



## THE CITY OF SAN DIEGO

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### OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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**Date Issued:** July 6, 2023

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# Review of Amendments to the Street Preservation Ordinance and Damage Fee

## OVERVIEW

On November 16, 2022, the Transportation Department presented proposed revisions to the City's Street Preservation Ordinance and Damage Fee to the Active Transportation and Infrastructure (ATI) Committee.<sup>1</sup> The amendments included more stringent restoration requirements as well as making the Street Damage Fee 100% cost recoverable. The item was unanimously approved to go to City Council no earlier than January 30, 2023, with directions to the Transportation Department to work with the City Attorney's Office to complete legal review, and to various offices to provide additional information including the following:

- The IBA update its 2012 report, [Street Preservation Ordinance and Damage Fee \(IBA-12-51 REV\)](#) to provide an assessment of the proposed amendments.
- The City Attorney's Office provide information about any history of litigation or settlements by the City related to accidents that took place as a result of trench related repairs.
- Transportation Department staff provide additional examples of safety hazards presented to vehicles, bicyclists, and pedestrians as a result of inadequate or failing trench repairs.
- Transportation Department staff provide responses to issues raised at the November 2022 ATI Committee by private entities that excavate in the public right-of-way; conduct additional discussions with the private entities to understand the concerns raised; and highlight potential changes from the proposed action as a result of continued discussions, including a redline of any changes made.

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<sup>1</sup> The Street Preservation Ordinance is intended to increase coordination of planned projects in the public right-of-way and reduce excessive trench cutting and excavations and resulting damage to City Streets. When street excavations are required, the Street Damage Fee enables the City to recover a portion of costs to rehabilitate streets.

#### OFFICE OF THE INDEPENDENT BUDGET ANALYST

202 C STREET MS 3A SAN DIEGO, CA 92101

TEL (619) 236-6555 FAX (619)-236-6556

These actions have been completed. The amendments to the Street Preservation Ordinance are expected to be presented to the City Council on July 10, 2023, and revisions to the Street Damage Fee are anticipated to be presented to the Budget and Government Efficiency Committee on July 12, 2023, and subsequently to City Council, tentatively on July 24/25, 2023.<sup>2</sup> We note there have been several changes to these items since the version was presented to the ATI Committee. We provide additional details in our *Key Changes to the Street Preservation Ordinance* section of this report.

As part of our analysis, we met with officials from several departments, including Transportation, Engineering & Capital Projects, Development Services, Public Utilities, Information Technology, as well as the City Attorney's Office. Our Office would like to thank staff from those departments for providing thoughtful responses.

## BACKGROUND

### **The Importance of Effectively Maintaining City Streets**

The City's network of approximately 3,000 miles of streets is a critical asset, and effective, fiscally responsible management of streets is important for the economy, tourism, and public safety. The management, maintenance, and poor condition of City streets have been a key issue for many years. Concerns relate to a lack of sufficient investment in street resurfacing. Concerns also include public utilities' excavations into newly resurfaced streets and the resulting long-term damage to streets, with excavators not being charged appropriate fees to fully cover this damage or held accountable if repaired trenches fail. Additionally, there is concern that excavation work is not sufficiently coordinated among City departments and private excavators to identify joint work opportunities and potential conflicts, resulting in increased excavations and damage to streets.<sup>3</sup>

The Transportation Department's long-term goal is to maintain the City's roadway network in good condition equivalent to an average network pavement Overall Condition Index (OCI) of 70 or higher.<sup>4</sup> In order to maintain pavement conditions, the [FY 2024 Proposed Capital Improvements Program \(CIP\) Budget](#) funded repair of 275 miles of streets in FY 2024. However, the funding need for street repairs, based on the most recent pavement condition assessment (conducted in

### **How this Report is Organized**

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- Conclusion and Recommendations
- *Appendix A: Right-of-Way Permit Process and Street Damage Fee Revenues from Private Excavators*

<sup>2</sup> The Street Damage Fee is considered to be a user fee and, therefore, is being taken to the Budget & Government Efficiency Committee to comply with [Council Policy 100-05](#) and [Administrative Regulation 95.25](#).

<sup>3</sup> This was also identified by the City Auditor in its 2016 [Performance Audit of the Street Preservation Ordinance](#), among other findings.

<sup>4</sup> OCI measures pavement condition, and is calculated using weighted characteristics, such as surface distress and ride quality. OCI generally ranges from 0 to 100, with 100 representing the best street condition.

2015-16), has not been fully funded for many years, and the City is reporting a \$987.2 million deferred capital backlog for pavement in the [FY 2024-28 Capital Infrastructure Planning Outlook \(CIP Outlook\)](#).<sup>5</sup> To regain the OCI of 70, the CIP Outlook noted that the City would need to fund 468 miles of pavement repairs per year. According to the CIP Outlook, the Transportation Department predicts the OCI has decreased since the previous street network assessment, indicating further deteriorated street conditions. A new pavement assessment is anticipated to be completed in the fall of 2023, and until that is completed, the actual OCI is not known.

### **Impacts of Excavations on Streets**

Numerous entities, known as public utilities, excavate in the public right-of-way as part of providing services for the City. This includes City departments, such as the Public Utilities Department (PUD) for water and sewer projects, and the Stormwater Department for drainage projects. This also includes private entities such as San Diego Gas & Electric (SDGE) as part of its installation, repair, and upgrading of natural gas pipelines and electrical infrastructure, including the undergrounding of electrical services, as well as internet service providers (ISPs) for cable, internet, and other telecommunications networks.

There are justifiable needs for street excavation, most notably the need to install and repair crucial utility infrastructure underground. However, numerous pavement-related engineering studies have concluded that utility excavations into streets result in long-term damage. This is because damage from excavations extends beyond the edges of the utility cut—known as the area of influence. Further, pavement excavations degrade and shorten pavement life no matter how well the excavation is restored, because excavations through the existing pavement layers damage each layer, reduce the structural integrity of the pavement, and cause surface roughness. In addition, the weakened pavement near patches will deteriorate at a faster rate than pavement not affected by patching. Even with high-quality trench repair, pavement cannot be fully restored to its original condition, which causes additional degradation over time and shortens the service life of the street. As a result, the street will require more frequent maintenance and additional rehabilitation costs, such as increased overlay thickness for both the patched and non-patched areas.

