



City of Cincinnati

August 3, 2009

To: Health, Environment and Education Committee

From: Milton Dohoney, Jr., City Manager

RE: Recycling Program Enhancements/Cost Savings

Reference Document #200801027

REPORT, dated 9/4/2008, submitted by Milton Dohoney, Jr., City Manager, regarding policies and procedures to maximize city recycling efforts. (SEE DOCUMENT #2008000634 FOR ADOPTED MOTION)

Background

As requested by Council, the Office of Environmental Quality (OEQ) has engaged in an extensive effort to develop an enhanced curbside recycling program that would increase citizen participation and landfill diversion rates while minimizing overall costs to the City government. Request for Proposals (RFP) were issued on December 10, 2008 for recycling collection and processing services and for larger wheeled recycling carts. Bids closed on March 20, 2009. OEQ also issued an RFP for companies that could provide recycling participation incentive programs to reward citizens for participating in the recycling program. OEQ has evaluated the proposals and engaged in extensive negotiations with those who responded to secure the best possible package of service enhancements at the lowest possible cost to the City. The City has entered into a new recycling collection and processing contract with Rumpke of Ohio, Inc. This report recommends entering into a contract for wheeled recycling carts and a recycling participation incentive program.

RFP Responses

OEQ received proposals from four companies interested in providing wheeled recycling carts and a recycling participation incentive program. The proposals came from: Cascade, Toter, Rehrig Pacific, and Otto. The proposal from Cascade was determined to offer the best combination of price and features.

Contract Options

The draft recycling contracts provide the City with two primary options on how to proceed with its recycling program. The contracts provide for:

Option 1 - A “status quo” option, which essentially continues the existing curbside recycling program with no major enhancements. Residents who request a bin would receive an 18 gallon bin. Curbside collection would occur weekly. While not recommended at this time, a bi-weekly option

exists.

Option 2 - The City can enhance its program by providing a 64-gallon wheeled cart to all eligible households. On request, a household can substitute a larger or smaller container. All containers would be equipped with a radio frequency identification (RFID) tag which identifies the container as belonging to a particular address, and all trucks would be equipped with an RFID reader, so the City would know which addresses are or are not participating, and would know when a container is at the wrong address. An incentive program is included, under which residents would earn points by participating in the recycling program, and these points would be redeemable for discounts or free merchandise from area retailers. The wheeled carts would be acquired through a lease/purchase agreement.

Financial Discussion

Option 1 (status quo) would cost the City approximately \$2.3 million in 2009, which matches the current 2009 recycling budget, as adjusted by the mid-year budget adjustment ordinance.

- Costs for 2010 are projected at \$2,367,706, which is \$40,000 more than the continuation target budget for 2010.
- Costs under the status quo program are expected to rise slightly over the course of this contract due to cost of living increases.
- A detailed financial analysis and cost projection for the status quo program is attached.

Option 2 (recycling program enhancements) – This option adds costs to acquire, distribute, and maintain carts, as well as to create and operate the recycling incentive program. However, it significantly increases the diversion of waste from the trash program to the recycling program which decreases the City’s landfill disposal costs and increases the City’s revenue sharing payments when the recycling markets recover. Expenses for collection and hauling of trash would be reduced by consolidating the current 36 daily trash routes into 32 routes, reducing staffing needs by 8 positions and reducing the vehicle fleet by 4 trucks. In addition, recycling incentive payments from the county may increase and Energy Efficiency and Conservation Block Grant (EECBG) funds will be available to offset a portion of the implementation costs. The detailed financial analysis for option 2 is attached. The financial analysis shows that:

- The enhanced program would cost \$20,000 less than the status quo program for the remainder of 2009.
- The enhanced program would cost \$240,000 less than the status quo program in 2010, and \$200,000 less than the continuation budget target for 2010.
- After 2010, the cost of the program is dependent on the recycling markets, and OEQ has analyzed three scenarios: conservative, worst case, and best case.
- Based on conservative assumptions, the enhanced program would cost \$29,000 less than the status quo program in 2011.
- Based on conservative assumptions, the net present value cost of the enhanced program over the 10 year life of the agreement is \$570,000 more than the status quo program.

Environmental Discussion

Option 1 - The curbside recycling program diverted approximately 11,800 tons of material from the

landfill during the recently completed contract year. Converting this material from waste to raw materials yields a number of environmental benefits. It conserves landfill space, conserves natural resources, reduces the use of fossil fuels (because it takes less energy to make products from recycled feedstocks than it does to make them from raw materials), and reduces greenhouse gas emissions (due to the reduced use of fossil fuels). While it may be possible to achieve some increases in recycling rates under the status quo program, this program has been in place for 20 years with only small fluctuations in the amount of material captured. It is unrealistic to expect significant volume increases from the recycling program without significant program enhancements.

