November 2, 2022

Auditor Timothy M. O’Brien, CPA  
Office of the Auditor  
City and County of Denver  
201 West Colfax Avenue, Dept. 705  
Denver, Colorado 80202

Dear Mr. O’Brien,

The Office of the Auditor has conducted a performance audit of Solid Waste Management Division Residential Trash, Recycling, and Compost Services.

This memorandum provides a written response for each reportable condition noted in the Auditor’s Report final draft that was sent to us on October 13, 2022. This response complies with Section 20-276 (c) of the Denver Revised Municipal Code (D.R.M.C.).

AUDIT FINDING 1  
The Solid Waste Management Division Lacks Strategic Direction and Quality Data to Inform How It Provides Services to Residents.

<table>
<thead>
<tr>
<th>RECOMMENDATION 1.1</th>
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<tbody>
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<td>The Solid Waste Management Division should develop a strategic plan that identifies specific objectives, goals, and needs of the division with particular focus on its role to deliver services to residents.</td>
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<th>Agree or Disagree with Recommendation</th>
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<tr>
<td>Agree</td>
<td>12/31/23</td>
<td>Margaret Medellin</td>
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Narrative for Recommendation 1.1  
SWM recognizes the importance of a comprehensive strategic plan as it transitions to a volume-based pricing service model. The SWM Division will turn its current business plan into a more robust long-term strategic plan that defines specific objectives, goals, and needs of the division, including its role to deliver services to customers in the most efficient, effective ways possible.

<table>
<thead>
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<th>RECOMMENDATION 1.2</th>
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<td>The Solid Waste Management Division should develop an internal control framework that includes a comprehensive set of detailed and documented policies and procedures at both the system and operational levels. Such policies and procedures should include, at a minimum: level-of-service policies, route policies, and cost-accounting policies.</td>
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</table>
Narrative for Recommendation 1.2
In conjunction with its strategic plan development, SWM will create and expand upon its internal control framework to mitigate risks that may impede strategic objectives. Control activities will include written policies and procedures, staff training plans, and succession and contingency plans for key roles. The policies and procedures will cover system and operational levels to ensure the efficiency and effectiveness of operations.

SWM has already made progress on this recommendation by adding staff to form the Office of Strategic Analytics and hiring a Senior Manager of Strategy and Policy. SWM is currently documenting new policies and procedures with the new billing system. SWM is also in the process of acquiring American Public Works (APWA) certification, which will demonstrate compliance with industry best practices.

Narrative for Recommendation 1.3
SWM is currently in the process of implementing Rubicon’s routing software, which will increase the level of route efficiency reporting for Solid Waste. SWM will continuously monitor Rubicon reports and integrate recommended route improvements when practical.

RECOMMENDATION 1.3
The Solid Waste Management Division should follow guidance from the Environmental Protection Agency and develop a standard process for routinely reviewing route efficiency. This should include documenting the data the division uses and the steps it takes to develop new route designs based on its review process.

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<td>Agree</td>
<td>5/31/2023</td>
<td>Rich Villa</td>
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RECOMMENDATION 1.4
The Department of Transportation & Infrastructure should coordinate guidance and training across all customer service teams and systems — including Denver’s 311 program, Denver Utilities Online, and PocketGov — to establish consistent data-entry
and case management practices and ensure performance dashboards report accurate, reliable data for informed decision-making.

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<td>9/30/23</td>
<td>Jessica Lally</td>
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**Narrative for Recommendation 1.4**

SWM is in the process of consolidating the case data, working with the 311 and pocketgov teams who own these data sources. SWM will create policies and procedures to ensure timely and accurate data entry and case management practices. SWM will also create dashboards and metrics to monitor performance.

**AUDIT FINDING 2**

The Solid Waste Management Division has Insufficient Resources to Collect Residential Trash, Respond to Illegal Dumping, and Support Its Other Work.

**RECOMMENDATION 2.1**

The Solid Waste Management Division should work with the Department of Finance and the Fleet Management Division to develop a documented fleet replacement schedule that ensures long-term fleet reliability and regular, staggered replacement of aged trucks to ensure efficient delivery of waste collection services. Once it develops this schedule, Solid Waste Management should develop and implement procedures to follow it — including monitoring and oversight.

