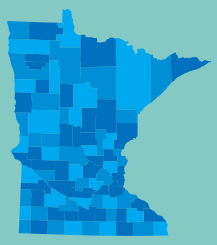
Wastewater

April 2026

2025 Subsurface Sewage Treatment Systems Annual Report

Protecting Minnesota's water resources

MINNESOTA POLLUTION CONTROL AGENCY



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Contributors/acknowledgements

Minnesota Pollution Control Agency Subsurface Sewage Treatment Systems staff would like to thank each local governmental unit that provided accurate information for the 2025 SSTS Annual Report. Without accurate data, summarizing SSTS activities and accomplishments in Minnesota would not be possible.

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Acronyms

ALS	Alternative local standards
FTPGW	Failing to protect groundwater
GPD	Gallons per day
ITPHS	Imminent threat to public health or safety
LGU	Local governmental unit
MPCA	Minnesota Pollution Control Agency
SSTS	Subsurface sewage treatment system
TCPA	Township Cooperation Planning Association

Executive summary

There were 185 local governmental units (LGUs) who administered subsurface sewage treatment system (SSTS) programs in 2025 that submitted annual report data to the Minnesota Pollution Control Agency (MPCA). The 185 local SSTS programs consist of 86 counties, 67 cities, 29 townships, and three other special purpose units of government with permitting authority.

A total of 664,554 SSTS were reported across Minnesota, representing an estimated 45.5 billion gallons of wastewater treated by SSTS per year (assuming 2.5 person/permit; 75 gallons/person; 365 days/year).

The LGUs issued 11,183 SSTS construction permits in 2025. Of the SSTS permitted in 2025, approximately 55% of the systems were replacement systems and 45% of the systems were new systems. One hundred seventy-nine of those permits were issued for system repairs. Approximately 95% serve residential dwellings and 5% serve other establishments.

The LGUs issued 11,183 SSTS construction permits in 2025 including 7,479 Type I systems. Approximately 67% of the SSTS permitted in 2025 were Type I systems, including 4,654 Type I mounds. There were 1,409 Type II systems, 1,583 Type III systems, 75 Type IV systems, and six Type V systems permitted in 2025. There were also 631 permits issued for tank replacements.

The majority of SSTS construction permits issued in 2025 were for systems with a flow volume between 1-2, 499 gallons per day (gpd); however, there were 30 new, and 11 replacement systems with a flow volume between 2,500-4,999 gpd. There was one new and three replacement systems with a flow volume between 5,000-10,000 gpd permitted.

The LGUs reported that 12,352 sewage tanks were installed in 2025.

There were 14,014 existing system compliance inspections conducted in 2025. The LGUs reported that 420 noncompliant properties were mitigated by centralized sewer connection, abandonment or removal, or a government buyout in 2025.

Of the 188 LGUs with SSTS programs in 2025, 98% approve SSTS designs before issuing construction permits, 99% verify soils at some point during the review process, 42% track SSTS maintenance activities, and approximately 77% have property transfer compliance inspection requirements.

Over 108,970 SSTS construction permits have been issued within the last ten years, indicating that around 16% of Minnesota's 664,554 SSTS have been constructed within the last ten years or contain components that are less than ten years old.

The number of estimated compliant SSTS has increased over the last ten years, from approximately 436,000 systems in 2016 to approximately 549,000 systems in 2025.

Trends observed from the 2025 SSTS Annual Report suggest continued improvements in subsurface wastewater treatment across the state.

Introduction

Minn. R. 7082.0040 requires local SSTS programs to submit annual reports to the MPCA by February 1 documenting their SSTS activities for the previous calendar year. Local SSTS programs occur at four governmental levels: 1) county, 2) city, 3) township, and 4) other special purpose units of government with permitting authority.

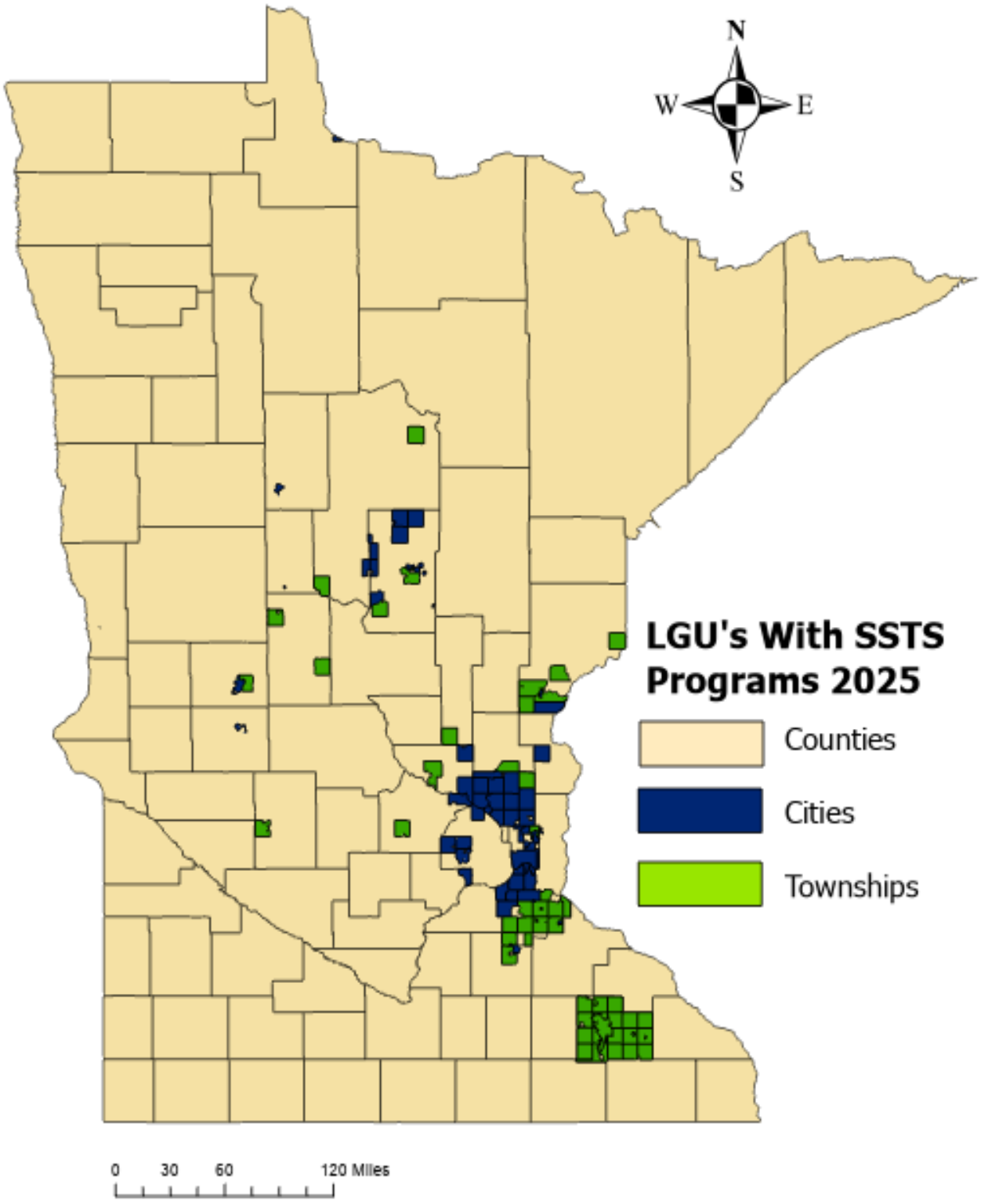
In December 2025, the MPCA sent out a web-based annual report survey to LGUs with known SSTS programs for them to complete. The annual report survey was used to obtain data from each local SSTS program so that relevant information could be summarized into a statewide 2025 SSTS Annual Report. The annual report survey is also used to track the number of sewage tanks installed and to ensure tank fee payments from licensed SSTS installers are made. Tank fees were approved by the Legislature in 2003 to help fund SSTS compliance efforts in the state.

The 2025 SSTS Annual Report generally follows the format used in the 2024 SSTS Annual Report and includes a broad analysis of SSTS trends. The analysis is based on data that LGUs provided in their annual report survey submissions. Some of the data is considered hard data, such as the reported number and types of permits issued. Other data is considered soft data, such as the estimates of SSTS compliance rates and the total number of SSTS in each jurisdiction. Additionally, the 2025 SSTS Annual Report includes information about SSTS certification and licensing, which was compiled by the MPCA's certification and training unit.

Annual report responses

In 2025, there were 188 LGUs that administered SSTS programs in Minnesota. The number of county programs remained the same at 86; however, the number of city and township programs changed from 2024. Appendix B1 contains a list of cities with SSTS programs in 2025. Appendix B2 contains a list of townships with SSTS programs in 2025. Appendix B3 contains a list of other special purpose units of government with SSTS programs in 2025. The distribution of LGUs with SSTS programs in 2025 is displayed in Figure 1.

Figure 1. LGUs with SSTS programs in 2025.



LGU participation

In December 2025, the 188 LGUs that were reported to have SSTS programs in 2025 were contacted by the MPCA and requested to submit annual report data through a web-based survey. The 2025 surveys were sent electronically to each SSTS administrator email contact previously provided in the 2024 annual report survey. In 2025, three LGUs notified the MPCA that they no longer administer an SSTS program. The 2025 SSTS Annual Report had a 98% response rate as 185 of the 188 expected annual report surveys were submitted. Table 1 provides the 2025 SSTS Annual Report response rate by LGU type.

Recipients who didn't report by the deadline were contacted by MPCA staff to determine if the LGU no longer had an active SSTS program, or to identify who was the correct LGU SSTS program contact or assist with submission of the survey.

Ensuring the annual report survey is sent to, and completed, by the right individual can be challenging. Common reasons for issues are: county staff are unsure of the local city or township contact for programs operating within the county boundaries, city and township programs with privately contracted inspection services changed, or annual report responsibilities were not transferred when LGU staff changed.

There were 86 counties, 70 cities, 29 townships, and three other special purpose units of government that made up the 191 LGUs with SSTS programs as of 2025 survey. Ramsey County is not required to submit an annual report survey as their entire jurisdiction is served by city and township SSTS programs. The special purpose units of government with permitting authority are the University of Minnesota, , Otter Tail Water Management District, and the Olmsted Township Cooperation Planning Association (TCPA).

Table 1. 2025 SSTS Annual Report response rate by LGU type.

	County	City	Township	Other	Total
LGUs Contacted	**86**	**70**	**29**	**3**	**188**
LGUs Reported	**86**	**67**	**29**	**3**	**185**
LGUs Not Reporting	**0**	**3**	**0**	**0**	**3**

Number of SSTS

In 2025, LGUs estimated that there were 664,554 total SSTS in Minnesota. In 2025, 10,991 SSTS construction permits were issued across the state. Additionally, there were 179 repair permits issued in 2025. Table 2 provides statewide values, as well as the highest and lowest countywide values, for the total number of SSTS reported and construction permits issued in 2025.

The greatest number of total SSTS was reported in St. Louis County (40,756); the lowest number of total SSTS was reported in Traverse County (628). The greatest number of construction permits issued in 2025 was reported in St. Louis County (725); the lowest number of construction permits issued in 2025 was reported in Mahnomen County (8). City, township, and other special purpose units of government data were consolidated into their respective counties to tabulate this information.

Table 2. Total number of SSTS reported and construction permits issued in 2025.

	Total number of SSTS	Construction permits issued in 2025
Statewide	664,554	11,075
Highest county	40,756	725
Lowest county	628	8

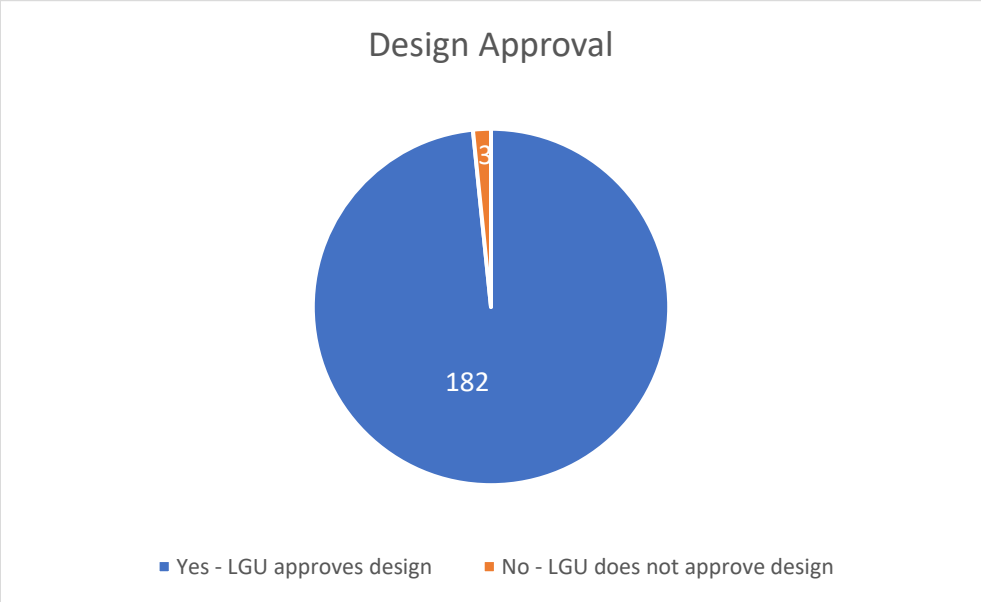
Appendix A1 contains a countywide list of the following information:

1. Number of SSTS reported in 2025.
2. Number of SSTS construction permits issued in 2025.
3. Number of SSTS construction permits issued over the last 23 years (2002-2025).
4. Number of existing system compliance inspections conducted in 2025 countywide (private inspector and LGUs).
5. Percentage of existing SSTS inspected in 2025out of total SSTS reported in county.
6. Counties with property transfer compliance inspection requirements.

Design approval

The annual report survey asks LGUs to indicate if they approve SSTS designs before issuing construction permits. Of the 188 LGUs with SSTS programs that reported in 2025, 182 (98.4%) reported that they approve SSTS designs before construction permit issuance (Figure 2). The three LGUs that reported not approving SSTS designs before construction permit issuance will be contacted to discuss rule requirements.

Figure 2. 2025 LGU status for SSTS design approval before construction permit issuance.



Soil verification

The annual report survey asks LGUs to indicate when they most often perform infield soil verification during the review process. In 2025, over 99% of LGUs reported verifying soils at some time before, during, or after system construction. There were 139 LGUs that reported verifying soils before construction permit issuance, 37 LGUs that reported verifying soils during construction, and eight LGUs that reported verifying soils after construction. There was one LGU that reported not verifying soils at any time before, during, or after system construction. Those jurisdictions that reported not verifying soils will be contacted to discuss the requirements of Minn. R. 7082.0500.

Figure 3 Provides a breakdown of when LGUs most often perform infield soil verifications in 2025.
Figure 4 Photo of the original soil mound absorption area roughened.

Figure 5 Displays the time of soil verification throughout the state by county.

Figure 3. 2025 LGU status for soil verification timing.

