



Office of the City Auditor

Performance Audit

January 2024

Some Street Cuts Don't Meet Revised Restoration Standards; Oversight of Inspection Process Can Improve



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12-2023



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January 16, 2024

Honorable Mayor and Members of the City Council:

This audit focuses on whether the Public Works Department's inspection process ensures utility street cuts are restored according to the city's revised street cut restoration standards ("Revised Standards"). The City Council passed an ordinance that revised the city's standards, design criteria, and requirements for street cut restorations that became effective September 2021. We observed a sample of restored street cuts that were approved by city inspectors and compared the restorations to the revised standards. We also assessed oversight of the excavation inspection process.

Some street cut restorations in our sample did not meet the Revised Standards. The restoration requirements that utility companies and contractors are required to perform under the Revised Standards depends on the age of the street and how recently the city repaved it (more or less than five years). In our observational sample of recently repaved streets, we found that 5 of 13 street cut restorations did not meet the Revised Standards. On the streets with older pavement (over five years), 2 of 9 street restorations in our sample did not meet the Revised Standards. We reviewed and confirmed our observations with the supervisors of the city inspectors. The supervisors were very professional about addressing our findings. They followed up on all issues we brought to their attention by either trying to bring the restorations into compliance or acknowledging restorations were not to city standards but could not be redone.

Supervisors' oversight of inspector workload and productivity is limited by the configuration of EnerGov, the software platform Public Works has used since 2018 to track permits and inspections. This system is not designed to track the multiple inspections required for street cut restorations. Current inspection practices also do not provide an efficient way for supervisors to monitor final inspections. Inspectors do not include photographs of the street cut restorations to support their approvals. Without evidence of compliance, supervisors cannot efficiently verify inspectors correctly passed street cut restorations.

Without good documentation, street cuts can be difficult to locate. Currently, inspectors do not collect street cut GPS locations needed to monitor the three-year street cut warranties that utility companies must provide. Inspectors are not calculating degradation fees correctly and may be waiving the fees without proper authorization. Additionally, the tables of values used to determine degradation fees have not been updated since November of 2000.

We make recommendations to improve oversight of the street cut restoration inspection process and to help ensure compliance with the Revised Standards. We also recommend additional training and oversight for degradation fee calculations and updating the tables of values used to calculate the degradation fees. Implementation of the recommendations should improve the drivability and longevity of city streets.

The draft report was sent to the director of public works on December 5, 2023, for review and comment. His response is appended. We would like to thank staff and management in the Public Works Department for their assistance and cooperation during this audit. The audit team for this project was Terry Bray and Sue Polys.



Douglas Jones, CGAP, CIA, CRMA
City Auditor

Some Street Cuts Don't Meet Revised Standards; Oversight of Inspection Process Can Improve

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Introduction

Audit Objective(s)

Do inspection processes ensure street cuts are restored by contractors according to updated city requirements?

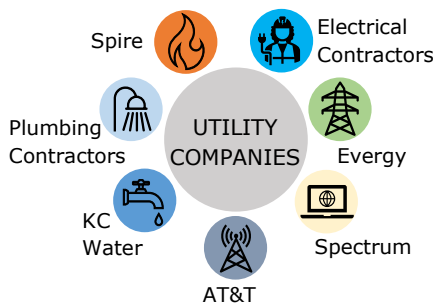
Our audit of Public Works' processes to ensure city streets are properly restored following utility street cuts focuses on management oversight of inspections and outcomes of implementing revised street cut restoration standards ("Revised Standards"). To answer our objective, we reviewed the tools and data Public Works uses to track and monitor street cut inspections. We also observed a limited sample of street cut restorations to assess outcomes following implementation of the Revised Standards.

We conducted this audit in accordance with Government Auditing Standards.

See Appendix A for more information about the audit objective, scope, methodology, and compliance with standards.

Background

Utility Company Street Cuts



Utility companies place or access utilities under city streets. This involves cutting a hole in the pavement and digging out fill material under the street (street cuts). City code requires utility companies to obtain an excavation permit prior to making a street cut¹ and then restore the street according to city standards.²

Street cuts can decrease pavement smoothness and safety and cause pavement to degrade faster. A shorter pavement lifespan increases city costs for resurfacing and rebuilding city streets.

Revised Street Restoration Standards

In 2021, the City Council revised the city's standards, design criteria, and requirements for street cut restorations.³ The Revised Standards are documented in Street Cut Restoration, standard drawing, SR-1.

