

CITY AUDITOR'S OFFICE

Residential Solid Waste Program Cost Analysis

October 4, 2010

AUDIT REPORT NO. 1117

CITY COUNCIL

Mayor W.J. "Jim" Lane Lisa Borowsky Wayne Ecton Vice Mayor Suzanne Klapp Robert Littlefield Ron McCullagh Marg Nelssen



October 4, 2010

Honorable Mayor and Members of the City Council:

Enclosed is a report on the City's Residential Solid Waste Program Cost Analysis, Audit No. 1117. This audit was conducted at City Council's direction to independently review the cost analysis presented by the Public Works Division at the August 30, 2010, City Council meeting.

Briefly, this audit determined that information the Public Works Division presented in its Council Report was fairly reliable. In conducting our audit, we included all 12 months of Fiscal Year 2009/10 while the Division's earlier analysis included 11 months. We also developed a separate analysis, included in this report, accounting for all components of the Residential Solid Waste program's costs.

If you need additional information or have any questions, please contact me at (480) 312-7867.

Sincerely,

Sharron Walker, CPA, CFE

City Auditor

Audit Team:

Joyce Gilbride, Assistant City Auditor Kyla Anderson, Senior Auditor

Xhurron Walker

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EXECUTIVE SUMMARY

This audit of the *Residential Solid Waste Program Cost Analysis* was conducted at the direction of City Council to independently review the cost analysis presented by the Public Works Division at the August 30, 2010, City Council meeting.

The Public Works Division's cost analysis for comparison to other cities' competitive bids was fairly reliable. First, we tested the Public Works analysis following the same cost methodology, but using more complete financial data. We included all 12 months of Fiscal Year 2009/10, while the Division's earlier analysis included 11 months. Next, we developed an independent analysis accounting for all components of the Residential Solid Waste program's costs for comparison to the competitive bids and to vendor quotes.

Comparison to other cities' competitive bids—Our independent analysis determined that the direct cost per residential dwelling unit was \$6.00 per month, which is lower than the \$6.09 determined by the Public Works Division's analysis. Our independent calculations determined a higher per unit direct cost for the area South of Indian Bend Road (\$5.98) than Public Works had calculated (\$5.46). However, our per-unit direct cost includes program representatives and their associated costs, which were not included in the other cities' competitive bids. Without these costs, the comparable unit cost of \$5.31 is less than the lowest vendor bid received by another city (\$5.98), and the lowest bid of the second city (\$6.25).

Comparison to vendor quotes—Our independent analysis determined the *total* monthly cost per residential dwelling unit was \$15.47 in FY 2009/10. This amount is substantially lower than residential rates quoted by vendors operating in a nearby town.

BACKGROUND

This audit of the *Residential Solid Waste Program Cost Analysis* was conducted at the direction of City Council to independently review the cost analysis presented by the Public Works Division at the August 30, 2010, City Council meeting.

As part of the City Manager's initiative to explore possible opportunities to partner with private sector companies to reduce costs and resolve anticipated fiscal year 2011/12 operating budget shortfalls, the Public Works Division developed a cost analysis of its Residential Solid Waste Program. This analysis, which was also conducted to comply with Council-adopted financial policies to evaluate alternative means of service delivery, was presented to the City Council at the August 30, 2010, meeting.

Alternative Service Delivery models

The Residential Solid Waste Program cost analysis reviewed four alternative service delivery models currently used in the local area:

- 1. City of Scottsdale staff providing the service, as is currently done.
- 2. A competitively bid private sector vendor providing the service, as is currently the City of Chandler model.
- 3. A managed competition process determining whether a vendor or city staff provides the service, as is currently the City of Phoenix model.
- 4. Each resident procuring his/her own residential solid waste disposal vendor, as is currently the Town of Paradise Valley model.

