Audit of Transportation Services: Improving Utility Cut Permit and Inspection Processes

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Executive Summary

"Utility cut" refers to excavating a portion of the public right-of-way

A "utility cut" refers to excavating a portion of the public right-of-way (e.g., pavement, sidewalks or boulevards) to provide access to underground utilities, such as water mains, power lines, and telecommunications infrastructure.

Why this audit matters

Utility cuts can lead to traffic disruptions and construction-related dust and noise complaints. Improper restoration of utility cuts can also deteriorate City roads and sidewalks or result in road hazards such as potholes or uneven surfaces, increasing the safety risk for drivers, cyclists and pedestrians. As a result, it is crucial for the City to effectively manage the utility cut process.

Utility Management Unit of Transportation Services Division oversees utility cut permits and inspections

The Transportation Services Division maintains City roads and sidewalks to ensure they remain safe and accessible for all users. Each year, the Utility Management Unit of Transportation Services issues approximately 35,000 utility cut permits to authorized public utility companies.

Before 2018, Transportation Services was responsible for permanently restoring roads and sidewalks after utility companies completed their work. Starting in 2018, Transportation Services no longer performs any utility cut repair work, but is responsible for inspecting repairs completed by utility companies to ensure they meet City standards and regulations.

Transportation Services established the Utility Management Unit in April 2024 following an internal review of the Utility Cut Program. One of the goals of the Utility Management Unit is to consolidate permit and inspection functions under one business unit.

Audit objective

The objective of this audit was to assess the efficiency of Transportation Services' utility cut permitting process and the effectiveness of the oversight of the utility cut repair work.

In assessing this objective, our audit aimed to answer the following questions:

1) Does Transportation Services meet the established service levels for processing permit applications?

2) Are inspections of utility cut repairs and warranties effective in holding utility companies accountable for meeting the City's standards and regulations?

3) Does Transportation Services have an effective cost recovery mechanism to account for pavement degradation and to ensure that the fees from utility companies cover the City's costs for administering and inspecting utility cut repairs?

Our audit identified the following opportunities for improvement:

A. Improve Application Processing Time and Implement Consistent Practices for Reviewing and Documenting Permit Applications

Lack of end-to-end data to measure permit application time

The Road Allowance Control System (RACS) used to manage permit applications is unable to track essential milestones in the permit process—such as when applications are received, reviewed, returned for corrections, or resubmitted. As a result, there is no end-to-end tracking of application processing times, making it hard for staff to monitor timeliness against its targets, or to identify delays, causes for delays, and opportunities for improvement.

42% to 90% of permits sampled exceeded the target for processing time

Our audit sample of 75 permits issued between 2022 and 2024 showed that application processing time[1] exceeded internal targets between 42 to 90 per cent of the time, depending on the type of permit[2]. See table below for details.

Average Permit Processing Time by Stream, Compared to Internal Targets
Prepared by the Auditor General's Office

Permit Type	Internal Target	Average Processing Time	Percentage of Applications Exceeding Target
Emergency	2 business days	3.25 business days	50%
Short-Stream	5 business days	6.07 business days	42%
Full-Stream	20 business days	83.60 business days	90%

Based on our review, delays were generally due to incomplete applications, resulting in the permit team going back and forth with utility companies to follow up on missing documents or to correct erroneous application information.

[1] We define application processing time as the date from when the permit application is received to the date the permit is issued.
[2] **Full-stream** permits apply to large-scale construction activities involving new infrastructure or significant alterations to existing infrastructure. **Short-stream** permits usually cover smaller scope maintenance and repair work. **Emergency** permits are for urgent work needed to address failures or damage to existing infrastructure. According to the City's Municipal Consent Requirements (MCR), **full-stream** applications normally should be processed within 20 business days while **short-stream** applications should be processed within five business days from the date they are deemed complete (i.e., when all required documents have been received). The MCR does not specify processing timelines for **emergency** applications, but the Utility Management Unit aims to process them within two business days. See **Exhibit 1** for more details.

Since the permit team and existing systems do not support processing time tracking, they cannot provide reasons for the delays without a case-by-case review. Improvements are needed for timely permit application processing to help avoid delays in essential utility cut work.

We also found several other opportunities related to reviewing and documenting permit applications, including increased quality assurance and documentation, and information storage.

Utility Management Unit does not oversee permits issued by Toronto Water

Toronto Water independently issues its own permits and conducts inspections, so the Utility Management Unit can't verify if restoration work by Toronto Water meets City standards or is completed on time. Transportation Services does not have a Memorandum of Understanding (MOU) with Toronto Water that reflects current roles and responsibilities since several process changes have occurred over the years for utility cut permits and inspections. Since the utility cut process involves multiple internal parties, it is important that they share information and clearly define roles and responsibilities regarding the oversight of City's utility cut permits.

Lack of coordination between WZCC Unit and Utility Management Unit

All utility work in the City requires both a utility cut permit and Road Disruption Activity Reporting System (RoDARS) approval. RoDARS approvals help Transportation Services manage road closures and traffic disruptions caused by work affecting the roadway. However, Work Zone Construction Coordination (WZCC) staff[3] do not consistently verify permit numbers listed on RoDARS applications.

43% of RoDARS applications had missing or incorrect permit numbers

Our review found that 43 per cent of applications from 2022 to 2024 had missing or incorrect permit numbers, which means that staff could not cross check these against the permit database. As a result, the City cannot reliably assess RoDARS compliance of utility companies.

93% of sampled permits did not have RoDARS approvals

Further, our review of 100 randomly selected samples of completed permit restorations indicated that approximately 93 per cent of them did not have RoDARS approvals on file.

Increased information sharing between the Utility Management and WZCC units would improve oversight, help inspections scheduling, and identify completed restorations.

[3] Work Zone Construction Coordination is a unit under Transportation Services Traffic Management Section. See **Exhibit 1** for more details.

B. Improve Inspections and Deficiency Monitoring

Limited or incorrect inspection and warranty records, 22% had no inspection work orders

Our review of a sample of 200 permits[4] for completed permanent cut repairs found significant inspection documentation gaps—22 per cent had no inspection work orders so it is possible that no inspections were done. Another 31 per cent had inspection work orders but no other information in Maximo (see **Exhibit 2: Glossary**), and 43 per cent had some documentation in either Maximo or manual records, but they are incomplete.

82 of 100 sampled permits were incorrectly marked as "warranty completed"

In addition, 100 of these 200 permits were marked as "warranty completed"[5] in the Maximo work order system, but 82 permits were incorrectly labeled. Management informed us that this was due to misunderstanding by the inspectors on the different status categories or data entry errors.

With about 4,000 permits showing as "warranty completed", the error rate in our sample raises concerns about the accuracy of warranty completion for the remaining permits. Permits with "warranty completed" status risk that they will not be monitored or reviewed for potential deficiencies and warranty repairs.

Lack of formal criteria for material testing

Material testing of concrete and asphalt used in permanent restoration ensures that utility cut restorations meet the City's standards for safety, durability, and long-term performance. We found that there are no formal criteria for selecting permits for material testing. Management informed us that the current practice is for inspectors to exercise judgement and arrange material testing when sufficient advance notice is provided by the utility companies. However, this approach is informal and not documented.

Of the 120 permits with documented material tests between 2022 and 2024, 18 permits (15 per cent) had deficiencies. We reviewed eight of these 18 permits and found that five were missing deficiency reports. Follow-up inspections were not performed before warranty expiration on two permits even though they were flagged for follow-up.

[4] We selected a sample of 200 permits for completed permanent cuts: 100 were selected from completion reports submitted by utility companies, and the remaining 100 were selected from permits recorded in Maximo as inspected and marked "warranty completed".

[5] When a permit has a "warranty completed" status, it means that the permit has gone through the entire warranty period life cycle, including completing all required inspections.

No formal process for monitoring permanent restoration and warranty deficiencies; 62% of deficiencies sampled not re-inspected

As for permanent restoration inspections, there is no formal process requiring utility companies to confirm when deficiencies resulting from inspections are repaired, nor a system for inspectors to track or follow up on those repairs. Of our sample of 13 permits with confirmed deficiencies, eight (62 per cent) were not re-inspected.

89% of service requests were closed; 36% of these exceeded target of 30 days, despite improvements since 2022

At the time of our audit, 1,713 or 89 per cent of all service request follow-up work orders (service requests) assigned to the Utility Management Unit between 2022 to 2024 were closed. The time taken to close a service request improved from 56 business days in 2022 to 27 in 2024. However, 621 (36 per cent) of the closed requests took longer than the 30-day internal target, averaging 80 business days to close.

Need for better KPIs and targets

While the permit team has established target processing times for each stream, they do not track actual processing times because the Road Allowance Control System (RACS) does not document the date a permit application is received. Starting in July 2024, the construction oversight team began tracking activity-based key performance indicators (KPIs). However, they only established targets for some of these KPIs and do not analyze the root causes for not meeting these targets. Developing additional KPIs and targets is needed to better monitor the over program efficiency.

C. Establish an Effective Cost Recovery Fee Structure

Some municipalities levy a pavement degradation fee to ensure that entities responsible for utility cuts contribute to costs associated with reduced road service life, earlier rehabilitation, and increased maintenance. Since 2018, when utility companies became responsible for permanently restoring their cuts, the City has not been recovering these fees because Transportation Services lacks the necessary information (e.g., cut sizes) to calculate these charges.

Approximately $20M in unrecovered pavement degradation fees due to lack of cut size data

We estimate that the City may have forgone approximately $20 million in pavement degradation fees from 2018 to 2024, given it no longer had data available (e.g., cut sizes) to inform the charges to be made. Management informed us that they performed an analysis in Q3 2024 to identify outstanding pavement degradation fees which approximates our calculated value. They also indicated they began discussions with major utility companies to potentially recover outstanding fees and establish accurate billing methods going forward.

Current fee structure may be insufficient to cover costs associated with a potential increase in inspection volumes

Transportation Services' 2023 cost analysis of its Utility Cut Program found that revenues were greater than costs by approximately 16 per cent. However, only 12 per cent of permits are inspected and there is a backlog of warranty inspections and deficiencies follow-up inspections. If inspection volumes increase, the current fee structure may be insufficient to cover the program costs.

$576k owing to Transportation Services by external utility companies related to legacy permits, with $453k currently being disputed

As of April 2025, the City is owed approximately $576,000 by external utility companies for permanent restoration work related to legacy permits issued before 2018. Approximately $453,000 of this amount is in dispute, mainly related to clarifying responsibilities, the scope of work, and costs.

D. Better Track and Integrate Utility Cut Data

This report identifies major issues with the City's utility cut data, resulting from a lack of complete, accurate, and centralized information. The three systems used—RACS (permits), RoDARS (traffic coordination), and Maximo (inspections)—are not integrated, leading to fragmented data and no automatic communication between units.

Management informed us that Transportation Services is in the planning phase of the RACS modernization process to replace the existing RACS, which will integrate the RACS and Maximo systems.

RACS is unable to track key permit dates and categorize permit types, making it difficult to summarize or report on utility permit activity. Maximo, used for inspections, was implemented in 2024, and contains missing or inaccurate data due to a transition from the previous manual process. These deficiencies hinder effective inspection and warranty tracking.

Transportation Services needs a more effective permit system that is fully integrated with work management systems such as Maximo. This integration would enable end-to-end utility cut permit tracking throughout its entire life cycle. It is important that all key milestones—such as permit application processing, RoDARS approvals, utility work completion, restoration inspections, and warranty management— are clearly documented and easily accessible in order to outline the entire process, support accurate performance measurement, and make informed operational and management decision-making.

Conclusion

Utility cuts can lead to traffic disruptions and construction-related dust and noise complaints. Additionally, improper utility cut restoration can deteriorate City roads and sidewalks or result in road hazards, increasing the safety risk for drivers, cyclists and pedestrians. As a result, it is crucial for the City to effectively manage the utility cut process.

For our first objective, we concluded that Transportation Services does not consistently meet established service levels for processing permit applications. While service levels exist, the division faces challenges in monitoring and achieving them due to inefficiencies in the permit process.

For our second objective, we concluded that inspections and warranty oversight are not sufficiently effective in holding utility companies accountable for restoring utility cuts to City standards. Our review identified several concerns, including poor recordkeeping in inspection files, incorrect or missing warranty start dates, inadequate tracking and follow-up on deficiencies, and no standardized inspection procedures.

For our third objective, we concluded that Transportation Services does not have an effective cost recovery mechanism to ensure that utility companies cover the City's costs related to pavement degradation, permit administration and inspections. Since 2018, the City has potentially forgone an estimated $20.4 million in pavement degradation fees. In addition, the current fee structure may be insufficient to cover costs associated with a potential increase in inspection volumes.

Implementing the 14 recommendations contained in this report will strengthen the effectiveness, efficiency, and oversight of the utility cut permit and inspection processes, ensuring it meets current and future service demands, while protecting public safety and preserving road infrastructure quality and longevity.

Thank you to management and staff

We would like to express our sincere appreciation for the co-operation and assistance we received during our audit from the management and staff of the Transportation Services Division.

Background

Utility companies often require access to underground infrastructure

Utility companies provide vital services such as water, natural gas, electricity, and telecommunications to City of Toronto residents and businesses. Utility companies often require access to the underground infrastructure to maintain, repair, and upgrade their networks.

"Utility cut" refers to excavating a portion of the public right-of-way

A "utility cut" refers to excavating a portion of the public right-of-way (e.g., pavement, sidewalks or boulevards) to provide access to underground utilities, such as water mains, power lines, and telecommunications infrastructure.

Why this audit matters

Utility cuts can lead to traffic disruptions and construction-related dust and noise complaints. Improper restoration of utility cuts can also deteriorate City roads and sidewalks or result in road hazards such as potholes or uneven surfaces, increasing the safety risk for drivers, cyclists and pedestrians. As a result, it is crucial for the City to effectively manage the utility cut process.