¹ Code of Ordinances, Kansas City, Missouri, Sec. [64-113\(a\)](#).

² Code of Ordinances, [Sec. 64-125](#).

³ [Ordinance 210692](#), effective date September 13, 2021.

Some Street Cuts Don't Meet Revised Restoration Standards; Oversight of Inspection Process Can Improve

The Revised Standards increased the length and width of street repaving that utilities must perform surrounding a street cut, especially on a street constructed or resurfaced in the last five years. The additional stricter resurfacing requirement helps create smoother pavement and better ride quality. (See Exhibit 1.)

Exhibit 1. Current and Previous Street Cut Resurfacing Standards

SR-1 Standard	Older Street Construction/Pavement	Newer Street Construction/Pavement
2021	Over FIVE years after construction or resurfacing:	Within FIVE years of construction or resurfacing:
	Full lane width	Two lane widths
	10 feet minimum length	Extend to block face or 250 feet maximum length
2017	More than TWO years after construction or resurfacing:	Within TWO years of construction or resurfacing:
	12 inches beyond edge of disturbed subgrade or pavement - width and length	Full lane width Extend the length of the lane to the width of the affected lane or the length of the cut plus four feet, whichever is greater

Source: Street Cut Restoration, standard drawing, SR-1, 2017 and 2021, Kansas City, Missouri.

The increased cost from additional resurfacing requirements, especially on newer streets, may be an incentive for utilities to coordinate with the city and complete scheduled maintenance projects ahead of city repaving.

Public Works Department Street Cut Permits and Inspections

The Public Works Department is responsible for issuance of the excavation (street cut) permits, inspections of the excavations, and enforcement of the city’s street restoration standards. (See Exhibit 2.)

Exhibit 2. Street Cut Permit and Inspection Process



Source: Public Works Department staff.

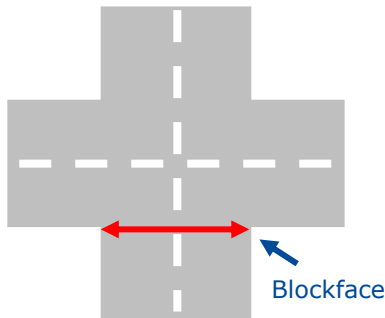
Findings and Recommendations

Utility Companies and Contractors Not Always Restoring Streets to New Standards

Some Street Cut Restorations on Newly Resurfaced Streets Not to Revised Standards

Some street cuts on more recently resurfaced streets were not consistently restored to the city’s Revised Standards. The city established revised standards in 2021 expanding the street cut restoration requirements that utility companies and contractors must follow when restoring city streets. The Revised Standards require restoration of excavations on streets previously resurfaced within five years of construction or resurfacing (“Newer Streets”) to extend the length and width of the street cut restoration to:

- Two full lane widths; and
- To the block face or 250 feet maximum.



We inspected 13 permitted street cut restorations made on city streets under the Revised Standards. The 13 restorations were performed on Newer Streets. We found 5 of the 13 street cuts were not restored to the Revised Standards. (See Exhibits 3 and 4.)

Exhibit 3: Newer Streets – Compliance with Street Cut Revised Restoration Standard

Permitted Street Cut Location	Patch Two Lane Widths Wide?	Patch Extends to Block Face or 250 ft Max.?
506 NE 113 th St	✓	✗
6448 Wornall Rd	✗	✓
8323, 8327, 8329 Park Ave and 84 th and Park Ave ⁴	✗	✗
8421 Brooklyn Ave	✓	✗
9807 Grandview Rd	✗	✗
2701 E 80 th St	✓	✓
3946 Oakley Ave	✓	✓
4437 N Agnes Ave	✓	✓
4447 N Montgall Ave	✓	✓
4646 Belleview Ave	✓	✓
8036 Bellefontaine Ave	✓	✓
901 E 77 th St	✓	✓
98 th Ter & Grandview Rd	✓	✓

Source: Street Cut Restoration, standard drawing, SR-1, 2021 and City Auditor’s Office sample observations.

⁴ The four Park Ave street cuts are on the same excavation permit.