Key assumptions

The Public Works Division conducted a direct cost comparison using the following key assumptions:

- 1. Existing service levels and standards currently provided to City of Scottsdale residents will be maintained. This means that weekly solid waste collection, weekly recycle collection, and monthly brush and bulk collection would continue. For comparison purposes, the analysis includes solid waste and recycle costs, but excludes brush and bulk collection which are assumed to remain with City staff. Additional City performance standards, such as immediate spill pick-up and bringing containers to the curb for residents who need additional assistance, are not quantified in terms of cost.
- 2. Directly-related support services will continue to be provided by the City. These services, such as customer service, quality control, container maintenance and repair and alley maintenance, will be discussed further in our analysis.
- 3. Existing sunk costs will be retained. In particular, these include the transfer station, which is owned and operated by the City, and solid waste and recycling containers which are owned and maintained by the City.
- 4. Existing service contracts will be retained. These include the landfill and sorting and marketing recyclables contracts, which are with the Salt River Pima Maricopa Indian Community, and household hazardous waste collection.
- 5. City indirect services will continue to be provided by the City at the current levels. These include legal, financial, information technology, and other general government services.

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As shown in Table 1, to provide a more direct comparison to recent City of Chandler and City of Phoenix bids, Public Works Division further limited its cost analysis to services provided in the City area south of Indian Bend Road. This limitation allowed the number of customers per square mile to approximate the number of customers per square mile in the Chandler and Phoenix bids.

Table 1. Service Area Descriptions

	Landfill (average miles round trip)	Recycle Facility (average miles round trip)	Service Area (square miles)	Customers per Square Mile
City of Scottsdale	19	19	184.2	429
City of Scottsdale—South				
of Indian Bend Road	23	23	16.5	1,184
Chandler	30	9	70	981
Phoenix (June 2009 bid area)	20	20	25.5	1,568

SOURCE: Public Works Division Council Report dated August 30, 2010, page 5.

Cost Comparisons

The *City of Phoenix* conducted a residential solid waste managed competition in June 2009 and July 2010. Because the City of Phoenix has a well-documented managed competition process, the Public Works Division used this as a base model for comparison purposes. The residential solid waste managed competition scope specified that the contractor was required to furnish labor, equipment, materials, supplies, supervision and other items to perform solid waste/recyclable materials collection service. The City of Phoenix staff bid \$6.25 and \$6.52 in 2009 and 2010, respectively, per residential account per month. The lowest vendor bids were \$8.75 and \$7.22, respectively. Besides the direct costs included in the managed competition, as noted in the Public Works Division analysis, the City of Phoenix has costs for staff to administer contracts and/or services, as well as to prepare the Request for Proposal specifications and develop the City bid. In addition, the City of Phoenix has costs associated with other city staff involved in the managed competition process, including Budget and Research, Materials Management, the City Attorney's office and the City Auditor's office.

The *City of Chandler* awarded a competitively-bid contract in April 2010 for residential solid waste and recycling services. This contract also included container repair and delivery, refuse services to City facilities, and brush and bulk collections, the costs of which were deducted to arrive at a consistent comparison. The basic residential solid waste and recycling services costs equaled \$5.98 per month. The division's analysis noted that the City of Chandler also has 11.5 full-time equivalent staff to administer the contract, monitor services, and provide customer service.

The *Town of Paradise Valley* requires its residents to obtain their own solid waste collection services; the Town does not administer any aspect of these services. The Public Works analysis in the August 30, 2010, Council Report included rates quoted by three of the four vendors listed on the Town's website. To verify this information, auditors obtained quotes for monthly service costs from all four vendors.

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OBJECTIVES, SCOPE, AND METHODOLOGY

The objective of this audit was to independently review the cost analysis presented by the Public Works Division for its Residential Solid Waste Program. The Public Works Division's analysis in the August 30, 2010, City Council Report was limited to the available data at the time, actual costs for the first 11 months of FY 2009/10. However, our audit encompassed the full 12 months of the fiscal year.