Utility Management Unit of Transportation Services Division oversees utility cut permit and inspection processes

The Transportation Services Division is responsible for maintaining City roads and sidewalks to ensure they remain safe and accessible for all users. The Utility Management Unit of Transportation Services issues approximately 35,000 utility cut permits to authorized public utility companies annually.

Typically, utility cuts are temporarily repaired to a safe state and permanently restored later. Where possible, restorations are completed simultaneously with their utility work.

All utility cut permits and associated work must comply with the requirements outlined in the City of Toronto *Municipal Code Chapter 743 – Streets and Sidewalks, Use of*, along with any standard and special conditions listed on the permit.

Utility companies are also required to follow the guidelines outlined in the City's Municipal Consent Requirements (MCR) document, which details the utility cut process and provides instructions for utility companies to follow.

In some cases, utility companies enter into agreements with the City, such as Municipal Access Agreements, Memoranda of Agreement or Memoranda of Understanding, which specify any additional terms and conditions.

2018 Changes to the Utility Cut Program

Since 2018, utility companies are responsible for permanent restoration of utility cuts

Before 2018, Transportation Services was responsible for the permanent restoration of transportation infrastructure after utility companies completed their work. Utility companies were invoiced for repair costs incurred by the City plus any administrative and pavement degradation fees. However, this process faced numerous challenges, such as customer service issues, utility company concerns, and an increasing backlog of pending permanent restorations.

Transportation Services is responsible for inspecting repairs to ensure they meet City standards and regulations

In 2018, Transportation Services shifted the responsibility for permanent restoration of utility cuts to the utility companies, leaving them accountable for restoring City infrastructure affected by their work. Under the current process, Transportation Services does not perform any repair work, but is responsible for inspecting the utility company repairs to ensure they meet City standards and regulations.

Transportation Services established the Utility Management Unit in April 2024 following an internal review of the Utility Cut Program. One of the goals of the Utility Management Unit is to consolidate permit and inspection functions under one business unit.

Transportation Services also retained a consultant in December 2024 to review its Utility Management program, including reviewing the existing state, jurisdictional scan and identifying best practices and technologies, and make recommendations for a future organizational model and resourcing needs for the unit.

See **Exhibit 1** for additional background information, including key utility cut stakeholders, and descriptions of the types of utility cut permits and utility cut process, permit application and approval process, RoDARS approval process, inspection and warranty process, and major systems used to manage utility cuts.

See **Exhibit 2: Glossary** for various terms, including system descriptions.

Audit Results

A. Improve Application Processing Time and Implement Consistent Practices for Reviewing and Documenting Permit Applications

A. 1. Stronger Oversight Needed Over Permit Process

Application Processing Timelines Are Not Tracked

According to the City's Municipal Consent Requirements (MCR), short-stream applications normally should be processed within five business days while full-stream applications should be processed within 20 business days after they are deemed complete (i.e., when all required documents have been received). The MCR does not specify processing timelines for emergency applications, but the Utility Management Unit aims to process them within two business days.

Application processing timelines are not tracked and assessed against targets

However, we found that the Division's Road Allowance Control System (RACS) does not capture fundamental permit application processing data, such as submission and first review dates, when the application was returned to the utility company due to missing or erroneous information, or when the utility company submits a revised application. This lack of end-to-end tracking makes it difficult for the permit team to accurately monitor application processing times and assess against targets, or identify areas of improvement.

Outside of RACS, for **full-stream permits**, we noted that the team manually tracks internal metrics, including the number of completed reviews, reviews taking more than 15 business days, and applications requiring construction design changes, which result in revised applications. While these metrics are informative, they do not measure the overall efficiency in processing applications. For example, they do not capture total elapsed time from the utility company's initial application submission to permit issuance.

For **emergency and short-stream permits**, there is no end-to-end permit tracking such as tracking of timelines relating to application processing or reviews outside of RACS.

As a result, while there are established targets for processing permit applications according to MCR, processing times are not tracked and assessed against targets. Management could not provide information such as how many permits are processed within required timelines, or the average time it took to issue a permit for each stream.

Management informed us that a new permitting software system is under development and is expected to improve timeline tracking and enable consistent performance reporting. However, management expects that this new platform will take multiple years to implement.

Average Sampled Processing Time Exceeded Internal Target Timelines

42% to 90% of permits sampled exceeded processing timeline target

We selected a sample of 75 permits issued from 2022 to 2024 from all three streams. We reviewed the permits case by case to assess how long it took Transportation Services to process the application, from the utility company's application submission date, to the permit issuance date. However, management advised that these timeframes currently include periods when applications are returned back to utility companies for revisions and therefore may include delays that are attributable to other parties. See results in **Figure 1** below.

Figure 1: Average Permit Processing Time by Stream, Compared to Internal Targets
Prepared by the Auditor General's Office

Permit Type	Internal Target	Average Processing Time	Percentage of Applications Exceeding Target
Emergency	2 business days	3.25 business days	50%
Short-Stream	5 business days	6.07 business days	42%
Full-Stream	20 business days	83.60 business days	90%

Specifically, we noted that application processing exceeded the internal target timelines 90 per cent of the time for **full-stream permits.**

Based on our review, the delays were generally due to incomplete applications. We noted that the permit team needs to go back and forth with utility companies to follow up on missing documents or to correct erroneous information on the application. Since the permit team and existing systems do not support processing time tracking, they cannot provide reasons for delays without a case-by-case review.

When developing effective internal target timelines, Management should consider:

- **Preliminary review work** – including unaccounted time used for multiple review rounds and back and forth with utility companies for missing or erroneous application information.
- **New applications versus extensions** – since extensions have fewer review steps, their targets and timeline should be tracked separately from new applications.
- **Submissions via RACS versus email** - email applications are manually entered into RACS, leading to longer processing times.

Recommendation:

1. **City Council request the General Manager, Transportation Services Division, to improve tracking and timeliness of the utility cut permit application review and approval process by:**

    a. **Ensuring that permit status and key application timelines (e.g., submission, first review, and resubmission dates) are accurately tracked to better monitor the permit process timeliness and identify delays and causes for delays;**

    b. **Ensuring factors such as preliminary review work, new permit versus permit extensions, and Road Allowance Control System (RACS) versus email submissions are tracked, to enable accurate processing time metrics and help staff identify delay causes; and**

    c. **Expanding the use of online submissions to reduce reliance on manual email submission and improve efficiency of the permit process.**

No Quality Assurance Review Over Permit Approvals

No requirement for supervisory review on a sample basis

Staff responsible for reviewing short-stream and emergency applications also have the authority to approve those permits, with no requirement for supervisory review for quality assurance on a sample basis.

While this may streamline approvals for urgent permits, there is a heightened risk that policy errors or misinterpretations may go unchecked. For example, if a permit is approved without confirming conflicts (e.g., overlapping utility infrastructure on the same site), this could lead to uncoordinated excavation, interference with capital projects, or even damage to restored roadways. A lack of quality assurance review also increases the likelihood of inconsistent decision-making across staff, which may undermine the City's credibility with utility companies and other stakeholders.

Given that the right-of-way (e.g., pavement, sidewalks or boulevards) is a critical and high-traffic area, any mistakes in the permit review process can result in public safety concerns, unnecessary utility disruptions, or costly rework.

While secondary reviews do take place during the RoDARS approval process and the permanent restoration inspection later on, the absence of quality assurance reviews during the application stage may

result in overlooked conflicts or proposed work not meeting required standards.

Utility Management Unit Does Not Have Oversight Over Toronto Water's Utility Cuts

Toronto Water has full access to issue permits and conduct inspections

The Utility Management Unit is responsible for overseeing and coordinating all utility cut work across the City, including reviewing and approving utility cut permits while ensuring utility cut work complies with City standards. However, we found that Toronto Water issues their own utility cut permits and conducts their own restoration inspections, without any involvement from the Utility Management Unit.

The Utility Management Unit has no formal ownership or visibility over permits and inspections managed by Toronto Water. Toronto Water has full access and approval privileges in RACS, which means that Toronto Water can issue utility cut permits without the Utility Management Unit's involvement.

Toronto Water not required to share permit and inspection results with Utility Management Unit

There is no formal policy or process requiring Toronto Water to share permit and inspection results with the Utility Management Unit or the Work Zone Construction Coordination Unit. Therefore, Toronto Water inspections results were not captured in the system or shared with the Utility Management Unit.

As a result, the Utility Management Unit could not ensure that Toronto Water's restoration work was completed in a timely manner and complied with City standards.

MOU with Toronto Water reflecting current roles and responsibilities is needed

Given that the utility cut process involves multiple units and divisions, it is important to clearly define the roles and responsibilities of all internal stakeholders and to ensure they are clearly understood and agreed upon. However, Transportation Services does not have a Memorandum of Understanding (MOU) with Toronto Water that reflects current roles and responsibilities since several process changes occurred over the years for utility cut permits and inspections.

Transportation Services should clarify the roles and responsibilities related to Toronto Water's utility cut permit issuance and inspections. This includes determining whether Transportation Services should centrally manage and oversee Toronto Water's permits, or if Toronto Water continues to manage its own permits, ensuring it provides timely inspection activity updates to Transportation Services. Since utility cut permit activity affects City's road infrastructure, Transportation Services should have an oversight of all permit activities.

Improvements Needed to RACS User Access Controls

Employees outside of Utility Management Unit have permit approval access to RACS

The access controls of the Road Allowance Control System (RACS) need improvement. Between 2022 and 2024, 111 users had access to approve permits. While staff from different units within Transportation Services and other City divisions (e.g., Toronto Water, Engineering & Construction Services, Solid Waste Management Services) may require approval rights for general cut permits, the system does not distinguish between utility cut permits and general cut permits. As a result, any user with approval access can approve utility cut permits by default. To maintain proper oversight, only authorized staff from the Utility Management Unit should be able to approve utility cut permits. However, management advised that current system limitations prevent this level of access control.

Additionally, there are 132 users with access to RACS but have not logged in to the system since 2020 to 2022. These unused accounts still have privileges, posing a security and fraud risk.

City IT staff do not have access to fully monitor or control user access in RACS

RACS access is managed through a third-party system, and City IT staff have not had access to review or modify user profiles since 2015. As a result, City IT staff cannot verify what permissions are granted to each user role and are unable to fully monitor or control user access.

These access control weaknesses introduce risks to the integrity of the permit process. Unauthorized users may issue permits, bypass essential reviews, or introduce errors, potentially impacting infrastructure quality, public safety, and the City's liability.

Recommendation:

2. City Council request the General Manager, Transportation Services Division, to strengthen oversight of the utility cut permit process by taking the following actions:

a. Establish a Memorandum of Understanding (MOU) with Toronto Water and other internal City stakeholders to clearly define roles and responsibilities for utility cut permits and ensure they are clearly understood and agreed upon;

b. Establish processes to centrally track permits issued and inspections conducted by other divisions, such as Toronto Water, and to ensure that inspection results are consistently stored in a centralized system; and

c. Review and deactivate unused accounts, restrict permit approval privileges to authorized staff, and implement appropriate tools or procedures to ensure oversight of user roles and access levels.

Inadequate Documentation for Reviewing Short-Term and Emergency Permit Applications

No formal requirements for documenting why a permit was approved, extended, or refused

The permit team does not consistently document the review process for short-stream and emergency permit applications. There is no formal requirement to record what was reviewed or why a permit was approved, extended, or refused.

Unlike the review of full-stream applications, where a detailed utility review checklist is used to guide and document each step, the review of short-stream and emergency permits lack a standardized checklist or guidance tool. The only documentation currently maintained is email correspondence, which is categorized and stored in a shared mailbox.

This approach creates a risk that permits are approved without a thorough or consistent review. Important steps may be missed, such as checking for conflicts with other capital projects or confirming necessary approvals, which could result in safety hazards, construction delays, and disruption to City operations or residents. Without documented rationale, it can also be difficult for the City to defend permit decisions if challenged, or to identify the cause of any issues that arise post-approval.

Storing key permit application information using an email inbox is inefficient and unreliable

Further, using an email inbox to store information is inefficient and unreliable because emails are not easily searchable, especially as volume grows, making it difficult to retrieve key details quickly. It's also hard to ensure completeness and version control, increasing the risk of missing or outdated information. For example, utility companies can submit multiple iterations of the same application, making it difficult to track information.

Recommendation:

3. **City Council request the General Manager, Transportation Services Division, to develop and implement a quality assurance process for all permit streams, including standardized checklists aligned with applicable policies and standards for reviewing permit applications to ensure that necessary conflict approvals are obtained, and appropriate documentation is maintained to support compliance and accountability.**

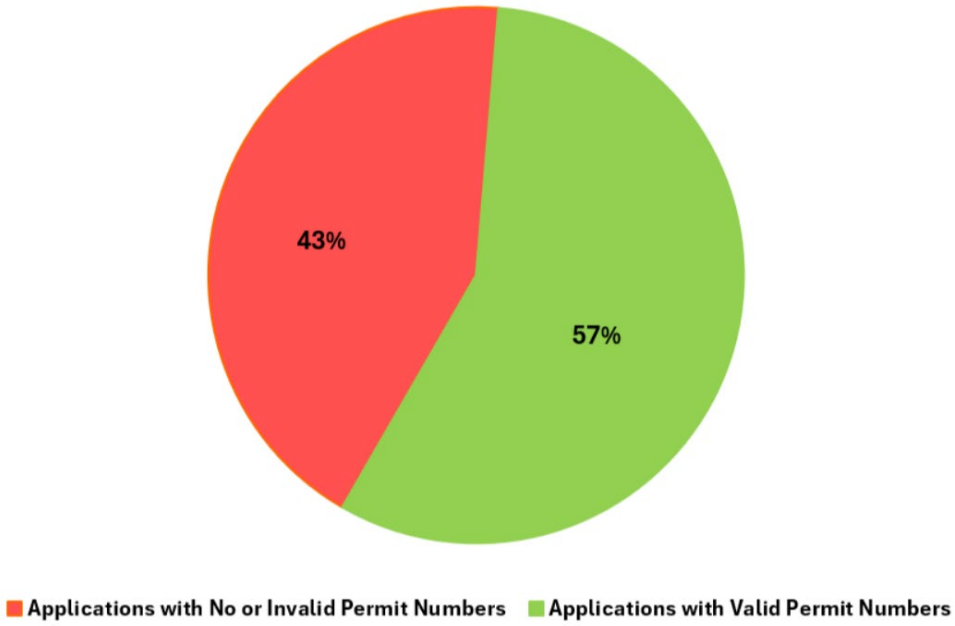
A. 2. Opportunity to Leverage RoDARS for Inspection Scheduling

Better Coordination Needed Between Utility Management Unit and Work Zone Construction Coordination Unit

Approximately 43% of RoDARS approvals have missing or invalid permit numbers

All utility work in the City requires both a utility cut permit and RoDARS approval. However, Work Zone Construction Coordination (WZCC) staff do not consistently verify or validate the accuracy of utility cut permit numbers listed on RoDARS applications. Our review found that approximately 43 per cent of RoDARS applications submitted between 2022 and 2024 had either missing or incorrect utility cut permit numbers, making it difficult to cross-reference them with the utility cut permit database. See **Figure 2** below for details.

