To:

The Honorable Mayor and Members of the City Council

From:

Charles D. Herbertson, Public Works Director and City Engineer

AMENDED CITY ENGINEER'S REPORT FOR REFUSE AND RECYCLING USER'S SERVICES CHARGES BEGINNING FISCAL YEAR 2017 -2018 THROUNG FISCAL YEAR 2019 - 2020

5/23/2017

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RCE 46658

**Public Works Director and City Engineer** 



## **PURPOSE**

The purpose of this transmittal is to summarize the utility's amended findings of the Refuse Rate Study that NBS performed for Culver City's Refuse Utility (City or Utility). NBS' findings focus on: (1) equitably allocating utility costs to the various customer classes and types of services, (2) adjusting various charges and rates in a manner that meets Prop 218 requirements, and (3) provides a plan that is financially sustainable.

Projected Utility revenue requirements and rate adjustments cover the next three fiscal years (2017/2018 through 2019 /2020). Recommended rate adjustments for FY 2017/2018 through FY 2019/2020 retain the City's current rate structure. Newer objectives also included in this amended report more accurately reflect actual operational and disposal costs.

## **OVERVIEW**

A comprehensive refuse rate study typically includes the following three components based on general utility industry standard cost of service methodologies: (1) Financial Plan/Revenue Requirements, (2) Cost of Service Analysis, (3) Rate Design Analysis.

## FINANCIAL PLAN AND REVENUE REQUIREMENTS ANALYSIS

**Projected Revenue Requirements and Rate Increases** – In FY 2014 – 2015, NBS prepared a detailed five year financial plan indicating that the Utility would need at least a three percent rate increase in each of the next five years (2015/16 through 2019/20). However, this plan did not fully fund capital improvements at the transfer station, was developed prior to the enactment of AB 1826 and was developed prior to the increased PERS payment adjustments requirements for municipalities. Table 1 shows a detailed financial plan through FY 2019/20 indicating that the Utility would need at least a seven percent increase in each of the next three years.

Table 1: Three Year Revenue Requirements and Rate Increases

Summary of Sources and Uses of	ear Revenue Requ Budget	mements and K	Projected	
Funds				<u> </u>
and Net Revenue Requirements	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Sources of Refuse Utility Funds		T	T	T
Rate Revenue Under Prevailing Rates	\$11,488,466	\$11,488,466	11,488,466	11,488,466
Interest Earnings (from Reserves)	114,231	114,231	114,231	114,231
Other Non-Rate Revenues & Grants	933,678	933,678	933,678	933,678
Total Sources of Funds	\$12,536,375	\$12,536,375	\$12,536,375	\$12,536,375
Uses of Refuse Utility Funds				
Refuse Collection - Personnel Services	\$4,269,425	4,562,060	\$4,609,334	\$4,787,494
" - Maint. & Oper	\$4,311,135	5,496,530	5,346,335	5,505,727
" - Capital Outlay				
Subtotal: Refuse Collection	\$8,580,560	\$10,058,590	\$9,955,669	\$10,293,221
Transfer Station - Personnel Services	\$909,711	934,708	\$962,749	\$991,635
" - Maint. & Oper	3,838,653	3,812,031	3,514,391	3,619,823
" " - Debt services	170,295	101,900	104,958	108,105
Subtotal: Transfer Station	\$4,918,659	\$4,848,639	\$4,582,098	\$4,719,563
Recycling - Personnel Services	\$234,432	241,358	248,599	\$256,587
" - Maint. & Oper.	15,248	52,735	54,317	55,416
Subtotal: Recycling	\$249,680	\$294,093	\$302,916	\$312,033
Total Uses of Refuse Disposal Funds	\$13,748,899	\$15,201,322	\$14,840,683	\$15,324,817
Surplus (Deficiency) before				
Rate Increase	(1,212,524)	(2,664,947)	(2,304,308)	(2,788,442)
Additional Revenue from Rate Increases		877,546	938,974	1,004,702
Total Rate Revenue –				
Including Rate Increases		\$13,413,921	\$14,352,895	\$15,357,597
Surplus (Deficiency) after Rate Increase	(\$1,212,524)	(\$1,787,401)	(\$487,788)	\$32,780
Projected Annual Rate Increase	0.00%	7.00%	7.00%	7.00%

Cash Management and Target Reserve Fund Balances - The Utility is projected to begin Fiscal Year 2017/18 with a total cash balance of \$ 3,108,492. Table 2 summarizes the cash balances for the operating and reserve funds. The reserve was drawn down in FY 2016/2017 due to transfer station improvements, AB 1826 requirement costs, purchase of a hoist for fleet maintenance refuse vehicle repair operations and purchase of a Caterpillar loader for the transfer station.