To gain an understanding of the analysis, we reviewed the August 30, 2010, City Council Report and interviewed Public Works staff, including the Solid Waste director and the Solid Waste Services managers in charge of the residential program. In addition, we obtained from the Phoenix City Auditor's office the procedures used in its reviews of City of Phoenix internal bids for the managed competition program. We also reviewed the City of Phoenix managed competition process, as outlined in the City's Operating Procedure 5.501.

Auditors obtained the Public Works Division calculations supporting its cost analysis presented in the August 30, 2010, City Council Report. To assure completeness, we summarized all Solid Waste department cost centers in the City's accounting records. The reported total costs of \$15.3 million agreed to total expenses recorded for FY 2009/10. We then determined the Solid Waste department's basis for including or excluding each cost center or portion of a cost center for their analysis. For example, certain cost centers or portions relate to the Commercial Solid Waste program, which was previously audited by this office in February 2010 (City Auditor Report No. 1005). Based on the results of that audit, these costs are properly excluded from the Residential Solid Waste Program cost analysis. Further, the Solid Waste department included a portion of brush truck costs because residential 20-gallon containers are manually serviced using a brush truck.

Residential dwelling units, the number of collections and the number of routes are used to calculate the route size for automated routes versus manual routes. The average route size then served as the basis for allocating Residential Solid Waste costs to the southern region being used for comparison.

- We compared the stated number of dwelling units to the number of residential accounts in the City's NorthStar billing system. While reasonable in comparison, the analysis used a dwelling unit count developed from the Solid Waste department's historical record and manual counts. The billing system's number of residential accounts does not represent the actual number of units because a few accounts represent multiple dwelling units and some small businesses receive residential service but are recorded as commercial customers.¹ The Solid Waste department used maps from the City's Land Information System to manually calculate the actual residential dwelling units currently in the region south of Indian Bend Road. Auditors selected sections of these maps and recalculated the residential pick up points to verify accuracy of the manual calculations.
- We also compared the stated number of routes to the Solid Waste refuse and recycling route schedules and maps.
- We then recalculated the route sizes and cost allocations.

Due to calculated higher productivity for the southern region, the Solid Waste department also

¹ A few homeowners associations have one account for their individual homeowners. Small businesses that do not have space for commercial containers are provided with residential containers and service.

allocated an additional amount for the increased maintenance and operations cost resulting from higher vehicle usage. We verified the data used in these calculations.

The cost analysis focused on comparing internal costs to the City of Phoenix and City of Chandler competitive bids.

- We obtained the bid summary for the City of Chandler from Solid Waste staff and reviewed
 the components of the bid service and the associated costs. For the number of full-time
 equivalent staff, we verified with the City of Chandler that the positions were fully dedicated
 to managing the residential solid waste services contract, monitoring service, and providing
 customer service.
- We obtained the City of Phoenix request for proposals and bid information from Solid Waste staff and verified data used in the cost analysis. In addition, we obtained from the City of Phoenix auditor's office documentation of the city's Operating Procedure 5.501 for the managed competition process and the more specific procedures used to review the cost analysis.

The Public Works Division's cost analysis also presented vendor quotes, obtained by Solid Waste department staff, for residential solid waste services in the Town of Paradise Valley. Auditors tested this information by contacting the vendors operating in the Town to obtain a quote for monthly residential refuse and recycling service there.

Auditors independently calculated the total cost of Residential Solid Waste service, including the direct, indirect, and City overhead costs, for comparison to these vendor quotes.

The results of these procedures are presented in the following *Findings and Analysis*.

We conducted this audit in accordance with generally accepted government auditing standards as required by Article III, Scottsdale Revised Code, §2-117 et seq. 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. Audit work took place in September 2010; Kyla Anderson and Joyce Gilbride conducted the audit.

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FINDINGS AND ANALYSIS

The Public Works Division's analysis of the Residential Solid Waste program's direct costs using 11 months of available Fiscal Year 2009/10 data was fairly accurate. In an independent analysis to ensure that all program costs had been properly included or excluded, auditors calculated the Residential Solid Waste Program's direct cost per dwelling unit at \$6.00 per month, or \$.09 lower than Public Works calculated.