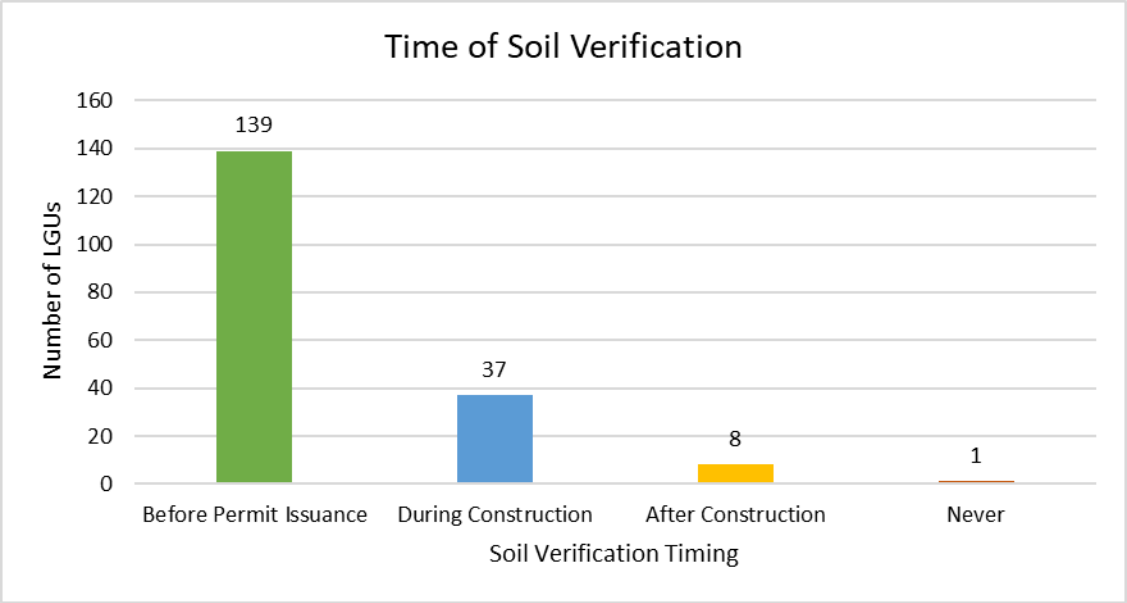
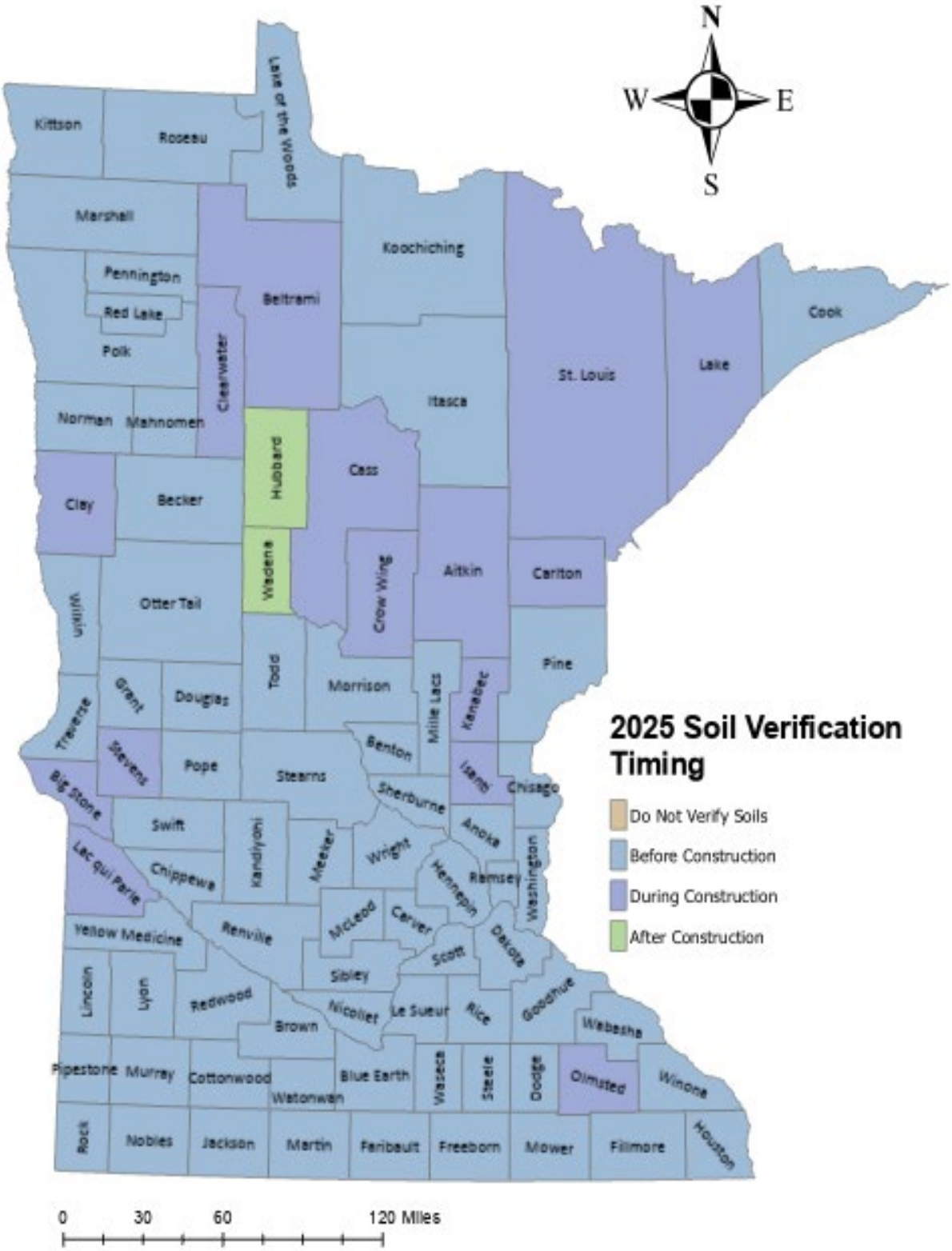


Figure 4. Photo of the original soil mound absorption area roughened.

Figure 5. Timing of soil verification as of 2025 by county.



Systems by type

The following section describes each of the types of SSTS.

Type I Systems are mounds, at-grades, trenches, or beds built in accordance with the prescriptive requirements of Minn. R. chs. 7080-7081.

- Specific prescriptive requirements in Minn. R. chs. 7080 and 7081.
- Requires a management plan.
- Has been termed “standard systems”.
- Designed by a basic, intermediate, or advanced designer – based on flow.

Type II Systems are holding tanks, privies, or SSTS in floodplain areas.

- Employed to fit non-standard site conditions (e.g., floodplain) or special dwelling and “other establishment” situations (privy or holding tank).
- Requires a management plan.
- Has been termed “alternative systems”.
- Designed by a basic, intermediate, or advanced designer – based on flow.

Type III Systems are systems that do not have one foot of natural soil, are determined to have disturbed soils, or have limited space for a soil dispersal area, among other potential deviations.

- Deviates from certain allowable Type I prescriptive standards when needed.
- Employed to fit non-standard soil and site conditions or organic loading-limited design without the use of pretreatment.
- Requires a management plan.
- Has been termed “other systems”.
- Designed by a basic, intermediate, or advanced designer – based on flow.

Type IV Systems are systems which employ a treatment component registered under Chapter 7083.4030 and can have a reduced infiltration area and/or vertical separation.

- Follows Type I prescriptive design requirements when site conditions allow.
- Deviates from Type I prescriptive standards due to the use of a registered treatment product.
- Employed to:
  - Reduce the vertical separation distance requirement.
  - Reduce the absorption area.
  - Extend the life of the soil system.
  - Reduce waste strength.
- Higher operation and maintenance requirements than a Type I – III.
- Requires a management plan.
- Requires an operating permit and service provider.
- Designed by an intermediate or advanced designer – based on flow.

Type V Systems are systems designed by a professional engineer that deviate from the prescriptive requirements of a Type I system.

- Does not need to follow prescriptive design standards.
- Must meet environmental and safety performance outcomes.

- Components not following Type I – IV design standards authorized by a professional engineer.
- Employed to use registered and/or non-registered treatment and dispersal products.
- Requires a management plan.
- Requires an operating permit and service provider.
- Designed by an advanced designer and signed off by a professional engineer or appropriately licensed professional.

SSTS reported by type

The number of SSTS construction permits reported by system type is presented in Table 3. The majority of SSTS permitted in 2025 were Type I systems; approximately 41% were mound systems. Over 7.5% of Type I systems permitted in 2025 contained proprietary distribution media (625 chamber systems and 215 EZ Flow systems).

There were 1,409 Type II systems, 1,583 Type III systems, 75 Type IV systems, and six Type V systems permitted in 2025.

Table 3. 2025 SSTS construction permits reported by system type.

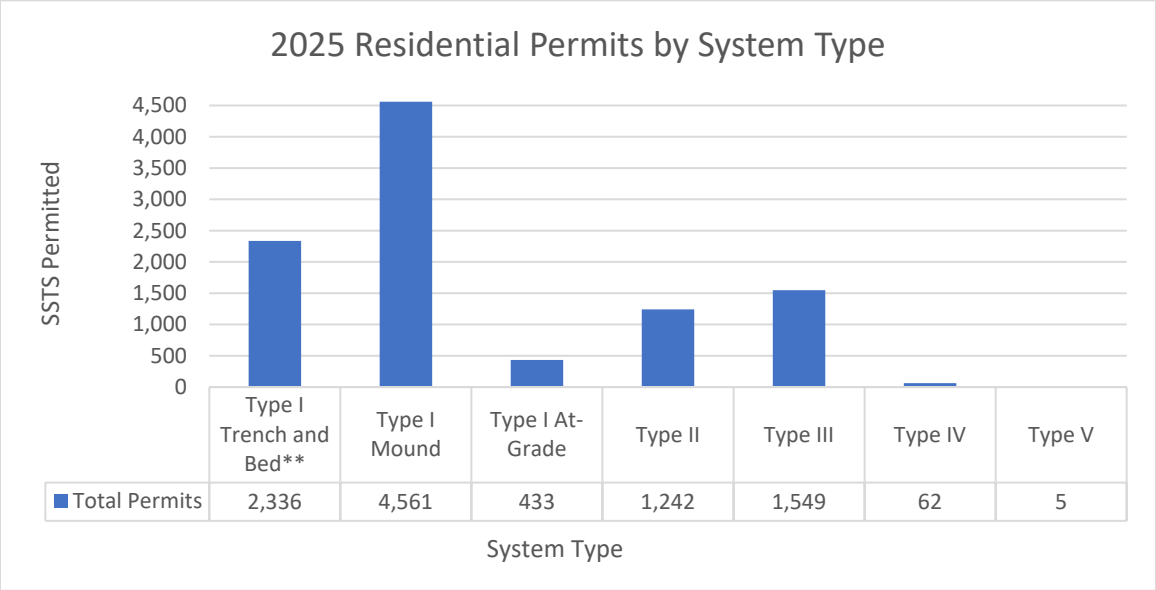
Type I	All	7,330	149	7,479
	Rock At-Grade	**419**	**5**	**424**
	Chamber At-Grade	**7**	**0**	**7**
	EZ Flow At-Grade	**7**	**0**	**7**
	Chamber Trench	**450**	**7**	**457**
	EZ Flow Trench	**27**	**3**	**30**
	Rock Trench	**539**	**18**	**557**
	Mound	**4,228**	**87**	**4,315**
	Chamber Mound	**158**	**3**	**161**
	EZ Flow Mound	**175**	**3**	**178**
	Seepage or Pressure Beds	**1,320**	**23**	**1,343**
Type II		**1,242**	**167**	**1,409**
Type III		**1,549**	**34**	**1,583**
Type IV		**62**	**13**	**75**
Type V		**5**	**1**	**6**
Tank Only		**598**	**33**	**631**
Total		**10,786**	**397**	**11,183**

Note: The totals in this dataset are inconsistent with construction permit data included elsewhere in this report due to inconsistencies among reporting LGUs. This dataset should only be used for identifying trends and proportional analysis.

Residential SSTS

The number of SSTS construction permits issued in 2025 for residential dwellings, reported by system type, is presented in Figure 6. A total of 10,786 residential SSTS were permitted in 2025. Type I systems accounted for approximately 68% of total residential SSTS permitted, including 2,336 trenches and beds, 4,561 mounds, and 433 at-grades. There were 1,242 Type II systems, 1,549 Type III systems, 62 Type IV systems, and five Type V systems permitted in 2025 for residential dwellings.

Figure 6. 2025 SSTS construction permits, reported by system type, for residential dwellings.

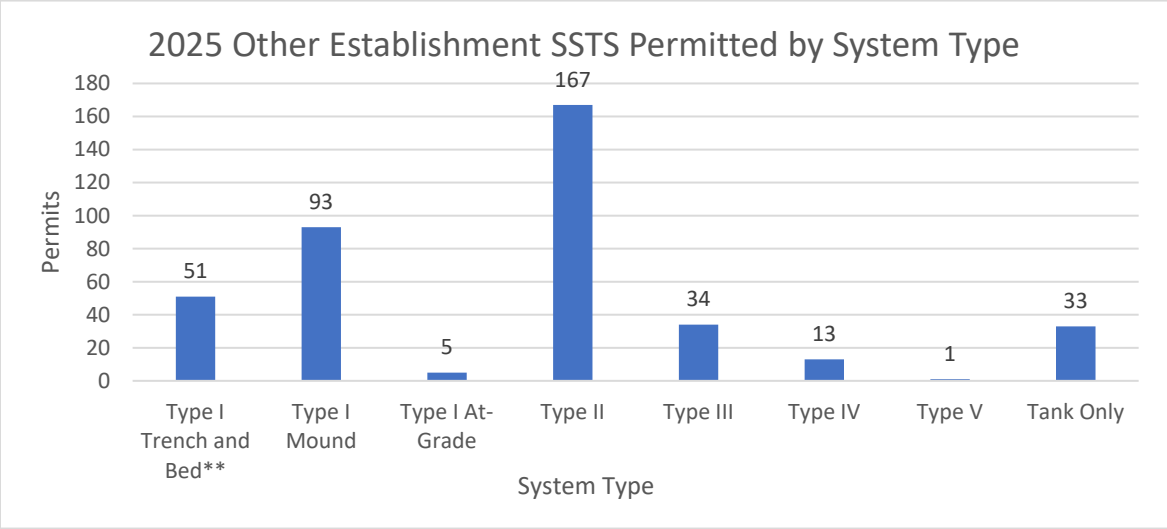


**Chamber Trench, EZ Flow Trench, Rock Trench, and Seepage or Pressure Bed Type I systems

Other establishment SSTS

The number of SSTS construction permits issued in 2025 for other establishments, reported by system type, is presented in Figure 7. A total of 397 other establishment SSTS were permitted in 2025. Type I systems accounted for approximately 37% of total other establishment SSTS permitted, including 51 trenches and beds, 93 mounds, and five at-grades. There were 167 Type II systems, 34 Type III systems, 13 Type IV systems, one Type V system, and 33 Tank only systems permitted in 2025 for other establishments.

Figure 7. 2025 SSTS construction permits, reported by system type, for other establishments.