Figure 2: RoDARS Approvals with Missing or Invalid Permit Numbers, 2022 to 2024
Prepared by the Auditor General's Office



13% of utility cut permits had RoDARS approval on file

Without this verification, the City cannot reliably assess overall RoDARS compliance rates among utility companies. Given that the City issues approximately 35,000 utility cut permits per year, this gap presents a potential public safety risk, as only about 13 per cent of permits issued during this period had a RoDARS approval on file—indicating a low rate of compliance.

Lack of information sharing between Utility Management Unit and WZCC Unit

Utility companies are required to notify the Utility Management Unit after they have completed the permanent restoration work so that inspections can be scheduled. However, the Utility Management Unit does not have an independent method to verify when restorations are completed. If a utility company fails to notify them, the Utility Management Unit may not know which cuts require inspection. If the

WZCC Unit shared RoDARS approval data with the Utility Management Unit, it would provide a secondary source of information and help improve inspection scheduling.

Similarly, when utility companies notify that permanent restorations are completed, the Utility Management Unit does not share this information with the WZCC Unit. As of April 2025, Transportation Services implemented a $306 fee to cover the administrative costs for utility companies failing to obtain a RoDARS approval or comply with RoDARS requirements (e.g., displaying QR code construction signs). If the Utility Management Unit shared completion data with the WZCC Unit, staff could cross-reference it with RoDARS approvals to identify cases where restoration work was completed without proper RoDARS authorization and recover the administrative costs.

Our review of 100 randomly selected samples indicated that approximately 93 per cent of completed restorations reported to the Utility Management Unit did not have RoDARS approvals on file.

Increased risk of uncoordinated utility activities, uninspected work, and regulatory non-compliance

This lack of visibility and communication between Transportation Services' two units, and the inability to cross check between the RoDARS approvals and the utility cut permits, increase the risk of uncoordinated utility activities, uninspected work, and regulatory non-compliance.

Management informed us that the RoDARS compliance rate was low for a number of reasons.

- Cumbersome Process – Before 2024, utility companies had to manually fill out and submit a paper form along with other documents including traffic management plan and utility cut permit to the appropriate regional office for RoDARS approval. Staff reported that utility companies were less inclined to apply due to this cumbersome process. Since 2024, a centralized online intake process has been implemented.

- No Expedited Process for Emergency (Same Day) Approvals – Traffic Management Centre Dispatch requires a minimum of three business days to review and approve RoDARS applications. Some utility companies do not apply for RoDARS for emergency work because they know their application will not be approved within their required timeframe. As of April 2025, utility companies can apply for expedited approvals in under three business days for an additional fee.

- Lack of Enforcement – Before April 2025, the City did not have any fees to recover administrative costs of non-compliance and staff had limited ability to enforce the RoDARS requirement.

Sample review showed 43 out of 45 permits from internal City parties did not apply for RoDARS approval

Furthermore, we noted that the Toronto Transit Commission (a City agency), Toronto Hydro (a City corporation) and the City's Traffic Management Centre had permits that did not comply with RoDARS requirements.

We reviewed a sample of 45 utility cut permits from these three internal parties and found that 43 of them did not apply for a RoDARS approval. Unauthorized occupation affecting the right-of-way without a RoDARS approval can adversely impact traffic and congestion in the City. This also leads to reputational risk for the City and can make it difficult for the City to enforce compliance with external utility companies if they see that internal parties are non-compliant.

With the new fees introduced in April 2025, the WZCC Unit is exploring how to enforce compliance (e.g., whether to perform inspections or cross check against permits).

While recovering administrative costs can help improve compliance to some extent, given the high rate of RoDARS non-compliance, Transportation Services should consider enhanced and proactive enforcement to create a stronger incentive for compliance.

Recommendation:

4. City Council request the General Manager, Transportation Services Division, to strengthen coordination and communication between the Utility Management Unit and the Work Zone Construction Coordination Unit to improve oversight of utility cut activities by:

a. Establishing a standardized communication protocol between the two units to ensure timely updates on permits and inspections;

b. Ensuring all Road Disruption Activity Reporting System (RoDARS) approvals are linked to valid and accurate Road Allowance Control System (RACS) permit numbers, and that all completed permits have corresponding RoDARS approvals; and

c. Implementing a process to enforce compliance with RoDARS approval requirements through actions including, but not limited to, inspecting QR code construction signs and recovering administrative costs for non-compliance.

B. Improve Inspections and Deficiency Monitoring

The scope of this audit covered the period from 2022 to 2024. It should be noted that 2024 was a transition year for the Utility Management Unit, as it was newly established in 2024 to consolidate permit and inspection functions under one business unit. While the permit team was quite experienced, the construction and oversight team, responsible for inspections, consisted of newly hired and less experienced staff.

In addition, Maximo, the work order management system, was implemented for the construction oversight team in May 2024. Therefore, at the time of this audit, the newly-formed construction oversight team was in the process of rolling out the first iteration of the Maximo inspection recording process.

Management advised that the learning curve required for both the newly-formed construction and oversight team, along with the transition to the Maximo system, likely contributed in part to some of the audit findings discussed in this section.

B. 1. Improve Timeliness, Accuracy, and Ensure Completion of Inspections and Warranties

Unable to Verify Whether Inspections were Complete

As of May 2024, all inspection records and related documentation are required to be entered and uploaded in Maximo. However, we found this was not done consistently.

Inspectors are responsible for maintaining individual inspection records. These records can be in various formats including electronic files, scanned documents, or paper copies.

While a shared drive was set up for electronic storage of these inspection records, we found inconsistencies in record keeping practices among the inspectors. For example, some inspectors initially stored records locally before uploading them to the shared drive, while others maintained paper copies for later digitization.

Almost 1/4 of sample had no inspection work order and remaining 3/4 lacked important information and/or supporting documents

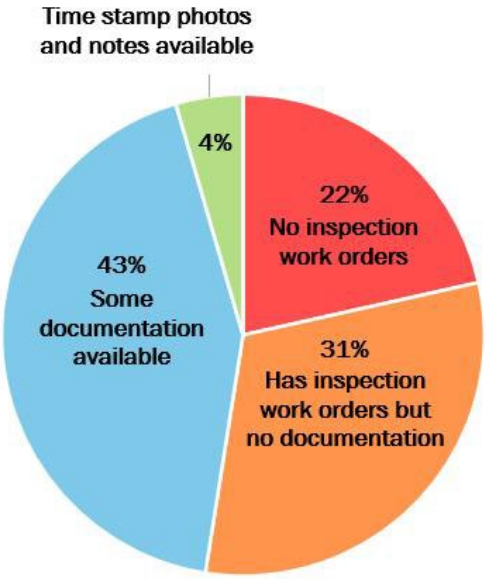
We reviewed a sample of 200 permits[4] where utility companies had completed permanent cut repair work and found that:

- 43 permits (22 per cent) had **no inspection work orders** in Maximo or supporting manual records. There was no evidence to support that inspections were conducted.
- 62 permits (31 per cent) had inspection work orders but **no other information in Maximo**.

- 86 permits (43 per cent) had some documentation in either Maximo or manual records, however, they were **incomplete**. For example, they had **missing photographs or inspection notes, or photos that lacked identifying information such as dates or locations**.

See **Figure 3** below for a breakdown of the 200 samples showing the availability of documentation.

Figure 3: A Breakdown of the 200 Samples Showing Availability of Documentation
Prepared by the Auditor General's Office



Before Maximo was implemented, each inspector was required to complete an Inspection Report, containing a checklist of items to inspect and boxes to record if deficiencies were found for each of the checklist items. However, this practice was discontinued after switching to Maximo, since inspection checklists have been replaced with operating logs within Maximo.

Training materials need to be periodically updated and inspectors provided with refresher training

The new system allows the inspector to decide what and how much information to log. Since the switch to Maximo, the importance of maintaining complete documentation has not been emphasized and staff use their own discretion to decide what documentation to retain in operating logs. While the Utility Management Unit recently updated their training material and provided training to inspectors on May 15, 2025, subsequent to our audit fieldwork, it is important to periodically update the training material to reflect new processes and provide refresher training to inspectors.

Inconsistent reporting by utility companies makes it challenging for the Utility Management Unit to track completion of permanent restoration work

The Utility Management Unit also has challenges with tracking permanent restoration work completion. The reporting formats and completion statuses reported by different utility companies are not consistent, making it difficult for the Utility Management Unit to track the actual completion date and determine when to inspect.

Inaccurate Warranty Statuses and Dates

82 of 100 sampled permits were incorrectly marked as "warranty completed"

Of the 200 permits we reviewed, 100 were marked as "warranty completed" in Maximo. However, we found through further inquiry with staff that 82 of these were incorrectly marked as "warranty completed" due to a misunderstanding by the inspectors on the different status categories or data entry errors.

With approximately 4,000 permits in Maximo currently showing a "warranty completed" status, this error rate in our sample raises concerns about the accuracy of the warranty status for the remaining 3,900 permits. Permits with a "warranty completed" status risk not being monitored or followed up for potential deficiencies and warranty repairs. Therefore, it's important that permits are marked with their correct warranty status.

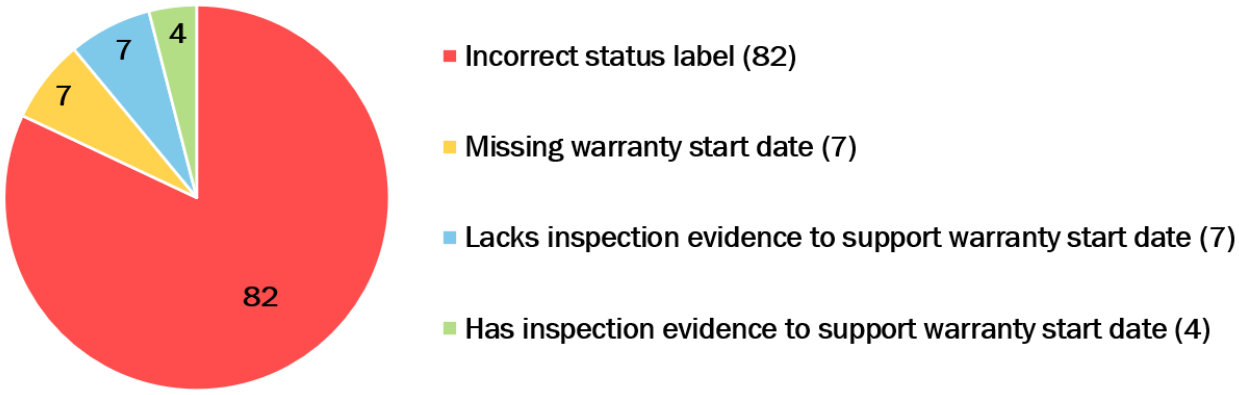
From our sample testing, among the remaining 18 permits where the "warranty completed" status was correctly entered:

- Seven permits did not have a recorded warranty start date. The warranty start date is a critical milestone that confirms whether completed work was inspected and accepted, and that the warranty period has begun. The Utility Management Unit relies on this date to schedule final warranty inspections.

- Of the remaining 11 permits with warranty start dates, seven lacked inspection evidence to support the recorded warranty start date.

See **Figure 4** below for a breakdown of the 100 warranty samples summarizing our testing results.

Figure 4: A Breakdown of the 100 Warranty Samples Summarizing Results
Prepared by the Auditor General's Office



Missing or incorrect warranty dates could prevent timely deficiency identification

Missing or incorrect warranty dates may result in delayed or missed inspections, which could prevent timely deficiency identification—posing potential public safety risks. Inaccurate dates also increase the likelihood of disputes over warranty coverage, which may result in legal exposure for the City.

Inconsistent Application of Warranty Start Date

Inconsistencies in how inspectors determine the warranty start date

As per the Municipal Consent Requirements and standard permit conditions, the warranty period is intended to begin only after the City inspects a permanent restoration. However, we found inconsistencies in how inspectors determined the warranty start date:

- In some cases, the warranty start date was recorded as the date the deficiency was first identified.
- In other cases, it was based on the date the deficiency was resolved and re-inspected.
- In some other cases where no inspection evidence was found, the inspector used the permit expiry date as the warranty start date.

If warranty period is misapplied or missed, City may be forced to cover the cost of repairs

Since warranties expire two years after their start date, recording start and expiration dates are essential to effective warranty management. They define the period during which utility companies are responsible for addressing deficiencies. If this period is misapplied or missed, the City—and ultimately taxpayers—may be forced to cover the costs of repairs that should have been addressed under warranty.

Late Permanent Restoration and Warranty Inspections

12% of sampled permits with completed permanent restoration were inspected 50 days or more after completion of repair

Out of 200 permits we sampled and reviewed, 157 permits were inspected. Of these, we found 19 permits (12 per cent) were inspected 50 days or more (averaging 221 days) after the permits were reported as permanently repaired. Additionally, we found four permits where warranty inspections were conducted between 26 days to 159 days late. Management informed us that inspections were delayed due to competing priorities, staff vacancies, and newly hired inspectors requiring training.