1. The Public Works' cost analysis for comparison to competitive bids was fairly accurate.

Using 11 months of data, Public Works calculated a citywide Residential Solid Waste unit cost of \$6.09 per residential unit per month. Using 12 months of data and the same cost methodology, auditors calculated a very similar \$6.07 per unit per month, with minor discrepancies due to rounding differences. These results are summarized in Table 2.

Table 2. Analysis of Residential Solid Waste Costs - Citywide Fiscal Year 2009/10

Citywide – 79,104 residential service units	Public Works_ (11 months)	Audit (12 months)
Residential Collection Service Admin costs	\$3,444,193	\$3,750,448
Alley Collection (300 Gallon containers) costs	184,628	199,455
Street Collection (90 & 20 Gallon containers) costs	822,055	893,177
Residential Curbside Recycling costs	808,152	874,231
	\$5,259,028	\$5,717,311
Plus 40% of Brush Truck costs (used to manually service 20 gallon containers)	20,000	20,000
	\$5,279,028	\$5,737,311
Average residential service units, FY to date (78,800 average units x 11		
months; 78,814 average units x 12 months)	866,800	945,768
Direct cost per residential service unit per month	\$ 6.09	\$ 6.07

SOURCE: Public Works Division Council Report and supporting worksheets; SmartStream Monthly Expenditure reports, Land Information System data, Solid Waste Tons Collected report, and Residential route maps.

After calculating the monthly unit cost citywide, the Public Works Division analyzed the costs for the area south of Indian Bend Road for comparison to the City of Chandler and City of Phoenix bids. As shown in Table 3 on page 8, when using the same methodology, our analysis of these reported costs found similar results, \$5.48 based on 12-months' data compared to \$5.46 per unit based on 11 months' data.

For comparison purposes, the City of Chandler awarded a vendor contract for which comparable elements totaled \$5.98 per unit. The City of Phoenix's June 2009 managed competition process determined the lowest cost was its internal bid of \$6.25 per unit based on comparable elements.

Table 3. Analysis of Residential Solid Waste Costs — South of Indian Bend Road Fiscal Year 2009/10

Area South of Indian Bend Road - 19,530 residential service units	W	ublic orks months)	Audit months)
Residential units ÷ 23.5 routes = Area average route size		1,662	1,662
Less Automated route size calculated below		(1,424)	(1,423)
Additional units serviced per route due to alleys in Southern Area		238	239
Increased productivity		16.7%	16.8%
Citywide direct cost per residential service unit, from Table 2	\$	6.09	\$ 6.07
Operational savings from higher productivity (\$6.09 x 16.7%; \$6.07 x 16.8%)		(1.02)	(1.02)
Additional fleet maintenance costs due to increased use		0.39	0.43
Direct cost per residential service unit per month - South of Indian Bend Road	\$	5.46	\$ 5.48
Average route sizes used			
Citywide = approx. 79,100 dwelling units x 2 collections per week ÷ 112.5 total routes		1,406	1,405
Manual = approx. 1,830 dwelling units with 20-gal. containers			
Automated = approx. 77,200 dwelling units x 2 collections per week ÷ 108.5 automated routes		1,424	1,423

SOURCE: Public Works Division Council Report and supporting worksheets; SmartStream Monthly Expenditure reports, Land Information System data, Solid Waste Tons Collected report, and Residential route maps.

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2. The Residential Solid Waste total unit cost was substantially lower than vendor quotes for a nearby town.

For further comparison to the competitive bids and to vendor quotes, auditors conducted an independent analysis of all Residential Solid Waste Program costs, including indirect costs and allocated City overhead costs. Costs were grouped as follows:

- *Direct* costs include the route, program representative and supervisory staff, vehicles, equipment, supplies and other costs that the department uses to provide the service. These costs are controlled by the department.
- Indirect costs include closely related services or supplies that support the Residential Solid Waste program. These costs, such as department administration, transfer station and landfill, are managed by the department. While these costs may continue if the program was contracted to a vendor, the department may be able to reduce some of them.
- Overhead costs represent the program's share of support services provided by other areas of
 the City, such as billing and collection, legal, and general government services. Contracting
 with a vendor for residential solid waste and recycling services may not affect these costs as
 the department does not control them.
- Other Program costs represent programs also funded by the Residential Solid Waste Program fees and operated by the department. However, their operations are independent of changes to solid waste and recycling operations.