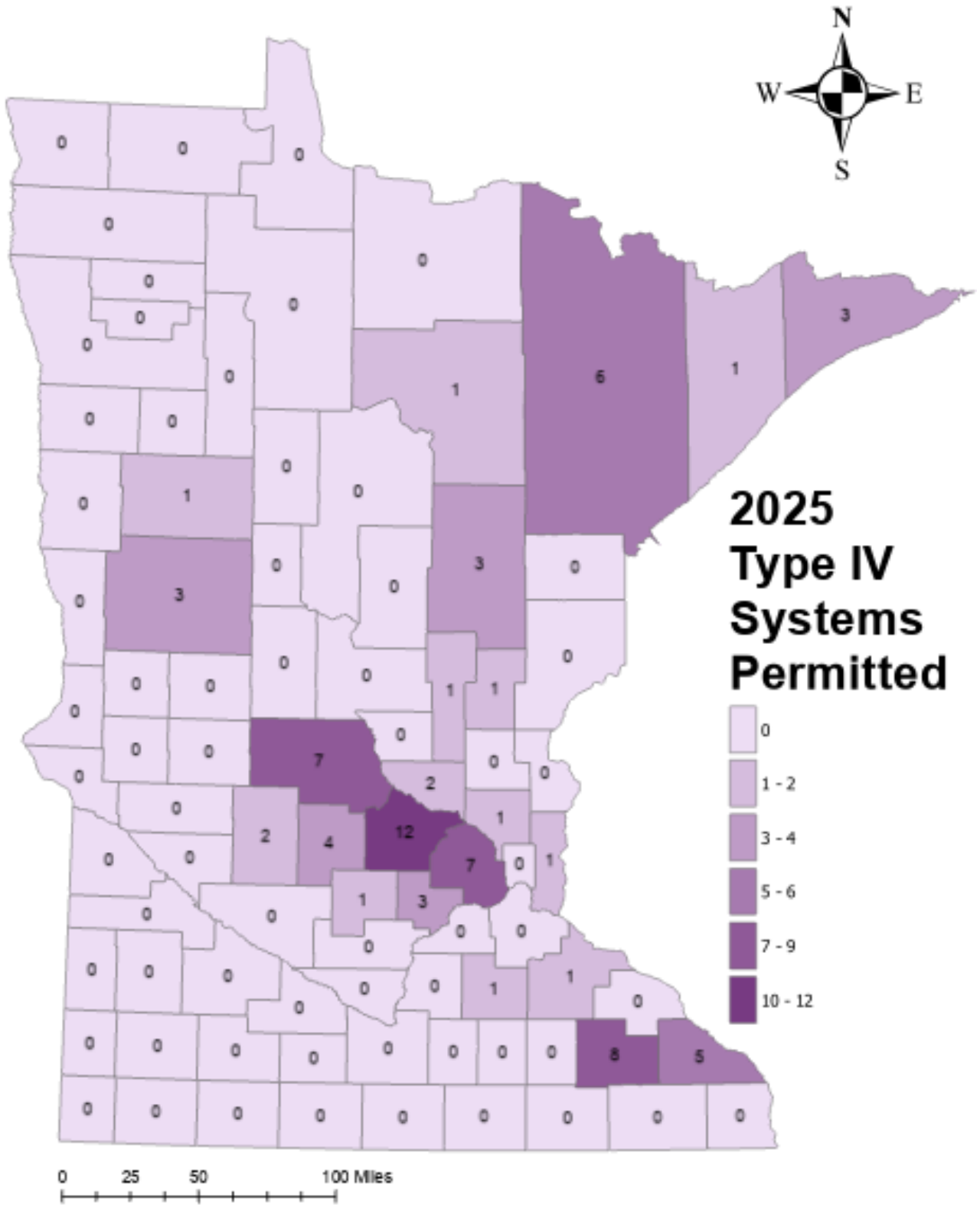


Type IV systems

A total of 75Type IV systems were permitted in 2025, consisting of 62 residential SSTS and 13 other establishment SSTS. An example of a maintainer measuring sludge and scum in a septic tank is shown in Figure 8. The greatest number of Type IV systems was reported in Wright County (12). Figure 9 presents the distribution of Type IV systems permitted in 2025 by county.

Figure 8. Measuring sludge and scum in septic tank.

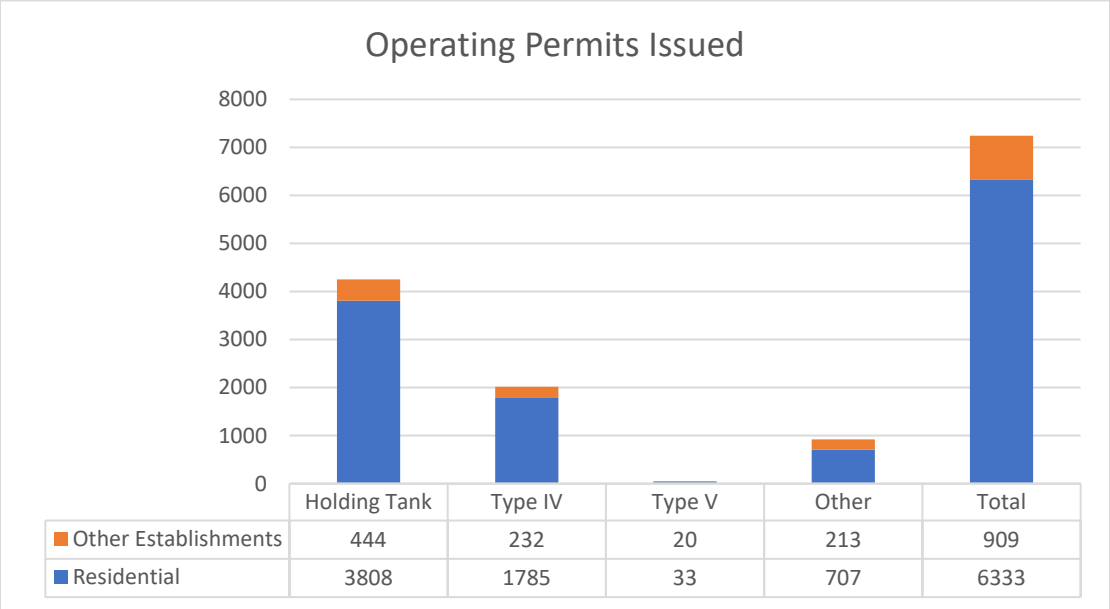
Figure 9. Type IV systems permitted in 2025 by county



Operating permit issuance

Operating permits are site-specific regulatory documents that outline various parameters for maintenance, monitoring, and other service functions for a variety of SSTS types. It was reported that 7,242 operating permits were issued in 2025 for both residential and other establishment systems. Approximately 59% of operating permits issued in 2025 are for holding tanks. Operating permits are required for all Type IV and Type V systems as well as MSTS. They are recommended for holding tanks and other risky sites. The types of operating permits issued in 2025 are presented in Figure 10. It is important to note that the structure of the question was changed on the 2025 Annual Report Survey to clarify that LGUs are reporting the total number of systems regulated under an operating permit in their jurisdiction, not just new operating permits issued in 2025. This is why there is a statistical increase in numbers compared to previous years.

Figure 10. Types of Operating Permits Issued in 2025.



	Holding Tank	Type IV	Type V	Other	Total
Other Establishments	444	232	20	213	909
Residential	3808	1785	33	707	6333

SSTS by wastewater flow volume

Over 99% of the total SSTS construction permits issued in 2025 were for systems with a flow volume between 1-2,499 gpd, consisting of 10,176 residential SSTS and 476 other establishment SSTS. Of the total SSTS with a flow volume between 1-2,499 gpd permitted, approximately 55% were replacement systems and 45% were new systems.

A total of 41 systems with a flow volume between 2,500 and 4,999 gpd were permitted in 2025, consisting of 27 residential SSTS and 14 other establishment SSTS. Of the total SSTS with a flow volume between 2,500 and 4,999 gpd permitted, 11 were replacement systems and 30 were new systems.

A total of four systems with a flow volume between 5,000 and 10,000 gpd were permitted in 2025. Of the total SSTS with a flow volume between 5,000 and 10,000 gpd permitted, one was new systems, and three were replacement systems. Of these systems three were other establishments and one was residential SSTS.

Table 4. provides the number of SSTS construction permits issued in 2025 by wastewater flow volume.

Table 4. SSTS permitted in 2025 by flow volume

Construction Permits Issued in 2025 by Flow Volume

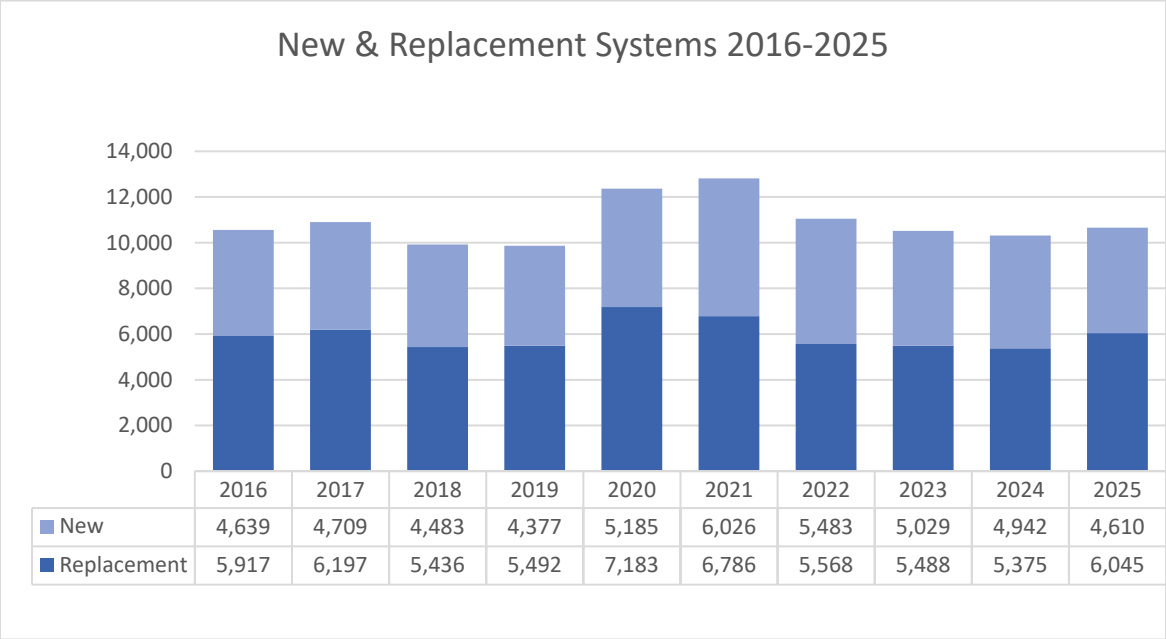
	Residential		Other Establishment		
Flow Volume	New	Replacement	New	Replacement	Total
1 – 2,499 gpd	4,316	5,832	263	199	10,610
2,500 – 4,999 gpd	20	7	10	4	41
5,000 – 10,000 gpd	0	1	1	2	4
Total	4,336	5,840	274	205	10,655

New and replacement SSTS

The number of SSTS construction permits issued for new and replacement systems over the last ten years is presented in Figure 11. Over 108,970 construction permits have been reported by LGUs since 2016; approximately 55% were for replacement systems and 45% were for new systems.

The LGUs issued 10,655 construction permits (not including repair permits) in 2025 for 4,610 new systems and 6,045 replacement systems. Existing systems may be replaced due to failing to protect groundwater (FTPGW) or posing an imminent threat to public health or safety (ITPHS). These conditions are typically identified through various local inspection triggers such as: property transfer inspections, land use permits, building permits, conditional use permits, variances, and complaints.

Figure 11. SSTS construction permits for new and replacement systems 2016-2025.



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
New	4,639	4,709	4,483	4,377	5,185	6,026	5,483	5,029	4,942	4,610
Replacement	5,917	6,197	5,436	5,492	7,183	6,786	5,568	5,488	5,375	6,045

Sewage tanks installed

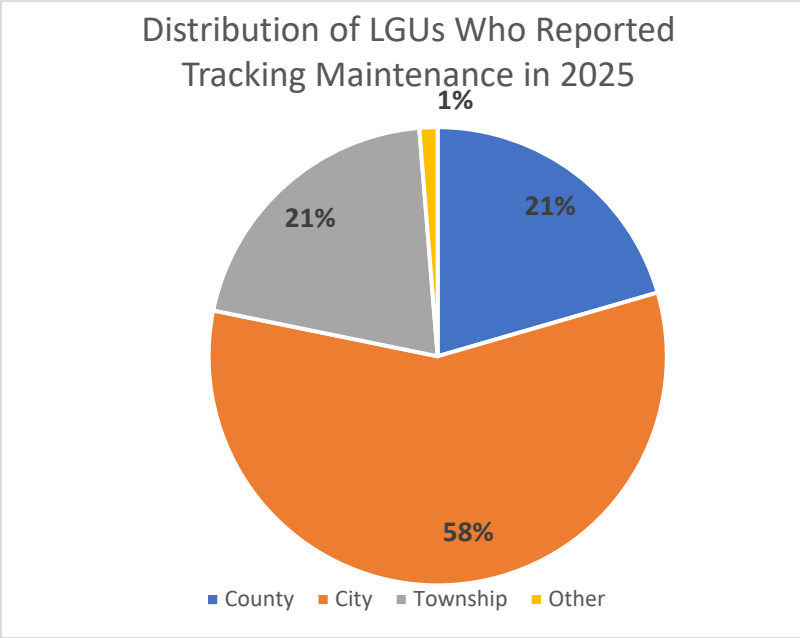
The LGUs reported that 12,352 sewage tanks were installed in 2025, including 12,066 standard sewage tanks and 286 performance-based system tanks. Collecting tank installation data supports the administration of Minn. Stat. § 115.551, which requires installers to pay a fee of $25 for each tank installed in the previous year. For performance-based systems, the tank fee is limited to $25 per household system installation.

Figure 12. New concrete tanks being installed.

Tracking SSTS maintenance activities

The annual report survey asks LGUs to indicate if they track SSTS maintenance activities. Of the 188 LGUs with SSTS programs in 2025, 78 (42%) reported that they track SSTS maintenance activities. There were 16 counties, 45 cities, 16 townships, and one other special purpose unit of government that reported tracking the maintenance of SSTS (Figure 13). The high proportion of city programs can be attributed to entities, such as the Met Council, requiring maintenance tracking in metropolitan areas.

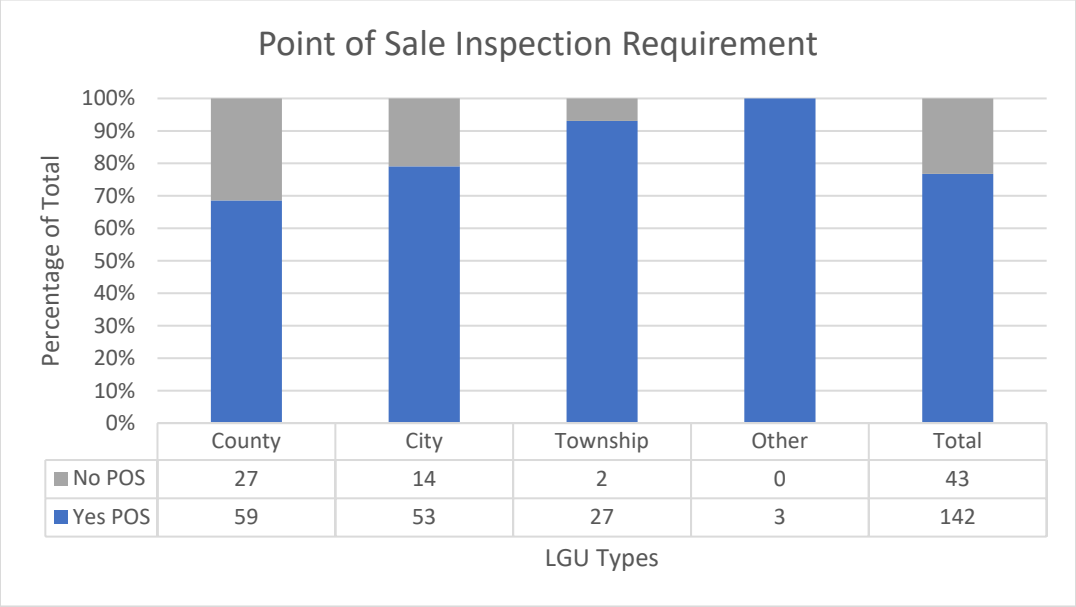
Figure 13. 2025 LGU status for tracking SSTS maintenance activities.