In 1999, an engineering study technical report was issued specifically on excavated and patched pavements in the City of San Diego, concluding that there are long-term structural and lifecycle impacts to the roadway, extending beyond the limits of the excavation area.<sup>6</sup> Experts agree that the science behind the study has not changed, and this has been the supporting document for the City's Street Preservation Ordinance and Street Damage Fees, with one exception. In 2015, the City expanded on the 1999 engineering study to examine smaller trench cut sizes (e.g. micro trenches), and concluded that even narrow trench cuts negatively impacted the pavement and caused long-term weakness to the pavement, even when patched.<sup>7</sup>

### **The Street Preservation Ordinance**

The existing Street Preservation Ordinance, adopted in 2013, was intended to increase coordination of planned projects in the public right-of-way and reduce excessive trench cutting

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<sup>5</sup> Exacerbating this underinvestment is the recent cost increases in asphalt overlay (\$1.5 million per mile) and slurry seal (\$180,000 per mile) due to inflation and supply chain issues as a result of the Covid-19 Pandemic.

<sup>6</sup> Engineering & Research, International, Inc., [Evaluation of Utility Cut Patching on Pavements in the City of San Diego](#), June 1999.

<sup>7</sup> Engineering & Research, International, Inc., [Trench Cut Study Update: Evaluation of Utility Cut Patching on Pavements in the City of San Diego](#), November 22, 2015.

and excavations and resulting damage to City streets. To achieve these goals, the existing 2013 Ordinance includes several key components, including:

- Public Right-of-Way Permit and Fees – Requiring a permit and related fees for private entities to excavate in the public right of way.
- Moratorium Streets and Waivers – A moratorium on street excavations is included to minimize excavations for newly reconstructed or resurfaced streets. A waiver can be obtained based on certain exceptions.
- Street Damage Fee – All excavators are required to pay the City a fee to recover the more frequent maintenance and additional rehabilitation costs that will be incurred by the City.
- Restoration of the Public Right-of-Way – In any case in which the sidewalk, street, or other public right-of-way is excavated, all excavators are required to restore the excavation in compliance with the Ordinance, regulations, and City Standard Drawings and specifications.
- Coordination of Excavation – Public utilities are required to coordinate planned infrastructure projects with the City to minimize the damage to the public right-of-way caused by multiple excavations, by providing a two-year plan for anticipated work.

#### Current Practice for Excavation Restoration

The current practice for excavation restoration is based on a City Engineer technical memorandum that was issued in 2015 requiring that excavators follow the City standard drawings for restoration of excavations.<sup>8</sup> The 2015 memorandum was intended to provide clarification on perceived conflicts within the 2013 Street Preservation Ordinance regarding resurfacing requirements. The 2013 Ordinance used the term “resurfacing” but did not define that term or specify what type of restoration would be necessary. Notably, the 2015 memorandum requires that surface pavement be restored in areas extending 6-inches around the perimeter of the excavation, instead of resurfacing a wider influence area extending more than 6-inches as required by the 2013 Ordinance.

A City task force convened on the Street Preservation Ordinance between 2014 – 2017 to identify needed improvements, although no amendments have been made since 2013. Proposed revisions to the Ordinance intend to address several challenges, such as clarifying which types of resurfacing will be required in certain scenarios and addressing the lack of coordination among various excavators resulting in repeated excavations in the public right-of-way. Additionally, some excavators have not provided appropriate, timely restoration, which has impacted other projects.

#### **The Street Damage Fee**

When street excavations are required, the purpose of the Street Damage Fee is for the City to recover the cost of the higher level of resurfacing and repairs needed to mitigate the long-term damage and degradation caused by the excavations. When these costs are not recovered, they are borne by the General Fund. It is important to distinguish the Street Damage Fee from the cost of actual repairs and resurfacing for the excavation or trench, which are required per the existing Ordinance and City Engineer’s memorandum. The Street Damage Fee is also intended to create

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<sup>8</sup> City Engineer Technical Memorandum, [Clarifying Requirements for Resurfacing for Asphalt Concrete and Concrete Street Excavations and Slurry Seal Requirements in Public Right-of-Way \(San Diego Municipal Code §§ 62.1210 and 62.1216\)](#), June 1, 2015.

an incentive for utilities to coordinate excavations in the streets to minimize the number of excavations.

Between FY 2006 and FY 2012, City departments were not required to pay a Street Damage Fee, and some private utilities were not being charged a Street Damage Fee.<sup>9</sup> In 2012, City Council approved a proposal for a graduated fee adjustment for wet (e.g., water pipelines) and dry utilities (e.g., electrical cables), which would increase the fee by 25% and 50% of the proposed increase in FY 2014 and FY 2015, respectively. The intention was to get to 100% cost recovery in FY 2016; however, this was neither brought to Council for approval nor implemented. Between FY 2013 and FY 2016, the City collected approximately \$2.5 million in Street Damage Fees.<sup>10</sup>

### **Right of Way Permits and Related Fees**

Prior to the start of excavation work, public utilities other than City departments must obtain a Public Right-of-Way Permit from the Development Services Department (DSD). DSD collects the Street Damage Fee from private excavators as part of its permit review process. In addition to Street Damage Fees, excavators are required to pay applicable permitting fees.<sup>11</sup> A permit is not issued until all fees are paid. DSD is also responsible for coordinating pre/post construction meetings and inspections, through its Right-of-Way Inspection team. This function was recently transferred from the Engineering & Capital Projects Department (E&CP) to DSD to close the gap between permit plan review and project implementation. A pre-construction meeting is held before the commencement of excavation work to clarify requirements and identify any potential issues. Ongoing inspections are conducted as the street is excavated and restored. After the completion of all excavation and required restoration work, a final inspection will be conducted before the permit is closed out. A detailed discussion and process diagram of the City's Street excavation permit review and inspection process can be found in *Appendix A* of this report.

## **FISCAL AND POLICY DISCUSSION**

### **Key Changes to the Street Preservation Ordinance**

Proposed amendments to the Street Preservation Ordinance are intended to provide clear policies and procedures and improve coordination for excavation work in the public right-of-way to more effectively maintain City streets. In this section, we assess key provisions of the amended Ordinance in comparison with the existing 2013 Ordinance as well as current practices based on the 2015 City Engineer's technical memorandum. We also note items that differ from the version of the Proposed Ordinance that was presented to ATI Committee in November 2022. Changes to the Street Damage Fee are discussed in the *Fiscal Impact from Amended Street Preservation Ordinance and Full Cost Recovery Street Damage Fee* section of this report.