Other department costs, such as Commercial Solid Waste, are not supported by residential solid waste fees and are not included in the analysis.

In conducting this analysis, auditors allocated or verified Solid Waste costs for the Residential program based on personnel and vehicle assignments, insurance and damage claims based on number of vehicles, and actual program expenses recorded for commodities. Then Residential Solid Waste program costs were identified as "south" or "north" based on personnel and vehicle assignments or other direct relationship to the particular area, or were allocated based on number of residential units served, personnel or vehicles.

This analysis, shown in Table 4, determined Residential Solid Waste direct costs were \$6.00 per dwelling unit per month. For comparison to the Chandler and Phoenix bids, the per-unit direct cost for the area South of Indian Bend Road (\$5.98) has to be adjusted to remove the program representatives and their associated costs as these positions were not in the bid services. The resulting \$5.31 per unit cost is less than the lowest vendor bid for comparable services in the City of Chandler (\$5.98) and the City of Phoenix low bid (\$6.25 in FY 2009/10).

Table 4. Audit Analysis of Residential Solid Waste Costs Fiscal Year 2009/10

	Program Direct Costs				
		South of Indian Bend North of India			of Indian Bend
Personnel Services*	Total Cost	Qty	Total	Qty	Total
Equipment Operator III	\$ 2,132,285	6	\$412,700	25	\$1,719,585
Solid Waste Services Manager	183,258	1	91,629	1	91,629
Solid Waste Program Representative	284,563	2	142,281	2	142,282
Total	\$ 2,600,106		\$646,610		\$1,953,496
Contractual Services					
Property, Liability, and Workers Compensation Insurance**	\$112,472	9	\$27,358	28	\$85,114
Trucks—Maintenance & operation***	2,234,827	7	539,441	22	1,695,386
Trucks-Vehicle replacement***	695,589	7	167,901	22	527,688
Half-ton Pickups—Maintenance & operation***	15,120	3	7,560	3	7,560
Half-ton Pickups—Vehicle replacement***	9,000	3	4,500	3	4,500
Damage & Accident Claims**	4,595	7	1,109	22	3,486
Total	\$3,071,603		\$747,869		\$2,323,734
Commodities					
Small Tools & Equipment	\$5,266	6	\$ 1,019	25	\$4,247
Clothing & Personal Protective Equipment	14,755	6	2,856	25	11,899
Total	\$20,021		\$3,875		\$16,146
Annual Direct Costs	\$5,691,730		\$1,398,354		\$4,293,376
Monthly Direct Cost per Unit	\$ 6.00		\$ 5.98		\$ 6.01
/					
(cont'd)					

Includes Salary, Overtime, Retirement, Health/Dental, FICA, and other applicable costs.

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^{**} Through the City's Risk Management Dept. *** Through the City's Fleet Management Dept.