Late warranty inspections may pose financial risks to City

Late warranty inspections may pose a financial risk to the City if a deficiency is found after the warranty period has expired, as the City may have to pay the additional costs to fix the defect.

Recommendations:

5. **City Council request the General Manager, Transportation Services Division, to develop and implement a structured process to manage and track the inspections throughout the entire permit life cycle until its warranty period is completed, specifically:**

    a. **Ensure timely permanent restoration and warranty inspections are performed for all permits; and**

    b. **Ensure a warranty start date is clearly defined and supported by inspection for all permits that come to the warranty stage.**

6. **City Council request the General Manager, Transportation Services Division, to set up a structured training program that is periodically updated to reflect new processes, and to provide refresher training to inspectors so they have clear guidance on how to carry out and document inspections properly, ensuring all evidence is complete, accurate, and uploaded into Maximo.**

B. 2. Strengthening Deficiency Identification and Documentation

Deficiencies may be identified during permanent restoration inspections, warranty inspections, or material testing. An effective deficiency management process is crucial to ensure that deficiencies identified during inspections are addressed in a timely manner to help the City mitigate public safety risks, financial risks and ensure restoration work complies with standards.

Lack of Formal Process for Material Testing

As discussed in the above **Section B.1.**, permanent restoration and warranty inspections are performed by inspectors from the Utility Management Unit (City inspectors). Restorations where asphalt or concrete are used may require material testing on a sample basis to help ensure public safety, prevent premature failures, reduce future maintenance costs, and hold utility companies accountable for the quality of their work. Material testing is essential to ensure that utility cut restorations meet the City's standards for safety, durability, and long-term performance. Material testing is contracted out to a third-party vendor (third-party inspectors).

Material testing includes two stages.

- First, the third-party inspector, accompanied by the City inspector, will perform on-site material testing for certain conditions. The City inspector issues a service receipt to the third-party inspector on site.

- Then, the third-party inspector takes a small sample of material to its lab at seven days and 28 days after the site visit for further testing. Once the lab tests are complete, the third-party inspector emails a final report summarizing the results from both on-site and lab tests to the Utility Management Unit.

Formal criteria for material testing have not been established

We found that formal criteria to determine how many and which permits to undergo material testing have not been established. Management informed us that the current practice is for inspectors to exercise judgement and arrange material testing when sufficient advance notice has been provided by the utility companies. However, this informal criteria are neither well defined nor documented.

We found that about 35,000 permits are issued each year and 120 permits with documented material tests between 2022 to 2024. Eighteen of the 120 (or 15 per cent) permits identified deficiency issues during material testing.

Management informed us that only the permits where permanent restoration is performed would be subject to material testing. In the absence of accurate permit data, management estimated that only about 5,000 permits in 2024 would have permanent restoration. Given the poor tracking and categorization of restoration type, we were unable to verify management’s count of permanent restoration, as it would require reviewing every permit case by case.

We selected eight material testing samples from 2022 to 2024 where deficiencies were identified. All of them had initially failed the on-site testing with material quality issues found. Of the eight samples, four had final lab test reports on file and subsequently passed the final 28-day lab test, indicating the overall load-carrying capacity was acceptable.

Sites flagged for follow-up were not monitored

Management informed us that other test properties may impact longer-term performance. Therefore, as a precaution, management informed us that all eight sites would be monitored. However, we did not find any record or evidence to suggest subsequent monitoring occurred before the warranty expiration for two of the eight samples requiring follow up.

We also found that two out of eight samples were either missing the on-site service receipt or final test report; and three were missing both.

No system or process to track permits with material testing and deficiencies

There is also currently no system or process to track permits which have material testing requested and conducted, along with a summary of material deficiencies and subsequent inspection.

While the third-party vendor provided the Utility Management Unit with individual test results, staff do not maintain a listing of test results to help monitor deficiencies.

Better Process Needed for Managing Inspection Deficiencies

Key inspection deficiency information was not tracked

We found that key deficiency information was not tracked, such as the nature of deficiencies, when utility companies were notified, when repairs were completed, and the deficiency repair status.

No tracking and monitoring of deficiencies requiring follow-up or re-inspection

Some deficiency records are scattered, for example stored in individual inspectors' mailboxes, local computers, or cell phones, while other records are uploaded to Maximo or a shared drive. Some deficiency records are not digitalized. Therefore, there is no deficiency tracking or monitoring of permits requiring follow-up and re-inspection. The Utility Management Unit does not regularly analyze recurring trends and common pavement quality issues categorized by utility companies.

In some cases, staff miscategorized incomplete work as a deficiency

We selected 22 inspection samples where permits with recorded deficiencies and found that:

- For nine of the 22 samples (41 per cent), staff clarified that the permit deficiency notation was a staff error because they miscategorized 'incomplete work' as a deficiency, or they were not able to locate evidence to confirm if the deficiency existed.

In some cases, there was no evidence that utility companies were notified of deficiencies

- For six of the remaining 13 samples (46 per cent) with confirmed deficiencies, there was no evidence on file that utility companies were notified. Management informed us that staff sometimes verbally notify utility companies. For another one of the remaining 13 samples (eight per cent) with confirmed deficiencies, the inspector did not inform the utility company about a deficiency identified in August 2024 until April 2025, after we had inquired with management about this case.

No established process for utility companies to report back on deficiency repairs

We also found that utility companies currently do not provide their work plan or timeline for repairing deficiencies. There is no established process for utility companies to report back once deficiencies are repaired, and for staff to follow up on the deficiency repair status. It is also important that utility companies acknowledge receipt of the deficiency notice as sometimes the deficiency repairs are performed after the warranty expires.

No systemic way for inspectors to know when they should follow up with utility companies regarding deficiencies

As a result, there was no systemic way for inspectors to know when they should follow up with the utility companies for a re-inspection or to track whether deficiencies were addressed by utility companies on a timely basis.

Of the 13 samples with confirmed deficiencies, we found:

- Five samples (38 per cent) were re-inspected, four of which were inspected before the warranty expiration while the last one was inspected after the warranty expired.

- For the remaining eight samples (62 per cent), no evidence of re-inspection was on file. Upon the audit team's April 2025 inquiry, the Utility Management Unit performed re-inspections on six samples and took site photos. In other words, most of the six samples had not been re-inspected for more than a year after deficiencies were identified and the warranty had expired. It was unclear from the limited documentation available whether the delay was due to late repairs or late re-inspection because the notifications from the utility companies about the completion of work was not on file.

The current practice poses a significant risk that outstanding deficiencies are not followed up, which can lead to increased public safety risks and complaints.

Recommendations:

7. **City Council request the General Manager, Transportation Services Division, to develop and implement a formal process for conducting material testing and monitoring material testing deficiencies.**

8. **City Council request the General Manager, Transportation Services Division, to develop and implement a formal process to monitor permits where deficiencies are identified. The process should include but not be limited to the following items:**

    a. **Maintain a centralized report to track permits with deficiencies, resolution timelines, and statuses;**

    b. **Develop a protocol to inform utility companies about the deficiencies before warranty expires; and**

    c. **Ensure re-inspection of resolved deficiencies is performed and documented.**

B. 3. Establish Formalized Standards for Service Requests

Opportunities to Improve Service Requests Process

At the time of our audit, 1,713 or 89 per cent of all service request follow-up work orders (service requests) assigned to the Utility Management Unit between 2022 to 2024 were closed.

36% of closed service requests took over 30 business days to close despite improvements since 2022

The time taken to close a service request improved from 56 business days in 2022 to 27 in 2024. However, 621 (36 per cent of the 1,713) closed requests took longer than the 30-day internal target, averaging 80 business days to close.

We selected 25 of the 621 closed service requests for further review and found that:

- One sample (four per cent) contained no notes or evidence (e.g., photos or emails) on file to support closing the service request.

Did not find evidence to confirm that closed service requests referred to utility companies were resolved

- For eight samples (32 per cent), the service requests were referred to utility companies and subsequently closed without confirming resolution. The overall timeline for resolving service requests should include subsequent restoration work and be documented.

- For eight samples (32 per cent), the issue was documented as resolved (e.g., top-up or permanent repair completed) but no evidence such as photos or emails were on file. It was not clear whether staff performed inspections to confirm the issue was resolved.

There was insufficient documentation to assess reasons for delay in resolving sampled service requests

There was insufficient documentation in the 25 samples to assess why resolving these service requests was delayed. Management informed us that potential reasons for delays include:

- Additional effort and research required to confirm whether the issue is related to utility work.
- Limited resources and competing demands across the City.
- The complexity and the effort level required to address individual service requests may vary.

Recommendation:

9. **City Council request the General Manager, Transportation Services Division, to establish formal service standards on service requests and enhance documentation practices to include actions taken with supporting evidence.**

B. 4. Strengthening Key Performance Indicators to Improve Program Performance

Permit Processing Time Targets Established but Not Tracked

Targets established for permit application processing time but permit processing time is not tracked

While the permit team has established target processing times for each stream of utility cut permit applications, (two business days for emergency permits, five business days for short stream permits, and 20 business days for full stream permits), they do not consistently record the date a permit application is received in RACS or track actual processing times. Utility cut permit applications should be processed in a timely manner to avoid delays in necessary infrastructure work.

We found that the permit application date was not recorded in RACS and processing times were not being tracked. Staff manually track weekly statistics on processed, active, and closed permits. However, this process does not provide an accurate picture of processing efficiency or whether targets are being met because it does not take into account the time spent on reviewing and ensuring all necessary documents are obtained from the utility companies.

Management informed us that they are in the process of updating RACS and anticipate that the new system will have the capability to better track and measure key performance indicators (KPIs).

Construction Oversight Team's Targets Not Met for Most KPIs

Starting in July 2024, the construction oversight team began tracking activity-based KPIs, such as the number of weekly inspections, open and closed service requests, and the material test failure rate. However, they have established targets for only some of these KPIs.

Most targets for construction oversight are not met and root causes for missed targets not identified

Further, the construction oversight team does not meet the targets for most of the KPIs that have established targets. Moreover, there is no analysis of the root causes for not meeting these targets. Management suggested that staffing levels were a significant contributing factor. The construction oversight team informed us that it is still refining and adjusting the targets as more information becomes available.

Opportunity to Improve Performance Monitoring and Reporting with Other Best Practice KPIs

Opportunity to explore other best practice KPIs

From our research, other best practice KPIs that Transportation Services are not currently tracking but could consider monitoring include:

- **Permit Processing Approval Time** – This KPI will help the permit team track the actual time it takes for permits from application submission to final approval.
- **Percentage of Permits Not Processed Within Target Times** – This KPI will help identify permits that exceeded the processing time targets.
- **Number of Unpaid Permits** – This KPI will track the number of unpaid or outstanding permits.
- **Inspection Failure/Deficiency Rate by Utility Company** – This KPI will help identify which utility companies have higher deficiency or inspection failure rates.
- **Inspection Backlog** – This KPI will help prioritize inspecting permits that are approaching warranty expiration.

Recommendation:

10. **City Council request the General Manager, Transportation Services Division, to update and report on its key performance indicators and targets, and investigate and take timely corrective actions when performance issues are identified.**

C. Establish an Effective Cost Recovery Fee Structure

C. 1. Implement a Pavement Degradation Fee Process to Recover Costs

Utility cuts can reduce pavement service life

A 2010 study by the City of Toronto concluded that utility cuts cause pavement to deteriorate faster, requiring earlier resurfacing work, and ultimately the premature reconstruction of the road. A similar study by the City of Calgary in 2014 found that utility cuts can reduce pavement service life by up to 22 per cent.[6] In 2020, the City of Saskatoon analyzed pavement data and found that roads with utility cuts had greater deterioration than those without, indicating lost asset value.[7]

Pavement degradation fee is levied by some municipalities

Some municipalities levy a pavement degradation fee to ensure that entities responsible for utility cuts contribute to the cost of reduced service life, earlier rehabilitation, and increased maintenance expenses. It is important to develop a fair and reasonable methodology for calculating a pavement degradation fee, in consultation with utility company feedback.

Challenges in Recovering Pavement Degradation Fees from 2018 to 2024

Pavement degradation fees are applied per square meter and calculated based on road classification, composition, and age. Before 2018, when Transportation Services performed permanent restoration of utility cuts, pavement degradation fees were calculated based on the size of the repairs completed by Transportation Services and included as part of the invoice for the repair work.

No pavement degradation fees billed for cuts performed by utility companies since 2018

Since 2018, Transportation Services no longer performs permanent restoration work on behalf of utility companies, except for a small number of outstanding legacy permits. Utility companies are responsible for permanent restoration. Where permanent restoration was performed by utility companies, there was no way to charge the pavement degradation fee since cut sizes were unknown to Transportation Services. As a result, no pavement degradation fees have been billed by Transportation Services for the cuts performed by the utility companies since 2018.

[6] Effect of Utility Cuts on Serviceability of Pavement Assets – A Case Study from The City of Calgary
[7] Characteristics of Utility Cuts and Their Impacts on Pavement Serviceability in the City of Saskatoon

Management informed us that due to historical under resourcing and the inability of staff to perform all cut measurements internally, efforts were made in 2023 to contact the utility companies and request the cut measurements from their restoration programs. However, the data received was ultimately incomplete and the utility companies communicated challenges with properly recording the cut measurements on their end.

Opportunity to recover approximately $20M in pavement degradation fees from 2018 to 2024

We estimated that there is an opportunity to recover approximately $2.6 million in pavement degradation fees per year or cumulatively $20.4 million from 2018 to 2024. We estimated this amount based on pavement degradation fees billed to utility companies between 2011 and 2017, adjusted for inflation. We made a conservative estimate that approximately 3,200 out of 35,000 permits issued each year would be invoiced for a pavement degradation fee—consistent with the average number of permits billed annually between 2011 and 2017.

