ No, railways are not mapped (SKIP TO Q21D)

21C. In what software program are railways in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

21D. Do you know the value of railways in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** railways
- ² Yes, we know the value of **some but not all** railways (SKIP TO Q21F)
- ³ No, we do not know the value of any railways (SKIP TO Q21F)

21E. What is the value of all railways in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

21F. Which other information about railways is included in your asset inventory? Mark all that apply.

- ¹ Condition of railways in our jurisdiction
- ² Age of railways in our jurisdiction
- ³ Material of railways in our jurisdiction
- ⁴ Size of railways in our jurisdiction
- ⁵ Our inventory includes other information about railways. Please specify: _____

System

21G. Please indicate any asset management system you use to operate, maintain, and improve railways in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for railways in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Electrical systems

This section of the survey focuses on electrical systems in [JURISDICTION].

Mapped

22B. Are electrical systems in [JURISDICTION] mapped?

- ¹ Yes, electrical systems are **fully** mapped
- ² Yes, electrical systems are **partially** mapped
- ³ No, electrical systems are not mapped (SKIP TO Q22D)

22C. In what software program are electrical systems in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

22D. Do you know the value of electrical systems in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** electrical systems
- ² Yes, we know the value of **some but not all** electrical systems (SKIP TO Q22F)
- ³ No, we do not know the value of any electrical systems (SKIP TO Q22F)

22E. What is the value of all electrical systems in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

22F. Which other information about electrical systems is included in your asset inventory? Mark all that apply.

- ¹ Condition of electrical systems in our jurisdiction
- ² Age of electrical systems in our jurisdiction
- ³ Material of electrical systems in our jurisdiction
- ⁴ Size of electrical systems in our jurisdiction
- ⁵ Our inventory includes other information about electrical systems. Please specify:

System

22G. Please indicate any asset management system you use to operate, maintain, and improve electrical systems in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for electrical systems in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS

- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Solid waste facilities

This section of the survey focuses on solid waste facilities in [JURISDICTION].

Mapped

23B. Are solid waste facilities in [JURISDICTION] mapped?

- ¹ Yes, solid waste facilities are **fully** mapped
- ² Yes, solid waste facilities are **partially** mapped
- ³ No, solid waste facilities are not mapped (SKIP TO Q23D)

23C. In what software program are solid waste facilities in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

23D. Do you know the value of solid waste facilities in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** solid waste facilities
- ² Yes, we know the value of **some but not all** solid waste facilities (SKIP TO Q23F)
- ³ No, we do not know the value of any solid waste facilities (SKIP TO Q23F)

23E. What is the value of all solid waste facilities in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

23F. Which other information about solid waste facilities is included in your asset inventory? Mark all that apply.

- ¹ Condition of solid waste facilities in our jurisdiction
- ² Age of solid waste facilities in our jurisdiction
- ³ Material of solid waste facilities in our jurisdiction
- ⁴ Size of solid waste facilities in our jurisdiction

⁵ Our inventory includes other information about solid waste facilities. Please specify:

System

23G. Please indicate any asset management system you use to operate, maintain, and improve solid waste facilities in [JURISDICTION]. Mark all that apply.

- ¹ We are not using any asset management system for solid waste facilities in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

Natural gas network

This section of the survey focuses on natural gas network in [JURISDICTION].

Mapped

24B. Are natural gas network in [JURISDICTION] mapped?

- ¹ Yes, natural gas network are **fully** mapped
- ² Yes, natural gas network are **partially** mapped
- ³ No, natural gas network are not mapped (SKIP TO Q24D)

24C. In what software program are natural gas network in [JURISDICTION] mapped?

- ¹ GIS (Geographic Information System software)
- ² CAD (Computer-aided design software)

Value

24D. Do you know the value of natural gas network in [JURISDICTION]? We understand that this information may not be readily available, and appreciate your efforts to obtain this information.

- ¹ Yes, we know the value of **all** natural gas network
- ² Yes, we know the value of **some but not all** natural gas network (SKIP TO Q24F)
- ³ No, we do not know the value of any natural gas network (SKIP TO Q24F)

24E. What is the value of all natural gas network in your jurisdiction?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

Inventory

24F. Which other information about natural gas network is included in your asset inventory? Mark all that apply.

- ¹ Condition of natural gas network in our jurisdiction
- ² Age of natural gas network in our jurisdiction
- ³ Material of natural gas network in our jurisdiction
- ⁴ Size of natural gas network in our jurisdiction
- ⁵ Our inventory includes other information about natural gas network. Please specify:

System

24G. Please indicate any asset management system you use to operate, maintain, and improve natural gas network in [JURISDICTION]. Mark all the apply.

- ¹ We are not using any asset management system for natural gas network in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks

- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here. Please specify: _____

REFLECTIONS ON ASSET MANAGEMENT

26A. (SKIP IF R DOES NOT USE A SYSTEM – SEE: Q10G-24G) Thinking of the asset management system(s) that you currently use, how important were the following factors when deciding to use that system?

	Extremely important	Somewhat Important	Not at all important
Ease of using the system	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Cost of the system	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Ability of the system to handle multiple asset types	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Length of time necessary to set up the system	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Whether the system required the assistance of an outside consultant to implement and/or use	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Having adequate staff skills and capacity to implement and use the system	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
The ability for the system to interact with other databases	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³

26B. On a scale of 1-5, with “1” being not very effective and “5” being very effective, how would you rate your agency’s Asset Management practices overall?