Total Cost	Table 4. Audit Analysis of Residential Solid Waste Costs (cont'd)							
Total Cost								
Total Cost					of Indian Bend			
Landfill Contract		Total Cost						
Container - Support Services 719,719 25% 179,930 75% 539,789 Cleaning & Waste Removal - Transfer Station 465,902 0% - 100% 465,902 Transfer Station Operations 222,237 0% - 100% 222,237 Solid Waste Mgt Admin Svcs. 300,435 25% 75,109 75% 225,326 Printing & Graphics 33,105 25% 75,109 75% 24,822 Licenses, Permits & Fees 11,689 25% 2,922 75% 8,767 Office & Misc Supplies 3,019 25% 755 75% 2,264 Software Maintenance & Licensing 1,829 25% 457 75% 1,372 Advertising 965 25% 241 75% 2,592,68 Monthly Indirect Cost per Unit \$ 3,40 \$ 2,71 \$ 3,63 Civ Verhead Costs CSW Verhead Costs Cost Verhead Costs \$ 27,682 75% \$ 83,047 Civ Verhead Costs	Landfill Contract							
Station	Container - Support Services		25%		75%			
Transfer Station Operations 222,237 0% - 100% 222,237 Solid Waste Mgt Admin Sves. 300,435 25% 75,109 75% 225,326 Printing & Graphics 33,105 25% 8,276 75% 24,829 Licenses, Permits & Fees 11,689 25% 2,922 75% 8,767 Office & Misc Supplies 3,019 25% 755 75% 2,264 Software Maintenance & Licensing 1,829 25% 457 75% 1,372 Advertising 965 25% 241 75% 724 Annual Indirect Costs 33,27,911 \$634,943 \$2,592,968 Monthly Indirect Cost per Unit \$3,40 \$2,71 \$3.63	Cleaning & Waste Removal – Transfer							
Solid Waste Mgt Admin Svcs. 300,435 25% 75,109 75% 225,326	Station	465,902	0%	-	100%	465,902		
Printing & Graphics 33,105 25% 8,276 75% 24,829	Transfer Station Operations	222,237	0%	-	100%	222,237		
Licenses, Permits & Fees	Solid Waste Mgt Admin Svcs.	300,435	25%	75,109	75%	225,326		
Office & Misc Supplies 3,019 25% 755 75% 2,264 Software Maintenance & Licensing 1,829 25% 457 75% 1,372 Advertising 965 25% 241 75% 724 Annual Indirect Costs \$3,227,911 \$634,943 \$2,592,968 City Overhead Costs City Overhead Costs Total Cost Mallocation Revenue Recovery - Solid Waste \$110,729 25% \$27,682 75% \$83,047 Utility Billing - Solid Waste 394,752 25% 98,688 75% 296,064 Remittance Processing - Solid Waste 237,651 25% 59,413 75% 178,238 Plus 14,75% Citywide Overhead 696,053 25% 1,940 55% 522,040 In-lieu property tax 7,939 25% 1,985 75% 522,040 In-leu property tax 31,600 25% 7,900 75% 23,700 Alley Maintenance 358,550 100%	Printing & Graphics	33,105	25%	8,276	75%	24,829		
Software Maintenance & Licensing 1,829 25% 457 75% 724	Licenses, Permits & Fees	11,689	25%	2,922	75%	8,767		
Advertising 965 25% 241 75% 724		3,019	25%	755	75%	2,264		
Sample S	Software Maintenance & Licensing	1,829	25%	457	75%	1,372		
Sample S	Advertising	965	25%	241	75%	724		
City Overhead Costs Total Cost % Allocation % Allocation % Allocation % Allocation % Sevenue Recovery - Solid Waste \$110,729 25% \$27,682 75% \$83,047 \$250,064 \$394,752 25% \$98,688 75% 296,064 \$237,651 25% 59,413 75% 178,238 \$101,475% Citywide Overhead 696,053 25% 174,013 75% 522,040 \$101,000 101,000	Annual Indirect Costs	\$3,227,911		\$ 634,943		\$2,592,968		
Total Cost	Monthly Indirect Cost per Unit	\$ 3.40		\$ 2.71		\$ 3.63		
Total Cost		City Overhead Costs						
Utility Billing - Solid Waste 394,752 25% 98,688 75% 296,064		Total Cost	%	Allocation	%	Allocation		
Remittance Processing - Solid Waste 237,651 25% 59,413 75% 178,238 Plus 14.75% Citywide Overhead 696,053 25% 174,013 75% 522,040 In-lieu property tax 7,939 25% 1,985 75% 5,954 CIP—Technology/Facilities 31,600 25% 7,900 75% 23,700 Alley Maintenance 358,550 100% 358,550 0% - Annual Overhead Costs \$1,837,274 \$ 728,231 \$ 1,109,043 Monthly Overhead Cost per Unit \$ 1.94 \$ 3.11 \$ 1.55 Other Program Costs Total Cost % Allocation % Allocation Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - -	Revenue Recovery - Solid Waste	\$ 110,729	25%	\$ 27,682	75%	\$83,047		