Exhibit 4. Newer Streets - Street Excavations Not Restored to Standard

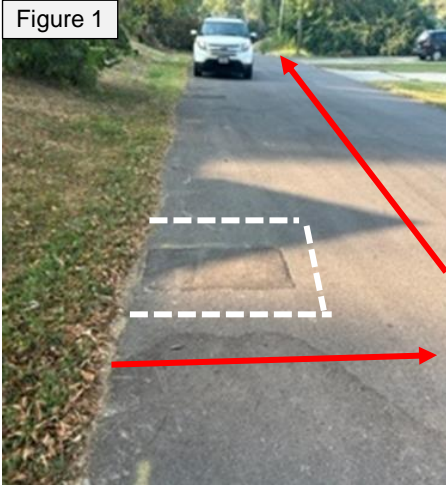


Figure 1. Width of repaving is not to required 2 lanes and length of repaving is not to required block face or 250' maximum.

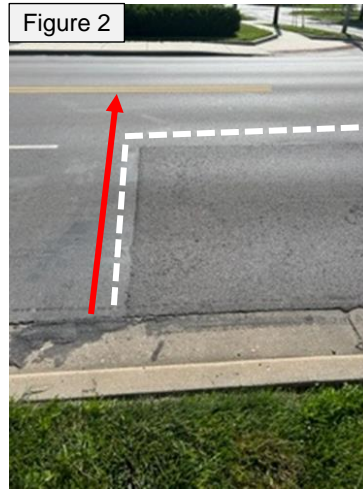


Figure 2. Width of repaving is not to required 2 lanes and length of repaving is not to required block face or 250' maximum



Figure 3. Width of repaving is not to required 2 lanes and length of repaving is not to required block face or 250' maximum.



Figure 4. Length of repaving is not to required block face or 250' maximum.

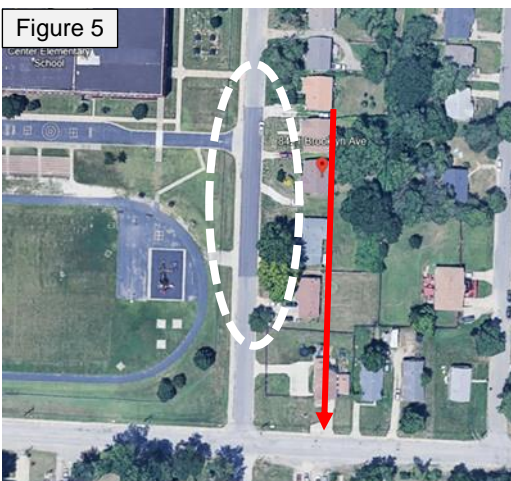


Figure 5. Length of repaving is not to required block face or 250' maximum.

Source: City Auditor's Office photographs and Google maps.

Some Street Cuts Restorations on Older Streets Not Restored to Revised Standards

Some street cut restorations on streets resurfaced over five years ago (“Older Streets”) are not consistently meeting the Revised Standards. The street cut restoration requirements that utility companies and contractors must follow when restoring Older Streets includes:

- Resurfaced to the full width of the lane; and
- At least 10 feet in length.

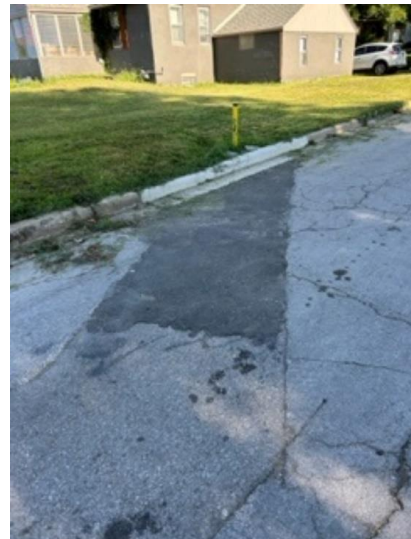
We found 2 of the 9 permitted street cuts on Older Streets that we reviewed were not restored to the required full lane width or 10 feet in length. (See Exhibits 5 and 6.)

Exhibit 5. Older Streets – Compliance with Street Cut Revised Restoration Standards

Permitted Street Cut Locations	Full Lane Width Wide?	At Least 10 Feet in Length?
1841 Newton Ave	✓	X
NW Corner of W 85 th St & Summit	X	✓
104 Archibald Ave	✓	✓
1408 NE 77 th Ter and 1507 NE 77 th Ter ⁵	✓	✓
2635 Cypress Ave	✓	✓
4233 N Winn Rd	✓	✓
6318 Bellefontaine Ave	✓	✓
7905 Michigan Ave	✓	✓
908 Baltimore Ave	✓	✓

Source: Street Cut Restoration, standard drawing, SR-1, 2021 and City Auditor’s Office sample observations.