Management informed us they have made efforts to recover outstanding pavement degradation fees

Management informed us that over the past few years, efforts have been made to assess and attempt to recover this outstanding amount. In Q3 2024, Transportation Services initiated discussions with utility companies regarding the recovery of outstanding amounts and is developing a methodology to assess pavement degradation fees moving forward. Management also informed us that they met with the five largest utility companies with the most permits issued annually.

It is important to note that only about 10 per cent of permits issued between 2011 and 2017 were invoiced for a pavement degradation fee. Management confirmed that the number of permits eligible for payment degradation fees between 2018 and 2024 is likely between five to 15 per cent of all permits issued annually.

Recommendation:

11. City Council request the General Manager, Transportation Services Division, to implement a process to charge pavement degradation fees and to recover past and ongoing costs of road damage caused by utility cuts.

C. 2. Fees Structure Should Reflect Full Program Cost

Under the *City of Toronto Act, 2006*, the City has the authority to charge user fees and service charges for services, activities, use of municipal property, and costs related to licensing, permits, and inspections. Fees should reflect the full cost of providing the service (direct and indirect). Those who benefit from or cause the cost of a service should pay for it.

City of Toronto's User Fee Policy mandates each division to conduct regular reviews of user fees to ensure they reflect the full cost of service delivery. This policy stresses that fees must be based on a comprehensive cost analysis, including direct and indirect costs.

The current fee structure for permit application and inspection fees, as per the latest available data, is:

- Short-stream and emergency: $339 (including HST)
- Full-stream: $1,603 (including HST) for excavations up to 1 km

Current Fee Structures Need to Account for Enhanced Utility Cut Program

Fees associated with utility cut permits are intended to recover the full cost of program administration

The fees associated with utility cut permits are intended to recover the full cost of program administration, which include application reviews, inspections, deficiency management, administrative support, and long-term pavement degradation. We observed the following:

- In 2023 a third-party consultant conducted a full permit fee review and assessed that revenues were greater than costs by approximately 16 per cent.

Current fee structure may be insufficient to cover costs associated with a potential increase in inspection volumes

- Currently, only about 12 per cent of permits are inspected. There is also a backlog of warranty inspections and deficiency follow-up inspections. If inspection volumes increase to a higher level, the current fee structure may be insufficient to cover the program costs.

Insufficient cost recovery for increasing inspection volumes could have public safety implications due to undetected or premature pavement degradation, and subsequently higher rehabilitation costs in the future.

Recommendation:

12. City Council request the General Manager, Transportation Services Division, to determine and propose any adjustments needed to the fee structure to reflect the full cost of program delivery, including inspections, compliance enforcement, and administrative support.

C. 3. Delays and Challenges to Complete Outstanding Restoration Work

Some Legacy Permits from before 2018 are Awaiting Restoration

Since the transfer of permanent restoration of utility cuts work from the City to utility companies in 2018, some legacy permits issued before the transfer are still awaiting restoration work by the City.

Challenges in completing remaining restoration work post 2018

Transportation Services has been aiming to complete the remaining restoration work since 2018 but informed us they encountered the following challenges:

- Coordinating restoration work with other major construction projects and/or events at some locations.
- Restricted access due to long-term development sites.
- Procurement delays and associated late construction starts.
- Remaining cuts were greater distances apart from each other, reducing the city contractors' efficiency to restore them in a shorter amount of time.
- Weather-related delays

Significant Delays in Permanent Restoration Work with Some Utility Cuts

Given the constant challenges and increasing pressure from utility companies to complete all remaining restorations and invoicing related to the legacy permits, Transportation Services decided to phase out its City-led permanent restoration program as of December 31, 2023.

326 legacy permits issued before 2018 still awaiting permanent restoration

At the time of the program phase-out, it was estimated that approximately 326 utility cuts were not permanently restored. These outstanding repairs are related to permits issued between 2008 and 2017. Many of them are located in the downtown core and within major project work areas.

Efforts have been made to coordinate restorations of 124 of the 326 cuts through the Eglinton project in 2024-2025.

Management advised that the remaining 202 permits will not be permanently restored due to various construction conflicts

However, management advised that the remaining 202 permits will not be permanently restored due to conflicts from capital works, development projects, or work zones. Management's plan to address these unrepaired utility cuts include:

- Monitoring remaining cuts and patching asphalt as needed to ensure a level surface.

- Allowing permanent restoration to occur gradually through other construction activities (e.g., capital works, utility projects, private construction).

- Performing restoration as part of routine complaint resolution process or state-of-good-repair programs.

As discussed in **Section C.1.**, the delays in or the lack of restoration work could contribute to the cost of reduced service life, earlier rehabilitation, and increased maintenance expenses.

Half a Million Owed to Transportation Services Division for Restoration Work Performed on Behalf of External Utility Companies

$576k owed to Transportation Services by external utility companies related to legacy permits, with $453k currently being disputed

As of April 2025, City was owed approximately $576,000 for permanent restoration work done by Transportation Services on behalf of external utility companies, related to legacy permits issued before 2018. In December 2021, the outstanding disputed amount was $1.3 million. Due to recovery efforts by Transportation Services, this amount has now decreased to approximately $453,000.

The disputes are primarily related to the clarification of responsibilities and extent of work, and the cost amount. Management advised that discussions are ongoing, and the possibility of recovering the disputed amounts may vary case by case due to the nature of the individual disputes.

Outstanding Amounts from Other City Divisions

$1M owed to Transportation Services by Other City Divisions

Transportation Services is also owed $1 million from internal City Divisions (i.e., Engineering & Construction Services, Toronto Water), which is an offset and the City overall is not impacted. In December 2021, the outstanding amount was $6 million, which included approximately $773,000 in disputes. Due to recovery efforts by Transportation Services, this amount has now dropped to $1 million and includes approximately $275,000 in dispute.

Management advised that they will review all outstanding balances/disputes and are working closely with Policy, Planning, Finance and Administration and the utility companies to reconcile and collect any remaining amounts.

Recommendation:

13. City Council request the General Manager, Transportation Services Division, in consultation with Legal Services where appropriate, to make best efforts to recover all outstanding permanent restoration costs for work performed on the legacy utility cut permits.

D. Better Track and Integrate Utility Cut Data

Lack of complete, accurate data, and a centralized data system, significantly impact permit management

Throughout this report, we identified examples that illustrate the numerous limitations with the utility cut data. The lack of complete and accurate data and a centralized data system significantly impact the Utility Management Unit's ability to manage permit processing and inspections, as well as its ability to co-ordinate effectively and efficiently with utility companies and other stakeholders.

Lack of integration between systems resulted in inconsistent and fragmented data

Lack of system integration between RACS (permits), RoDARS (traffic coordination) and Maximo (inspections) resulted in inconsistent and fragmented data. Furthermore, the three systems are not configured to automatically notify relevant units of permit issuance, RoDARS approvals, or inspections.

While RACS is used for permit issuance, Maximo is used for permit inspections. We noted that between the two systems, there is no end-to-end permit life cycle tracking. As discussed in **Section A.1.**, RACS does not capture key dates related to processing permit applications.

Furthermore, RACS does not categorize the type of permits (i.e., utility cut versus non-utility cut permits or original applications versus permit extensions). As such, RACS does not have an easily accessible reporting function the Utility Management Unit can use to summarize utility permit activities. For example, information such as the total number of permits by stream, by utility companies, or by permit type, would require staff effort to aggregate or condense into a meaningful summary for management review.

We also noted in **Section B.2.** that staff do not accurately track key dates relating to inspections, material testing, and deficiencies in Maximo. We also noted that there is missing or inaccurate warranty information and a lack of inspection documentation in Maximo. Management acknowledged this and informed us that these limitations are due to the transition from the previous process to the new Maximo system in May 2024.

It is important for staff to receive regular training on the new processes in order for the Utility Management Unit to have accurate data for decision making, and to manage inspections and warranties, effectively and efficiently.

Moreover, as discussed in **Section A.2.**, missing and invalid utility cut permit numbers in RoDARS limit the Utility Management and the Work Zone Construction Coordination Units to coordinate utility cut work and schedule inspections.

Transportation Services needs a more effective permit system that is fully integrated with work management systems such as Maximo. This integration would enable end-to-end tracking of utility cut permits

throughout their entire life cycle. It is important that key milestones—such as permit application processing, issuance, RoDARS approvals, utility work in progress and completion, temporary and permanent restoration inspections, and warranty management—are clearly documented and easily accessible. Access to this information provides a complete picture of the process and supports accurate performance measurement, as well as informed operational and management decision-making.

Management informed us that Transportation Services is in the planning phase of the RACS modernization process to replace the existing RACS, which will integrate the RACS and Maximo system.

Recommendation:

14. City Council request the General Manager, Transportation Services Division, to implement an effective permit system that integrates with the inspection system for more efficient processing and tracking of permits and inspection data.

Conclusion

Utility cuts can lead to traffic disruptions and construction-related dust and noise complaints. Additionally, improper utility cut restorations can accelerate the deterioration of City roads and sidewalks or result in road hazards such as potholes or uneven surfaces, increasing the safety risk for drivers, cyclists and pedestrians. As a result, it is crucial for the City to effectively manage the utility cut process.

For our first objective, we concluded that Transportation Services does not consistently meet established service levels for processing permit applications. While service levels exist, the division faces challenges in monitoring and achieving them due to inefficiencies in the permit process.

For our second objective, we concluded that inspections and warranty oversight are not sufficiently effective in holding utility companies accountable for restoring utility cuts to City standards. Our review identified several concerns, including poor recordkeeping in inspection files, incorrect or missing warranty start dates, inadequate tracking and follow-up on deficiencies, and no standardized inspection procedures.

For our third objective, we concluded that Transportation Services does not have an effective cost recovery mechanism to account for pavement degradation or to ensure that utility companies cover the City's cost related to permit administration and inspections. Since 2018, the City has potentially forgone an estimated $20.4 million in pavement degradation fees, due to a lack of cut size data. In addition, the current fee structure may be insufficient to cover costs associated with a potential increase in inspection volumes.

14 recommendations to improve utility cut permit and inspection processes

Implementing the 14 recommendations in this report will strengthen the effectiveness, efficiency, and oversight of the utility cut permit and inspection processes, ensuring it meets current and future service demands, while protecting public safety and preserving road infrastructure quality and longevity by:

- improving data accuracy and implementing better permit timeline tracking to enable timelier and more transparent permit processing;

- enhancing performance targets to account for different permit streams and submission methods, and strengthening key performance indicators to reinforce accountability across the Utility Cut Program;

- implementing clear policies and structured inspection procedures, improving deficiency management and re-inspection processes and formalizing material testing to identify and resolve deficient work, and help safeguard the integrity and safety of city infrastructure; and

- implementing a process to collect the necessary information for calculating and charging pavement degradation fees, updating fee structures, and recovering outstanding amounts for restoration work to ensure the City is compensated for costs incurred and that future program funding is more sustainable and equitable.

Thank you to management and staff

We would like to express our sincere appreciation for the co-operation and assistance we received during our audit from the management and staff of the Transportation Services Division.

Audit Objective, Scope, and Methodology

Audit included in the 2025 Work Plan	The Auditor General's 2025 Work Plan included an audit of the Transportation Services' Utility Cut Program.
Audit objective	The objective of this audit was to assess the efficiency of Transportation Services' utility cut permit process and the effectiveness of the oversight of the utility cut repair work. In assessing this objective, our audit aimed to answer the following questions: 1) Does Transportation Services meet the established service levels for processing permit applications? 2) Are inspections of utility cut repairs and warranties effective in holding utility companies accountable for meeting the City's standards and regulations? 3) Does Transportation Services have an effective cost recovery mechanism to account for pavement degradation and to ensure that the fees from utility companies cover the City's costs for administering and inspecting utility cut repairs?
Audit scope	This audit focused on the permit, inspection, and cost recovery processes relating to Transportation Services' utility cut management program for the period from 2022 to 2024. Our audit scope also included a review of legacy permits issued before 2018, for which we reviewed data as far back as 2010 to analyze historical pavement degradation fee amounts in order to estimate amounts that should have been charged post 2018.
Areas not covered within the scope of this audit	Since Transportation Services is responsible for overseeing the entire program, the activities of other divisions (i.e., Engineering & Construction Services, Toronto Water, Strategic Capital Coordination Office) which are only partially involved, were not included in our audit scope.
Scope Limitations	Our findings and conclusions relating to our sample testing of permit applications, inspections, material testing, warranty and service requests are based on data and documentation available in RACS, RoDARS, Maximo, and manual records maintained by staff.

Given the fragmented nature of this information, data quality issues, and insufficient supporting evidence in the system, we could not rely on data alone. Instead, our audit work involved significant effort of case-by-case reviews of manual records relevant to our samples.

Methodology

Our audit methodology included:

- Reviewing relevant City bylaws, legislation, regulations, operational policies, procedures, budget information, Council decisions, staff reports, and internal audit and compliance reports.

- Interviewing staff from various divisions and sections, including the Utility Management Unit and Work Zone Construction Coordination Unit at Transportation Services, the Construction Inspection Team at Engineering & Construction Services, as well as the Strategic Capital Coordination Office.

- Reviewing a sample of 75 approved permit applications from 2022 to 2024. We used a judgemental sampling methodology to ensure coverage of all permit streams and took into account the proportionate share of major utility companies. Samples were then randomly selected within each permit stream (20 from emergency stream, 45 short-stream and 10 full stream permit applications).

- Reviewing a sample of 200 permits where utility companies completed permanent restoration work from 2022 to 2024. We used a judgemental sampling methodology and took into account the proportionate share of major utility companies. One hundred samples were then randomly selected from OneStage email box where utility companies submit their completion reports and another 100 samples with warranty completed status randomly selected from Maximo.

- Reviewing a sample of 30 permits (22 identified through inspections and eight through material testing) where deficiencies were identified through inspections conducted between 2022 and 2024. We used a judgemental sampling methodology and randomly selected samples.

- Reviewing a sample of 25 closed service request follow-up work orders from 2022 to 2024. We used a judgemental sampling methodology and randomly selected samples from the population of service request work orders that took more than 30 business days to close.

