

**Post-Audit Review 20-05:  
City Wide Services Pothole  
Repairs**

**December 2021**

**City Auditor**

Stan Sewell, CPA, CGFM, CFE

**Senior Auditor**

Lisa Culver, CFE





# OFFICE OF INTERNAL AUDIT

## Stan Sewell, City Auditor

December 23, 2021

To: Mayor Tim Kelley  
City Council Members

Subject: Post-Audit Review of City Wide Services Pothole Repairs (Report #20-05)

Dear Mayor Kelley and City Council Members:

Attached is a summary report on the status of audit recommendations in our 2021 Pothole Repairs report. The purpose of this report is to confirm whether, and to what degree, management has implemented the recommendations made in the original audit.

The original audit concluded:

1. Increased monitoring of pothole repairs would ensure timely and quality repairs are performed; and,
2. Accurate pothole repair data is needed to help make informed decisions on pavement conditions so paving projects can be adequately planned.

The audit had ten recommendations to improve efficiency and effectiveness of the pothole repair operations. At the time of this Post-Audit Review, three recommendations were not implemented, two were partially implemented, and five were implemented. Recommendations partially implemented and not implemented are herein reported to the Audit Committee for follow-up, as appropriate.

This Post-Audit Review consisted principally of inquiries of City personnel and examinations of various supporting documentation. It was substantially less in scope than an audit in accordance with generally accepted government auditing standards. The evidence obtained provided a reasonable basis for our conclusions; however, had an audit been performed, other matters might have come to our attention that would have been reported to you and our conclusions may have been modified.

Sincerely,

Stan Sewell, CPA, CGFM, CFE  
City Auditor

Attachment

cc:     Audit Committee Members  
          Joda Thongnopnua, Chief of Staff  
          Ryan Ewalt, Chief Operating Officer  
          Chris Anderson, Director of Innovation, Delivery & Performance  
          Bill Payne, Interim Public Works Administrator  
          Ricky Colston, Director of City Wide Services  
          Jim Arnette, TN Local Government Audit

---

## RECOMMENDATIONS NOT IMPLEMENTED (3)

Recommendation	Actions Taken
3 We recommended Public Works implement a process requiring the pothole repair crews take before and after pictures of the repair. These photos would be provided to CWS staff who could review the pictures for quality compliance.	According to the CWS Director once the Pothole Inspector position has been filled, this procedure will be initiated.
6 We recommended Public Works review the pothole repair process and set a time that is acceptable to address citizen's safety and service requests. Consideration should be given to adopting completion times similar to Knoxville which has comparable lane miles and patch trucks in service and have a set response time of 48 hours.	According to the CWS Director, the completion time on pothole repairs was recently updated in Accela to eight days by the Office of Performance Management and Open Data. The Director does not have the authority to change this completion time. He believes eight days is too long for completion and his staff works to have the service request completed more quickly. The current average completion time is 2.4 days.
8 We recommended Public Works ensure they are meeting the performance measurements as stated in DPW 24 Section 24.8 which sets an on-time completion rate of 95% on pothole repair service requests.	CWS has improved their on-time completion rate from 72.52% for FY20 to 86.6% over the past eight months. However, they are still below the required on-time completion rate of 94% which was lowered from 95% in the latest version of DPW Policy 24 Section 24.8.

---

## RECOMMENDATIONS PARTIALLY IMPLEMENTED (2)

Recommendation	Actions Taken
4 We recommended Public Works provide training on how to properly fill out the <i>Daily Patching Worksheet</i> to ensure the data is complete and accurate. Further, we recommended Public Works periodically review the <i>Daily Patching Worksheets</i> to ensure their accuracy and completeness. The review would include obtaining the truck's GPS data and comparing it to the entries on the <i>Daily Patching Worksheet</i> .	The patch truck drivers have been trained on how to properly complete the <i>Daily Patching Worksheet</i> . The General Supervisor receives the daily sheets from each driver at the end of the day and reviews each sheet. OIA conducted a review of the <i>Daily Patching Worksheets</i> for the week of November 1, 2021. We found one of the five days daily worksheets was incomplete.
9 We recommended Public Works consider investing in new technology or utilize currently available technology to accurately identify the location of pavement repairs, provide navigation, as well as, other features to help in the efficiency and safety of the pothole repair crews. Further, we recommended Public Works ensure accurate digital pothole repair data is available to CDOT.	The patch trucks were recently outfitted with a new vehicle navigation system which provides monitoring features of the vehicle, trip histories, as well as, other enhanced features. CWS is in the process of completely understanding the capabilities of the new system and has not researched other technology for pothole operations. The patch truck drivers are logging all potholes filled on the <i>Daily Patching Worksheet</i> even if they are not associated with a service request. The General Supervisor is creating a service request for these potholes filled so the data can be tracked by CDOT.

---

## RECOMMENDATIONS FULLY IMPLEMENTED (5)

Recommendation	Actions Taken
1 We recommended Public Works take steps to ensure the quality of pothole repairs by following DPW Policy 24.	The new General Supervisor over pothole repairs is performing pre and post inspections of pothole repairs. This is ensuring the pothole is located and repaired to quality standards.
2 We recommended Public Works develop a methodology to ensure pothole crews routinely inspect all city streets for needed pothole repairs. This could be accomplished by following the set routes of the garbage trucks or street sweepers which cover the majority of the city's streets.	The General Supervisor has developed maps of the City which coincide with the leaf collection routes. When the patch truck drivers have down time they inspect each street on the map until all streets have been inspected.
5 We recommended Public Works develop a process to ensure they are collecting the <i>Daily Patching Worksheet</i> for each day.	The General Supervisor receives a <i>Daily Patching Worksheet</i> from each driver at the end of the day and updates the service requests based upon the data on the sheets. He has also developed a log.
7 We recommended Public Works update all written procedures manuals with the same Service Length Agreement requirement. CWS staff should be provided the updated SOP's and this should be documented.	CWS has updated their SOP to reflect the current on-time completion rate of eight days as set in Accela. The staff has been provided the updated SOP.
10 We recommended Public Works update written Standard Operating Procedures on pothole repair operations and ensure the receipt of the revised policies be documented for each employee.	CWS has updated their Road Repair SOP to include current operations. The updated SOP has been distributed to the patch truck drivers.

### **City of Chattanooga Fraud, Waste, and Abuse Hotline**

Internal Audit's Fraud, Waste, and Abuse Hotline gives employees and citizens an avenue to report misconduct, waste or misuse of resources in any City facility or department.

Internal Audit contracts with a hotline vendor, Navex Global, to provide and maintain the reporting system. The third party system allows for anonymous reports. All reports are taken seriously and responded to in a timely manner. Reports to the hotline serve the public interest and assist the Office of Internal Audit in meeting high standards of public accountability.

To make a report, call 1-877-338-4452 or visit our website:

[www.chattanooga.gov/internal-audit](http://www.chattanooga.gov/internal-audit)