Not very effective					Very effective
1	2	3	4	5	

27. Is there anything that we didn’t ask about in this survey that you think is critical for implementing and using Asset Management?

29A. What is the gap between your annual infrastructure investment needs and your available funds?

\$ 0000000 (Please provide your answer as an exact dollar amount, not a range, even if it is just an estimate.)

30. In the past two years, have you completed any other Asset Management surveys?

- ¹ Yes
- ² No (SKIP TO Q31)

30A. Would you be willing to share a copy of the Asset Management survey you completed in the past two years or connect us with someone who can send us a copy?

¹ Yes → After you complete this survey, please email the other survey you took to Ryan Evans at ryan.evans@wilder.org or send any information to him about the survey.

² No

31. Would you be willing to have a short follow-up phone conversation with someone from MN2050 to talk more about this survey and [JURISDICTION]'s Asset Management practices?

¹ Yes

² No

Thank you for completing this survey!

Analysis codebook

MN 2050 Codebook

Q1A. From [JURISDICTION], who participates at any level in Asset Management?
Mark all that apply. (CODE – 3)

Precoded responses:

- ¹ Engineering personnel
- ² Finance personnel
- ³ GIS personnel
- ⁴ Data Processing personnel
- ⁵ Planning personnel
- ⁶ Other personnel – please specify department: _____

Coded responses:

- 10. Public Works
- 11. Maintenance
- 12. Administration
- 13. Utilities
- 14. Streets
- 15. Parks
- 16. City Council/Clerk

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable

Q1B. Which department leads Asset Management at [JURISDICTION]? (CODE – 1)

Precoded responses:

- ¹ Engineering
- ² Finance
- ³ GIS
- ⁴ Data Processing
- ⁵ Planning
- ⁶ Other – please specify department: _____

Coded responses:

10. Public Works
11. Administration
12. Split up by individual departments
13. City Council/Clerk/Manager

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable

Q1C. What are the top 1-2 reasons that your jurisdiction practices Asset Management?
(CODE – 2)

Coded responses:

10. Planning (non-specific)
11. Budgeting/cost-effectiveness/Capital Improvement Planning
12. Prioritizing maintenance/efficiency/better maintenance
13. Operational needs (non-specific)
14. Asset preservation/maintain infrastructure/extend life of assets
15. Tracking/mapping/documentation of assets and asset condition
16. Audit requirements/reporting

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable

Q9B. What other type of public infrastructure assets are included in [JURISDICTION]?
Please specify: (CODE – 3)

[Response options from Q8 for back coding]

- ¹ Airports
- ² Bridges
- ³ Transit lines
- ⁴ Traffic fixtures (signs, signals, lights, etc.)
- ⁵ Buildings
- ⁶ Water supply and distribution pipes (water pipes)
- ⁷ Waste water collection and treatment (sanitary sewers)
- ⁸ Storm sewers
- ⁹ Storm ponds
- ¹⁰ Airports
- ¹¹ Ports (i.e., for watercraft)
- ¹² Railways (for freight or transit)
- ¹³ Electrical systems
- ¹⁴ Solid waste facilities
- ¹⁵ Natural gas network

Coded responses:

- 20. Parks/Park assets & facilities
- 21. Trails
- 22. Fiber Optics

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable

Q10F-Q24F.

Which other information about _____ is included in your asset inventory? Mark all that apply. (CODE – 3)

Precoded responses:

- ¹ Condition of _____ in our jurisdiction
- ² Age of _____ in our jurisdiction
- ³ Material of _____ in our jurisdiction
- ⁴ Size of _____ in our jurisdiction
- ⁵ Our inventory includes other information about _____. Please specify: _____

Coded responses:

- 10. Maintenance history/records
- 11. Utilities
- 12. Inspection records
- 13. Location
- 14. Valves
- 15. Hydrants
- 16. Pressure
- 17. Water main breaks
- 18. Flow direction

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable

Q10G-Q24G.

Please indicate any asset management system you use to operate, maintain, and improve ____ in [JURISDICTION]. Mark all that apply. (CODE – 3)

Precoded responses:

- ¹ We are not using any asset management system for ____ in [JURISDICTION].
- ² Agile Assets
- ³ Cartegraph
- ⁴ City Services
- ⁵ CityWorks
- ⁶ Element FX
- ⁷ ESRI GIS database
- ⁸ Icon
- ¹⁰ Infor EAM
- ¹¹ InfraSeek
- ¹² MapFeeder
- ¹³ Maximo
- ¹⁴ MnDOT SIMS
- ¹⁵ Mpower Innovations
- ¹⁶ PubWorks
- ¹⁷ Simple Signs
- ¹⁸ VueWorks
- ¹⁹ MS Excel
- ²⁰ Pencil and paper
- ²¹ We are using an asset management system not listed here.
Please specify: _____

Coded responses:

30. Archibus
31. Oracle
32. CAD/AutoCAD
33. Element XS
34. Beehive
35. Arc View
36. Access database
37. Dbase
38. IMaint
39. Laserfiche
40. Other GIS system
41. PASER
42. Road Pro
43. RTVision
44. SWAMP
45. Pontis
46. Famis

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable

Q27. Is there anything that we didn't ask about in this survey that you think is critical for implementing and using Asset Management? (CODE – 3)

Coded responses:

10. Connect capital to maintenance operations
11. Challenges with staffing
12. Challenges with cost/lack of resources
13. Coordinate/share information/data

- 2. Nothing/None/No
- 3. Other
- 5. Non-response answer
- 6. Missing
- 7. Refused
- 8. Don't know
- 9. Not applicable