- Examining access controls, and reviewing data from RACS, RoDARS and Maximo for the period 2022 to 2024.

- Analyzing historical pavement degradation fee data from 2011 to 2017 and historical outstanding invoice payments related to the legacy permits before 2018.

- Performing other relevant procedures as necessary.

Compliance with generally accepted government auditing standards

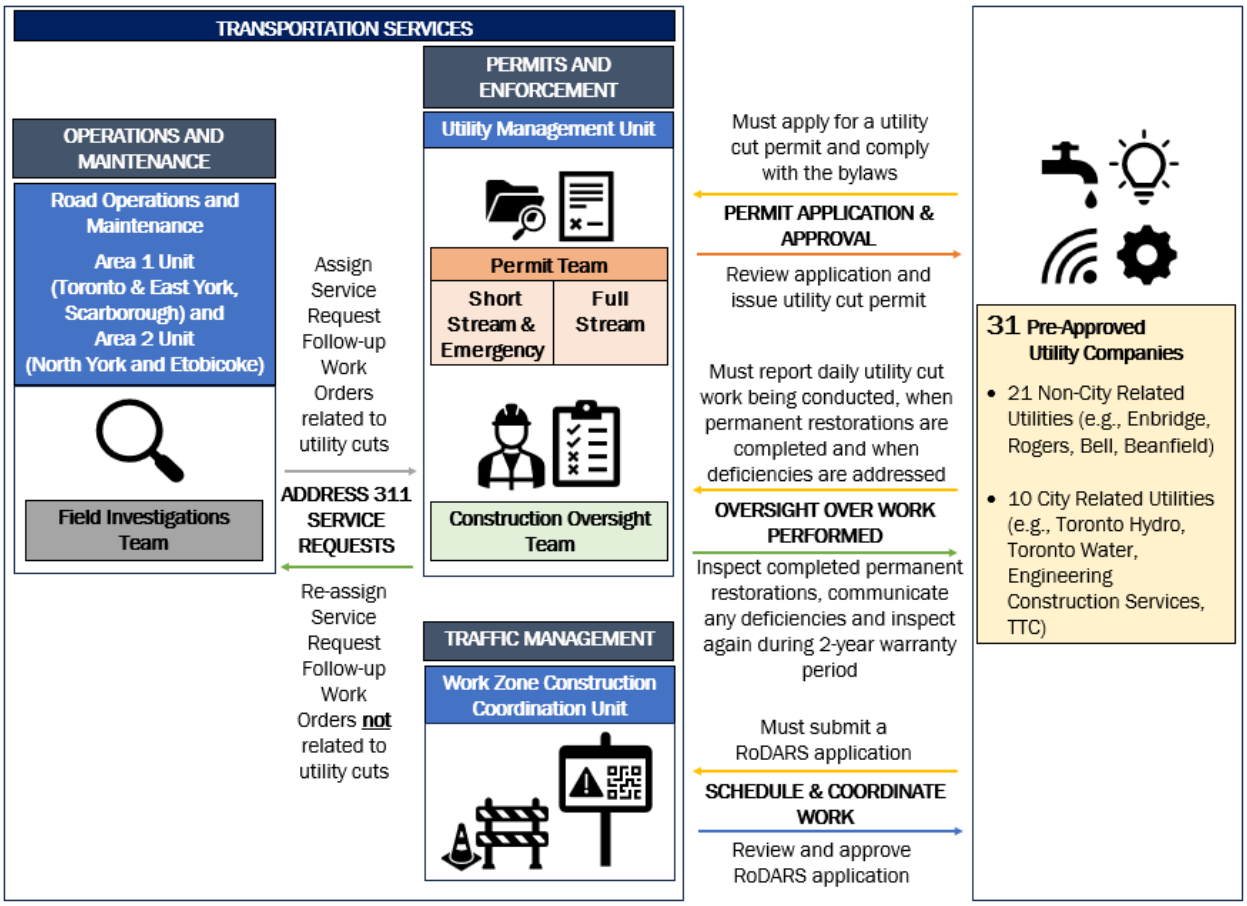
We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Exhibit 1: Additional Background Information - Key Utility Cut Stakeholders, and Descriptions of the Types of Utility Cut Permits and Utility Cut Process, Permit Application and Approval Process, RoDARS Approval Process, Inspection and Warranty Process, and Major Systems Used

Key Stakeholder Roles and Responsibilities

Figure 5 below outlines roles and responsibilities of all the key stakeholders involved in utility cuts at the time of our audit.

Figure 5: Roles and Responsibilities of Key Stakeholders Involved in Utility Cuts
Prepared by the Auditor General's Office



All utility cut work requires a permit from the Utility Management Unit. This dedicated unit was established in April 2024 by Transportation Services following an internal review of the Utility Cut Program. The goals of the Utility Management Unit are to:

- Consolidate permit and inspection functions under one business unit;
- Improve consistency and oversight of utility work; and
- Improve collaboration and relationships with utility stakeholders.

The Utility Management Unit is comprised of two operational teams:

- **The permit team** reviews permit applications and approves permits.

- **The construction oversight team** inspects permanent restorations completed by utility companies and performs warranty inspections, to ensure they meet City quality standards. Most inspection staff were hired after this team was established in April 2024.

Three Types of Utility Cut Permits

Emergency Permits are for urgent work needed to address failures or damage to existing infrastructure, which may pose a danger to the public, disrupt essential services, or damage other utilities.

Short-stream Permits usually cover smaller scope maintenance and repair work, such as replacement of covers for underground structures (e.g., manholes).

Full-stream Permits apply to large-scale construction activities involving new infrastructure or significant alterations to existing infrastructure, including relocating or removing adjacent infrastructure.

Figure 6 below shows the three types of utility cut permits issued from 2022 to 2024.

Figure 6: Types of Permits Issued, 2022-2024
Prepared by the Auditor General's Office

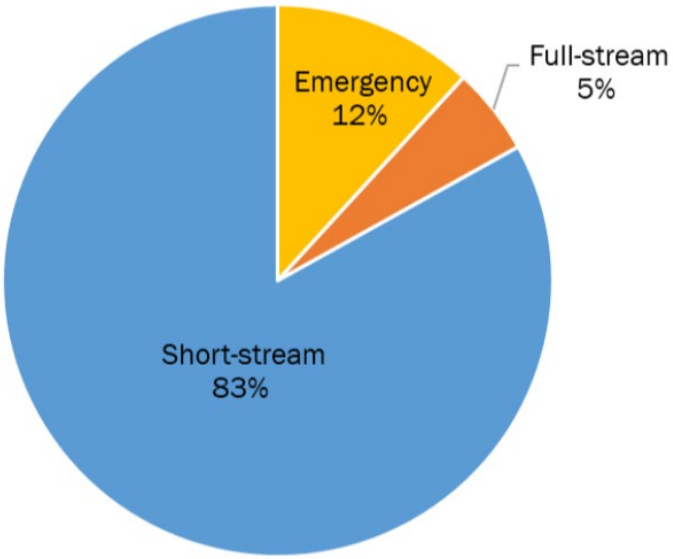
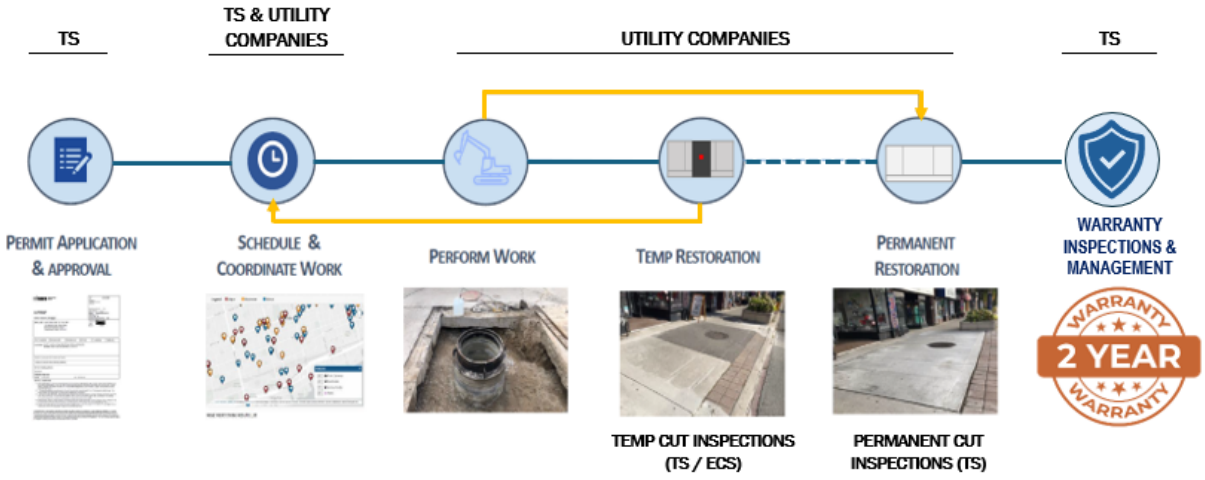


Figure 7 below illustrates the utility cuts process.

Figure 7: The Utility Cut Process
Prepared by the Auditor General's Office



Legend:
TS = Transportation Services
ECS = Engineering & Construction Services
A small team under the Engineering & Construction Services Division inspects full-stream temporary restorations.

Where possible, permanent restorations are completed simultaneously with utility work.

Typically, utility cuts are temporarily repaired to provide immediate access to traffic and pedestrians, and permanently restored at a later date.

Note: If a utility company's permit expires before they can complete permanent restoration they are required to submit a new application.

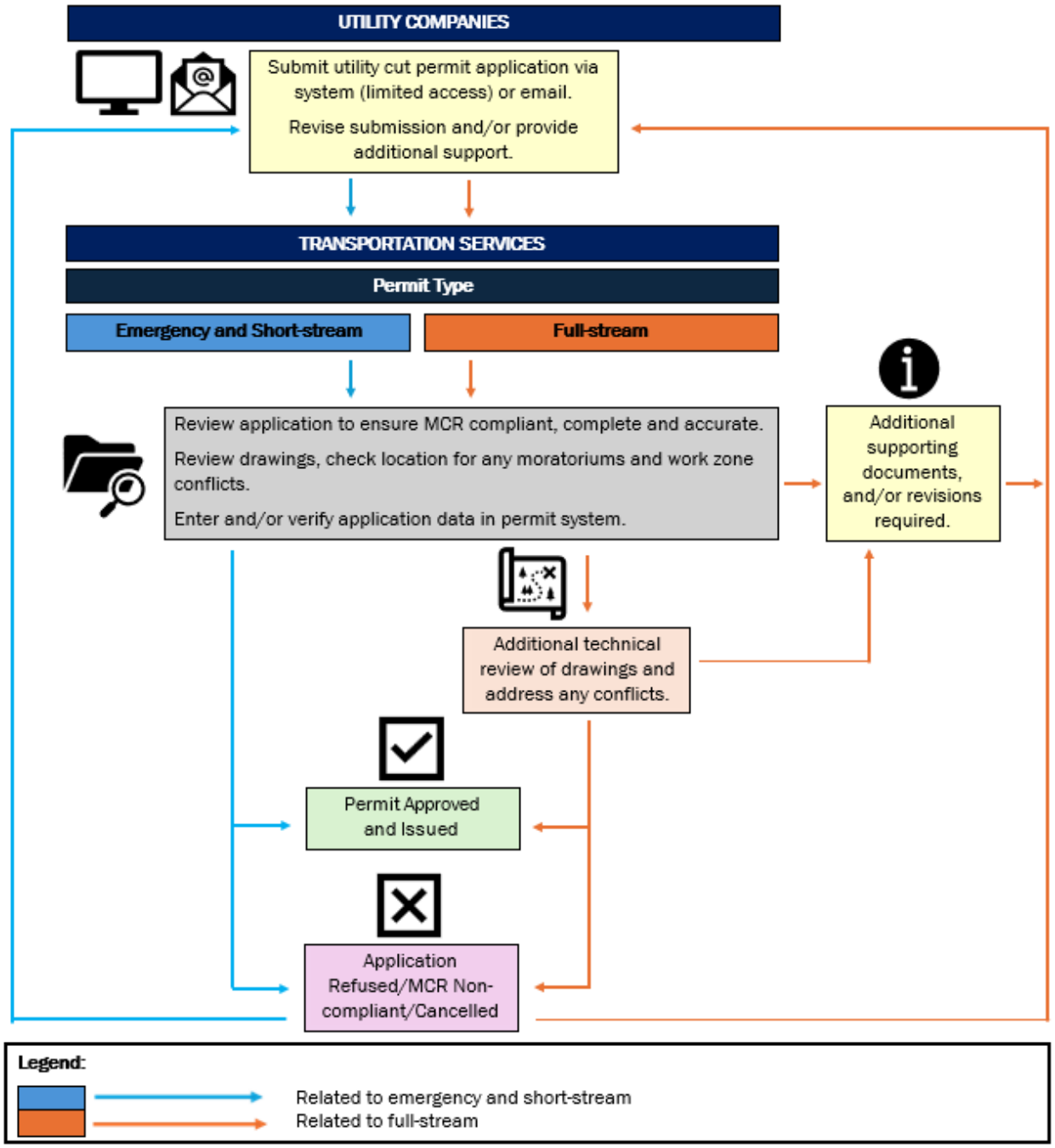
The Utility Cut Permit Application and Approval Process

The Municipal Consent Requirements (MCR) provide detailed guidelines for applicants on how to complete utility cut permit applications, outlining both the process and the responsibilities of utility companies.

As illustrated in **Figure 8**, the permit application process begins with the utility companies submitting an application. Some utility companies apply directly through the permit system using internal access or a VPN, while other utility companies submit their applications via email.

The permit team is responsible for reviewing applications. As part of their due diligence, staff assess whether the proposed work complies with MCR, identify any conflicts with City or utility projects, check moratoriums and aesthetic requirements, and resolve any accessibility concerns under the *Accessibility for Ontarians with Disability Act*. Where conflicts are found, staff must ensure they are resolved and proper signoffs from relevant City or utility stakeholders are included in the application package.