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<td>6/30/23</td>
<td>Nick Williams</td>
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**Narrative for Recommendation 2.1**

With the implementation of the Volume-Based Trash Pricing Program in 2023, all trash, recycling, and composting costs will move to the new SRF, including fleet management costs. As a result, these fleet vehicles will no longer be part of the City’s centralized process, which will give SWM the ability to manage the fleet budget and fleet replacement schedule on its own. SWM will work with DOF and Fleet Management to develop a written procedure to create, update, and monitor its vehicle replacement schedule.
RECOMMENDATION 2.2
The Solid Waste Management Division should determine how many drivers, inspectors, and program support staff it needs to ensure continuity of operations and provide the additional services required by the city’s new volume-based pricing model. Such an analysis should consider:

- How many staff are needed to complete all routes as scheduled.
- How many inspectors are needed to provide adequate coverage for all areas of the city.
- How many staff or contractors are needed to replace the efforts of staff who were transferred to the Office of Climate Action, Sustainability, and Resiliency in 2020 and to cover expanded service needs for education and outreach under volume-based pricing.

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Narrative for Recommendation 2.2
SWM will update its written analysis to determine appropriate staffing levels for drivers, inspectors, and program support.

Solid Waste monitors its vacancy rate and is actively recruiting for those driver positions. The Division recently re-classified the driver positions to Solid Waste Collection Operators to be able to pay competitively with the private sector. The Division has identified that one inspector per district is the goal for adequate coverage. In addition to the 3 inspectors, they have today, Solid Waste received two new positions with the Volume-based Pricing implementation funds. The Division plans to grow their inspector team over the next two years to a total of 9 inspectors.

Through contracting with community-based organizations for outreach and establishing long term partnerships, Solid Waste will be able to reach more residents directly than it was able to with its previous Program staff. Solid Waste is actively recruiting a Waste Diversion and Recycling Manager, responsible for the Division’s Education and Outreach plan.

RECOMMENDATION 2.3
After implementing Recommendation 2.2, the Solid Waste Management Division should define and document roles and responsibilities for inspectors and program support staff related to addressing cart contamination and responding to illegal dumping.
Narrative for Recommendation 2.3
SWM will clearly define roles and responsibilities for inspectors and program support in its written analysis from Recommendation 2.2. Solid Waste is growing its contamination auditing process with inspectors with help from the Office of Strategic Analytics.

RECOMMENDATION 2.4
If the Solid Waste Management Division will rely on other city agencies or third-party contractors to provide program support for education and outreach related to the volume-based pricing program, the division should draft memoranda of understanding or otherwise document such agreements to define the roles and responsibilities to be carried out by such partners.

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Narrative for Recommendation 2.4
SWM will verify that SOWs exist for all contractors and community-based organizations performing outreach on DOTI’s behalf.

AUDIT FINDING 3
The City is Inadequately Prepared for Its New Volume-Based Pricing Program, which May Worsen Existing Service-Delivery Issues for Residents.

RECOMMENDATION 3.1
Within the first year of the volume-based pricing program, the Solid Waste Management Division should plan, document, and implement processes to regularly review the division’s performance for service delivery and how well it is increasing waste diversion behaviors of the Denver households it serves.

Such review processes may include a cost-of-service rate analysis, a resident satisfaction and service preference survey, and an environmental cost analysis. The division should
complete such reviews in the second year of program operations, which will help position the division to meet the program reporting requirement defined in city ordinance.

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**Narrative for Recommendation 3.1**

As part of Recommendations 1.1 and 1.2, SWM will define objectives, performance metrics, and procedures to regularly monitor performance. This will include service delivery performance, a cost-of-service rate analysis, customer surveys, and an environmental cost analysis. SWM will adjust the program as necessary as a result of these performance reviews.

Per the Ordinance, the program must perform a cost-of-service study no less than every 5 years.

Please contact Jessica Lally at Jessica.Lally@denvergov.org with any questions.

Sincerely,

Margaret Medellin
Deputy Manager of Utilities

cc:  Valerie Walling, CPA, Deputy Auditor  
Dawn Wiseman, CRMA, Audit Director  
Karole Dachelet, MPA, Audit Manager  
Nicholas Williams, DOTI Deputy Manager Internal & External Affairs  
Earl Jackson, DOTI Chief Financial Officer  
Peter Spanberger, DOTI Director of Accounting  
Richard Villa, DOTI Interim Director of Solid Waste Management