Exhibit 6. Older Streets - Street Excavations Not Restored to Standard



Source: City Auditor’s Office photographs.

⁵ Both locations on NE 77th Ter are part of the same permit.

Inspectors Approved Restorations Not Meeting Revised Standards



Public Works inspectors approved the seven (5 newer, 2 older) permitted street cut restorations we observed that were not repaired in accordance with the Revised Standards. Inspectors are instructed to perform a final inspection upon completion of the utility company's restoration work. The inspector should check the pavement surface to ensure, in addition to other criteria, that the resurfacing is the required length and width. Supervisors agreed with our assessment that these seven restorations were not done in accordance with the city's Revised Standards. Management indicated there may be legitimate reasons for inspectors to approve non-standard restorations but that the inspector should confer with their supervisor before approving one. Inspectors did not document reasons for approving restorations that did not meet the Revised Standards or document receiving approval from a supervisor.

The purpose of the City Council's revision of the street cut restoration standards was to improve the smoothness of city streets and life of the pavement. Utility street cuts have a significant detrimental effect on pavement performance. Without proper street cut restoration, streets fail sooner. Inspectors are responsible for enforcing the city's Revised Standards.

Recommendation

To help ensure city streets are maintained and street cuts are restored in compliance with city code, the director of public works should ensure inspectors do not approve street cut restorations if they do not meet the city's SR-1 standards, unless an exception is approved by the director or his/her designee and documented in writing.

Management Should Improve Oversight of Inspection Process; Make Better Use of Technology

Managers Need Better Tools to Actively Manage

Management does not have EnerGov configured to track required street cut inspections. Management should design its information system to help ensure the city achieves its goal of smooth, safe streets. Public Works requires three inspections of permitted excavations in city streets – an initial inspection, an interim inspection, and a final inspection to ensure street cut excavations are repaired correctly.⁶

⁶ Kansas City, Missouri, Public Works Department, Excavation Permits, Excavation Permit Inspections, April 6, 2023.

Excavation Permit Inspections



- Preliminary**
- ✓ Location
 - ✓ Has work begun
 - ✓ Contact contractor



- Interim**
- ✓ Flowable fill used as back fill
 - ✓ Backfill is required depth



- Final**
- ✓ Width and length resurfaced
 - ✓ Smooth surface & grade
 - ✓ Quantities and location documented
 - ✓ Degradation fee calculated

EnerGov, the software platform Public Works uses to track permits and inspections, is not configured to allow inspectors to track the three inspections required as part of street cut restoration process. EnerGov does not allow Public Works to capture data related to the dates, times, and outcome of each inspection. If inspectors use the system’s function to assign a status of “pass” to an interim inspection, the excavation permit is removed from the inspectors’ caseload.

Without the ability to automatically track the completion of preliminary and interim inspections, management does not know whether the inspections are occurring, and cannot track inspector productivity or workload. Supervisors state that there are too many inspections for the number of inspectors.⁷ But because of how EnerGov tracks excavation inspections, management does not have the data to demonstrate how many excavation inspections are occurring or are being missed.

Supervisors said that EnerGov’s tracking of excavation inspections has been this way since 2018 when Public Works started using the system. They were told in order to correct the system; the program would need to be rewritten. EnerGov is configured to track multiple inspections for other types of permits.

Recommendation

To help department managers and supervisors monitor and balance inspector workloads and make sure necessary excavation inspections are completed, the director of public works should ensure the department has an information system that inspectors can use to track all inspection activity and management can use for oversight.

Supervisors cannot easily verify whether inspectors ensured street restorations met city standards. Management should establish and perform regular monitoring of final excavation permit inspections to help ensure inspectors are enforcing city street cut restoration standards.

Inspectors do not include photographs of the street cut restorations to support their decision. Without evidence of compliance, management and supervisors cannot verify restorations were correctly approved without in-person reviews. In-person review of passed permit inspections is not efficient.

Documenting final restoration with electronically attached photographs could allow management and supervisors to review the photos online and provide confirmation that the required full one or two lanes were resurfaced and the resurfaced length at

⁷ Inspectors also inspect street plate and traffic control permits. We did not audit the system’s ability to track those inspections. Management should track total inspector workload.

least appeared in line with Revised Standards (although exact distance could not be easily documented in a photograph). Photographs also provide location and date/time stamp evidence that the inspector inspected the correct location and can settle disputes with utility companies and contractors.