Figure 8: Permit Process Flow Chart
Prepared by the Auditor General's Office



Staff rely on a variety of tools and resources to review applications, including the Utility Cut Permit Manual, MCR, and infrastructure databases and mapping tools (e.g., T.O.INview, Digital Map Owners Group, the Official Record of Highways).

These tools help identify conflicts with existing infrastructure (i.e., other utilities in the same spot) and ongoing capital projects. This comprehensive review process is to ensure all permit approvals are coordinated, compliant, and do not negatively impact City assets, public safety, or infrastructure planning.

Emergency and short-stream permits generally involve quicker, simpler reviews, while full-stream permits require detailed technical review and coordination across utility companies and other City capital projects.

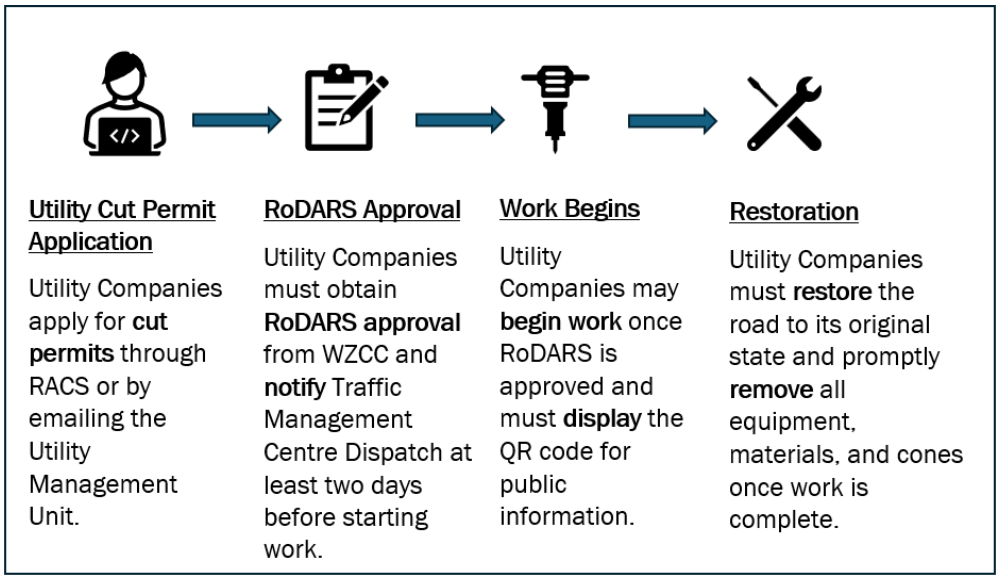
According to MCR, short-stream applications normally should be processed within five business days while full-stream applications should be processed within 20 business days from the date they are deemed complete. The MCR does not specify processing timelines for emergency applications, but the Utility Management Unit aims to process them within two business days.[8]

RoDARS Approvals

Road Disruption Activity Reporting System (RoDARS) informs the public of planned roadway closures throughout the City. RoDARS approval helps Transportation Services manage traffic disruptions caused by the utility work. Unauthorized occupation affecting the right-of-way without a RoDARS approval could adversely impact traffic and congestion in the City.

Therefore, all work affecting the road or right-of-way (ROW) must also obtain a separate RoDARS approval from the Work Zone Construction Coordination (WZCC) unit. See **Figure 9** below for details on the RoDARS approval process.

Figure 9: RoDARS Approval Process Flow Chart
Prepared by the Auditor General's Office



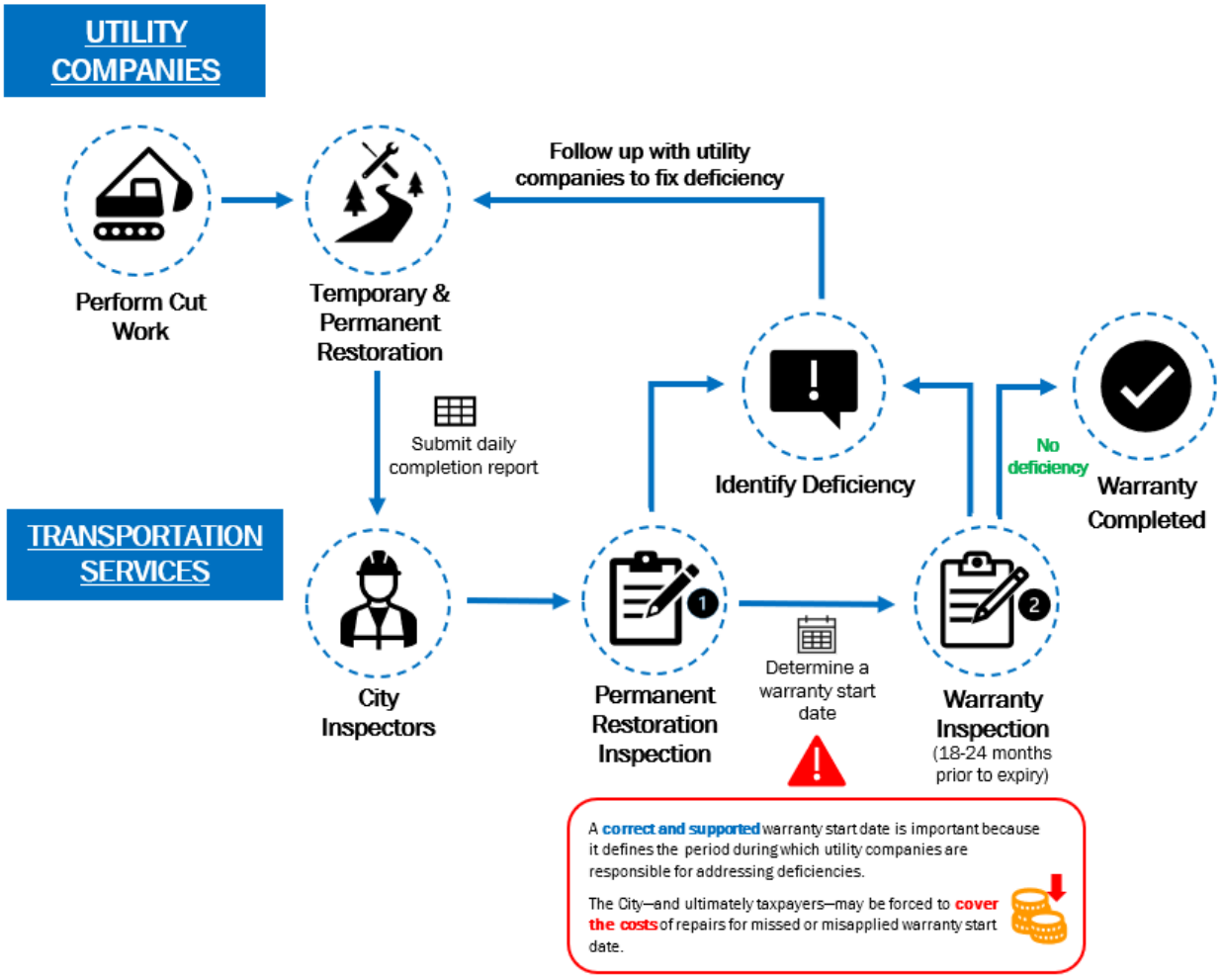
[8] Occasionally, emergency permit applications are received after the work is completed which is allowed in some circumstances.

The Utility Cut Inspection and Warranty Process

All utility cuts, except those made on grass boulevards, are subject to a standard two-year warranty period. Permanent restoration and warranty inspections help ensure road cuts are properly restored, and defects are fixed at the utility companies' expense. After the warranty period, the City bears the cost of any repairs. Inspections prior to the end of warranty period help protect the City's infrastructure investment and holds utility companies accountable for the quality of their work.

As illustrated in **Figure 10**, the utility companies notify the Utility Management Unit daily when permanent restoration work starts, or in some cases, when the permanent restoration work is complete.

Figure 10: Inspection Process Flow Chart
Prepared by the Auditor General's Office



City inspectors physically inspect the quality of work done by utility companies to ensure City standards are met. If the work is not compliant, the inspector notifies the utility company about the deficiencies.

According to internal policies, a utility cut program inspector is expected to conduct a final inspection within six months before the warranty expires to ensure the pavement is still under good condition. If the final inspection is satisfactory, the utility cut program inspector logs the permit status as "warranty completed."

When a permit has a "warranty completed" status, it means that the permit has gone through the entire warranty period life cycle, including completing all required inspections.

Inspectors may also material test concrete and asphalt used in permanent restoration on a sample basis. Material testing is essential to ensure utility cut restorations meet the City's standards for safety, durability, and long-term performance. It also helps prevent premature failures, reduces future maintenance costs, and holds utility companies accountable for the quality of their work.

Major Systems Used in Managing Utility Cuts

Transportation Services uses Road Allowance Control System (RACS), OneStage Email Box, Road Disruption Activity Reporting System (RoDARS) and Maximo work management system to track utility cut data such as permit statuses, schedule inspections, initiate warranty periods, invoice fees, and ensure restoration works comply with City standards.

In 2024, Transportation Services implemented the Maximo work management system, and a new system for managing RoDARS approvals.

See **Exhibit 2 Glossary** for system descriptions.

Exhibit 2: Glossary

Prepared by the Auditor General's Office

Emergency Permits – are for urgent work needed to address failures or damage to existing infrastructure, which may pose a danger to the public, disrupt essential services, or damage other utilities.

Full-stream Permits – apply to large-scale construction activities involving new infrastructure or significant alterations to existing infrastructure, including relocating or removing adjacent infrastructure.

Material Testing – testing the quality of materials used (e.g., concrete) to restore a utility cut to ensure they meet standards for strength, durability, and compaction.

Maximo – a work order management system implemented in May 2024 to record inspection work and permit status information. At the time of this audit, the newly-formed construction oversight team was rolling out the first iteration of the Maximo inspection recording process.

Municipal Consent Requirements (MCR) – approval needed from the City before installing or modifying utility infrastructure within public rights-of-way, ensuring proposed work does not conflict with existing or planned infrastructure.

OneStage Email Box – receives email notifications for utility cut work-in-progress and completions from utility companies.

Pavement Degradation Fee – covers the costs associated with the reduction in pavement service-life and increased maintenance expenses as a result of utility cuts. These fees are based on the type of pavement, age of pavement, road classification, and are calculated based on the physical size of the utility cuts made into the pavement.

Permanent Restoration – the final repair of a utility cut using durable materials (like asphalt or concrete) to restore the road or sidewalk to its original condition after temporary work is completed.

Right-of-way – typically includes public spaces such as roads, sidewalks, and boulevards, where infrastructure like water mains, gas lines, or telecommunications cables may be installed, maintained, or accessed by utility providers or the city.

Road Allowance Control System (RACS) – a system used to issue permits and store information for managing utility cut permit applications and approvals.

Road Disruption Activity Reporting System (RoDARS) – a system used to manage the issuance of RoDARS approvals, which help manage road occupation and traffic disruptions resulting from utility cut work.

RoDARS Approval – all work affecting the road or right-of-way must obtain a RoDARS approval to inform the public of planned roadway closure.

Short-stream Permits – usually cover smaller scope maintenance and repair work, such as replacement of covers for underground structures e.g., manholes.

Temporary Repair – a short-term repair made after utility work to make the area safe and usable until permanent restoration can be completed.

Utility Cut – refers to excavating a portion of the public right-of-way (e.g., pavement, sidewalks or boulevards) to provide access to underground utilities, such as water mains, power lines, and telecommunications infrastructure.

Appendix 1: Management's Response to the Auditor General's Report Entitled: "Audit of Transportation Services: Improving Utility Cut Permit and Inspection Processes"

Recommendation 1: City Council request the General Manager, Transportation Services Division, to improve tracking and timeliness of the utility cut permit application review and approval process by:

a. **Ensuring that permit status and key application timelines (e.g., submission, first review, and resubmission dates) are accurately tracked to better monitor the permit process timeliness and identify delays and causes for delays;**

b. **Ensuring factors such as preliminary review work, new permit versus permit extensions, and Road Allowance Control System (RACS) versus email submissions are tracked, to enable accurate processing time metrics and help staff identify delay causes; and**

c. **Expanding the use of online submissions to reduce reliance on manual email submission and improve efficiency of the permit process.**

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division acknowledges the importance of tracking timelines for permit processing to support effective monitoring and oversight of the program. The existing permitting system has limited functionality and does not support the level of detail required to fully meet this recommendation.

In alignment with this recommendation, the Division initiated a modernization project in 2022 to replace the existing permitting software (RACS). The new system will include features that support automation, minimize manual data entry, and enable advanced reporting and live dashboards. Furthermore, the recommendations identified through this audit are being incorporated into the ongoing RACS Modernization Project to ensure enhanced tracking, transparency, and improved program oversight is achieved. In the interim, the Division will also review opportunities to improve tracking and reporting until the new permitting system is implemented.

As part of the RACs modernization project a client interface will be developed to allow utilities to submit their applications directly through a customer facing portal. In the interim, the Division will explore expanding access for utilities to enter applications directly into the current system where feasible.

Timeline to completion: Q1 2029

Recommendation 2: City Council request the General Manager, Transportation Services Division, to strengthen oversight of the utility cut permit process by taking the following actions:

a. **Establish a Memorandum of Understanding (MOU) with Toronto Water and other internal City stakeholders to clearly define roles and responsibilities for utility cut permits and ensure they are clearly understood and agreed upon;**

b. **Establish processes to centrally track permits issued and inspections conducted by other divisions, such as Toronto Water, and to ensure that inspection results are consistently stored in a centralized system; and**

c. **Review and deactivate unused accounts, restrict permit approval privileges to authorized staff, and implement appropriate tools or procedures to ensure oversight of user roles and access levels.**

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division acknowledges the importance of strengthening our relationships and clarifying roles and responsibilities amongst City stakeholders. Planned initiatives to support this recommendation include the development of Memorandum of Understanding (MOU) between Transportation Services and its partner divisions. As part of this work, the Division will review the current practices relating to permitting, inspections and oversight of utility work performed by other City Divisions including sharing inspection information. This exercise will establish a clearly defined processes that promotes transparency, ensure appropriate oversight, and strengthen accountability between all parties.