Compliance inspections for property transfers

There is currently no state-level requirement for LGUs to require compliance inspections for property transfers; however, many LGUs have indicated that this is the most effective trigger for identifying noncompliant systems. The annual report survey asks LGUs to indicate if they require compliance inspections for property transfers. Of the 185 LGUs that reported with SSTS programs in 2025, 142 (77 %) reported that they require compliance inspections for property transfers. The LGUs with property transfer compliance inspection requirements consist of 59 counties, 53 cities, 27 townships, and three other special purpose units of government (Figure 14).

Figure 14. 2025 LGU status for requiring compliance inspections for property transfers.



Existing system compliance inspections

The LGUs reported that there were 14,014 existing system compliance inspections in 2025, representing a 9% increase from 2024 (12,810). Compliance inspections are an important part of addressing existing systems that pose environmental or human health risk. The LGUs include inspection triggers in their ordinances, such as at the time of property transfer or when a building permit is sought, to create a mechanism for verifying system compliance and correcting noncompliant systems.

The number of existing system compliance inspections broken down by LGU type is provided in Table 5; counties reported 11,983, cities reported 1,502, townships reported 337, and other special purpose units of government reported 152. Figure 15 displays the total number of existing system compliance inspections reported countywide. **Figure 16** displays the amount of existing system compliance inspections for 2025 as a percentage of total SSTS reported countywide.

Table 5. 2025 existing system compliance inspections by LGU type.

Local unit of government	Number of existing system compliance inspections	LGU percentage of total compliance inspections
County	**11983**	85.5%
City	1,502	10.7%
Township	337	2.4%
Other	152	1.1%
Total	**14,014**	**100%**

Figure 15. 2025 existing system compliance inspections per county.

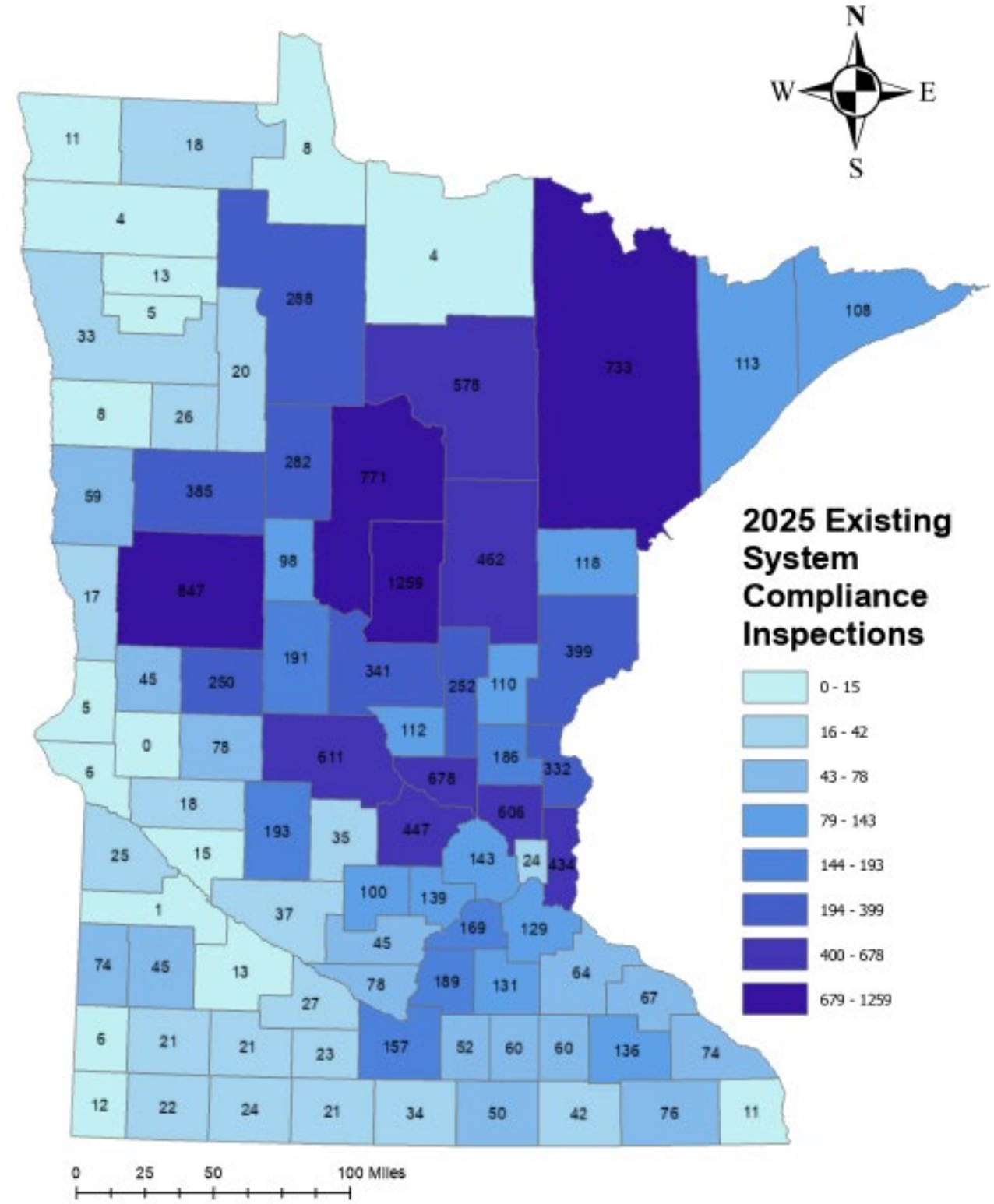
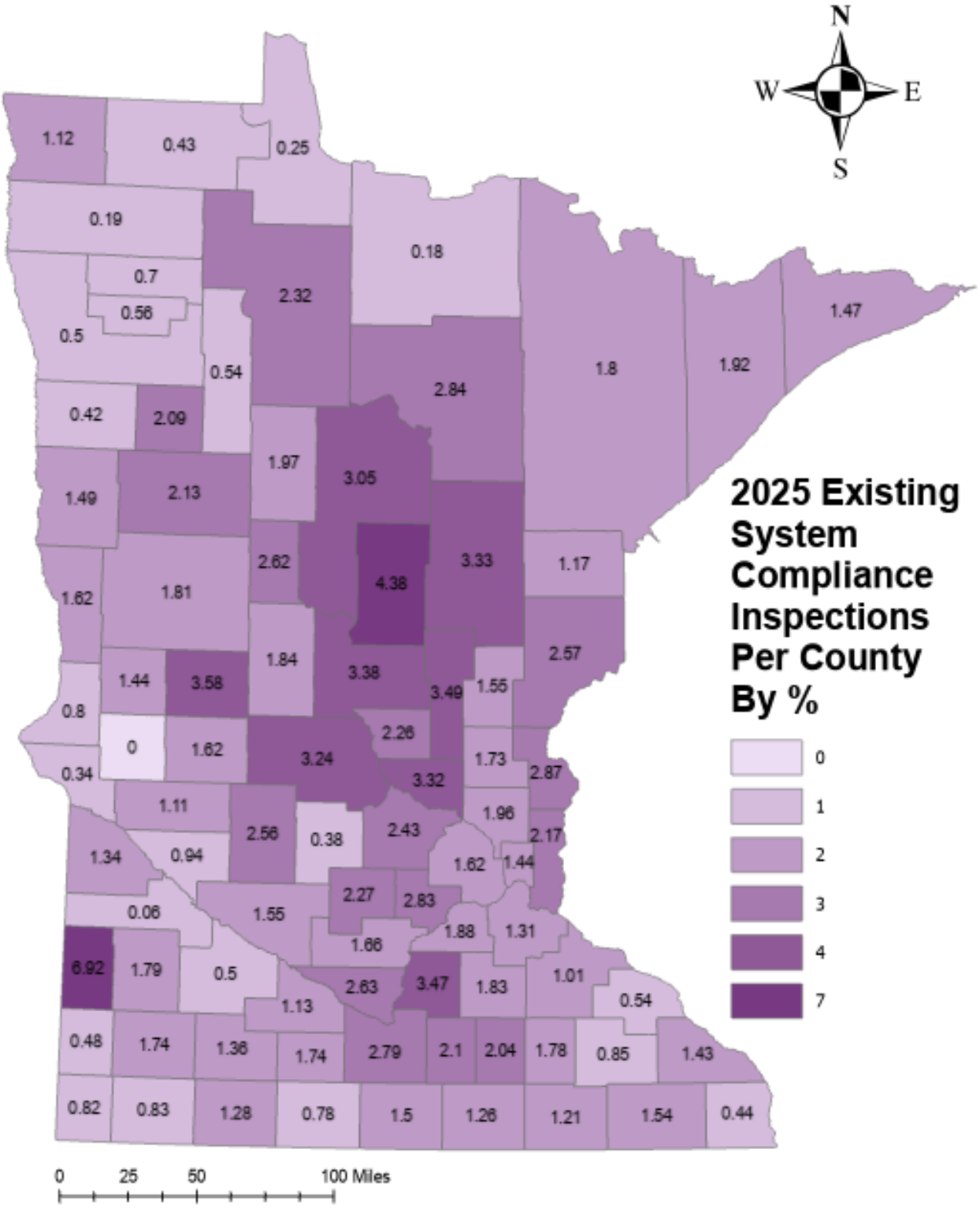


Figure 16. 2025 existing system compliance inspections presented as a percentage of total systems in county.



Noncompliant properties mitigated by centralized sewer connection, abandonment or removal, or government buyout

The number of noncompliant properties mitigated in 2025 by 1) connecting to centralized sewer, 2) abandonment or removal, or 3) a government buyout is provided in Figure 17. The LGUs reported that 420 noncompliant properties had SSTS discontinued through one of these three mechanisms. Of the noncompliant properties with SSTS discontinued in 2025, 126 were connected to centralized sewer, 286 were abandoned or removed, and eight were part of a government buyout program.

Figure 17. Noncompliant properties with discontinued SSTS in 2025.

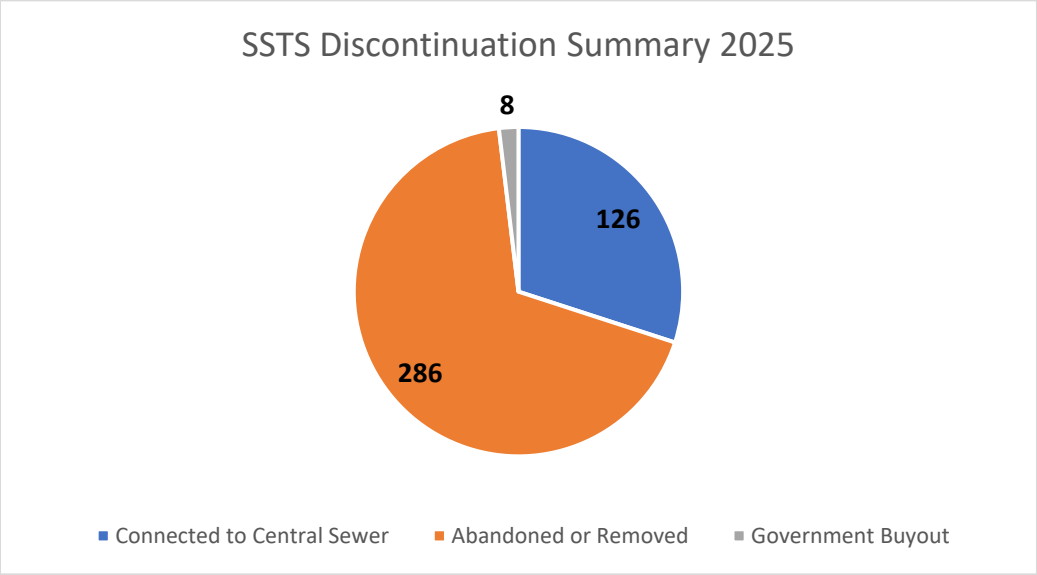
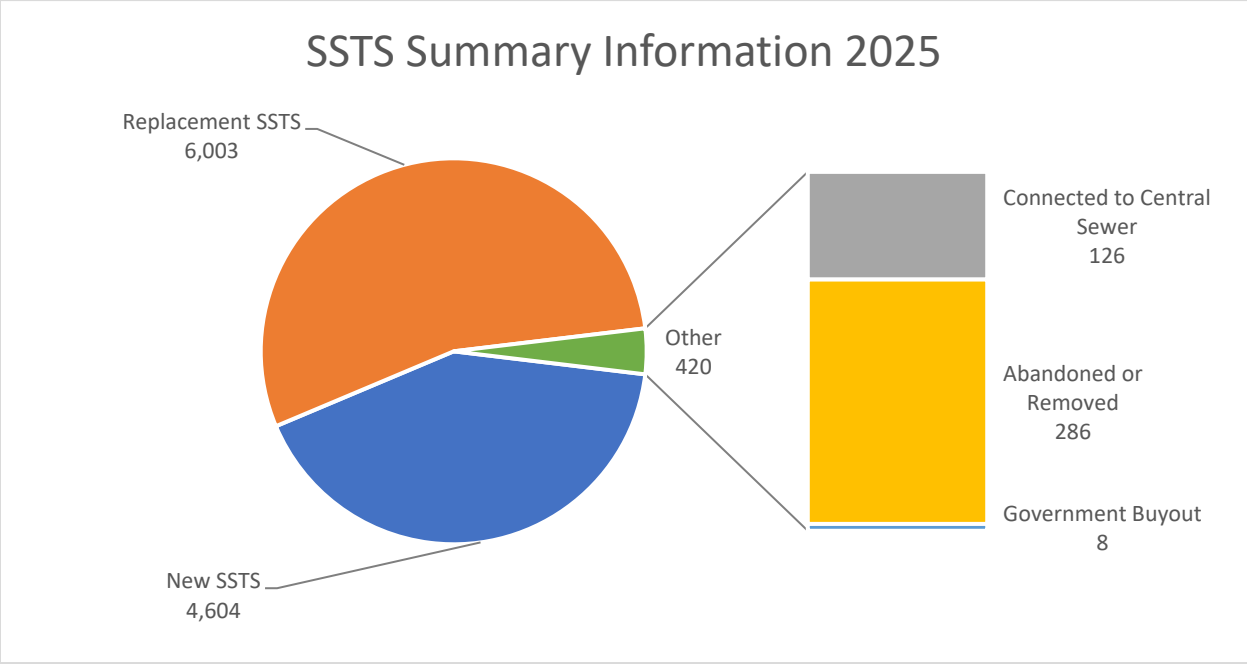


Figure 18 presents a summary of SSTS activity for 2025, including new SSTS permitted, replacement SSTS permitted, and noncompliant properties with SSTS discontinued through centralized sewer connection, abandonment or removal, or a government buyout. The total number reported for these SSTS activities in 2025 was 11,027.