Plus 14.75% Citywide Overhead 696,053 25% 174,013 75% 522,040 In-lieu property tax 7,939 25% 1,985 75% 5,954 CIP—Technology/Facilities 31,600 25% 7,900 75% 23,700 Alley Maintenance 358,550 100% 358,550 0% - Annual Overhead Costs \$1,837,274 \$728,231 \$1,109,043 Monthly Overhead Cost per Unit \$1.94 \$3.11 \$1.55	Utility Billing - Solid Waste	394,752	25%	98,688	75%	296,064		
In-lieu property tax	Remittance Processing - Solid Waste	237,651	25%	59,413	75%	178,238		
CIP—Technology/Facilities 31,600 25% 7,900 75% 23,700 Alley Maintenance 358,550 100% 358,550 0% - Annual Overhead Costs \$1,837,274 \$728,231 \$1,109,043 Monthly Overhead Cost per Unit \$1.94 \$3.11 \$1.55 Other Program Costs Total Cost % Allocation % Allocation Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - Annual Other Program Costs \$3,911,248 \$771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$4.13 \$3.30 \$4.40	Plus 14.75% Citywide Overhead	696,053	25%	174,013	75%	522,040		
Alley Maintenance 358,550 100% 358,550 0%	In-lieu property tax	7,939	25%	1,985	75%	5,954		
State Station Statio	CIP—Technology/Facilities	31,600	25%	7,900	75%	23,700		
Monthly Overhead Cost per Unit \$ 1.94 \$ 3.11 \$ 1.55 Other Program Costs Total Cost % Allocation % Allocation Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - - Annual Other Program Costs \$3,911,248 \$771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$4.13 \$3.30 \$4.40 Residential Solid Waste, FY2009/10	Alley Maintenance	358,550	100%	358,550	0%	-		
Other Program Costs Total Cost % Allocation % Allocation Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - - Annual Other Program Costs \$3,911,248 \$ 771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10 \$14,668,163	Annual Overhead Costs	\$1,837,274		\$ 728,231		\$ 1,109,043		
Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - - Annual Other Program Costs \$3,911,248 \$ 771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10 \$14,668,163	Monthly Overhead Cost per Unit	\$ 1.94		\$ 3.11		\$ 1 .55		
Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - - Annual Other Program Costs \$3,911,248 \$ 771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10			Oth	ner Program Cost	ts			
Brush Collection Program \$2,957,733 25% \$739,433 75% \$2,218,300 Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - - Annual Other Program Costs \$3,911,248 \$771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$4.13 \$3.30 \$4.40 Residential Solid Waste, FY2009/10		Total Cost				Allocation		
Household Hazardous Waste 128,515 25% 32,129 75% 96,386 CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) **** - - - - - Annual Other Program Costs \$3,911,248 \$ 771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10	Brush Collection Program							
CIP - Transfer Station Expansion 825,000 0% - 100% 825,000 Operating Reserve (90 days) ****								
Operating Reserve (90 days) **** - - - Annual Other Program Costs \$3,911,248 \$ 771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10 \$14,668,163 \$ 3.20 \$ 3.30 \$ 3.30		-		- , -				
Annual Other Program Costs \$3,911,248 \$ 771,562 \$3,139,686 Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10 \$14,668,163 \$ 3.30 \$ 3.30 \$ 3.30	·	_		_		_		
Monthly Other Program Costs Per Unit \$ 4.13 \$ 3.30 \$ 4.40 Residential Solid Waste, FY2009/10 \$14,668,163		\$3.911.248		\$ 771.562		\$3.139.686		
Residential Solid Waste, FY2009/10 \$14,668,163	<u>~</u>			·				
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	Residential Solid Waste, FY2009/10	\$14,668,163						
run Cost per Unit 5 15.47	Full Cost per Unit	\$ 15.47						