**Table 2 Summary of Projected Three Year Reserves** 

SUMMARY OF RESERVE FUNDS	Estimate FY 16/17	FY 17/18	Projected FY 18/19	FY 19/20
Total Beginning Cash (1)	\$3,108,492	\$1,895,968	\$108,567	(379,221)
Operating Reserve				Antion Surpring
Beginning Reserve Balance (2)	\$3,108,492	\$1,895,968	\$ 108,567	(379,221)
Plus: Net Cash Flow		***************************************		
(After Rate Increases)	(1,212,524)	(1,787,401)	(487,788)	\$ 32,780
Less: Transfer Out to Capital	***************************************			
Replacement Reserve	0	0		0

Cost of Service Analysis – The purpose of the cost of service analysis is to equitably allocate the refuse utility costs, or the net revenue required from refuse rates, to each customer class. This means that the City is obligated to fairly allocate refuse program costs to the three customer classes (refuse, commercial and drop-box services). The cost of service analysis includes two primary steps:

- 1. Classifying various expenditures to one of several types of costs:
  - Collection System related costs
  - Transfer Station related costs
  - Disposal Related Costs
- 2. Allocating Costs to customer classes based on specific allocation factors:
  - Collection costs are allocated based on a detailed analysis of staffing costs and by subdividing these costs into residential vs: commercial programs. (roll-off/drop box costs are treated as a separate collection program)
  - Transfer station costs are allocated based on total tonnages of materials handled by customer class (residential, commercial, and roll-off/drop box)
  - Disposal costs are allocated based on the tonnages of materials handled at the transfer station.

This analysis produced the cost allocations for each customer class for FY 17/18 as shown in Table 3. Table 3 indicates that \$ 15,201,322 million should be recovered through refuse rates.

Table 3: Revenue Requirements by Customer Class for FY 17/18

Summary of Cost Allocations to Customer Classes					
Cost Categories	Residential	Commercial	Drop Box	Total	
Collection Costs	\$ 3,209,331	\$ 5,486,923	\$ 1,656,429	\$ 10,352,683	
Transfer Station	\$ 914,078	\$ 1,562,778	\$ 471,783	\$ 2,948,639	
Disposal	\$ 589,000	\$ 1,007,000	\$ 304,000	\$ 1,900,000	
Total Cost Of	\$ 4,712,409	\$ 8,056,701	\$ 2,432,212	\$ 15,201,322	
Service	·				
Percent of Total	31%	53%	16%	100%	

## **RATE DESIGN AND PROPOSED RATES**

The purpose of the rate design analysis is to determine how to collect rate revenue (as shown in Table 3) from the individual rates for specific services within each customer class. Accurately allocating these amounts of rate revenue improves the overall equity among customer classes. The required rate increase is seven percent per year for the next three fiscal years. Table 4 summarizes the current and proposed FY 2017/2018 through 2019/2020 refuse, recycling and organics collection rates and Table 5 summarizes the rate increase for drop box services.

These rates take into account increased costs for transportation and disposal of refuse; new costs associated with organics programs as required by AB 1826; a decrease in revenue due to lower monetary values of recyclable material; rising CalPers Funding requirements, new recycling programs to meet the 75% diversion goals as enacted by the State of California; and an increase in daily operational costs including vehicle purchases, fuel and equipment maintenance.

Based on the results of this amended report, staff recommends the City take the following actions:

- Adopt this rate analysis for the required three fiscal years FY 2017/2018 through FY 2019/2020 as the basis for adjustments to the City's current refuse rate
- Adopt and implement the proposed refuse rates shown below in Tables 4 and 5. This will
  necessitate a Prop 218 process to adopt the FY 2017/2018 through FY 2019/2020 rates.