Figure 18. Summary of new SSTS, replacement SSTS, noncompliant properties with discontinued SSTS in 2025.



SSTS compliance trends

Each LGU was asked to provide their ***best estimate*** of SSTS compliance in their jurisdiction. This includes the following information:

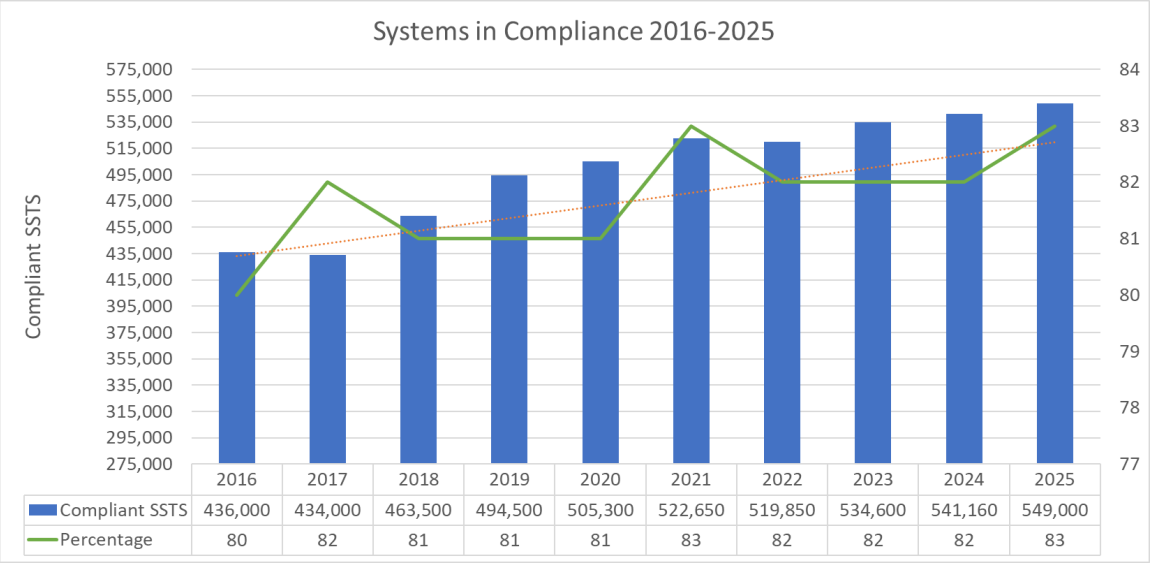
- Total number of SSTS in jurisdiction.
- Number of SSTS estimated to be compliant.
- Number of SSTS estimated to be an ITPHS.
- Number of SSTS estimated to be FTPGW.

Figures 19, Figure 20, and 21 present annual estimates of SSTS compliance status from 2016 to 2025.

Overall, SSTS in Minnesota are becoming increasingly compliant year by year. Negative trends in some years can conflict with overall compliance trends. Many LGUs are involved with developing databases, reviewing old files, completing inventories, and other processes that facilitate more accurate data.

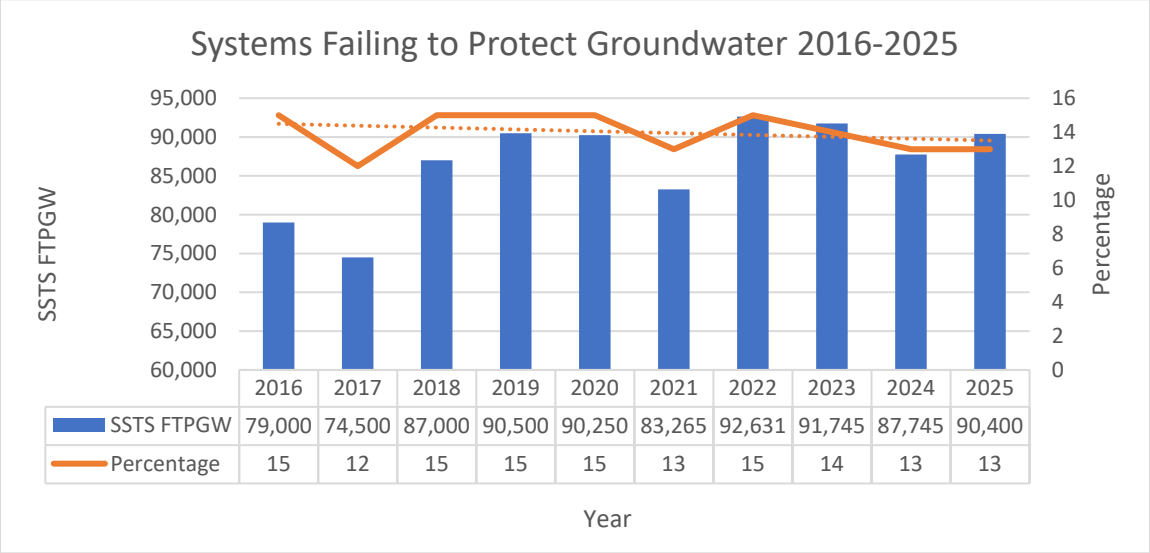
The number of estimated compliant SSTS has increased over the last ten years, from approximately 436,000 in 2016 to 549,000 systems in 2025. Additionally, the estimated percentage of compliant SSTS out of total SSTS increased from 80% in 2015 to 83% in 2025. Figure 19 displays the number and percentage of SSTS with compliant status estimated by LGUs over the last ten years.

Figure 19. Estimated SSTS with compliant status 2016-2025.



The estimated number of SSTS FTPGW has on average stayed about the same over the last ten years, from approximately 79,000 systems in 2016 (15%), to 90,400 systems in 2025 (13%). Some of the significant changes in percentage from this time frame can be attributed to changes in how LGUs report these data. Figure 20 displays the number and percentage of SSTS with FTPGW status estimated by LGUs over the last ten years.

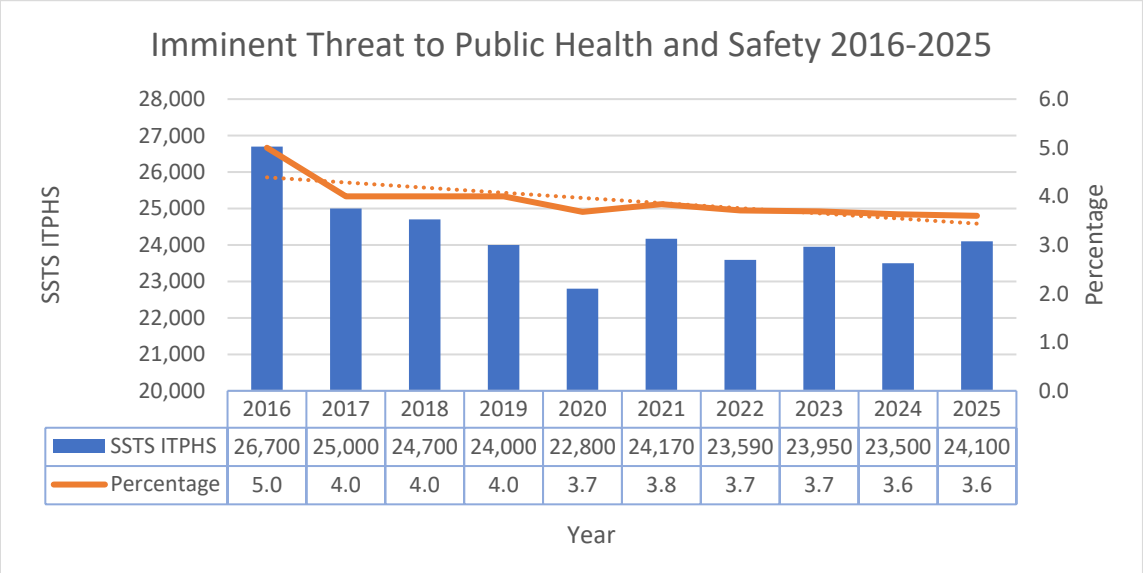
Figure 20. Estimated SSTS with FTPGW status 2016-2025.



The estimated number of SSTS with an ITPHS status has decreased over the last ten years, from approximately 26,700 (5%) systems in 2016 to 24,100 (3.6%) systems in 2025. Figure 21 displays the number and percentage of SSTS with ITPHS status estimated by LGUs over the last ten years. Systems

that have been identified as an ITPHS may include when there is sewage backup into the dwelling or other establishment, sewage discharge to the ground surface or surface waters, and unsecured or damaged maintenance hole covers. Per state statute, systems identified as an ITPHS must be upgraded, replaced, repaired, or discontinued within ten months of receipt of a notice of noncompliance or within a shorter period if required by local ordinance.

Figure 21. Estimated SSTS with ITPHS status 2016-2025.



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SSTS ITPHS	26,700	25,000	24,700	24,000	22,800	24,170	23,590	23,950	23,500	24,100
Percentage	5.0	4.0	4.0	4.0	3.7	3.8	3.7	3.7	3.6	3.6

Figure 22. Sewage discharging to the surface.

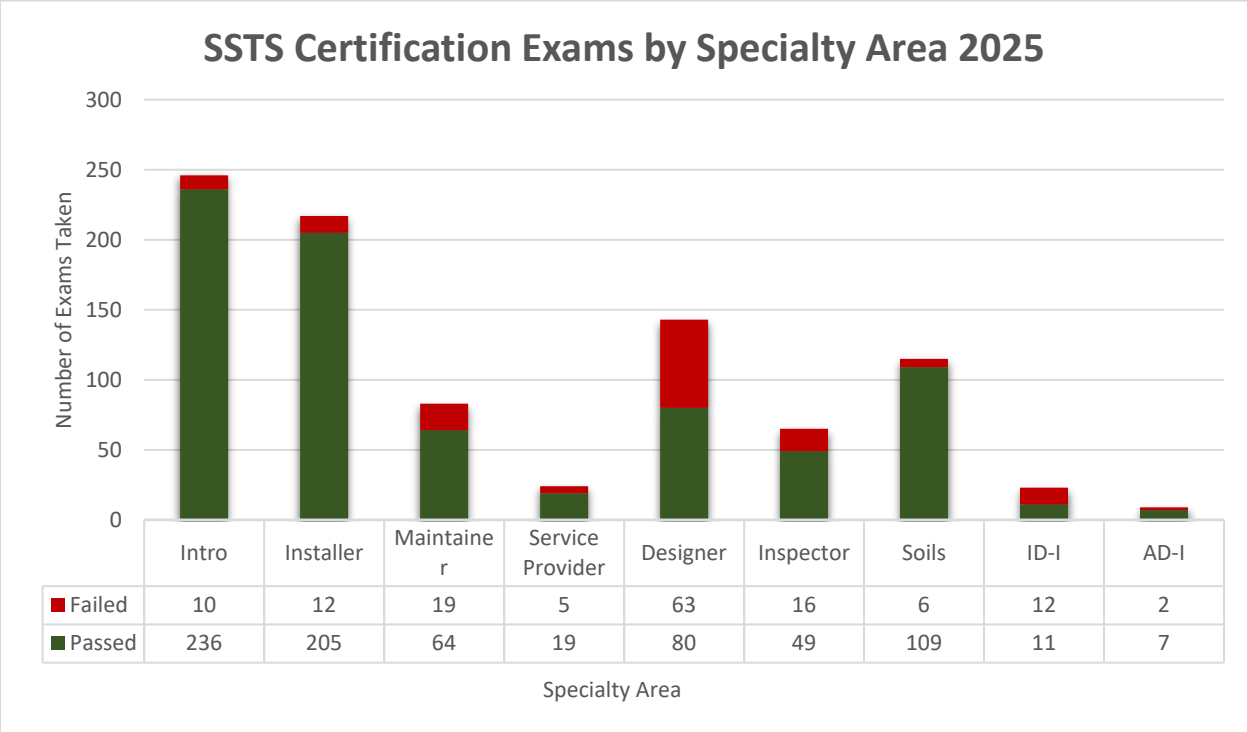
2025 SSTS certification and licensing

In 1978, the MPCA Citizens' Board adopted standards for Individual Sewage Treatment Systems. In cooperation with the University of Minnesota, they began hosting voluntary Onsite Sewage Treatment System workshops. In 1994, the Minnesota Legislature made it mandatory for SSTS professionals to be certified and licensed.

Since then, over 1,400 workshops have taken place throughout Minnesota, with just over 61,000 participants. More than 30,000 certification exams have been taken, resulting in just under 1,300 business licenses and just under 3,800 individual certifications being awarded by the MPCA to SSTS designers, installers, maintainers, service providers, and inspectors.

Figure 23 presents 2025 data for all SSTS certification exam types. Figure 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33 present data on individual certification exam types over the last ten years.

Figure 23. 2025 SSTS certification exams by specialty area



Observations on 2025 Exam Data

In 2025, there were 916 SSTS examinations taken across all specialty areas, compared to an average of 664 exams taken during the same time period in 2015-2019, which is an increase of 38% from pre-COVID years. These 2025 numbers also show sustained growth in SSTS examinations administered post-COVID. In 2023, there were 873 examinations taken, 925 exams taken in 2024, and 916 exams taken in 2025. The vast majority of passage rates across specialty areas have stayed consistent with ten-year averages.