^{****} A sufficient cash balance existed to provide 90 days' operating reserves so an additional amount was not added.

SOURCE: SmartStream Monthly Expenditure reports, Payroll Expenditure and Position Control reports, Fleet Equipment Cost Information reports, and Maintenance & Operations charges.

The Public Works analysis in the August 30, 2010, Council Report also included rates quoted by three of the four vendors listed on the Town's website. To verify the stated rate information, auditors obtained quotes for monthly service costs from all four vendors, as shown in Table 5.

Table 5. Private Vendor Rates for a Town of Paradise Valley Residence

Company	Approx. Base fee	Recycle fee (optional)	Miscellaneous fees ¹	Estimated total monthly fees
Allied Waste/Republic Services ²	\$29	\$5	\$6	\$40
Area Disposal ²	\$27	\$11	included	\$38
Scott Waste Services ³	\$60	included	none	\$60
Waste Management ²	\$33	\$10	included	\$43

- 1 Miscellaneous fees include environmental fee, fuel surcharge, etc.
- 2 Base monthly fee includes solid waste collection only, 2 times per week.
- 3 Base monthly fee includes 1 solid waste and 1 recycle collection per week.

SOURCE: Auditor calls to vendors listed on the Town of Paradise Valley website.

Unlike the City of Scottsdale's Residential Solid Waste services, three of these vendors stated they do not offer green waste or bulk waste collection services. The fourth, Scott Waste Services, stated bulk waste pick-up is offered one time per year.

Because the Town does not provide any related ancillary services, such as billing or collection, these private vendor fees can be compared to the City of Scottsdale's total monthly residential fee of \$16.00.2 And they can also be compared to the \$15.47 unit cost per month determined by the independent cost analysis shown in Table 4.

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² The City of Scottsdale's Solid Waste department operates as an enterprise; therefore, the City's financial policies require it to set its rates to recover all direct, indirect and overhead costs. Monthly residential solid waste charges are \$15.96 plus a state recycling fee of \$0.04 per account.

3. Other observations

During the course of this analysis, we noted areas that merit further review. These include:

- **Vehicle fleet** management should evaluate the number of "backup" trucks currently maintained in the Residential Solid Waste vehicle fleet. Besides 3 trucks for replacement drivers, there are an additional 4 trucks available per day in the fleet. Related, we are currently auditing the City's vehicle fleet costs and department charges. In particular, we will be analyzing if vehicle replacement charges are set at an appropriate level.
- **Alley maintenance** management should evaluate whether a lower level of alley maintenance would be appropriate to reduce these costs. As shown in Table 4, alley maintenance costs increase the Southern area's average residential solid waste costs by \$1.53 per month.
- **Citywide overhead charges** –an audit of these costs is currently planned for the FY 2011/12 Audit Plan. Excluding charges for utility billing, payment processing and collection services, city overhead increases a residential solid waste bill by an average of \$.73 per month.
- **Number of drivers** while this analysis includes costs of the 31 drivers used in FY 2009/10, the Residential Solid Waste program now operates with 30 drivers.

City Auditor's Office

4021 N. 75th St., Suite 105 Scottsdale, Arizona 85251 (480) 312-7756 http://www.ScottsdaleAZ.gov Search: "auditor"

Audit Committee

Councilman Robert Littlefield, Chairman Councilwoman Lisa Borowsky Vice Mayor Suzanne Klapp

City Auditor's Office

Kyla Anderson, Senior Auditor Joyce Gilbride, Assistant City Auditor Lisa Gurtler, Assistant City Auditor Erika Keel, Auditor Joanna Munar, Senior Auditor Lee Pettit, Senior Auditor Sharron Walker, City Auditor



The City Auditor's Office provides independent research, analysis, consultation, and educational services to promote operational efficiency, effectiveness, accountability, and integrity in response to City needs.