Fees for Mulch Site Services Audit Summary

Why OCA did this project
Public Works Department management requested assistance from Internal Auditing in assessing the true cost to operate the mulch site at 2100 N 145th E Ave in Tulsa. Tulsa Authority for the Recovery of Energy (TARE) provides all services related to refuse and recycling within City corporate limits which includes this mulch site.

A thorough review of revenue and costs was necessary to bring the fees to a reasonable amount so costs would be adequately covered.

Project Scope
Review all costs, both direct and indirect, to determine an accurate rate per cubic yard to charge at the mulch site.

How OCA did this project
Project procedures included:

- Create a cost calculation worksheet template.
- Obtain cost information. Public Works staff provided percentages for shared services estimates.
- Obtain revenue information.
- Determine units processed from the prior year and current year.

Key observations

1. The rate per cubic yard needs to be adjusted to adequately cover total costs, both direct and indirect.
2. All loads brought to the mulch site should be tracked for residential, non-residential, and commercial.
Fees for Mulch Site Services

Background
Since 1996, the City of Tulsa mulch site has provided a site for greenwaste drop off and free mulch and firewood for residents and commercial business. This site accepts drop offs of tree branches, grass clippings and leaves. Tulsa, Broken Arrow, Jenks, and Bixby residents can drop off at no charge by showing a driver's license or current city utility bill from the municipality where they live, or a manifest from their community.

The City of Tulsa mulch site is operated by Tulsa Area Recovery of Energy (TARE) which was established in 1977 and is administered by a board of trustees. TARE contracts with the City of Tulsa for day-to-day operations. TARE has legal and administrative authority over the refuse and recycling systems within the City of Tulsa corporate limits.

The trust was formed to conform with Oklahoma law, which at that time precluded municipalities from incurring long term debt. Oklahoma Statutes Title 63, Section 2256 allows municipalities to develop a plan directly, or through a public trust, to provide for the collection and disposal of solid waste generated or existing within the incorporated limits of such city or town.

The original fee structure was determined in connection with a bond issue used to finance building the Walter B Hall Resource Recovery Facility. After the bond was paid off in 2007, this rate changed from $2.58 to $0.55/cubic yard due to a surplus of funds accumulated over the life of the bond. The rate was not reviewed for adequate cost recovery after the surplus was depleted. Mulch site management contacted Internal Auditing to assist in a fees analysis to determine a sufficient rate to cover current costs of operations.

This project allowed Internal Auditing to test a framework for calculating service costs that was created by a multi-department working group. Audit worked with mulch site management to locate the data needed for the rate calculation and relied on their knowledge and expertise for estimations and assumptions. The calculation methodology and results were provided to mulch site management to use in their discussions with TARE board regarding possible rate changes. TARE sent out a Request for Proposal (RFP) to determine outsourcing feasibility.
**Project Objective**
Review all costs, both direct and indirect, to determine an accurate rate per cubic yard to charge at the mulch site.

The fee calculation framework formula is:
(Direct Cost + Indirect Cost – Subsidies) /Units = Cost Per Unit

Calculate direct cost:
1. Determine section’s projected spend from most current approved budget that applies to the service.
2. Determine upper management’s salary to be allocated to the service, based on time spent on section activities. This allocation should not already be present in the section’s budget.
3. Obtain asset depreciation amount to be included for the year.

Calculate indirect cost:
4. Calculate the service’s percentage of City of Tulsa shared services. Choose a methodology (percentage of budget, head count, man hours, or other reasonable basis).
5. Add any other department expenses applicable to the service not currently included in the section’s budget.
6. Add the department’s rental cost for space at City Hall, obtained from the Indirect Cost Allocation Plan available from Budget Division.

Identify any subsidies:
7. Identify any services management has decided to subsidize. There were no subsidies for this service.

Calculate units of service:
8. Commercial and non-residential units were calculated by using revenue collected divided by the current fee of $0.55/cubic yard. Management estimated residential units at 40% of the total cubic yards that were dropped off.
Observations

Observation 1:
Calculations indicated the mulch site is currently operating at approximately $4.72 loss per cubic yard processed.

Recommendation
The fee per cubic yard should be adjusted to adequately cover total costs, both direct and indirect. The fee should be reviewed annually.

Management Response
Public Works and TARE do agree with the finding.

We accept that the current cost including depreciation is $5.27 per cubic yard. Our corrective action is to address the current cost of $0.55/CY. This was brought by Public Works staff before the TARE board. Note that staff can only recommend changes but that all authority resides with the board. The board accepted the cost model but didn’t want to make such a drastic change in a single year. The main concern was around a large increase in illegal dumping.

After several discussion sessions, on 3/26/24, a new price structure was enacted whereby the greenwaste price was increased to half of the cost this coming year and at full cost the following.
Observation 2:
Currently, the amount of greenwaste brought in by residents is not tracked. Amounts are estimated. Internal Auditing determined cubic yards of greenwaste based on the revenue collected from commercial and non-residential customers. We relied on management’s expertise to estimate the ratio of residential to commercial and non-residential loads. Management indicated that approximately 40% of the cubic yards of greenwaste were residential. Internal Auditing used previous revenue data for the most accurate calculation of units.