Figure 24. Introduction to Onsite Systems certification exams 2016-2025

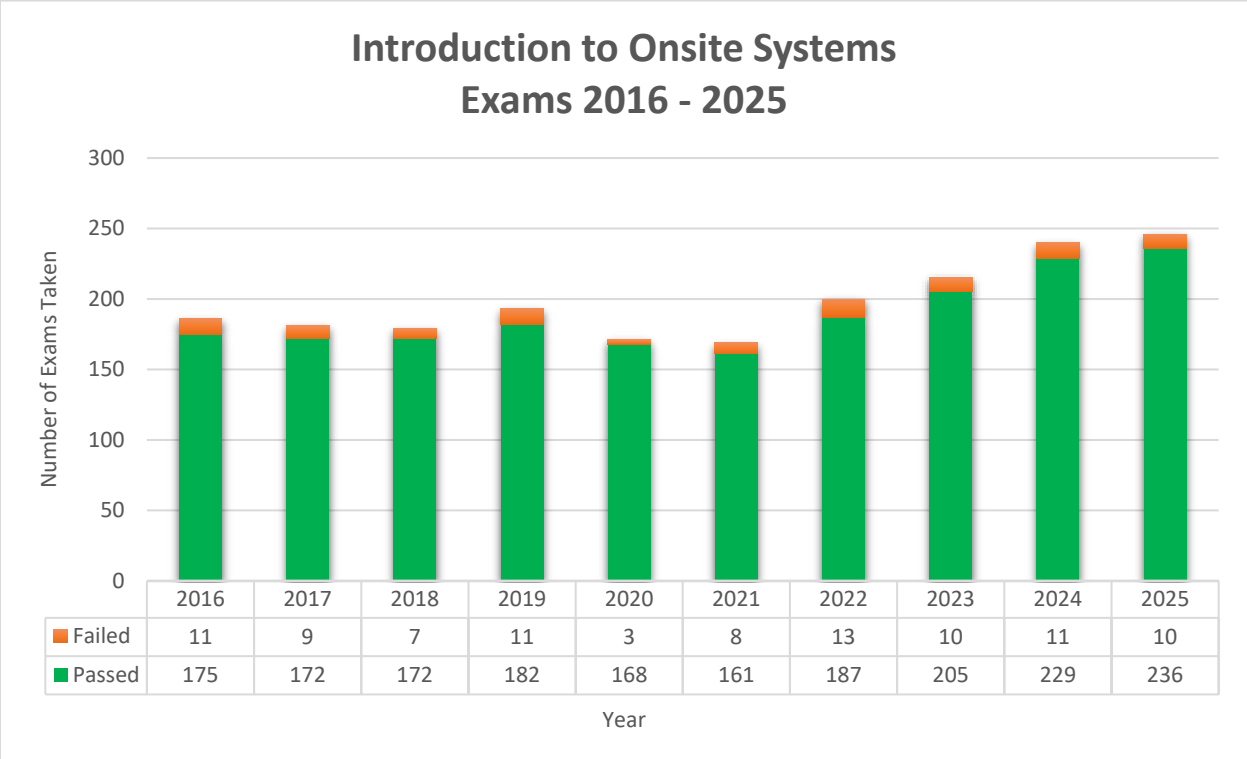


Figure 25. Installing Onsite Systems certification exams 2016-2025

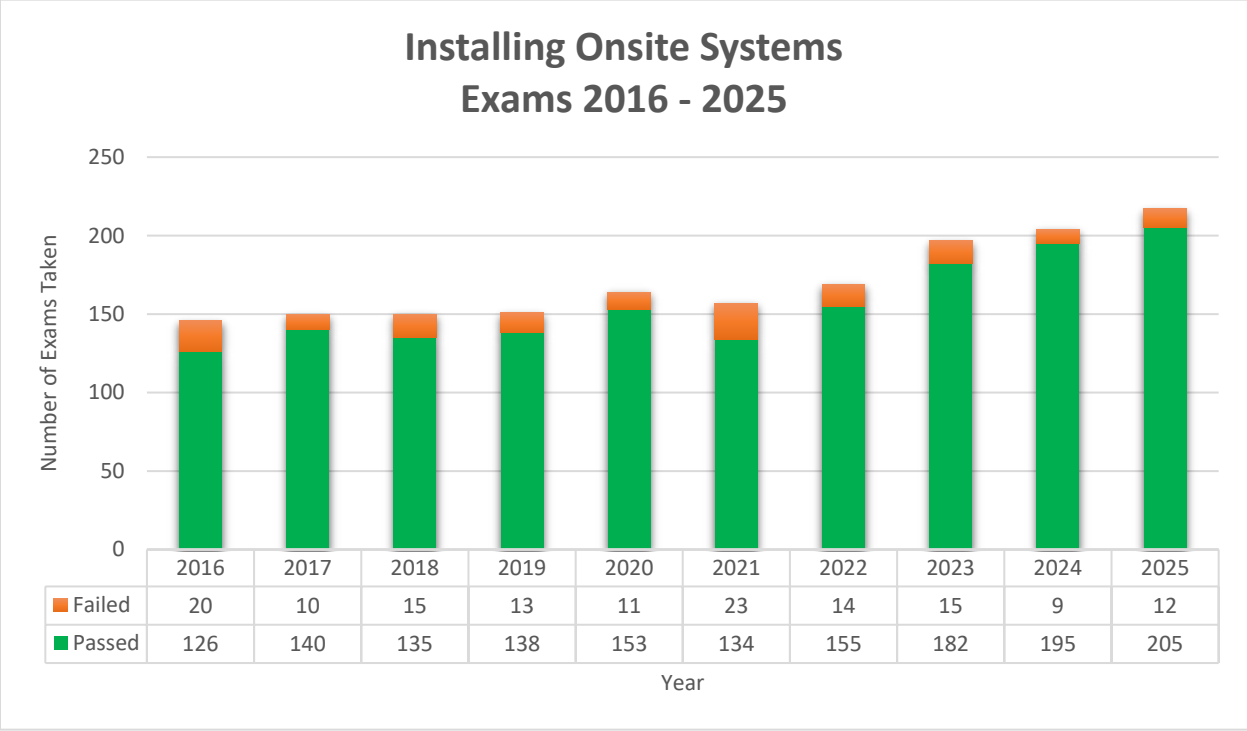


Figure 26. Maintaining Onsite Systems certification exams 2015-2024

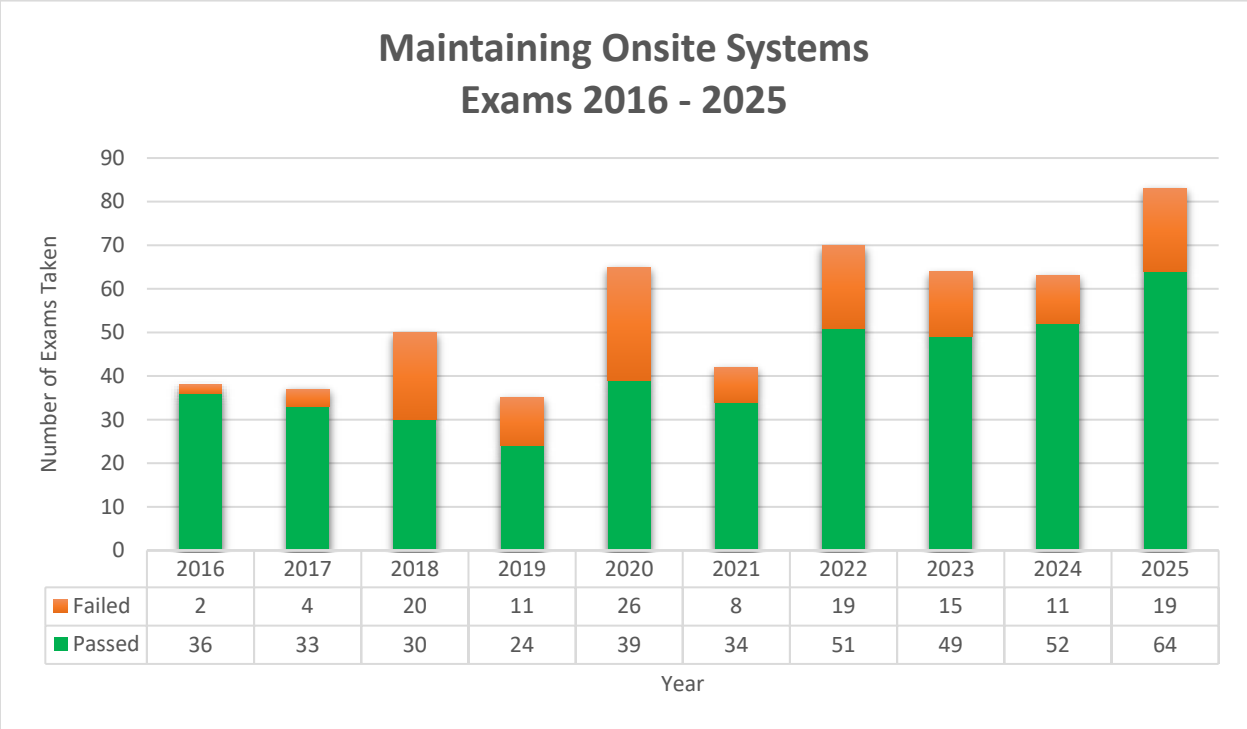


Figure 27. Service Provider for Onsite Systems certification exams 2016-2025

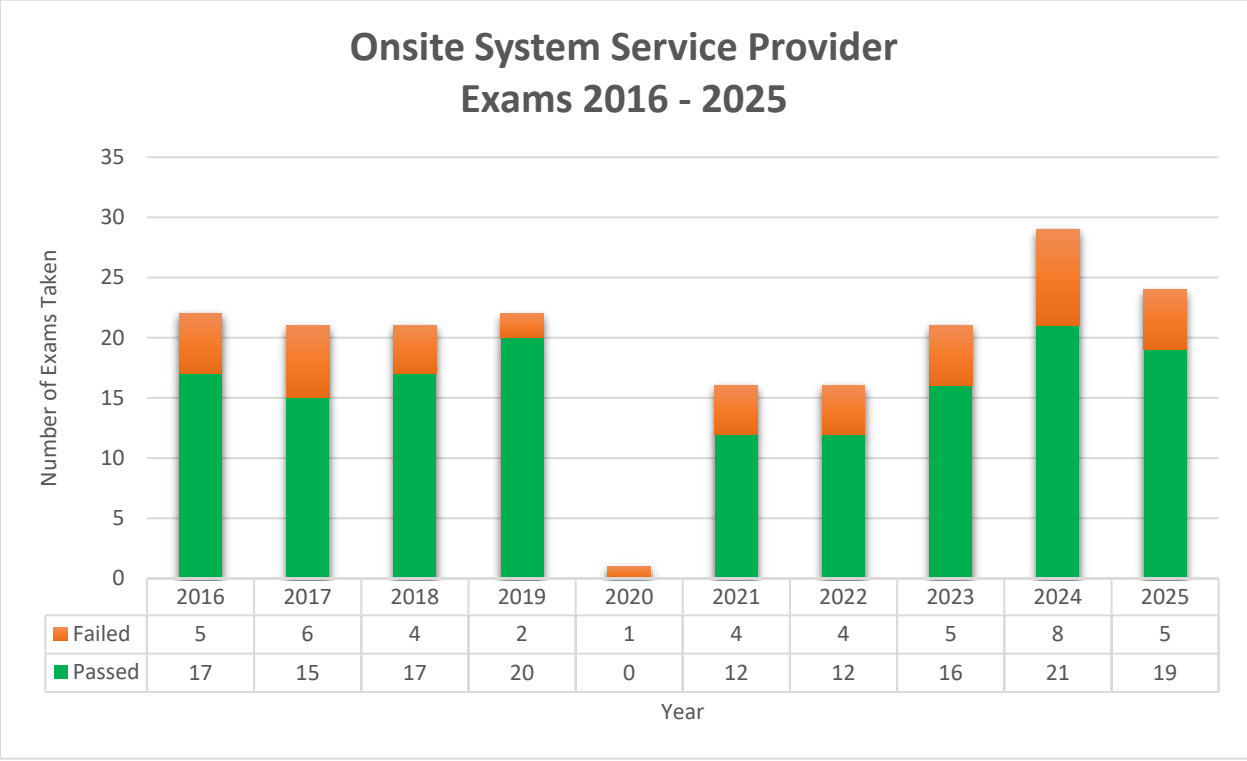


Figure 28. Designing Onsite Systems certification exams 2016-2025

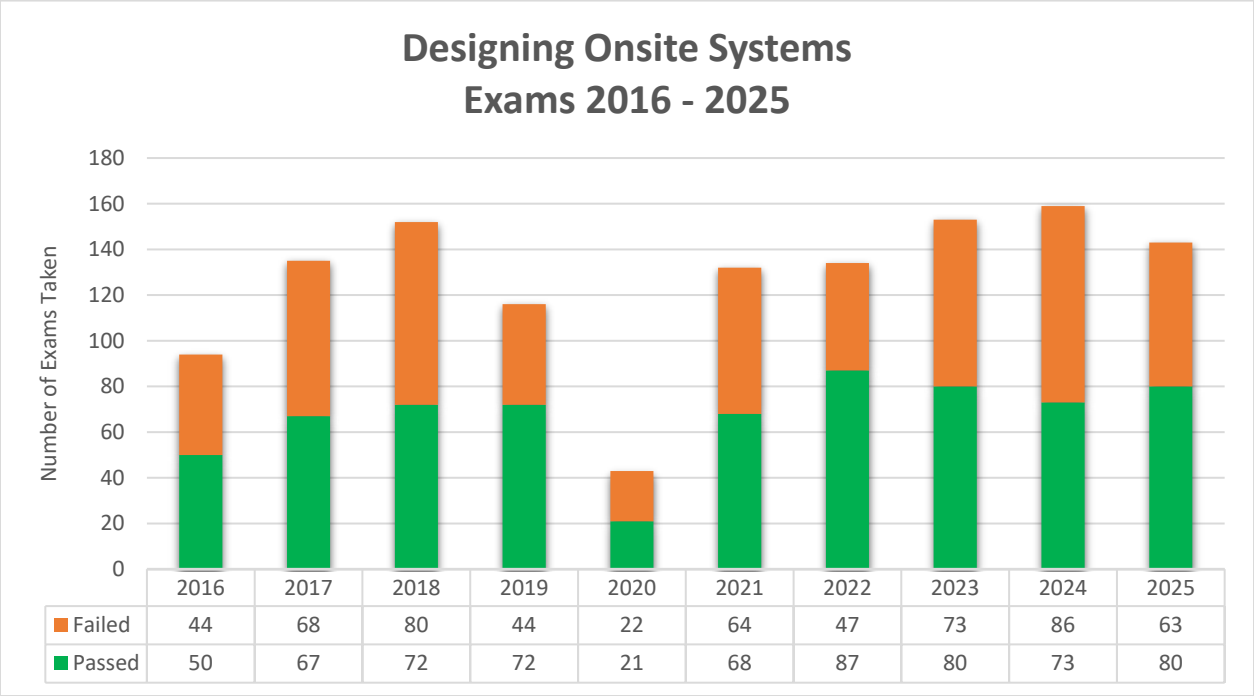


Figure 29. Inspecting Onsite Systems certification exams 2016-2025

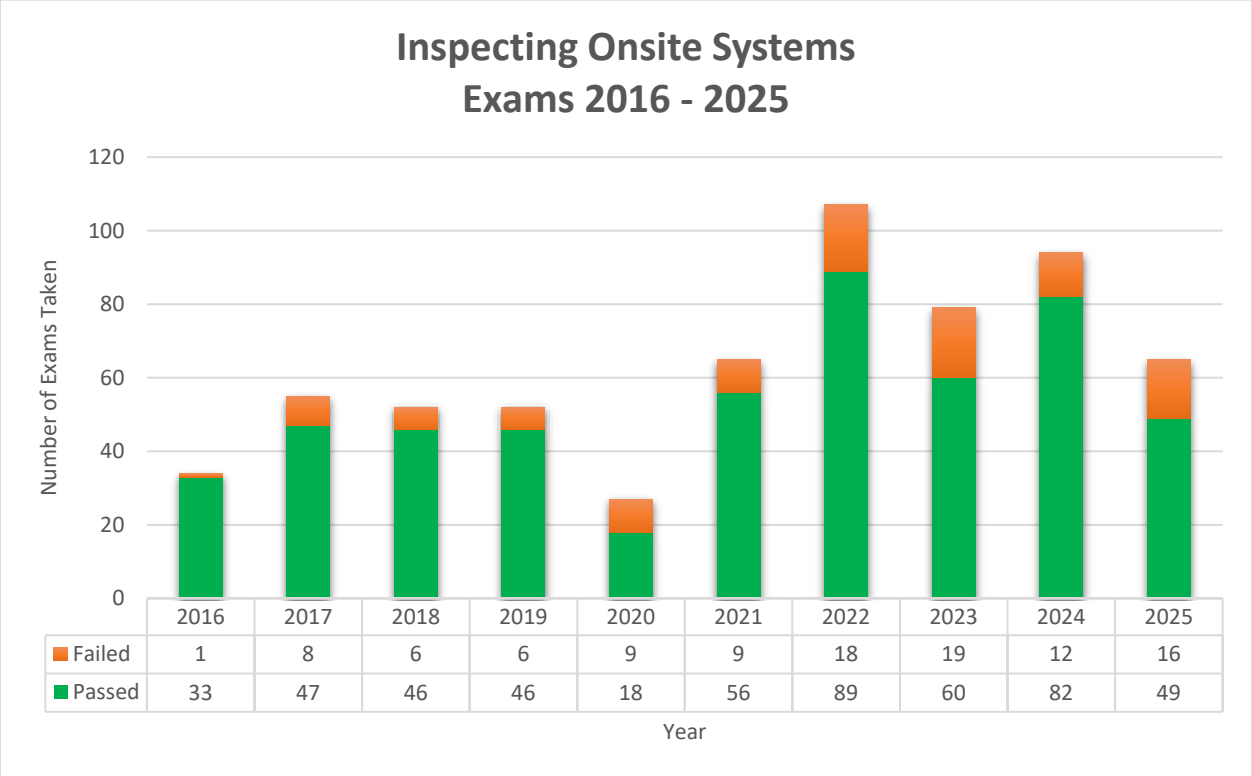


Figure 30. Soils and Onsite Systems certification exams 2016-2025

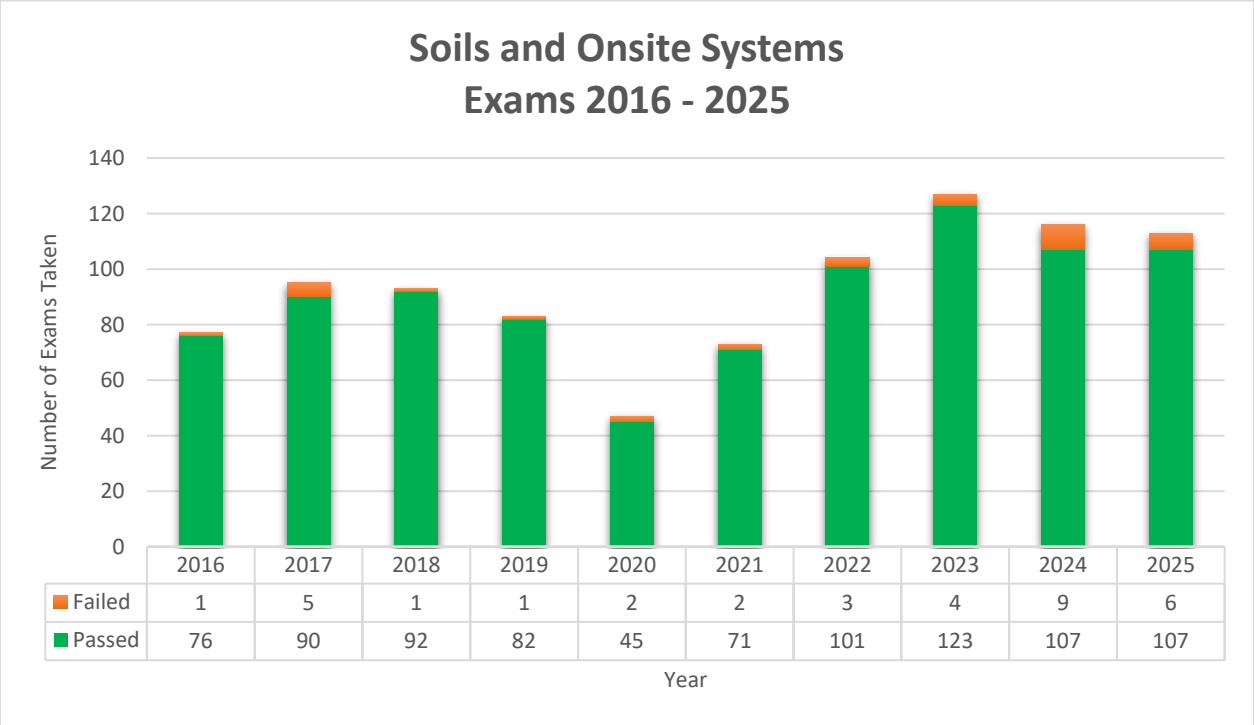


Figure 31. Soils (Field Portion) and Onsite Systems certification exams 2016-2025

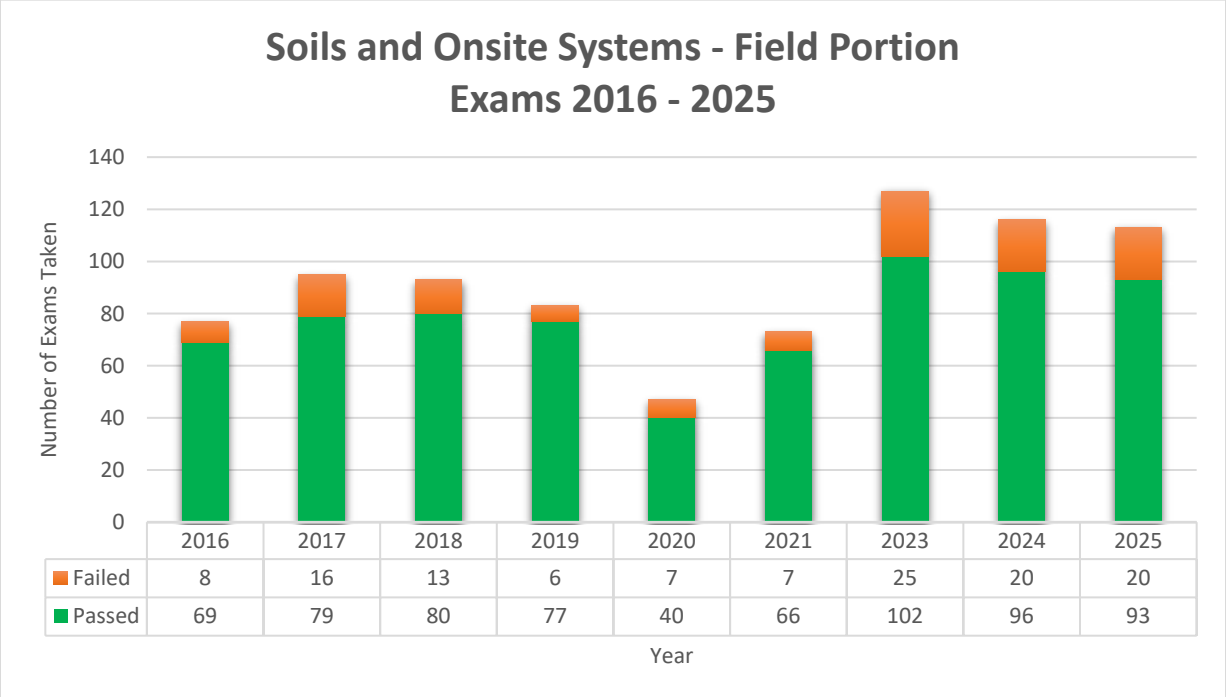
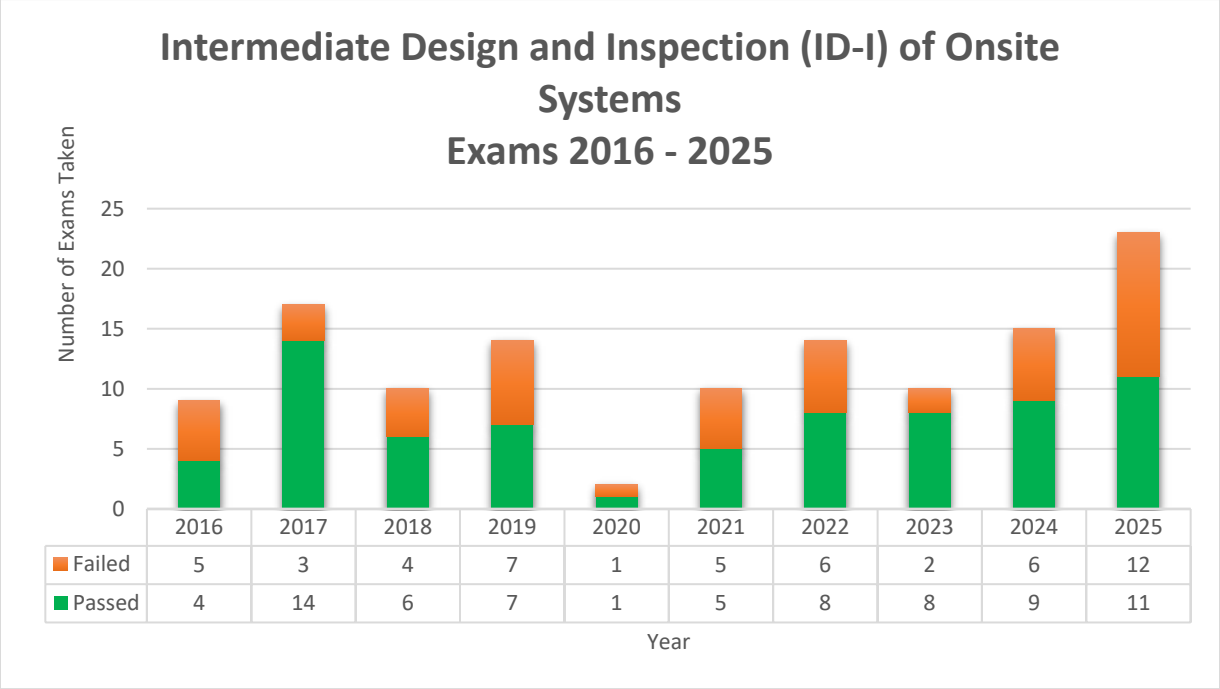
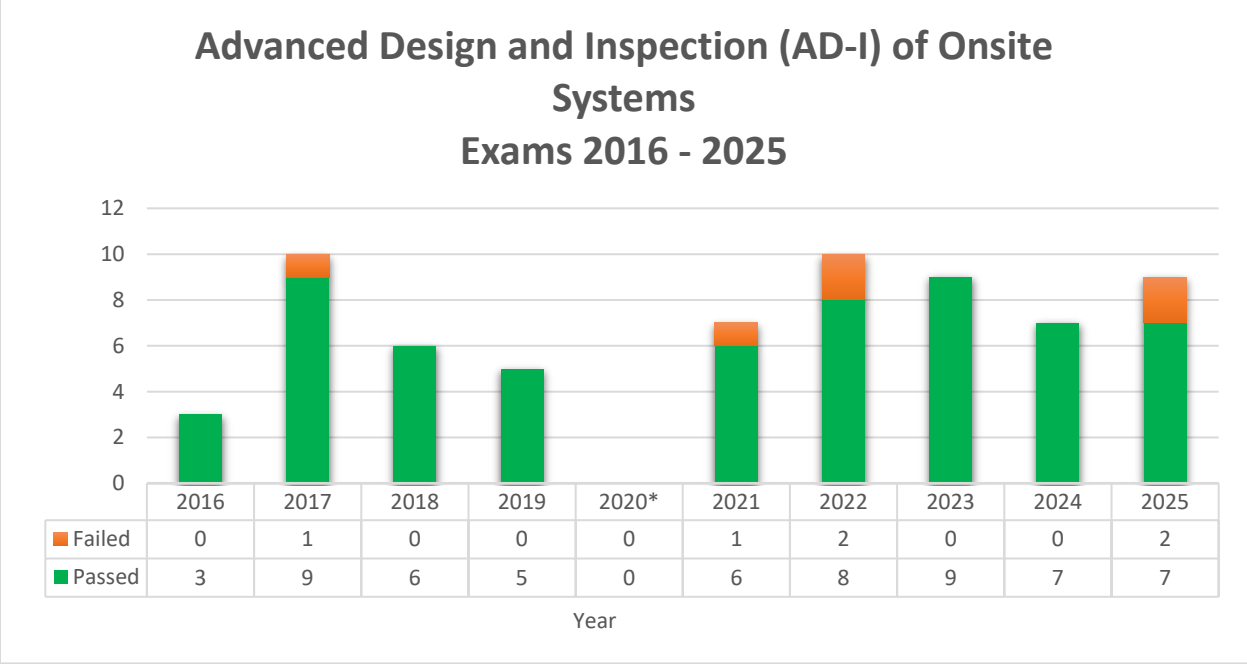


Figure 32. Intermediate Design and Inspection (ID-I) of Onsite Systems certification exams 2016-2025



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Failed	5	3	4	7	1	5	6	2	6	12
Passed	4	14	6	7	1	5	8	8	9	11

Figure 33. Advanced Design and Inspection (AD-I) of Onsite Systems certification exams 2016-2025



	2016	2017	2018	2019	2020*	2021	2022	2023	2024	2025
Failed	0	1	0	0	0	1	2	0	0	2
Passed	3	9	6	5	0	6	8	9	7	7

* Advanced Design and Inspection (AD-I) of Onsite Systems was not offered prior to 2020.

Summary and conclusions

Minn. R. 7082.0040 requires local SSTS programs to submit annual reports to the MPCA by February 1 documenting their SSTS activities for the previous calendar year. In December 2025, the MPCA sent out a web-based annual report survey to LGUs with known SSTS programs. The annual report survey collected data from each local SSTS program so that relevant information could be summarized into the statewide 2025 SSTS Annual Report.

There were 188 LGUs (86 counties, 70 cities, 29 townships, and three other special purpose units of government with permitting authority), who administered SSTS programs in 2025, 185 of those LGU's submitted annual report data.