Provisions in the amended Ordinance will go into effect on *January 1, 2024*. It is important to clarify that, for private utilities, the amended Ordinance will be applicable only to *new* projects for

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<sup>9</sup> In its [2010 Street Maintenance Audit](#), the City Auditor found Street Damage Fees decreased from \$232,032 in FY 2005 to \$54,453 in FY 2006 with only \$31,684 being collected from FY 2007 through FY 2010.

<sup>10</sup> Data as of September 2015, [City Auditor 2016 Performance Audit of the Street Preservation Ordinance](#).

<sup>11</sup> These fees may include plan review fees, such as plan check fees for public right-of way permits; inspection fees, such as right-of-way permit inspection fees and after-hour inspection fees; administrative fees, such as general plan maintenance fees and records fees; and other fees, such as the Permit Extension Fee and Construction Change Fee. These fees may be collected by the City at initial project submittal, during permit review, at permit issuance, or during inspection.

which public right-of-way permits have *not* been issued. Projects in the pipeline which have been issued a permit remain subject to the existing 2013 Ordinance. For City department projects, those which have achieved 100% design remain subject to the existing Ordinance. City projects that are at less than 100% design will plan to comply with the amended Ordinance provisions.

***Additional Provisions Intended to Ensure Effective Coordination of Excavations by Public Utilities (§62.1106)***

Under both the existing 2013 and amended Ordinance, public utilities (City Departments and private utilities) are required to coordinate the installation of their facilities with the City to minimize damage to the public right-of-way. This includes submitting a document that shows all planned trenching in the public right-of-way to be done in the next 24 months on April 1 and October 1 of each year. The City intends to use this information to facilitate coordination among excavators to avoid unnecessary excavation in the public right-of-way.

While the requirement for all utilities to submit a 24-month plan for trenching is included in the existing 2013 Ordinance, Transportation Department officials told us that no entity has complied with the requirement due to unwillingness to share information on the location of planned trenching, claiming the proprietary and confidential nature of the information. We note that both the existing 2013 and the amended versions of the Ordinance reference that the City will not release information that is marked and supported as a trade secret or is confidential or proprietary information. Also, the amended Ordinance allows that public utilities may submit amendments to previously submitted coordination plans at any time.

When these utilities apply for a right-of-way permit, they do not submit information in a geospatial format, but are required to submit either a construction plan or public improvement plan that includes specific site drawings. As a result, this shows up in the City's digital coordination system (Project Finder) as a dot on the map and does not show the full site to be excavated, which makes it difficult for City staff who are trying to identify project- and event-related conflicts. This lack of coordination poses potential problems; as an example, without additional information it is difficult to ensure excavators don't show up to trench on Harbor Drive near the Convention Center during Comicon. As another example, this information is important to help ensure various excavators don't end up trenching in the same location repeatedly.

To begin to address these challenges, the amended Ordinance includes the following provisions:

- The planning document is required to be in a geospatial data format, or other City Engineer approved format. Once this is provided, the Transportation Department has a GIS analyst that will upload the data into the system.
- A project will *not* be issued a Public Right-of-Way Permit until it has been coordinated in the City's digital coordination system.

Ensuring compliance with this and other provisions in the amended Ordinance will require leadership and coordination by the Transportation Department as well as enforcement by DSD.

***Reduced Time Period for Moratorium Streets (§62.1206) and Additional Waivers Provisions (§62.1207) Intended to Help City Projects Move Forward***

Under both the existing 2013 and amended versions of the Ordinance, excavations are not permitted in a moratorium street without a valid moratorium waiver for streets that have been

newly constructed or reconstructed. The time period for Moratorium Streets is being reduced in the amended Ordinance from five to three years for asphalt overlay, and from three years to one year for slurry seal. The Transportation Department and E&CP both supported this change, noting that all non-City public utilities requesting a waiver have been granted one, whereas City departments have been complying with the moratorium and not requesting waivers. When a utility gets a waiver and then repaves a street, the moratorium is once again triggered, which further delays City projects.

Both the existing 2013 and amended version of the Ordinance allow moratorium waivers that can be approved by the City Engineer for several circumstances, including an emergency, new service to a specific location that cannot be provided via existing conduits or trenchless technology, and when the installation or relocation of facilities required by a non-government owned public utility is required by the City, State, or Federal government. The amended Ordinance provides additional activities that would be eligible for a moratorium waiver, including new surface improvements, work performed to correct defects during the warranty period, excavations through an intersection, and projects waiting in the digital coordination system when another project has extended the moratorium. The reduction in the effective moratorium time period, coupled with more stringent review/potential denial of waivers and higher levels of excavation restoration required in the proposed Ordinance, is intended to help City projects move forward and enhance project coordination and delivery.

We note that the version of the Proposed Ordinance provided to the ATI Committee would have transferred the waiver authority from the City Engineer to the Transportation Department Director, however the newly proposed version leaves this authority with the City Engineer. The City Engineer is anticipated to update the delegation of authority memorandum to provide several senior engineers in the Transportation Department the authority to grant or deny waivers.

***Increased Restoration Requirements for Streets Not Under an Excavation Moratorium (§62.1211)***

The current practice for excavation restoration, based on a 2015 City Engineer technical memorandum, requires that surface pavement be restored in areas extending 6-inches around the perimeter of excavations, instead of resurfacing a wider influence area extending more than 6-inches as required in the existing 2013 Street Preservation Ordinance. Note that the proposed revisions to the Ordinance that were presented to the ATI Committee in November 2022 included fully restoring the street beyond the area of influence. This is included as an alternative compliance option in the amended Ordinance (discussed in more detail in the following section).

The existing 2013 Ordinance has different requirements for wet and dry utilities. A key change in the amended Ordinance is replacing these separate requirements based on utility types with requirements for major excavations (a trench greater than 6 inches in width or greater than 3 feet in depth) and minor excavations (a trench 6 inches or less in width and 3 feet or less in depth). The amended Ordinance also establishes a timeline for completing street restoration. Major excavations must restore the trench as required by City Adopted Standards, asphalt overlay the excavation influence areas within 180 days of the trench cap, as well as repair damage to the existing pavement from the excavation work (as determined by the City Engineer). Additionally, if the trench or excavation influence area enters a bicycle lane, the entire width of the bicycle lane must be asphalt overlaid and restriped for the length of the trench including the excavation influence area. For minor excavations, excavators are required to restore the trench per City

Adopted Standards and asphalt overlay the excavation influence areas and repair damage to the existing pavement from the excavation work.