Recommendation

To help supervisors efficiently monitor inspectors' final street restoration inspections and to help improve street quality, the director of public works should implement photograph documentation of final restoration inspections and direct managers to monitor inspector's acceptance of final restoration for accuracy.



GPS Locations Needed to Monitor Street Cut Warranties

Management has not developed a method for inspectors to capture Global Positioning System (GPS) locations of street cuts. Management should use quality information to achieve its objective of improving city street drivability and longevity. Inspectors currently document street cut locations using cardinal directions.⁸ For example, a location may be stored as "11' NSC of 113th, 475' EEC of Oak". This method may be more cumbersome for determining location and prevents the department from integrating location data into their street condition survey data.⁹

GPS locations of street cuts are needed for the Public Works Department to incorporate into pavement condition survey data. Having the GPS locations of street cuts would allow the department to systematically identify which pavement failures are potentially due to failed street cut restorations. Public Works could then invoke the three-year warranty that utilities must provide on their street cut repairs. The city is not currently doing systematic warranty inspections of street cut restorations.

Supervisors said the EnerGov inspection tablet could capture the GPS coordinates, but it would require a different application and not populate EnerGov.

Recommendation:

To help ensure that data is available for the city to monitor street cut conditions and to hold utilities accountable for street cut failures, the director of public works should identify a method for inspectors to efficiently capture GPS location of street cuts and use the locations with pavement condition survey data to identify failed street cut restorations.

⁸ Cardinal directions are North, South, East, and West.

⁹ The city contracts a street condition survey every three years. The survey uses LiDAR, a technique using laser light, to measure asphalt surface conditions. The LiDAR is mounted on a moving vehicle which travels city streets and captures condition information such as rutting and cracks. The dataset the survey collects is then used to develop a rating curve which can predict expected street degradation over time. The rating helps identify streets in need of resurfacing and helps plan and prioritize street maintenance resources.

Degradation Fee Calculations and Waivers Need Oversight

Inspectors are not charging degradation fees correctly. The city charges a fee to the utility companies to compensate for the degradation to the life of the pavement caused by street cuts. Each city inspector is responsible for calculating a degradation fee after the utility company or contractor has restored the street to the city’s Revised Standards. City code requires the tables of values to be used in calculating the fee, published by the public works director. This table identifies the fee’s cost per square foot depending on when the street was constructed and how recently it had been repaved. (See Exhibit 7.)

Exhibit 7. Table of Values – Street Degradation Depreciation Rates and Costs

Public Works Department
Capital Projects Section
Permits Inspection Group

Street Degradation Costs

Cost per square foot for Streets, Overlays and Slurry seal X Depreciation Rate X Area of Influence

Table 1
Depreciation Rates and Costs for Kansas City, MO

“P”			“O”			“S”		
Construction Cost \$10.00			Maintenance Cost \$0.40			Maintenance Cost \$0.11		
Age	From Construction	Cost/ Sq Ft	Age	Mill & Overlay	Cost/ Sq Ft	Age	Slurry Seal	Cost/ Sq Ft
1	100	10.00	1	100	0.40	1	100	0.11
2	97	9.67	2	90	0.36	2	80	0.09
3	93	9.33	3	80	0.32	3	60	0.07
4	90	9.00	4	70	0.28	4	40	0.04
5	87	8.67	5	60	0.24	5	20	0.02
6	83	8.33	6	50	0.20		Over 5	0.00
7	80	8.00	7	40	0.16			
8	77	7.67	8	30	0.12			
9	73	7.33	9	20	0.08			
10	70	7.00	10	10	0.04			
11	67	6.67		Over 10	0.00			
12	63	6.33						
13	60	6.00						
14	57	5.67						
15	53	5.33						
16	50	5.00						
17	47	4.67						
18	43	4.33						
19	40	4.00						
20	37	3.67						
21	33	3.33						
22	30	3.00						
23	27	2.67						
24	23	2.33						
25	20	2.00						
26	Residual	2.00						
+	Value							

The area of influence is equal to the area of the restored pavement plus 2 feet on each side.