A total of 664,554 SSTS were reported across Minnesota, representing an estimated 45.5 billion gallons of wastewater treated by SSTS in 2025 (assuming 2.5 person/permit; 75 gallons/person; 365 days/year).

The LGUs issued 11,183 SSTS construction permits in 2025. Of the SSTS permitted in 2025, approximately 55% of the systems were replacement systems and 45% of the systems were new systems. Additionally, there were 179 permits issued for system repairs. Of the SSTS permitted in 2025, approximately 95% serve residential dwellings and 5% serve other establishments.

Breaking those numbers down further, LGUs permitted 7,479 Type I systems. This is approximately 67% of the SSTS permitted in 2025. The Type I systems included 4,654 Type I mounds. There were 1,409 Type II systems, 1,583 Type III systems, 75 Type IV systems, and six Type V systems permitted in 2025. There were also 631 permits issued for tank replacements.

The majority of SSTS construction permits issued in 2025 were for systems with a flow volume between 1-2,499 gpd; however, there were 41 systems permitted with a flow volume between 2,500-4,999 gpd and four systems permitted with a flow volume between 5,000-10,000 gpd.

The LGUs reported that 12,352 sewage tanks were installed in 2025.

There were 14,014 existing system compliance inspections conducted in 2025. The LGUs reported that 420 noncompliant properties were mitigated by centralized sewer connection, abandonment or removal, or a government buyout in 2025.

Of the 188 LGUs with SSTS programs in 2025, 98% approve SSTS designs before issuing construction permits, over 99% verify soils at some point during the review process 42% track SSTS maintenance activities, and approximately 77% have property transfer compliance inspection requirements.

Over 108,000 SSTS construction permits have been issued within the last ten years, indicating that over 16% of Minnesota's 664,554 SSTS have been constructed within the last ten years or contain components that are less than ten years old.

The number of estimated compliant SSTS has increased over the last ten years, from an estimated 436,000 systems in 2016 to approximately 549,000 systems in 2025. An increase of 113,000 systems.

Trends observed from the 2025 SSTS Annual Report suggest continued improvements in subsurface wastewater treatment across the state.