We discussed potentially calculating the financial impacts on projects due to increased restoration requirements with Transportation Department, DSD, and E&CP officials. They indicated that it is difficult to determine these impacts given the large variability between projects, from minor to major excavations, and various project factors such as whether they require ADA-related infrastructure.

***Additional Option for Alternative Compliance In-lieu of Paying the Street Damage Fee (§62.1211)***

Unlike the existing 2013 Ordinance, the amended Ordinance adds a voluntary compliance option, known as alternative compliance, which enables public utilities to fully restore the excavated street in lieu of paying the Street Damage Fee. This option requires repair and backfill of the trench as required by City's Adopted Standards, and asphalt overlay of the trench and all lanes affected by the trench, including any lanes within the excavation influence area. This must be completed within 180 days of the trench cap. This method of repair is a more comprehensive repair of the overall street, and has the potential to be a more comprehensive repair standard that does not require additional work on the part of the City following the conclusion of the repair.

As discussed, the Ordinance applies to both City departments and to other public utilities. While the additional restoration requirements associated with alternative compliance may be a more costly option, City departments in particular should assess both options before deciding which option to choose. Notably, there are special considerations for PUD in utilizing alternative compliance; mainly, in order for ratepayer funds to be utilized on a project, there must be a clear nexus to the funds required to be spent on the project to the impact that the project creates. Since the alternative compliance methods were not part of the 1999 Engineering Study, not having that nexus could prevent PUD from utilizing the alternative compliance pathway. The City Attorney's Office would need to opine further on the legal issues for PUD utilizing the alternative compliance method using water and sewer funds. This is discussed in more detail in the *Impacted City Departments – Public Utilities Department* section of this report.

Overall, the alternative compliance option, and the potential that the 1999 Engineering Study does not support it, demonstrates the limitations of depending on this study as opposed to the Transportation Department conducting a new engineering study for this update of the Street Preservation Ordinance. Additionally, a new study would be able to consider other improvements to trenching and repair that have happened since 1999, which may better address the known damage that the excavations have to the street and support more comprehensive repair requirements, such as those discussed in the *Requirements and Fees in Other Jurisdictions* section. **Our Office recommends that the Transportation Department procure engineering services to conduct a new study on pavement in San Diego.**

***Increased Compliance and Enforcement Provisions, but Lack of Staff to Proactively Achieve***

There have been ongoing challenges with compliance and enforcement of the existing 2013 Street Preservation Ordinance, largely due to the lack of leadership and coordination among City departments as well as insufficient staff levels to provide needed support. The proposed revisions to the Ordinance have some teeth in that they include clear and specific restoration compliance requirements, timelines, and repair and maintenance obligations. Inspections of work performed



in the public right-of-way will be critical for compliance and enforcement of these more stringent requirements.

We note, however, that the Transportation Department, the lead department for managing this program, currently does not have sufficient staff to provide needed governance, coordination, compliance, and enforcement. The Administration & Right-of-Way Division currently has five code compliance officers who, in addition to ensuring compliance with the Street Preservation Ordinance, must also respond to issues related to vegetation encroachment and graffiti, and have work backlogs for the latter two. The Department submitted a request that was not funded in the FY 2024 Budget for 6.00 full-time equivalent positions and \$1.1 million that would have added code compliance officers and one program manager to help proactively provide leadership and enforce provisions in the amended Street Preservation Ordinance. **Without additional staff or deprioritizing other compliance work, the Department is unlikely to be able to proactively govern and enforce the Street Preservation Ordinance, thus limiting the benefits that the City would otherwise receive under the enhanced restoration requirements of the amended Ordinance.**

### **Fiscal Impact from Amended Street Preservation Ordinance and Full Cost Recovery Street Damage Fee**

A major component to the amended Street Preservation Ordinance is an update to the Street Damage Fee. As discussed earlier in this report, excavations into pavement, no matter how well-repaired, cause additional degradation to streets and require additional maintenance costs. These additional costs must be borne by the excavator and/or the City, or the street will continue to degrade and result in much more expensive repairs. Previous changes to the Street Preservation Ordinance were designed to recover these costs, as for many years prior to the adoption of the existing 2013 Ordinance, public utilities were not being charged a fee and the City's budget constraints prevented the proactive maintenance of excavated streets without additional revenue. However, the current fees under the existing 2013 Ordinance are not fully cost recoverable.

Part of the proposal for an amended Ordinance includes updating the existing fee to full cost recovery based on current year construction cost, along with annual escalators to ensure the fee remains at full cost recovery.<sup>12</sup> To update fees, Transportation Department staff started with recommended fees from the original 1999 engineering study, and applied a multiplier for increased costs based on RS Means Construction Cost Data. Based on the data, all 1999 fees were updated by a factor of 4.37 to arrive at the new set of fees. Overall, this represents an average increase of 135% over the fees that are currently being charged.

While the item before Council would allow for a fee that obtains full cost recovery, per advice from the City Attorney's Office, the actual fee schedule itself will have to be approved by the Budget & Government Efficiency Committee, and then subsequently approved by the City Council in a separate item. However, since the fee schedule and methodology have been included in the staff report and this is a key provision of the amended Ordinance, our analysis includes an estimated fiscal impact assuming passage of the fee based on full cost recovery.

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<sup>12</sup> The amended Ordinance requires that the Street Damage Fee Schedule be automatically adjusted every year on July 1 based on the RS Means Construction Cost Index (or a similar construction industry index selected by the City Manager if the RS Means Construction Cost Index is discontinued). (§62.1216)

The following table details potential revenue from the proposed fees. For the estimate, we utilized FY 2022 actuals for the Trench Cut Fund, based on cuts that were done within that specific year, and increased these by the 135% average increase noted above. As shown in the table below, this fee increase would have resulted in an additional \$5.1 million in FY 2022 for the Trench Cut Excavation Fund. This amount could fund approximately 3.4 miles of additional asphalt overlay on City streets in a given year, based on average per mile estimates (\$1.5 million per mile). As explained in more detail below, our Office notes that a majority of the revenue for this fee increase would come from City sources as just over 56% of the existing revenue comes from City sources, whether it is from City projects directly (39%) or from the General Fund to credit fees from SDGE (17%).