The Division is committed to implementing this recommendation; however, it is important to note that successful implementation of this recommendation may depend on increased staff capacity and/or system resources. The Division remains committed to addressing the recommendation and, through the ongoing consultant assignment, is actively reviewing and considering how best to build the necessary capacity to support full implementation of this recommendation. We are anticipating bringing forward additional staff asks in the 2026 and 2027 budget.

Timeline to completion: Q1 2027

The Division completed an internal compliance review of the utility cut program in 2024 which identified challenges regarding RACS access rights. However, the existing system does not allow for differentiated access levels by team, and as a result, it is anticipated that staff outside the Utility Management team will also have the same access rights that enable them to approve similar types of permits.

The Division will develop and implement a standard process for periodic review of system access and user privileges within the relevant systems utilized by Utility Management to address this recommendation. Additionally, the Division initiated a modernization project in 2022 to replace the existing permitting software (RACS). The new system will allow differentiated access levels by users and teams.

Timeline to completion: Q1 2026

Recommendation 3: City Council request the General Manager, Transportation Services Division, to develop and implement a quality assurance process for all permit streams, including standardized checklists aligned with applicable policies and standards for reviewing permit applications to ensure that necessary conflict approvals are obtained, and appropriate documentation is maintained to support compliance and accountability.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division will develop quality assurance processes related to utility cut permit application processing to address this recommendation including the review of existing and development of new checklists as required.

The Division is committed to implementing this recommendation and anticipates that Quality Assurance Process can be developed and implemented in a timely manner. However, full implementation of this recommendation, including standardized checklists, may depend upon increased staff capacity and/or system resources to maintain current service levels. As the volume of short and emergency permit applications received is 95% of all applications approximately 33,500, any changes or additional steps added to the process will exacerbate existing resource challenges and further affect service delivery.

The Division remains committed to addressing the recommendation and, through the ongoing consultant assignment, is actively reviewing and considering how best to build the necessary capacity to support full implementation of this recommendation. We are anticipating bringing forward additional staff asks in the 2026 and 2027 budget.

Furthermore, in alignment with this recommendation, the Division is also actively participating in broader working groups with the Strategic Capital Coordination Office focused on improving coordination and processes, with a particular emphasis on utility-related coordination.

Lastly, the Division has included requirements that the future permitting system incorporate digital checklists directly into the system to improve consistency, documentation and provide additional guidance for staff involved in the permitting process.

Timeline to completion:
Quality Assurance Process – Q2 2026
Checklists Short stream & Emergency – Q1 2029 (RACS Modernization)

Recommendation 4: City Council request the General Manager, Transportation Services Division, to strengthen coordination and communication between the Utility Management Unit and the Work Zone Construction Coordination Unit to improve oversight of utility cut activities by:

a. **Establishing a standardized communication protocol between the two units to ensure timely updates on permits and inspections;**

b. **Ensuring all Road Disruption Activity Reporting System (RoDARS) approvals are linked to valid and accurate Road Allowance Control System (RACS) permit numbers, and that all completed permits have corresponding RoDARS approvals; and**

c. **Implementing a process to enforce compliance with RoDARS approval requirements through actions including, but not limited to, inspecting QR code construction signs and recovering administrative costs for non-compliance.**

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division acknowledges the importance of coordination and communication across functional teams. In support of these goals, the Division has already undertaken multiple improvement initiatives within the respective areas, including:

- Completing an Internal Compliance Review that identified gaps in communication/coordination between units (2024).
- Forming a dedicated Utility Management unit to align permitting, inspection and communication functions related to utility cut activities (2024).
- Restructuring the Work Zone Coordination to be integrated within the RoDARS system.
- Developing, piloting and implementing a new RoDARS system moving from email-based communications to a centralized system-based process (2024-2025).
- Implementing Maximo Work Management System for inspections (2024).
- Initiated a project to modernize and replace the existing Road Allowance Control System (RACS) (2022 Ongoing).
- Initiated a project to integrate the existing RACS and Maximo systems (2024 Ongoing)

The Division has undertaken multiple improvements within these two areas and is working towards integrating new and existing systems to improve communications and information sharing amongst teams in support of this recommendation. Furthermore, the long-term RACS Modernization Project will be designed to integrate with all major platforms, enabling the automation and streamlining of communications across teams to support efficient and coordinated service delivery.

Planned initiatives include the development of a new return form within the RoDARS system, which will allow utilities to provide updates to the City on completed work and support improved coordination between the Work Zone and Utility Management Units.

Given the volume of permits and anticipated applications in RoDARS, this communication protocol will require an automated approach or system validation step to ensure efficiency and consistency

in processing. The Division will establish this protocol in conjunction with ongoing projects to integrate new and existing systems.

The Division has recently implemented a new RoDARS system that requires each applicant to upload their permit as part of their RoDARS submission. During the review of the RoDARS submissions staff are required to confirm that a valid permit has been submitted. As part of ongoing system integration projects, the Division will develop a process to validate and reconcile information between the two systems.

The Division will be developing and implementing a process to enforce compliance with RoDARS approval requirements along with inspections of QR codes and application of associated fees.

Timeline to completion: Q2 2027

Recommendation 5: City Council request the General Manager, Transportation Services Division, to develop and implement a structured process to manage and track the inspections throughout the entire permit life cycle until its warranty period is completed, specifically:

a. **Ensure timely permanent restoration and warranty inspections are performed for all permits; and**

b. **Ensure a warranty start date is clearly defined and supported by inspection for all permits that come to the warranty stage.**

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division acknowledges the importance of developing a robust process to better manage and track inspections throughout the permit lifecycle. In support of this recommendation, the Division has already implemented the Maximo Work Management System starting in 2024 to help support centralized tracking and documentation related to inspections. However, we also acknowledge that there is room for improvement in existing processes and practices. To address this, the Division has initiated a project to integrate Maximo with the existing permitting system and is also working on implementing a Maximo mobile solution to enhance field reporting and operational efficiency.

Planned initiatives include the development of a new return form within the RoDARS system, which will allow utilities to provide updates to the City on completed work and support improved coordination and scheduling of inspections. As part of these system integration efforts, the Division will also be evaluating opportunities to enhance current processes and improve overall inspection practices in support of this audit recommendation.

Timeline to completion: Q4 2025

Recommendation 6: City Council request the General Manager, Transportation Services Division, to set up a structured training program that is periodically updated to reflect new processes, and to provide refresher training to inspectors so they have clear guidance on how to carry out and document inspections properly, ensuring all evidence is complete, accurate, and uploaded into Maximo.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: The Division agrees with this recommendation. The Division acknowledges the importance of establishing policies, guidance and structured training for staff to ensure inspections are thorough, consistent and well documented. In May 2025, the Division developed and delivered an updated training and supplementary resources for all inspection staff in the Utility Management unit. This training emphasized the importance of comprehensive documentation and ensuring sufficient information is stored within the information system (Maximo). Furthermore, as part of ongoing Maximo system integration and associated process changes, the Division will continue to update and provide refresher training, resources, and updates on process changes to staff as required. Development of associated Standard Operating Procedures is well underway and is expected to be finalized by Q4 2025. Timeline to completion: Q4 2025

Recommendation 7: City Council request the General Manager, Transportation Services Division, to develop and implement a formal process for conducting material testing and monitoring material testing deficiencies.

Management Response: ☒ **Agree** ☐ **Disagree**
Comments/Action Plan/Time Frame: The Division agrees with this recommendation. Development of a Standard Operating Procedure for material testing related to utility permanent restorations is well underway and is anticipated to be fully implemented by Q2 2026. Timeline to completion: Q2 2026

Recommendation 8: City Council request the General Manager, Transportation Services Division, to develop and implement a formal process to monitor permits where deficiencies are identified. The process should include but not be limited to the following items:

a. **Maintain a centralized report to track permits with deficiencies, resolution timelines, and statuses;**

b. **Develop a protocol to inform utility companies about the deficiencies before warranty expires; and**

c. **Ensure re-inspection of resolved deficiencies is performed and documented.**

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division acknowledges the importance of centrally tracking deficiencies, ensuring that all identified issues are addressed and re-inspected to confirm work has been completed. Ongoing efforts to support this recommendation include:

- Implementing Maximo Work Management System for centralized inspection tracking (2024).
- Updating training for all inspection staff, reinforcing expectations for documenting deficiencies, and conducting follow-up inspections. (2025)
- Creating a new centralized email mailbox to track all correspondence related to deficiencies (2025)

Presently, communications with utilities regarding deficiencies are primarily completed via email by individual inspectors. To support continuity and improve record-keeping, the Division has implemented a new centralized email inbox to retain correspondence, particularly when inspectors are unavailable or are no longer with the business unit. Furthermore, recent training has emphasized the need to upload correspondence to the centralized information system.

Planned initiatives include the development of a Standard Operating Procedure (SOP) to guide the identification, notification, and follow-up of deficiencies. In the longer term, the Division has also incorporated requirements into the RACS modernization project to enable deficiencies to be communicated to utilities through an electronic portal, allowing them to confirm resolution and improve tracking and accountability across the entire permit lifecycle.

Timeline to completion:
SOP Development & Implementation – Q3 2026 to Q4 2026

Recommendation 9: City Council request the General Manager, Transportation Services Division, to establish formal service standards on service requests and enhance documentation practices to include actions taken with supporting evidence.

Management Response: ☒ Agree ☐ Disagree
Comments/Action Plan/Time Frame: **The Division agrees with this recommendation.** The Division will review and establish formal service standards and develop procedures to enhance documentation regarding public complaints. A dashboard to track customer complaints assigned to the Utility Management team is currently under development and will assist management in monitoring progress and tracking outstanding complaints. Furthermore, this recommendation will also be considered as part of the ongoing consultant assignment which aims to inform service standards based on best practices as well as staff resourcing requirements to achieve this objective. Timeline to completion: Q4 2026

Recommendation 10: City Council request the General Manager, Transportation Services Division, to update and report on its key performance indicators and targets, and investigate and take timely corrective actions when performance issues are identified.

Management Response: ☒ Agree ☐ Disagree
Comments/Action Plan/Time Frame: The Division agrees with this recommendation. The Division began tracking some Metrics for the program in Q3 of 2024, however, this tracking was manual and inefficient. In support of this recommendation, the development of a dashboard to track available metrics is underway. This recommendation will be further considered as part of the Division's ongoing consultant assignment, which includes recommendations for best practices, service standards, and key performance metrics. Planned initiatives include the development of a performance framework for the Utility Management unit incorporating recommendations from this audit as well as our ongoing consultant assignment. Timeline to completion: Q4 2026

Recommendation 11: City Council request the General Manager, Transportation Services Division, to implement a process to charge pavement degradation fees and to recover past and ongoing costs of road damage caused by utility cuts.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

This recommendation complements ongoing work being performed by the Division to recover pavement degradation fees including:

- Completing an Internal Compliance Review that reinforced challenges collecting pavement degradation fees (2024).
- Developing a financial model to estimate past pavement degradation fee costs (2024).
- Holding discussions with major utilities regarding past pavement degradation fees (2024 ongoing).

Planned initiatives include the development of a new return form within the RoDARS system, which will allow utilities to provide updates to the City on completed work including the size of utility cuts. This information can be used to calculate and charge pavement degradation fees on an ongoing basis.

Timeline to completion:
Old costs – Q3 2026
Billing new program – Q2 2026

Recommendation 12: City Council request the General Manager, Transportation Services Division, to determine and propose any adjustments needed to the fee structure to reflect the full cost of program delivery, including inspections, compliance enforcement, and administrative support.

Management Response: ☒ **Agree** ☐ **Disagree**

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

In 2024, the Division implemented a new Utility Management unit with the intent to consolidate permitting and inspection functions, improve consistency and oversight of utility work. The unit aims to achieve an efficient permitting process, effective oversight of utility work, protect City assets, and minimize the impacts of utility work on the public.

The Division acknowledged that the Utility Management Unit, as currently structured, was not positioned to fully meet its goals and objectives. Therefore, in 2024 the Division engaged an independent consultant to perform a comprehensive review of the utility management program. This work includes a review of the current utility management practices at the City, a jurisdictional scan and making recommendations for a proposed organizational structure, staff and resource requirements. This work is presently ongoing, and the results will inform future staff requests and associated updates to fees that will reflect the full cost of the program.

Timeline to completion: Q1 2027

Recommendation 13: City Council request the General Manager, Transportation Services Division, in consultation with Legal Services where appropriate, to make best efforts to recover all outstanding permanent restoration costs for work performed on the legacy utility cut permits.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

The Division will consult with Legal Services and make best efforts to recover all outstanding permanent restoration costs identified during the audit.

Timeline to completion: Q2 2026 to Q4 2026

Recommendation 14: City Council request the General Manager, Transportation Services Division, to implement an effective permit system that integrates with the inspection system for more efficient processing and tracking of permits and inspection data.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

The Division agrees with this recommendation.

Beginning in 2022, the Division in consultation with the Technology Services Division initiated a project to modernize and replace the existing Road Allowance Control System (RACS) used for permitting. The requirements for this project include integration with the work Management System (Maximo) and the Road Disruption Activity Reporting System (RoDARS) and other related systems and aims to achieve a better integrated and more seamless process. Another major requirement for this system is the development of a client facing portal that centralizes communications relating to permitting, inspections and the resolution of deficiencies between the Division and utilities within the system. Lastly, the system will support enhanced tracking of information throughout the permit lifecycle to support improved transparency, performance monitoring, and reporting.

While the RACS system replacement is being implemented, the Division is also taking steps to integrate the existing RACs and Maximo systems to improve communication between the systems until the new replacement system is available.

Timeline to completion:
RACs replacement – Q1 2029
RACs/Maximo Integration – Q4 2026

AUDITOR GENERAL TORONTO