The history of the street segments shall be available in books on the 5th floor of City Hall

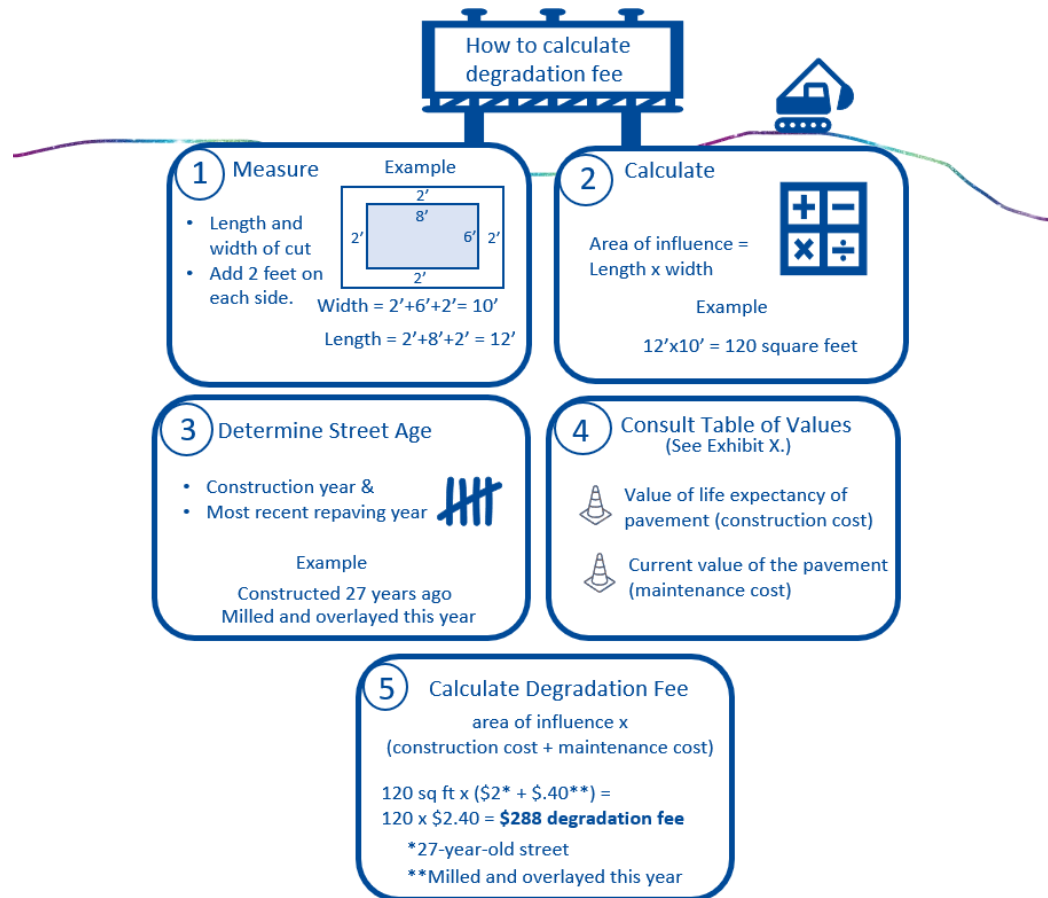
Rev. 11/08/00
Page 1 of 2

Source: Public Works Department.

Of the ten street cuts in our sample that were charged a degradation fee, seven of the fees were incorrectly calculated. The

degradation fee calculation includes the square feet of the street excavation plus an additional 2 feet on each side of the cut, multiplied by the sum of the remaining value of the street construction and the pavement maintenance.¹⁰ (See Exhibit 8.) For most of the incorrectly calculated degradation fees in our sample, the inspector did not charge the pavement maintenance cost, therefore the utility was undercharged.

Exhibit 8. Example of How to Calculate Degradation Fee



Source: Kansas City Code of Ordinances and Public Works Department.

Charging the correct fee to utility companies excavating city streets is important so that utilities are treated equally. Also, ensuring that construction and maintenance costs are recouped for degradation to city streets is important as a funding source for the city's street reconstruction and maintenance.

Recommendation: To help ensure degradation fees are calculated correctly, the director of public works should provide training on how to calculate degradation fees and ensure supervisors monitor inspectors' fee calculations.

¹⁰ Public Works said they no longer use the slurry and seal maintenance cost in their degradation fee.

Inspectors may be waiving degradation fees without proper authorization. City code gives the City Council the authority to modify or waive the imposition of degradation fees if the City Council determines that it is in the city's interest. City code also states that degradation fees will not be charged when a street is reconstructed curb to curb in association with an excavation permit.¹¹ The Public Works Department also does not charge itself degradation fees for the department's projects.