<b>Street Damage Fee Updated Revenue Estimates (FY 2022 Actuals)</b>			
<b>Source</b>	<b>FY 2022 Actual</b>	<b>With Updated Fee</b>	<b>Revenue Increase</b>
City Projects	\$1,483,295	\$3,485,743	\$2,002,448
Outside Projects	1,655,375	3,890,131	2,234,756
SDG&E*	653,717	1,536,235	882,518
<b>Total Revenue</b>	<b>\$3,792,387</b>	<b>\$8,912,109</b>	<b>\$5,119,722</b>

*\*Offset with General Fund resources*

While this illustrates the revenue that could be raised through increased fees in a single year, it should be noted trench cut fees can be quite volatile as they are based on the actual amount of trenching that is happening in any given year. Historically, Trench Cut Excavation Fund annual revenue has ranged from \$1.4 million up to a high of \$3.8 million in FY 2022, with an average annual revenue of approximately \$2.8 million. Based on the average annual revenue, the expected increase in revenue would be closer to \$3.8 million.<sup>13</sup> No additional revenues for the Street Damage Fee were included in the FY 2024 Budget.

Additionally, as mentioned earlier, the amended Ordinance contains alternative compliance options which would allow a utility to fully repair the street to a higher standard in lieu of paying the Street Damage Fee. While utilities taking the alternative compliance approach would repair the streets to a better standard, it would mean less overall funding for the Trench Cut Excavation Fund. At this point however, we are unable to determine how many projects, if any, would utilize the alternative compliance provisions, especially given that City utilities may not be able to utilize the provision at all given legal concerns, as described in the next section.

***Impacted City Departments – Public Utilities Department***

As noted in the previous table, City Capital Improvements Program (CIP) projects are a major contributor to the Trench Cut Excavation Fund each year. The vast majority of this funding comes from PUD, as their CIP projects related to water and sewer pipeline repair and replacement routinely require major excavations within City streets. For the FY 2022 actuals of \$1.5 million presented in the previous table, 96% of those fees came from either the water or sewer utility enterprise funds. Additionally, these projects also typically pay for higher costs as these utilities

<sup>13</sup> This number was determined by increasing the average revenue of \$2.8 million by the average fee increase of 135%.

are considered “wet” under the existing fee structure. As such, the majority of the increased fee revenue associated with CIP Projects in the above table would come from the PUD enterprise funds, assuming that the rate of trenching continues at the same pace.

As previously discussed, the alternative compliance provisions may be difficult for PUD to utilize given the lack of solid foundation for that compliance alternative within the 1999 Engineering Study. PUD operates as an enterprise fund, which means that their operations are paid for by rate payers who receive their services. The rate setting process for water and sewer rates is further governed by Proposition 218, which requires that rates be no higher than what is required to provide water and sewer services. The City Attorney’s Office should advise whether PUD can take advantage of the alternative compliance pathways for their impacted CIP projects. **Provided PUD projects can utilize the alternative compliance pathway, PUD and E&CP staff should cost out both the regular street restoration plus fee payment method costs, as well as the alternative compliance costs, to see the differences for each method, and the overall feasibility of each approach.**

#### ***SDGE – Franchise Agreement Provisions Related to Street Damage Fees***

Beyond City departments, another major utility which conducts trenching in City streets is SDGE. SDGE is the provider of all electric and natural gas services within the City of San Diego and does so under a franchise agreement with the City. The current agreements for gas and electric services were approved in 2021, and both carry terms of ten plus ten years, with a potential opt-out provision after the first ten-year term.

As part of those agreements, SDGE pays the City a franchise fee, which totals 3% of gross receipts for each utility. These fees, per the City Charter, accrue to the General Fund (75%) and the Environmental Growth Funds (25%). As part of that consideration, the SDGE specific franchise agreements stipulate that “Any City-imposed fees for right-of-way usage (Right-of-Way Fee) shall be credited with the consideration paid herein...Any revenues that remain after this credit of Right-of-Way Fees will be credited towards any additional fees the City imposes for inspection, trenching, cutting, or deterioration of the right-of-way.” Due to this provision, the City credits trench cut fees for SDGE against franchise fee revenues. Since the overall revenues accrue mainly to the General Fund, this is done by providing for a budgetary transfer within the Transportation Department General Fund budget which covers trench cutting fees incurred by SDGE for their projects. As noted in the table above, based on FY 2022 revenues the increased fees would have required an additional General Fund payment of \$0.9 million. **The recently approved FY 2024 budget did not contain any additional funds for this transfer, and as such raising the Street Damage Fees may increase General Fund costs beyond the current budget for FY 2024.**

#### ***Outside Projects – Revenues from Private Excavators***

DSD is responsible for assessing and collecting the Street Damage Fee from private excavators, such as telecommunication ISPs, during the right-of-way permit review process. We identified several challenges with this process and with Accela that impact the quality of data related to fees charged to/paid by these entities, which are detailed in *Appendix A* of this report. Given amendments to the Ordinance and potential fee increases, it is important for the City to have accurate information on Street Damage Fees and revenues.

Without the assurance that Street Damage Fees are calculated, charged, and paid properly, the City could miss out on related revenues to help recover the repair costs as a result of excavations made

by private entities. If this issue persists, the intent and effectiveness of the proposed amendments to the Street Preservation Ordinance may not be achieved. **In the short term, we recommend DSD reassess its existing Street Damage Fee calculation process and develop a Standard Operating Procedure (SOP) with the appropriate level of internal controls to reduce human errors.** The SOP could be modeled after E&CP’s SOP for Street Damage Fee calculation and payment for determining fees for City projects, which requires supervisors to review and sign the calculations for verification purposes. **Alternatively, DSD could consider embedding the Street Damage Fee calculation in its permit processing system. In the long term, DSD should take into account ways to fully automate fee calculations and compatibility with the City’s financial management system when soliciting bids for the new permit processing system.**

**Requirements and Fees In Other Jurisdictions**

Several other jurisdictions also charge Street Damage Fees to recover additional costs of resurfacing and repairs to mitigate the long-term impact of excavations. The following table summarizes the fee range and fee basis for each jurisdiction. We note that when comparing Street Damage Fees, it is important to understand that the overall street pavement condition, weather conditions, and soil structures vary among jurisdictions. These factors could affect the impact of excavation cuts and hence the costs to mitigate such impacts. As reflected in the table below, the proposed full cost recovery fee range for the City of San Diego is largely in line with fees assessed by other jurisdictions.