Table 4: CURRENT AND PROPOSED RESIDENTIAL AND COMMERCIAL REFUSE RATES

Proposed Residential and Comm	<del>, , , , , , , , , , , , , , , , , , , </del>		<del></del>	· · · · · · · · · · · · · · · · · · ·			
Customer Class &	Current	Proposed	Proposed	Proposed	% Fact		
Level of Service	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	Each		
	Refuse Rates	Refuse Rates	Refuse Rates	Refuse Rates	Year		
	(\$/mo or lift)	(\$/mo. or lift)	(\$/mo. or lift)	(\$/mo. or lift)			
Residential Service							
Residential Automated Collections	\$ 31.38/mo	\$ 33.58/mo	\$ 35.93/mo	\$ 38.44/mo	7%		
Can Service – Commercial Extra	\$ 28.24/mo	\$30.22/mo	\$ 31.12/mo	\$ 32.06/mo	7%		
Auto Can- Refuse	\$ 15.00/mo	\$ 16.05/mo	\$16.53/mo	\$ 17.03/mo	7%		
		ial (Bin) Service					
Scheduled Commercial (Bin )Serv				т			
2-CY Scheduled Refuse ( 1x/week)	\$ 117.85/mo	\$ 126.10/mo	\$ 134.93/mo	\$ 144.37/mo	7%		
3-CY Scheduled Refuse (1x/week)	\$144.79/mo	\$ 154.93/mo	\$ 165.77/mo	\$ 177.87/mo	7%		
300g Schedule Refuse (1x/week)	\$144.79/mo	\$ 154.93/mo	\$ 165.77/mo	\$ 177.87/mo	7%		
Unscheduled/One-Time/On-Call	· · · · · · · · · · · · · · · · · · ·	<i>i</i>		_ ···_	r <del></del>		
2-CY Call/Extra Pickup-Refuse	\$ 28.69/lift	\$ 30.70/lift	\$ 32.85/lift	\$ 35.15/lift	7%		
3-CY Call/Extra Pickup-Refuse	\$ 43.05/lift	\$ 46.07/lift	\$ 49.29/lift	\$ 52.74/lift	7%		
2-CY Collection (On-call residential)	\$ 28.69/lift	\$ 30.70/lift	\$ 32.85/lift	\$ 35.15/lift	7%		
3-CY Collection Trash (residential)	\$ 43.05/lift	\$ 46.07/lift	\$ 49.29/lift	\$ 52.74/lift	7%		
<b>Organics Commercial (Bin) Servic</b>	е						
2-CY Scheduled Organics	\$ 69.26/mo	\$ 74.11/mo	\$ 79.30/mo	\$ 84.85/mo	7%		
3-CY Scheduled Organics	\$ 73.10/mo	\$ 78.22/mo	\$ 83.69/mo	\$ 89.55/mo	7%		
2-Cy Call Organics	\$ 15.02/lift	\$ 16.07/lift	\$ 17.20/lift	\$ 18.40/lift	7%		
3-CY Call Organics	\$ 17.05/lift	\$ 18.24/lift	\$ 19.52/lift	\$ 20.89/lift	7%		
Recycling Commercial (Bin) Servi	ce						
Can Service - Recycle	\$ 12.56/lift	\$ 13.44/lift	\$ 14.38/lift	\$ 15.39/lift	7%		
2-CY Scheduled Recycle	\$ 28.94/mo	\$ 30.97/mo	\$ 33.13/mo	\$ 35.45/mo	7%		
3-CY Scheduled Recycle	\$ 30.67/mo	\$ 32.82/mo	\$ 35.12/mo	\$ 37.58/mo	7%		
2-CY Call Recycle	\$ 6.61/lift	\$ 7.08/lift	\$ 7.57/lift	\$ 8.10/lift	7%		
3-CY Call Recycle	\$ 7.17/lift	\$ 7.67/lift	\$ 8.21/lift	\$ 8.78/lift	7%		
Waste -to- Energy Commercial (B	in) Service		<del></del>				
3-CY Scheduled Waste-to-Energy	\$ 155.00/mo	\$ 165.85/mo	\$ 177.46/mo	\$ 189.88/mo	7%		
2-CY Call Waste-to-Energy	\$ 30.82/lift	\$ 32.98/lift	\$ 35.29/lift	\$ 37.76/lift	7%		
3-CY Call Waste-to-Energy	\$ 46.25/lift	\$ 49.49/lift	\$ 52.95/lift	\$ 56.66/lift	7%		
Miscellaneous Services	<u> </u>	<u> </u>		,			
Bin Rental - 2 & 3 CY Bins	\$ 48.00/mo	\$ 51.36/mo	\$ 54.96/mo	\$ 58.80/mo	7%		
Bin Pull- out Scheduled	\$ 32.72/mo	\$ 35.01/mo	\$ 37.46/mo	\$ 40.08/mo	7%		
Bin Pull-out On-Call	\$ 6.88/bin	\$ 7.36/bin	\$ 7.88/bin	\$ 8.43/bin	7%		
Bulk Pick-up	\$ 42.36/bin	\$ 45.33/bin	\$ 48.50/bin	\$ 51.89/bin	7%		
Bulk Pick-up Additional	\$ 21.18/bin	\$ 22.66/bin	\$ 24.25/bin	\$ 25.95/bin	7%		
Bin Lock Set	\$ 9.91/mo	\$ 10.61/mo	\$ 11.35/mo	\$ 12.14/mo	7%		
2-CY Temp Delivery/Removal	\$ 8.58/lift	\$ 9.18/lift	\$ 9.82/lift	\$ 10.51/lift	7%		
3-CY Temp Delivery/Removal	\$ 8.58/lift	\$ 9.18/lift	\$ 9.82/lift	\$ 10.51/lift	7%		