Of the 22 permitted street cuts we reviewed, inspectors did not charge degradation fees for 12 cuts. Those 12 street cuts did not have documentation indicating the reason the fee was waived. At our request, supervisors reviewed the permit and inspection documentation and provided explanations why some, but not all, the street cuts were not charged fees. Only three of the waived fees were authorized by city code.

Degradation fees are needed as a funding source for street maintenance. Fee waivers should not be given unless authorized by city code or the City Council and documented in writing to allow for supervisory monitoring.

Recommendation: To help the city recoup the cost of street degradation due to utility excavations, the director of public works should ensure inspectors are charging utilities the required degradation fees, unless waiving the fee is authorized by city code or City Council approval and documented in writing.

Degradation Fees Table Needs Updating

Degradation fees have remained unchanged since 2000, but costs have increased. Degradation fees were established to recover some of the costs associated with the decreased life of pavement caused by cutting the pavement. City code authorizes the public works director to publish the tables of values used to calculate the degradation fee.¹² The tables of values are based on the depreciated cost per square foot for street construction and maintenance costs for mill and overlay.

The tables of values for these construction and maintenance activities have not increased in the 23 years since they were originally published. While the code does not specify the method or frequency the costs in the tables should be updated, the second page of the Degradation Costs tables published by the Public Works Department directs that the "Table of construction and maintenance cost shall be reviewed and updated annually by the director of public works."

¹¹ Code of Ordinances, [Sec. 64-118\(b\)](#).

¹² Code of Ordinances, [Sec. 64-118\(c\)](#).

Recommendation: To better reflect the cost of the damage and shortening of pavement life created by excavation cuts in paved portions of city-owned property, rights-of-way, or easements used as streets or alleys, the director of public works should annually update and publish the tables of values used to calculate the degradation fee.

Recommendations

1. The director of public works should ensure inspectors do not approve street cut restorations if they do not meet the city's SR-1 standards, unless an exception is approved by the director or his/her designee and documented in writing.
2. The director of the public works should ensure the department has an information system that inspectors can use to track all inspection activity and management can use for oversight.
3. The director of public works should implement photograph documentation of final restoration inspections and direct supervisors to monitor inspectors' acceptance of final restoration for accuracy.
4. The director of public works should identify a method for inspectors to efficiently capture GPS location of street cuts and use the locations with pavement condition survey data to identify failed street cut restorations.
5. The director of public works should provide training on how to calculate degradation fees and ensure supervisors monitor inspectors' fee calculations.
6. The director of public works should ensure inspectors are charging utilities the required degradation fees, unless waiving the fee is authorized by city code or City Council approval and documented in writing.
7. The director of public works should annually update and publish the tables of values used to calculate the degradation fee.

Appendix A: Objective, Scope and Methodology, and Compliance Statement

We conducted this performance audit of the Public Works Department's inspections of utility street cut restoration under the authority of Article II, Section 216 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the city auditor's primary duties.

A performance audit provides "objective analysis, findings, and conclusions to assist management and those charged with governance and oversight with, among other things, improving program performance and operations, reducing costs, facilitating decision making by parties with responsibility for overseeing or initiating corrective action, and contributing to public accountability."¹³

Why We Did This Audit

Better street maintenance is a top priority for residents. Street cuts can decrease pavement smoothness and safety, cause pavement to degrade faster, and a shorter pavement lifespan increasing city costs for resurfacing and rebuilding city streets. Assessing the inspection process and compliance with the recent changes in street cut restoration standards can help identify areas for improvement early in the implementation to help ensure a longer useful life for city streets.

Audit Objective

This report is designed to answer the following question:

- Do inspection processes ensure street cuts are restored by contractors according to updated city requirements?

Scope and Methodology

Our audit of Public Works' processes to ensure city streets are properly restored following utility street cuts focuses on management oversight of inspections and outcomes of implementing revised regulations. Our audit methods included:

- Reviewing the new street restoration standards, SR-1, to identify new provisions.
- Reviewing the procedures in the excavation permit inspection manual to identify procedures inspectors are to follow when inspecting street cuts.

¹³ Comptroller General of the United States, [Government Auditing Standards](#) (Washington, DC: U.S. Government Printing Office, 2018), pp. 10, 11.