**Comparison of Street Damage Fees in Other Jurisdictions**

Jurisdiction	Street Damage/Trench Cut Fee Range	Basis
City of San Diego, CA <i>Existing Fee</i>	\$0 - \$1.95 per square foot (dry utility) \$0 - \$3.94 per square foot (wet utility)	street classification, age of pavement, utility type
City of San Diego, CA <i>Full Cost Recovery Fee</i>	\$0.31 - \$4.59 per square foot (dry utility) \$0.44 - \$6.60 per square foot (wet utility)	street classification, age of pavement, utility type
Austin, TX	\$3.67 - \$5.22 per square foot	type of pavement
Escondido, CA	\$640 trenching up to 300 linear feet \$600 + \$1 per linear foot over 300 linear feet	size of cut
Los Angeles, CA	\$8.24 - \$19.44 per square foot, applies to an area that equals the length & width of the excavation cut plus 5 feet on all sides	street classification
Phoenix, AZ	Trench cut fee <i>not</i> imposed. Permittee may choose to pay in lieu of performing restoration work.	
Sacramento, CA	\$1.00 - \$7.00 per linear foot	type of cut, age of pavement
San Antonio, TX	\$3.11 - \$4.67 per square foot	pavement thickness and/or street classification, and pavement condition index
San Francisco, CA	Trench cut fee <i>not</i> imposed. \$25,000 bond required	
Santa Ana, CA	\$10 - \$23 (dry utility) \$16 - \$36 (wet utility)	street classification, age of pavement, utility type

Notably, some jurisdictions have moved *away* from assessing Street Damage Fees, and instead focus on ensuring streets are properly restored and maintained following excavations. For instance, San Francisco does not impose a trench cut fee for excavation work, but requires excavators to file and maintain a street excavation bond in the amount of \$25,000, in favor of the City and County of San Francisco, for a period of three years from the satisfactory completion of the pavement restoration.<sup>14</sup> The street excavation bond is a way to guarantee that the excavators maintain, repair, or reconstruct the site of the excavation in accordance with City standards. If the excavator fails to do so, costs incurred by the City to repair or restore the pavement could be deducted from the deposit.

San Francisco also sets stringent restoration requirements. For asphalt roadways, a new minimum 8-inch-thick concrete base is required to be poured within 120 hours prior to restoring the asphalt; and the asphalt must be placed within 120 hours of setting the concrete base. For concrete roadways, concrete panels are required to be poured within 120 hours from the time the excavation is backfilled and compacted. In contrast, under San Diego's amended Street Preservation Ordinance, excavators have 180 working days to asphalt overlay the street and are not required to renew the concrete base for asphalt roadways. The alternative compliance option also provides for 180 working days for restoration work in lieu of paying the Street Damage Fee.

While the bond and more stringent restoration requirements could be more effective in mitigating the damage resulting from excavation and holding excavators accountable for their maintenance obligation, the City is currently limited by what is covered in the 1999 Engineering Study. **We recommend the Transportation Department closely monitor the implementation and effectiveness of the amended Street Preservation Ordinance. Additionally, we recommend staff research opportunities to minimize excavation impacts by conducting a new engineering study and ensure prompt restoration and repair of the public right-of-way in future amendments. These may include enacting higher restoration standards and a deposit requirement in lieu of paying the Street Damage Fee if such measures are more effective in improving street conditions.**

### **The Broadband Master Plan Could Change Approach to Installing Fiber, Reducing Excavations**

The City's Broadband Master Planning effort, currently in the procurement phase, is intended to develop recommended solutions to increase broadband access and/or affordability in underserved communities to make service more sustainable. Additionally, the Plan aims to help the City achieve the new California State goals for broadband speeds.<sup>15</sup> In order to achieve intended goals, the City will need to devise solutions to increase fiber deployment in areas where there is currently no fiber laid (this information is currently considered proprietary). The Department of Information Technology (DoIT) told us this effort will require mapping, potentially through a third-party partner, to gain access to infrastructure maps and identify needed infrastructure.

As part of this process, the City intends to develop public-private partnerships and include ISPs in the planning process to collaborate and identify solutions. Currently, ISPs have indicated they have

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<sup>14</sup> Excavation fees charged in San Francisco are administrative fees associated with the cost of processing permit applications, inspections, parking management, etc.

<sup>15</sup> The [California Broadband for All 2020 Action Plan](#), sets a broadband speed goal of 100/20 megabits per second (Mbps) (100 megabits per second of download speed and 20 megabits per second of upload speed).

relatively short planning horizons, as their business is reactionary and responds to demand for services. However, the master planning effort will work to identify known areas needing fiber and potentially provide longer planning horizons for ISPs and the opportunity for the City and regional partners to apply for State and federal grant funds to help fund broadband infrastructure projects.

The DoIT also noted that potential outcomes and models resulting from the master plan may include “open access” infrastructure. For example, this could involve developing a partnership with ISPs and having a third-party partner lay conduit and fiber infrastructure that many different entities could use. This would be a more coordinated approach where ISPs plug into the open access network, which may result in ISPs not needing to dig up streets repeatedly. [Riverside](#) and [Oceanside](#) are two examples of cities that recently developed partnerships to build a fiber optic open access network. While the City’s Broadband Master Plan is still up to 18 months from completion, this effort could be a first step towards evaluating the overall approach to installing fiber deployment, reducing excessive and repeated excavations of City streets. DoIT indicated the Transportation Department, E&CP, DSD, and other appropriate departments would be included in these efforts.

## CONCLUSION AND RECOMMENDATIONS

The City is investing \$139.8 million in FY 2024 for resurfacing and reconstruction of City streets. While the City has faced challenges implementing and enforcing the existing 2013 Street Preservation Ordinance and Damage Fee, we believe the amendments could be a positive step for protecting this significant investment in infrastructure. Amendments proposed promote coordination among City departments and private utilities excavating in the public right-of-way; encourage utilities to minimize excavations into newly resurfaced streets; and should result in higher-quality restoration for excavations. The Street Damage Fee further provides the opportunity for the City to ensure that it will have additional funds to maintain streets that have been damaged by public utilities’ excavations. However, it is important to note that the majority of the revenue comes from City sources, largely water and sewer funds as well as the General Fund, and that the City’s street repair needs far exceed estimated incremental revenue associated with increasing the Street Damage Fee.