Recommendation
All loads brought to the mulch site should be tracked for residential, non-residential, and commercial to have the most accurate units for future fee evaluations.

Management Response
The Public Works and TARE groups agree with this finding.

The mulch site will begin with an estimated volume of green debris collection based upon vehicle size. We discussed scales but there is too much operational challenge in keeping a scale running in those environments while also having to account for moisture influencing weight. We opted for a visual method. We worked with our current debris monitoring firm for storm cleanup, Tetratech, and devised a simple approach for our gate workers.
# MULCH SITE RATE CALCULATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT COSTS</td>
<td>$2,382,574</td>
</tr>
<tr>
<td>INDIRECT COSTS</td>
<td>$314,228</td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
<td><strong>$2,696,802</strong></td>
</tr>
<tr>
<td>ANY SUBSIDIES</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL AFTER SUBSIDIES</strong></td>
<td><strong>$2,696,802</strong></td>
</tr>
<tr>
<td>EXPECTED UNITS</td>
<td>511,856</td>
</tr>
<tr>
<td>RATE CALCULATION</td>
<td>$5.27 per yd³</td>
</tr>
</tbody>
</table>
Direct Cost Calculation

1. Determine section's projected spend from most current approved budget that applies to the service. Make sure to exclude any assets purchased already represented in M5 data. If a section provides more than one service, you will need to select and document how to split the section’s direct costs between the services. If a section’s manpower is used for a single service, 100% of the calculation in step 3 above is the cost of the service.

2. Determine upper management's salary utilized based on time spent on section activities. This allocation should not already be present in section budget.

3. Obtain asset listing and depreciation amounts to be included for the year. This is done by using depreciation amounts for current equipment and equipment expected to be purchased next FY based on an 8-year depreciation schedule. Include maintenance and fuel costs.

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### Budget Actual Spend from Account Inquiry:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most current approved budget excluding capital</td>
<td>$1,451,141</td>
</tr>
<tr>
<td>% Dedicated to Service</td>
<td>100%</td>
</tr>
<tr>
<td>Total Budget Actual Spend from Account Inquiry</td>
<td>$1,451,141</td>
</tr>
</tbody>
</table>

### Department Management Cost (outside of section):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Salaries*Time spent</td>
<td>$33,844</td>
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<tr>
<td>Total Department Management</td>
<td>$33,844</td>
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</table>

### Equipment:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation of current equipment</td>
<td>$117,991</td>
</tr>
<tr>
<td>Depreciation of equipment purchased next FY</td>
<td>$157,125</td>
</tr>
<tr>
<td>Maintenance FY 23</td>
<td>$388,085</td>
</tr>
<tr>
<td>Fuel FY 23</td>
<td>$234,389</td>
</tr>
<tr>
<td>Total Equipment Cost</td>
<td>$897,590</td>
</tr>
</tbody>
</table>

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**TOTAL DIRECT COST**

<table>
<thead>
<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,382,574</td>
</tr>
</tbody>
</table>

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I. This number includes the budget for 7303229 less any capital purchases (54xxx items)
II. Account 7303229 is exclusive to the mulch site section
III. Totals include managerial costs that are not previously included in section costs
IV. Useful life was determined by section management based on historical experience
V. Maintenance and fuel were calculated on prior year actual expenses
Indirect Cost Calculation

4 Calculate your percentage of City of Tulsa shared services. Choose a methodology (% of budget, headcount, manhours, other)

* For this project, IA chose % of budget since the mulch site is its own section 7303229 and includes no other services. The current TARE rate model was used in this analysis.

a) Obtain sections most current budget total that is applicable to the service without capital expenditures
b) Obtain the division’s most current budget without capital
c) Calculate percentage (sections budget/division’s budget)
d) Obtain the shared services from the most recent rate model
e) Multiply the shared services total budget calculated in step 4d times your division’s percentage calculated in step 4c.

5 Add in any other department expenses applicable to the service not currently included in the section's budget.

6 Add your department’s rental cost for space at City Hall from Indirect Cost Allocation Plan, available from the Budget Division

<table>
<thead>
<tr>
<th>4</th>
<th>Shared Services:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Section 7303229 Budget Without Capital $1,451,141</td>
</tr>
<tr>
<td></td>
<td>Division 730 Budget Without Capital $34,398,686</td>
</tr>
<tr>
<td></td>
<td>% of Shared Services for Service 4%</td>
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<tr>
<td></td>
<td>Division 730 Shared Services $696,938</td>
</tr>
<tr>
<td></td>
<td>Total Mulch Site Shared Services $29,401</td>
</tr>
</tbody>
</table>

| 5  | Other TARE expenses applicable to service: $284,385 | IV |

| 6  | Office Space Rental Cost: $442 | V |

TOTAL INDIRECT COST $314,228

I FY 24 section 7303229 budget without capital
II FY 24 total budget for TARE (730) without capital
III Division shared services can be found on TARE rate model
IV Additional expenses to be included were determined by section management and can be found on the TARE rate model
V OTC office space calculated from Indirect Cost Allocation Plan from FY 2023 Budget