Appendix A

Countywide statistics

County	Total SSTS reported in 2025	Construction permits reported in 2025	Total construction permits issued 2002-2025	Number of compliance inspections of existing SSTS conducted countywide (private inspector and LGU)	Percent of total existing SSTS inspected in 2025 out of total SSTS	Counties with compliance inspections for property transfer
Aitkin	13854	251	6295	462	3.3%	Yes
Anoka*	30972	475	11130	606	2.0%	No
Becker	18055	352	7941	385	2.1%	No
Beltrami*	12398	235	5376	288	2.3%	Yes
Benton	4954	90	2460	112	2.3%	Yes
Big Stone	1770	25	669	6	0.3%	Yes
Blue Earth	5620	101	3266	157	2.8%	Yes
Brown	2400	44	1320	27	1.1%	Yes
Carlton	10126	124	3350	118	1.2%	No
Carver*	4906	102	2479	139	2.8%	Yes
Cass*	25297	470	11402	771	3.0%	Yes
Chippewa	1592	34	772	15	0.9%	No
Chisago*	11565	220	5011	332	2.9%	Yes
Clay	3970	63	1928	59	1.5%	Yes
Clearwater	3693	44	961	20	0.5%	No
Cook	7334	134	3309	108	1.5%	No
Cottonwood	1539	37	845	21	1.4%	Yes
Crow Wing*	28742	618	12423	1259	4.4%	Yes
Dakota*	9883	116	3784	129	1.3%	Yes
Dodge	3373	50	1773	60	1.8%	Yes
Douglas*	6993	186	4764	250	3.6%	Yes
Faribault	2262	21	1496	34	1.5%	Yes
Fillmore	4923	110	2356	76	1.5%	Yes
Freeborn	3979	52	2240	50	1.3%	Yes
Goodhue	6354	119	2808	64	1.0%	Yes
Grant	3116	40	791	45	1.4%	Yes
Hennepin*	8810	150	3300	143	1.6%	No
Houston	2481	63	1322	11	0.4%	No
Hubbard*	14346	275	6710	282	2.0%	No

County	Total SSTS reported in 2025	Construction permits reported in 2025	Total construction permits issued 2002-2025	Number of compliance inspections of existing SSTS conducted countywide (private inspector and LGU)	Percent of total existing SSTS inspected in 2025 out of total SSTS	Counties with compliance inspections for property transfer
Isanti*	10771	215	4376	186	1.7%	Yes
Itasca*	20350	324	7706	578	2.8%	No
Jackson	1880	34	1048	24	1.3%	Yes
Kanabec	7111	130	2298	110	1.5%	No
Kandiyohi*	7534	141	4136	193	2.6%	Yes
Kittson	983	9	220	11	1.1%	No
Koochiching	2220	26	891	4	0.2%	No
Lac qui Parle	1867	32	728	25	1.3%	Yes
Lake	5874	112	2151	113	1.9%	Yes
Lake of the Woods*	3169	40	3036	8	0.3%	No
Le Sueur	5446	103	3102	189	3.5%	Yes
Lincoln	1069	26	811	74	6.9%	Yes
Lyon	2520	35	1125	45	1.8%	Yes
Mahnomen	1246	8	375	26	2.1%	No
Marshall	2100	16	380	4	0.2%	No
Martin	2680	56	1362	21	0.8%	Yes
McLeod	4403	80	2390	100	2.3%	Yes
Meeker	9153	83	3145	35	0.4%	Yes
Mille Lacs	7226	189	4452	252	3.5%	Yes
Morrison	10088	163	6251	341	3.4%	Yes
Mower	3460	60	2073	42	1.2%	Yes
Murray	1207	41	949	21	1.7%	Yes
Nicollet	2961	49	1499	78	2.6%	Yes
Nobles	2661	45	921	22	0.8%	Yes
Norman	1887	17	309	8	0.4%	No
Olmsted*	15997	162	3323	136	0.9%	Yes
Otter Tail*	46835	617	12864	847	1.8%	Yes
Pennington	1868	17	481	13	0.7%	No
Pine*	15538	264	5199	399	2.6%	Yes
Pipestone	1248	20	633	6	0.5%	Yes
Polk	6575	95	2155	33	0.5%	No
Pope*	4821	76	1932	78	1.6%	Yes

County	Total SSTS reported in 2025	Construction permits reported in 2025	Total construction permits issued 2002-2025	Number of compliance inspections of existing SSTS conducted countywide (private inspector and LGU)	Percent of total existing SSTS inspected in 2025 out of total SSTS	Counties with compliance inspections for property transfer
Ramsey*	1666	24	451	24	1.4%	N/A
Red Lake	899	12	280	5	0.6%	Yes
Redwood	2612	28	1133	13	0.5%	No
Renville	2394	36	1520	37	1.5%	Yes
Rice*	7173	138	3437	131	1.8%	Yes
Rock	1458	23	554	12	0.8%	No
Roseau	4153	17	426	18	0.4%	No
Scott	8982	140	3489	169	1.9%	No
Sherburne*	20447	360	12020	678	3.3%	Yes
Sibley	2708	46	1431	45	1.7%	Yes
St. Louis	40756	742	16698	733	1.8%	Yes
Stearns	18837	366	9920	611	3.2%	Yes
Steele	2935	55	1450	60	2.0%	Yes
Stevens	2053	18	537	0	0.0%	No
Swift	1617	28	662	18	1.1%	Yes
Todd*	10354	156	4292	191	1.8%	Yes
Traverse	628	14	346	5	0.8%	Yes
Wabasha	12489	55	1738	67	0.5%	No
Wadena	3742	100	2305	98	2.6%	Yes
Waseca	2475	46	1335	52	2.1%	Yes
Washington*	19984	279	6448	434	2.2%	Yes
Watonwan	1321	27	711	23	1.7%	Yes
Wilkin*	1048	25	648	17	1.6%	Yes
Winona	5190	85	2200	74	1.4%	No
Wright*	18387	351	7486	447	2.4%	Yes
Yellow Medicine	1738	22	749	1	0.1%	No
Total	**664,101**	**11,079**	**265,768**	**14,014**	**2.11%**	**(59) Yes**

*County, City, Township, and other special purpose units of government data were added to their respective counties to tabulate this information.

Appendix B

Appendix B1

City programs

County name Number of cities with SSTS programs	City Submitted annual report	City No annual report submitted
Anoka County (12)	Andover City	
	Anoka City	
	Blaine City	
	Columbus City	
	Coon Rapids City	
	East Bethel City	
	Ham Lake City	
	Lino Lakes City	
	Nowthen City	
	Oak Grove City	
	Ramsey City	
	Saint Francis City	
Beltrami (1)	Wilton City	
Carver County (1)	Chanhassan City	
Cass County (1)	Lake Shore City	
Chisago County (2)	North Branch City	
	Wyoming City	
Crow Wing County (13)	Baxter City	
	Crosby City	
	Crosslake City	
	Cuyuna City	
	Deerwood City	
	Emily City	
	Fifty Lakes City	
	Garrison City	
	Jenkins City	
	Manhattan Beach City	
	Nisswa City	
	Pequot Lakes City	
	Trommald City	
Dakota County (15)	Apple Valley City	
	Burnsville City	
	Coates City	

County name Number of cities with SSTS programs	City Submitted annual report	City No annual report submitted
	Eagan City	
	Hampton City	
	Inver Grove Heights City	
	Lakeville City	
	Lilydale City	
	Mendota Heights City	
	Miesville City	
	Rosemount City	
	South Saint Paul City	
	Sunfish Lake City	
	Vermillion City	
	West Saint Paul City	
Douglas County (1)		Alexandria City
Hennepin County (5)	Dayton City	
	Independence City	
	Medina City	
	Orono City	
	Woodland City	
Hubbard County (1)	Park Rapids City	
Lake of the Woods (1)	Baudette City	
Pine County (2)	Rock Creek City	
	Pine City	
Pope County (1)		Glenwood City
Ramsey County (7)	Gem Lake City	
	Little Canada City	
	Maplewood City	
	North Oaks City	
	Saint Paul City	
	Shoreview City	
	White Bear Lake City	
Rice County (1)	Northfield City	
Sherburne County (3)	Baldwin City	
	Elk River City	
	Zimmerman City	
Washington (1)	Dellwood City	

County name **Number of cities with SSTS programs**	**City** **Submitted annual report**	**City** **No annual report submitted**
Wilkin County (1)		Doran City
Wright County (1)	Otsego City	

Appendix B2

Township programs

County name Number of townships with SSTS programs	Township Submitted annual report	Township No annual report submitted
Anoka County (1)	Linwood Township	
Crow Wing County (2)	Crow Wing Township	
	Irondale Township	
Dakota County (11)	Castle Rock Township	
	Douglas Township	
	Empire Township	
	Eureka Township	
	Greenvale Township	
	Hampton Township	
	Marshan Township	
	Nininger Township	
	Ravenna Township	
	Scotia Township	
	Vermillion Township	
Douglas County (1)	Alexandria Township	
Isanti County (1)	Athens Township	
Kandiyohi County (1)	Saint Johns Township	
Mille Lacs County (1)	Greenbush Township	
Pine County (5)	Arna Township	
	Munch Township	
	Pine City Township	
	Pokegema Township	
	Royalton Township	
Ramsey County (1)	White Bear Township	
Rice County (1)	Bridgewater Township	
Sherburne County 1)	Becker Township	
Todd County (2)	Bertha Township	
	Bruce Township	
Wright County (1)	Middleville Township	

Appendix B3

Other special purpose units of government programs

County name	Other
Number of townships with SSTS programs	**Submitted annual report**
Olmsted County (1)	TCPA
Otter Tail County (1)	Otter Tail Water Management District
Other (1)	University of Minnesota

Appendix C

List of 2025 SSTS Annual Report questions

1. **General program information – Yes or No answer.**
    a. Alternative Local Standards (ALS) for existing systems?
        i. ALS are standards that are less restrictive than Minn. R. chs. 7080-7083, do not confuse them with the old system category of 'Alternative Systems' (floodplains, holding tanks, privies).
    b. ALS new or replacement SSTS using a minimum of two foot of separation in allowable areas of the LGU?
    c. ALS new or replacement SSTS using 2006 Rules?
    d. Do you track SSTS maintenance/pumping?
    e. Do you have jurisdiction-wide compliance inspections for property transfer?
    f. Do you approve SSTS design before issuing permit?
    g. When in your permitting process do you verify soils?
2. **Residential SSTS by system type – Write number of permits issued for each category.**
    a. # permits issued for Type I/Rock Trenches.
    b. # permits issued for Type I/EZ Flow.
    c. # permits issued for Type I/Chamber Trenches.
    d. # permits issued for Type I/Seepage or Pressure Beds.
    e. # permits issued for Type I/Mounds/Rock
    f. # permits issued for Type I/Mounds/EZ Flow
    g. # permits issued for Type I/Mounds/Chamber.
    h. # permits issued for Type I/At-Grades/Rock.
    i. # permits issued for Type I/At-Grades/EZ Flow.
    j. # permits issued for Type I/At-Grades/Chamber.
    k. # permits issued for Type II/Privies, Holding Tanks, and Floodplain Areas.
    l. # permits issued for Type III.
    m. # permits issued for Type IV/Registered Product Systems.
    n. # permits issued for Type V.
    o. # permits issued for Tank Replacements.
    p. Total number of Permits issued for Residences by Type.
3. **Total number of Residences regulated under an Operating Permit in your jurisdiction for**
    a. Type II Holding Tanks.
    b. Type IV Systems.
    c. Type V Systems.
    d. Other (MSTS, Type III, High Risk Lots)
4. **Residential SSTS by flow volume – Write number of permits issued for each category.**
    a. New systems 1-2,499 gpd.
    b. New systems 2,500-4,999 gpd.
    c. New systems 5,000-10,000 gpd.

d. Replacement systems 1-2,499 gpd.
e. Replacement systems 2,500-4,999 gpd.
f. Replacement systems 5,000-10,000 gpd.

5. Other establishment SSTS by system type – Write number of permits issued for each category.

a. # permits issued for Type I/Rock Trenches.
b. # permits issued for Type I/EZ Flow.
c. # permits issued for Type I/Chamber Trenches.
d. # permits issued for Type I/Seepage or Pressure Beds.
e. # permits issued for Type I/Mounds /Rock
f. # permits issued for Type I/Mounds/EZ Flow
g. # permits issued for Type I/Mounds/Chamber.
h. # permits issued for Type I/At-grades /Rock.
i. # permits issued for Type I/At-Grades/EZ Flow.
j. # permits issued for Type I/At-Grades/Chamber
k. # permits issued for Type II/Privies, Holding Tanks, and Floodplain Areas.
l. # permits issued for Type III.
m. # permits issued for Type IV/Registered Product Systems.
n. # permits issued for Type V.
o. # permits issued for Tank Replacements.
p. Total number of Permits issued for Residences by Type.

6. Total number of other establishments regulated under an Operating Permit in your jurisdiction for

a. Type II Holding Tanks.
b. Type IV Systems.
c. Type V Systems.
d. Other (MSTS, Type III, High Risk Lots)

7. Other establishment SSTS by flow volume – Write number of permits issued for each category.

a. New systems 1-2,499 gpd.
b. New systems 2,500-4,999 gpd.
c. New systems 5,000-10,000 gpd.
d. Replacement systems 1-2,499 gpd.
e. Replacement systems 2,500-4,999 gpd.
f. Replacement systems 5,000-10,000 gpd.

8. Permits issued for SSTS repairs – Write number of permits issued for each category.

Complete this part only if you issue repair permits.

a. Residential SSTS repairs.
b. Other establishment SSTS repairs.

9. Jurisdiction-wide SSTS questions – Write number for each category.

a. # Fulltime dwellings with SSTS.
b. # Seasonal dwellings with SSTS.
c. # Cluster SSTS.

d. # Dwellings served by Cluster SSTS.
e. # other establishments with SSTS.

10. **SSTS compliance – Write whole numbers only, do not use a decimal or use the percent sign. For example, if your answer is <1%, enter 1.**
    a. Percentage of failing systems within jurisdiction.
    b. Percentage of imminent systems within jurisdiction.
    c. Percentage of compliant SSTS within jurisdiction.
    d. Total percentage SSTS – You do not enter anything here, the spreadsheet will calculate this answer.
        i. This should total 100, if it does not check your answers to a, c, and/or e and adjust accordingly.
11. **The number of compliance inspections of existing SSTS conducted in their jurisdiction.**
12. **The number of noncompliant properties connected to centralized sewer.**
13. **The number of noncompliant properties mitigated by abandonment or removal of a dwelling.**
14. **The number of noncompliant properties mitigated through government buyout.**
15. **Inspector's information.**
    a. Name of department head.
    b. Name of Trained Administrator.
    c. Name and email address of SSTS contact.
    d. Inspector(s) name(s) and;
        i. License numbers if inspections are contracted out to a licensed SSTS inspection business.
        ii. Certification numbers if inspections are done in-house by LGU staff certified as SSTS inspectors.
16. **Tank Installation Report.**
    a. Installer name.
    b. Installer license number.
    c. Number of septic tanks installed.
        i. This includes pump/lift tanks and holding tanks.
    d. Number of Performance/Type V systems installed.
        i. Minn. Stat. § 115.551 limits the number of septic tanks for Performance/Type V systems to one per household.
    e. Number of tanks installed by homeowners (if allowed in your jurisdiction).
        i. Name of homeowner.
        ii. Address.