The amendments to the Ordinance have some teeth in clear and specific restoration compliance requirements, timelines, and repair and maintenance obligations. We note, however, that the Transportation Department currently does not have sufficient staff to provide the needed support to enforce the amended Ordinance, and full enforcement may therefore require either additional resources or deprioritizing other enforcement activities. Without this, the Department will not be able to proactively enforce the amended Ordinance, thus limiting the benefits that the City could otherwise receive.


Key findings and recommendations discussed throughout this report are summarized below.

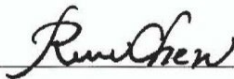
- ***Need for Updated or New Engineering Study*** – Amendments to the Street Preservation Ordinance and Street Damage Fee continue to be based on the 1999 engineering study. While the supporting science of trench cuts has remained constant, this limits the Ordinance to items included in that study. Many other technologies have advanced significantly, as an illustration of this, the City will now require planned projects to be provided in a geospatial data format rather than a PDF document. Additionally, new trenching technologies and filler materials could be on the horizon. In this regard, we recommend that the Transportation Department

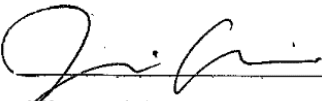
should procure engineering services to conduct a new study on pavement in San Diego which may better address the known damage that the excavations have to the street and could enable the City to require public utilities to more fully and effectively restore streets.

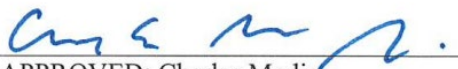
- ***Need for Budget and Staff to Support Effective Governance, Compliance, and Enforcement of Amended Ordinance*** – Not having adequate staff to ensure that these provisions are enforced means that the City will not achieve the full benefit of the proposed changes. As the amended Ordinance goes into effect on January 1, 2024 and is implemented, we recommend the Transportation Department assess funding, staff, and other needs, and that these be seriously considered for funding in future budgets.
- ***Assessing Alternative Compliance*** – We recommend that, if PUD CIP projects can utilize the alternative compliance pathway, that PUD and E&CP staff compare the costs of the regular street restoration plus fee payment method *and* alternative compliance to see what the cost differences are for each method and the overall feasibility of each approach.
- ***Assessing Innovative Ways of Achieving the Goal of Street Preservation*** – As the amended Street Preservation Ordinance is implemented, we recommend the Transportation Department assess its effectiveness and research further opportunities to minimize excavation impacts and ensure timely restoration of the public right-of-way. For example, the Transportation Department could assess whether higher restoration standards and a deposit requirement in lieu of paying the Street Damage Fee, as is done in San Francisco, would be a more effective approach. We also support plans for the Transportation Department, E&CP, and DSD to work with DoIT on the development and implementation of the Broadband Master Plan, which could change the approach to installing fiber and reduce street excavations.
- ***Ensuring Street Damage Fees are Calculated Accurately/Charged to Applicants Properly*** – In the short term, we recommend DSD reassess its existing fee calculation process and develop an SOP with the appropriate level of internal controls to reduce human errors. Alternatively, DSD could consider embedding the Street Damage Fee calculation in its permit processing system. In the longer term, we recommend that DSD consider ways to fully automate fee calculations and compatibility with the City’s financial management system, when soliciting bids for its new permit processing system.

  
Erin Noel  
Senior Fiscal and Policy Analyst

  
Jordan More  
Senior Fiscal and Policy Analyst

  
Ruixin Chen  
Fiscal & Policy Analyst

  
Jillian Andolina  
Deputy Director

  
APPROVED: Charles Modica  
Independent Budget Analyst

## Appendix A

### **Right-of-Way Permit Process and Street Damage Fee Revenues from Private Excavators**

#### ***Right-of-Way Permit Process***

Prior to the start of excavation work, public utilities must obtain applicable permits from the City, such as Public Right-of-Way Permits and Traffic Control Permits. As part of plan development for permit application, a public utility develops a Construction Plan and a Traffic Control Plan, and coordinates with City Departments to identify active projects in the vicinity of the proposed project to avoid conflicts and locate as-built drawings. Once the application is submitted to the Development Services Department (DSD), the Project Intake team at DSD will review plan submittal and assign the project to various review disciplines, which include Civil Engineering and Traffic Control & Safety among other disciplines, as applicable. Assigned Discipline Reviewers will verify compliance with local, State, and federal regulations, established street moratoria, and development standards during the Plan Check process, which may take multiple review cycles depending on the quality of the submittal and the complexity of the project. For telecom projects, DSD has a dedicated team – Wireless-Communication Support and Utility Permitting (WSUP) – to provide project management support throughout the permitting process. The team holds bi-weekly meetings with telecom companies (independent Service Providers or ISPs) to address general and project-specific issues and continuously monitors issues brought up by telecom companies through emails.