TABLE 5: CURRENT AND PROPOSED DROP BOX REFUSE RATE

Proposed	Drop Box Refuse S		<del>,</del>	-Time Rates	_
Drop Box Service	Current	Proposed	Proposed	Proposed	%
Туре	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	Each
	<b>Drop Box Rates</b>	Drop Box Rates	Drop Box Rates	Drop Box	Year
				Rate	
<b>Drop Box Collection Only</b>	(Empties)				
DB 8-CY Empty	\$ 167.23/empty	\$ 178.94/empty	\$ 191.46/empty	\$ 204.86/empty	7%
DB 30-CY Empty	\$ 167.23/empty	\$ 178.94/empty	\$ 191.46/empty	\$ 204.86/empty	7%
DB 40-CY Empty	\$ 167.23/empty	\$ 178.94/empty	\$ 191.46/empty	\$ 204.86/empty	7%
DB 50 -CY Empty	\$ 167.23/empty	\$ 178.94/empty	\$ 191.46/empty	\$ 204.86/empty	7%
DB Compactor Empty	\$ 167.23/empty	\$ 178.94/empty	\$ 191.46/empty	\$ 204.86/empty	7%
<b>Drop Box Tonnage Only</b>					
Tonnage Refuse	\$ 83.31/ton	\$ 89.14/ton	\$ 95.38/ton	\$ 102.06/ton	7%
Tonnage Metal	\$ 22.17/ton	\$ 23.72/ton	\$ 25.38/ton	\$ 27.16/ton	
Tonnage	\$ 65.05	\$ 69.60	\$ 74.48	\$ 79.69	7%
Asphalt/Concrete					
Tonnage Wood	\$ 90.91	\$ 97.27	\$ 104.08/ton	\$111.37/ton	7%
Tonnage Other Inert	\$ 65.05	\$ 69.60	\$ 74.48	\$ 79.69	7%
Tonnage Mixed C&D	\$ 90.91	\$ 97.27	\$ 104.08/ton	\$111.37/ton	7%
Tonnage Organics	\$ 70.45/ton	\$ 75.39/ton	\$ 80.67/ton	\$ 86.32/ton	7%
Tonnage Waste-to-	\$ 104.60/ton	\$ 111.93/ton	\$ 119.77/ton	\$ 128.15/ton	7%
Energy	, ,				
Miscellaneous Fees and	d Charge				
Compactor Restaurants	\$ 151.41/mo	\$ 162.01/mo	\$ 173.36/mo	\$ 185.50/mo	7%
DB Monthly Rental	\$ 147.61/mo	\$ 157.94/mo	\$ 169.00/mo	\$ 180.83/mo	7%
DB Respot	\$ 39.49/empty	\$ 40.11/empty	\$ 42.92/empty	\$ 45.93/empty	7%
Compactor Non	\$ 53.56/mo	\$ 57.31/mo	\$ 61.32/mo	\$ 65.61/mo	7%
Restaurant				¥	
Communal Compactor	\$ 92.70/mo	\$ 99.19/mo	\$ 106.13/mo	\$ 113.56/mo	7%
Housekeeping		·			
Compactor	\$ 82.40/mo	\$ 88.17/mo	\$ 94.34/mo	\$ 100.94/mo	7%
Administrative Fee					
Additional Penalty Cha		exceeding 11 ton			
Tonnage - Refuse	\$ 124.97/ton	\$ 133.62/ton	\$ 143.08/ton	\$ 153.09/ton	7%
Tonnage – Metal	\$ 33.25/ton	\$ 35.58/ton	\$ 38.07/ton	\$ 40.73/ton	7%
Tonnage - Asphalt	\$ 97.58/ton	\$ 104.41/ton	\$ 111.72/ton	\$ 199.54/ton	7%
Tonnage - Wood	\$ 136.36/ton	\$ 145.91/ton	\$ 156.12/ton	\$ 167.05/ton	7%
Tonnage - Inert	\$ 97.58/ton	\$ 104.41/ton	\$ 111.72/ton	\$ 199.54/ton	7%
Tonnage – Mixed C&D	\$ 136.36/ton	\$ 145.91/ton	\$ 156.12/ton	\$ 167.05/ton	7%
Tonnage - Organics	\$ 105.69/ton	\$ 113.09/ton	\$ 121.00/ton	\$ 129.47/ton	7%
Tonnage - WTE	\$ 156.91/ton	\$ 167.89/ton	\$ 179.65/ton	\$ 192.22/ton	7%