

Special Report

City Utility Street Cut Repairs Follow-Up

February 2022



This is a special report as part of a series following up on recommendations made in previous audits.

We issued four recommendations through the 2017 audit of City Utility Street Cut Repairs. The Public Works Department and Austin Water have taken actions to address these recommendations including actions to eliminate the utility cut backlog. In addition, the departments have made enhancements to ensure that temporary patches meet the applicable City standards and that the departments maintain reliable data relating to the backlog and utility cut repair costs.

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Cover: [Utility street cut repair on Northwestern Avenue](#), City of Austin
Public Works Department, 2021.

Objective

This report documents implementation of recommendations from the audit of City Utility Street Cut Repairs released in March 2017.

Background

We conducted an audit of City Utility Street Cut Repairs as part of the fiscal year 2017 audit plan. Management and the public had expressed concerns with the timeliness and quality of utility street cut repairs.

The objective of the 2017 audit was to determine whether street cut repairs are completed in an effective and timely manner to minimize safety impacts to the public and whether the current model is cost-effective. The audit resulted in two findings and four recommendations. Three of the recommendations were addressed to Public Works and one was addressed to Austin Water.

Visit the [City's open data portal](#) to learn more about the City's progress on recommendations from other audits.

What We Learned

Summary

We issued four recommendations through the 2017 audit of City Utility Street Cut Repairs. Three of the recommendations were addressed to Public Works and one to Austin Water. We verified the departments implemented these four recommendations.

**Exhibit 1: Verified status of recommendations from
March 2017 City Utility Street Cut Repairs Audit**

#	Recommendation	Status Verified by OCA
1.	The Public Works Department Director should evaluate options for eliminating the backlog of utility cut repairs, such as expanding the use of contracted services and reallocating resources internally.	Implemented
2.	The Austin Water Director should ensure temporary patches meet the requirements of the City Code Standards Manual.	Implemented
3.	<p>The Public Works Director should develop, implement, and monitor written policies and procedures to ensure:</p> <ul style="list-style-type: none">a) Utility cut repair work order data is complete and accurateb) Repairs are prioritized efficientlyc) Inspections are performed in compliance with the City Code Standards Manuald) Temporary patches are not in place longer than 90 dayse) Quality control and assurance steps are completed consistently	Implemented
4.	The Public Works Director should assess the cost-effectiveness of the Utility Excavation Repair activity using the complete data obtained through implementation of Recommendation 3.	Implemented

Source: Auditor analysis of City actions to address the 2017 City Utility Street Cut Repairs Audit recommendations, December 2021

What has the City done to address the issues we identified?

In the 2017 audit of City Utility Street Cut Repairs, we found that there was a significant backlog of utility cut patches awaiting a permanent repair that could take several years for Public Works to address. Some of the utility cut patches were unreliable and could pose a safety hazard due to issues with age or height. Public Works did not maintain complete and consistent data to determine the backlog's true size or whether their work was cost-effective in comparison with the work of their contractor. As a result, Public Works management could not be sure the information they reported or used for planning or resource allocation was accurate.

Public Works and Austin Water have taken steps to resolve issues identified in the audit.

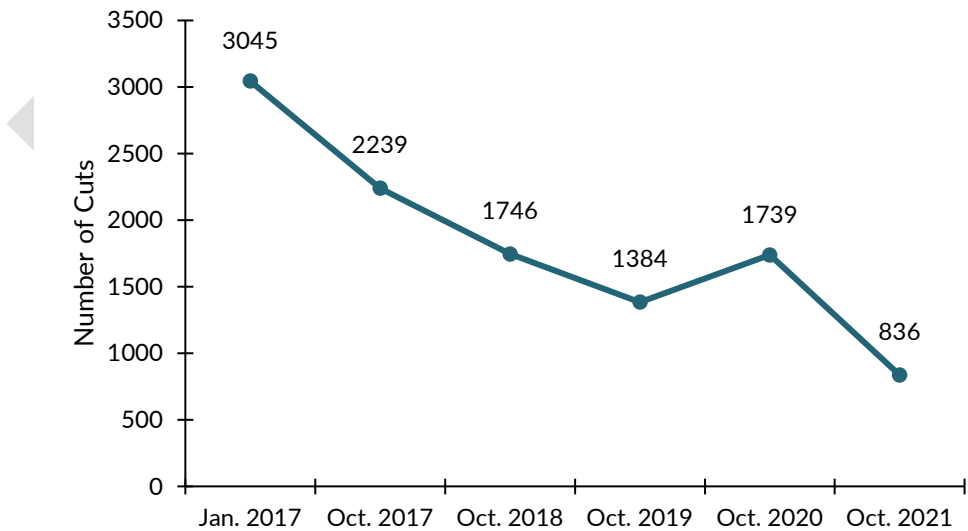
Recommendation 1: The Public Works Department Director should evaluate options for eliminating the backlog of utility cut repairs, such as expanding the use of contracted services and reallocating resources internally

To address the backlog, Public Works utilizes additional staff from other areas of the department and an external contractor. Based on performance reports, in March 2021 the Public Works Utility Excavation Repair team completed 73% of the total 411 cut repairs for the month. The Public Works support staff team completed 16%, and an external contractor completed 11% of the cut repairs.