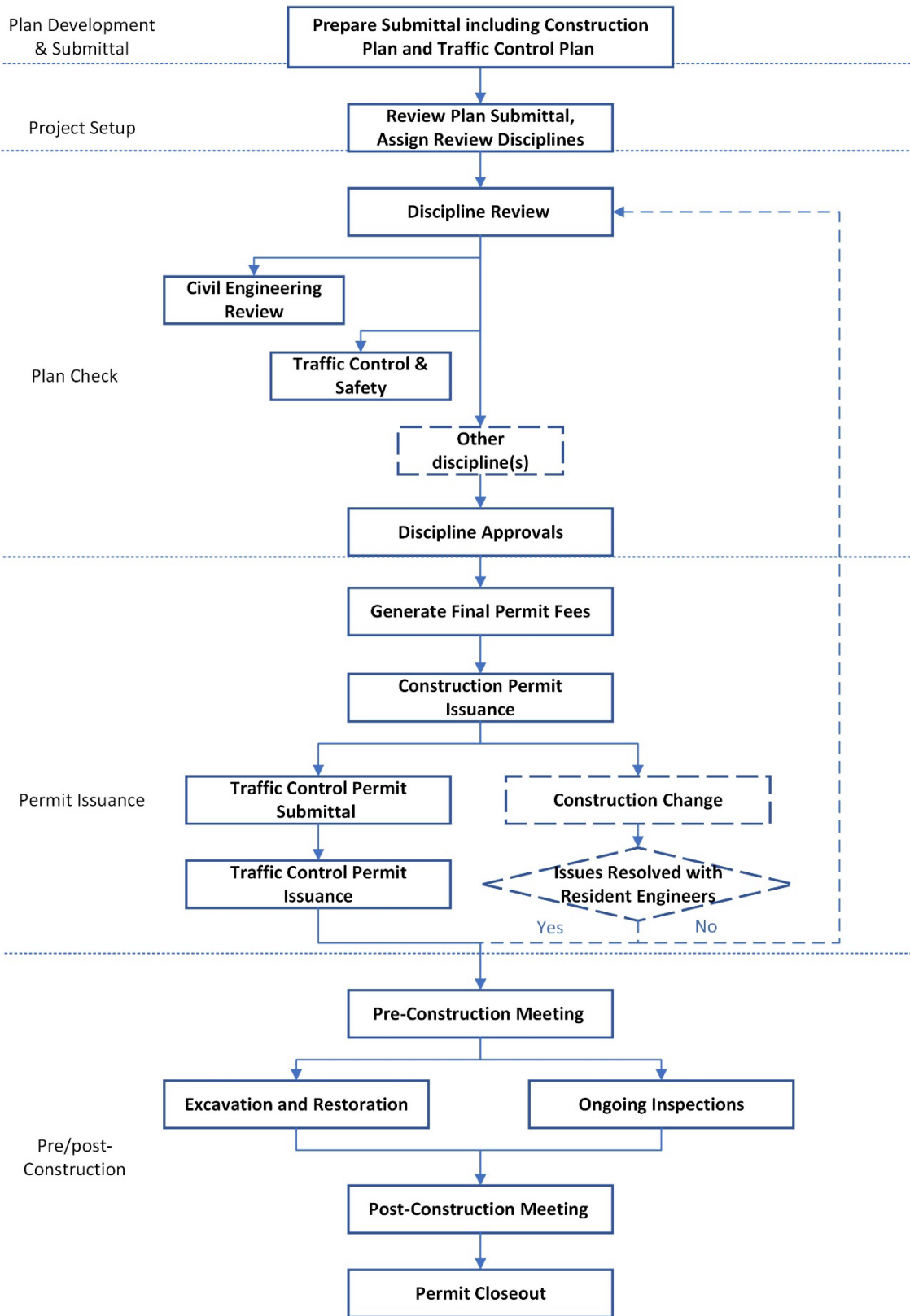
After all required discipline approvals and fees have been paid, a Public Right-of-Way permit is issued. Once the public utility is ready to perform the work in the City’s right-of-way, it would complete a Traffic Control Plan/Permit Form and submit it along with the previously approved traffic control plan to obtain a Traffic Control Permit, which sets the specific hours and conditions of project operations. Any construction change proposed by the public utility must be approved by the City before the commencement of the construction change work. According to DSD staff, public utilities would try to resolve any issues arising from construction change with City’s resident engineers (REs). However, for major changes, the project may need to go through the Plan Check process again to be vetted by all discipline reviewers.

The last part of the City’s process, consisting of pre/post construction meetings and inspections, is managed by DSD’s Right-of-Way Inspection team. This function was recently transferred from Engineering & Capital Projects Department (E&CP) to DSD to close the gap between permit plan review and project implementation. A pre-construction meeting is held before the commencement of work to clarify requirements and identify any potential issues. Ongoing inspections are conducted as the street is excavated and restored. After the completion of all excavation and required restoration work, a final inspection will be conducted before the permit is closed out.

The chart on the next page provides a high-level overview of the City’s Right-of-Way Permit process.



## Right-of-Way Permit Process Diagram



### *Street Damage Fee Revenues from Private Excavators*

DSD is responsible for assessing and collecting the Street Damage Fee from private excavators, such as telecommunication ISPs, during the right-of-way permit review process. We identified several challenges with this process and with Accela that impact the quality of data for fees charged to/paid by these entities. Given amendments to the Ordinance and potential fee increases, it is important for the City to have accurate information on Street Damage Fees and revenues.

To simplify the calculations and ensure consistency, DSD uses a standardized template with a built-in formula to perform a cost analysis.<sup>16</sup> DSD permit reviewers enter relevant project information into the template, which automatically calculates the total Street Damage Fees for a given project. DSD reviewers then manually enter the computed Street Damage Fees in Accela to be charged to permit applicants along with permit review fees.

Given that the template is shared among multiple reviewers with various data fields requiring manual entries, data may be susceptible to human error both from this process as well as manual entry into Accela. According to DSD, data on the template is not vetted and is not intended for reporting purposes, and DSD currently does not have a verification process in place to ensure fees are calculated and entered into Accela accurately. While permits are not issued until all fees are paid, **it is important to ensure that all Street Damage Fees are calculated accurately and charged to applicants properly.** DSD staff stated that high workload and vacancy issues have made it challenging for the Department to verify fee calculations. As the administrator of the Street Preservation Ordinance program, the Transportation Department largely relies on other departments to calculate applicable fees for projects and does not have an established process to determine whether fees are assessed and collected properly by other City departments.

Potential data accuracy issues are further complicated by software limitations with Accela. According to DSD, Accela does not come with accounting functionalities to allow staff to verify whether payments posted in Accela match accounting records from the City's financial management system, SAP. DSD staff has been trying to improve data quality control by spot-checking source data exported from Accela and identifying misalignment. However, this process can be time-consuming and is likely not the best solution. DSD staff noted that automating Street Damage Fee calculations in Accela could help avoid human errors, which would require additional investment in enhancements to Accela. Alternatively, a new software system may be able to address this issue by providing built-in fee calculation and basic accounting functions. The Department anticipates issuing a Request for Proposal in the upcoming months for a new permit processing system.

Without the assurance that Street Damage Fees are calculated, charged, and paid properly, the City could miss out on related revenues to help recover the repair costs as a result of excavations made by private entities. If this issue persists, the intent and effectiveness of the proposed amendments to the Street Preservation Ordinance may not be achieved. **In the short term, we recommend DSD reassess its existing Street Damage Fee calculation process and develop a Standard Operating Procedure (SOP) with the appropriate level of internal controls to reduce human errors. The SOP could be modeled after E&CP's SOP for Street Damage Fee calculation and payment, which requires supervisors to review and sign the calculations for verification**

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<sup>16</sup> The template factors in various parameters such as street class and age group, width and length of the trench, size of excavation influence area, type of utility, trench orientation, etc., in accordance with the Municipal Code.

**purposes. Alternatively, DSD could consider embedding the Street Damage Fee calculation in its permit processing system. In the long term, DSD should take into account ways to fully automate fee calculations and compatibility with the City's financial management system when soliciting bids for the new permit processing system.**