- Interviewing department management to identify permit and inspection processes and to understand the inspection staff's role and current practices.
- Observing inspection staff in the field as they inspect utility street cuts and collect data.
- Reviewing EnerGov street cut inspection database to better understand how it tracks inspections and what documentation is entered by inspectors.
- Physically inspecting locations of 80 closed excavation permits to identify excavations that were done in the street.
- Assessing a judgmental sample of 22 closed street cut excavation permits with passed inspections between March 2022 and July 2023 and comparing them to the new SR-1 standard drawing requirements.
- Reviewing the accuracy of degradation fee calculations for a small sample of street cuts.
- Reviewing city code to understand requirements for increasing degradation fees.

Statement of Compliance with 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. No information was omitted from this report because it was deemed confidential or sensitive.

Scope of Work on Internal Controls

We assessed internal controls relevant to tracking inspections in EnerGov, and implementation and operating effectiveness of degradation fee charges. We identified internal control deficiencies related to each of these items. The details of these deficiencies are discussed in the body of the report.

Scope of Work on Data Reliability

We did not assess the reliability of computer processed data. Our audit conclusions were based on our physical observations of street cut restorations and manual review of inspection documentation maintained in EnerGov.

Appendix B: Director of Public Works' Response



Inter-Departmental Communication Public Works Department

RECEIVED

JAN 09 2024

Date: January 2, 2024

CITY AUDITOR'S OFFICE

To: Douglas Jones, City Auditor

From: Michael Shaw, Director of Public Works

Subject: Response to Performance Audit: *Some Street Cuts Don't Meet Revised Standards; Oversight of Inspection Process Can Improve*

- 1. The director of the public works department should ensure inspectors do not approve street cut restorations if they do not meet the city's SR-1 standards unless an exception is approved by the director or his/her designee and documented in writing.***

Agree— Inspection management has already started weekly training sessions to ensure all inspectors inspect on the same accord. As training continues throughout staffing changes, this will be a continual goal. We agree that the inspectors should follow the SR-1 standards on most locations, if circumstances require, we will get directors' prior approval to adjust the limits of the restoration.

- 2. The director of the public works should ensure the department has an information system that inspectors can use to track all inspection activity and management can use for oversight.***

Agree – Our current Energov system does not have this option available. We will need to work with IT to add more inspection options. The permits were initially set up this way, but it was not conducive to all permits. Permits for work done on the pavement require more inspection than permits where work is done in the grass area. Having multiple inspections on all permits creates additional work on the permits in the grass area. We are currently working with IT to add a backfill inspection that can be requested by applicants on-line who are working in the street. This will allow for an appropriately scheduled inspection of the pavement prior to final restoration. We should have this completed in the next 3 months. Public Works will work to identify technology and/or additional staffing solutions to best implement this recommendation. This function will take a year to 18 months (about 1 and a half years) to complete.

- 3. The director of public works should implement photograph documentation of final restoration inspections and direct supervisors to monitor inspectors' acceptance of final restoration for accuracy.***

Agree - Our current Energov system does not have this option available. Simultaneously, we will work with the Energov vendor while exploring other systems to get the function of pictures of the inspections added to the software. The Solid Waste Services division uses software that utilizes cameras on trash collection trucks. Combining those images with images captured during

inspections and creating a timeline throughout the warranty period is our goal. Adding images to the inspections should be completed within the next 18 months (about 1 and a half years).

4. The director of public works should identify a method for inspectors to efficiently capture GPS location of street cuts and use the locations with pavement condition survey data to identify failed street cut restorations.

Agree – Our current Energov system does not have this option available. We will work with this vendor or other systems to get this function of GPS location of street cuts. This function may take 18 months (about 1 and a half years) to complete.

5. The director of public works should provide training on how to calculate degradation fees and ensure supervisors monitor inspectors' fee calculations.

Agree – The right of way permit inspection group has started using a degradation fees application to assist with fees. The application has a table of values to calculate the degradation fee and the age of the roadway is provided inside the application. The training to use the application will be done within a month at the weekly meetings.

6. The director of public works should ensure inspectors are charging utilities the required degradation fees, unless waiving the fee is authorized by city code or City Council approval and documented in writing.

Agree – The director of public works will ensure inspectors and managers follow the city code or City Council for approval for waiving degradation fees.

7. The director of public works should annually update and publish the tables of values used to calculate the degradation fee.

Agree in Part – The director of public works will submit an annual update to the tables of values used to calculate the degradation fee to the finance department for the annual budget. When updates of the fees are required, appropriate ordinances will be submitted for approval by the City Council.

cc: Brian Platt, City Manager