To address the backlog of utility cuts that have been in place for more than 90 days, the department establishes monthly repair targets for existing utility cuts and monitors achievement of the established targets. Also, through use of a GIS tool, Public Works and Austin Water can now track the utility street cuts across the City, including the location and how long a specific cut has remained unaddressed.

While Public Works has greatly reduced the utility street cut backlog, some locations needing a permanent repair remain unaddressed for a significant amount of time. According to a backlog report for fiscal years 2017 to 2021, Public Works had a backlog of over 3,000 locations needing a permanent repair in January 2017. This was down to 836 locations in October 2021. However, 59% of these locations had not been repaired for a long time (ranging from 90 to over 366 days).

Exhibit 2: The Public Works utility cut backlog has significantly reduced



Source: Public Works utility cut backlog report for fiscal years 2017 to 2021, November 2021

Public Works Department management noted that the COVID-19 pandemic affected the department’s ability to address the utility cut backlog.

Recommendation 2: The Austin Water Director should ensure temporary patches meet the requirements of the City Code Standards Manual

Based on evidence gathered, we determined that Austin Water has made enhancements to ensure temporary patches meet the requirements of the City Code Standards Manual. Austin Water has dedicated resources to quality assurance and quality control. For example, Austin Water created a project coordinator position. This employee was assigned the responsibility to assist in developing procedures, inspecting work, and training staff on utility work completion. The employee is also assigned the responsibility to provide guidance on temporary patch repairs and work quality improvement. Also, the department developed a formal training and quality assurance procedures document. This document identifies applicable City utility cut standards.

In addition, the department developed standard operating guidelines for temporary patch repairs. The guidelines establish inspection requirements and target inspection samples. It also assigns responsibilities for quality control.

In May 2021, Austin Water entered into a service level agreement with Public Works. The agreement outlines the roles and responsibilities for temporary patch work and other administrative requirements. The agreement also has a plan for Austin Water to purchase equipment and start up an in-house crew to perform temporary utility cut repairs. According to Austin Water management, most of the needed equipment will be available by the end of the calendar year 2021, and temporary staff will be hired in the second quarter of fiscal year 2022.

As noted above, through implementation of a GIS tool, Austin Water and Public Works can track the utility cuts across the City, including the location of the utility cuts and how long a specific cut has remained unaddressed.

Recommendation 3: The Public Works Director should develop, implement, and monitor written policies and procedures to ensure:

- a) Utility cut repair work order data is complete and accurate
- b) Repairs are prioritized efficiently
- c) Inspections are performed in compliance with the City Code Standards Manual
- d) Temporary patches are not in place longer than 90 days
- e) Quality control and assurance steps are completed consistently

We determined that Public Works has implemented standard operating procedures for management of street cut repairs. These operating procedures address prioritization of repairs, collection and maintenance of repair data, inspection requirements, and quality control procedures.

To address data reliability, a link between the Public Works and Austin Water work order tracking systems was implemented in May 2020. According to Austin Water management, this minimized manual entry in the two systems. The link also enables staff to review updates daily for cuts that are completed or canceled in the Public Works system.

To address the backlog of cuts that have been in place for more than 90 days, the department established monthly repair targets and monitors achievement of the established targets. According to an internal report, the department surpassed the established targets each month. However, in October 2021, 503 (59%) out of the 858 utility cuts had been in place longer than 90 days.

The GIS tool implemented by Public Works and Austin Water also addresses this recommendation. It allows staff to track street cuts by location and how long they have remained unaddressed.

Recommendation 4: The Public Works Director should assess the cost-effectiveness of the Utility Excavation Repair activity using the complete data obtained through implementation of Recommendation 3

Public Works implemented an annual financial review process that includes an Excel tool to assess the cost of the Utility Excavation Repair activities over time and provide insight to cost-effectiveness when compared to operational data (locations completed).

According to Public Works management, Street and Bridge Operations staff worked with Public Works Financial Services to establish actual cost comparisons for in-house versus contract evaluations.

The department also tracks information on utility cut repairs' revenue and expenditures, including expected revenue and actual revenue comparisons. Staff reports this information in the department's monthly performance management meetings. Also, Public Works provides monthly billing statements to Austin Water leadership that capture total cost of work. This includes contract-related expenditures and in-house Public Works expenditures. Public Works management stated that staff closely monitors revenue targets with expenditures.

Scope

The project scope included actions taken by Public Works and Austin Water to respond to the recommendations in the 2017 City Utility Street Cut Repairs Audit.

Methodology

To complete this special report, we performed the following steps:

- Communicated with City staff in the Public Works Department and Austin Water
- Reviewed documents relevant to recommendation implementation
- Reviewed Council resolutions and discussions, City memos, budget information, news articles, and other relevant documents
- Evaluated management actions to respond to relevant recommendations

Project Type

This project is considered a non-audit project under Government Auditing Standards and was conducted in accordance with the ethics and general standards (Chapters 1-5).

DRAFT

The Office of the City Auditor was created by the Austin City Charter as an independent office reporting to City Council to help establish accountability and improve City services. Special requests are designed to answer specific questions to assist Council in decision-making. We do not draw conclusions or make recommendations in these reports.

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