Option 2 – The enhanced program would increase the volume of material recycled by approximately 300%, to 32,112 tons per year. This would triple all of the benefits outlined above. The energy savings would be equivalent to saving 9.5 million gallons of gasoline per year. The greenhouse gas reductions would be equivalent to taking 15,264 cars off the road for a year.

Job Creation

Increasing recycling creates jobs. The proposed enhancements would move more than 20,000 tons per year of material from the landfill to productive uses. Landfill disposal of 20,000 tons per year of material creates only 2 jobs, while recycling that material creates 20 jobs sorting and processing the material, and an additional 36 jobs at recycling-based manufacturing facilities.

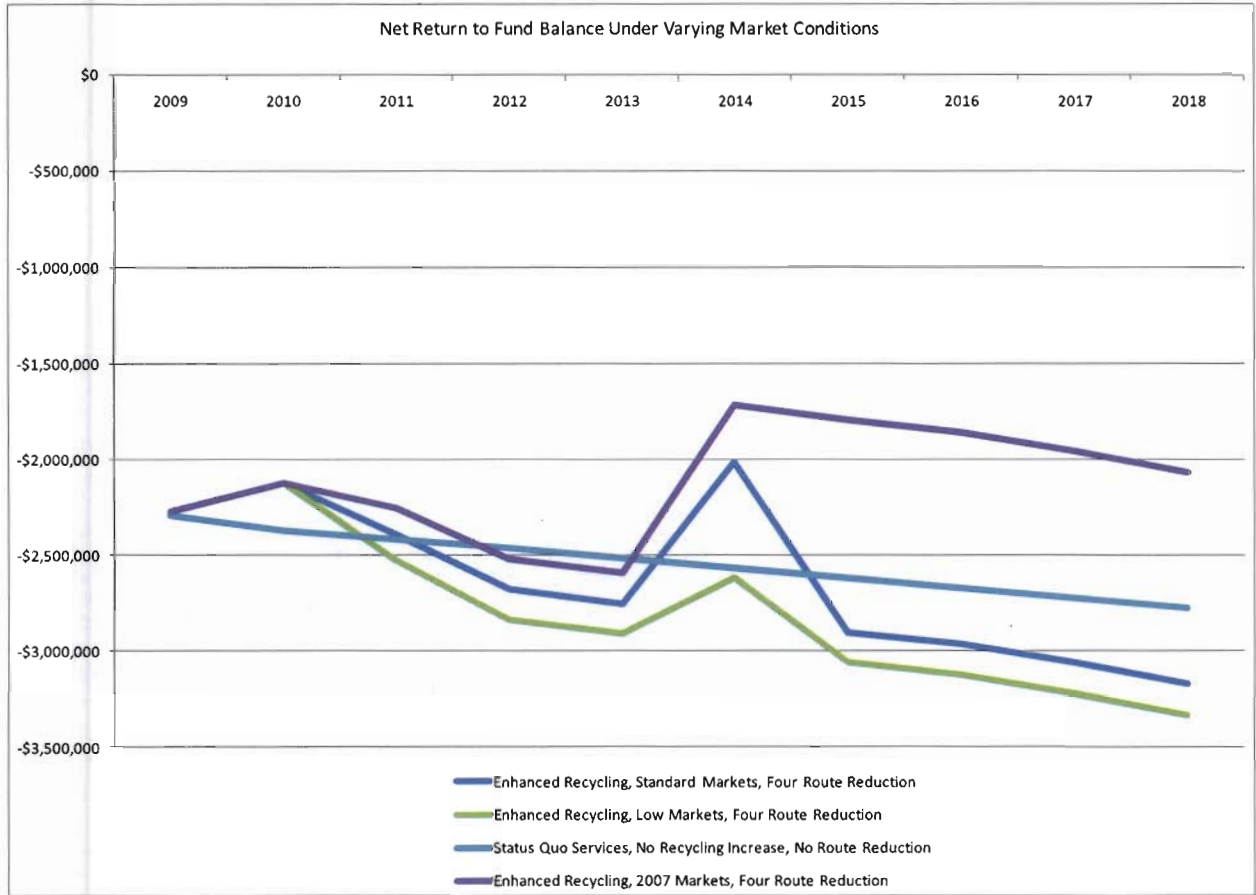
Conclusion

The Administration was directed to develop the elements of an enhanced curbside recycling program. It has done that and the options are being presented to Council for its consideration. If this report is approved, the Administration will promptly enter into the proposed Cascade contract, will enter into a lease/purchase agreement to acquire wheeled recycling carts, and will make all other arrangements necessary to implement the enhanced recycling program.

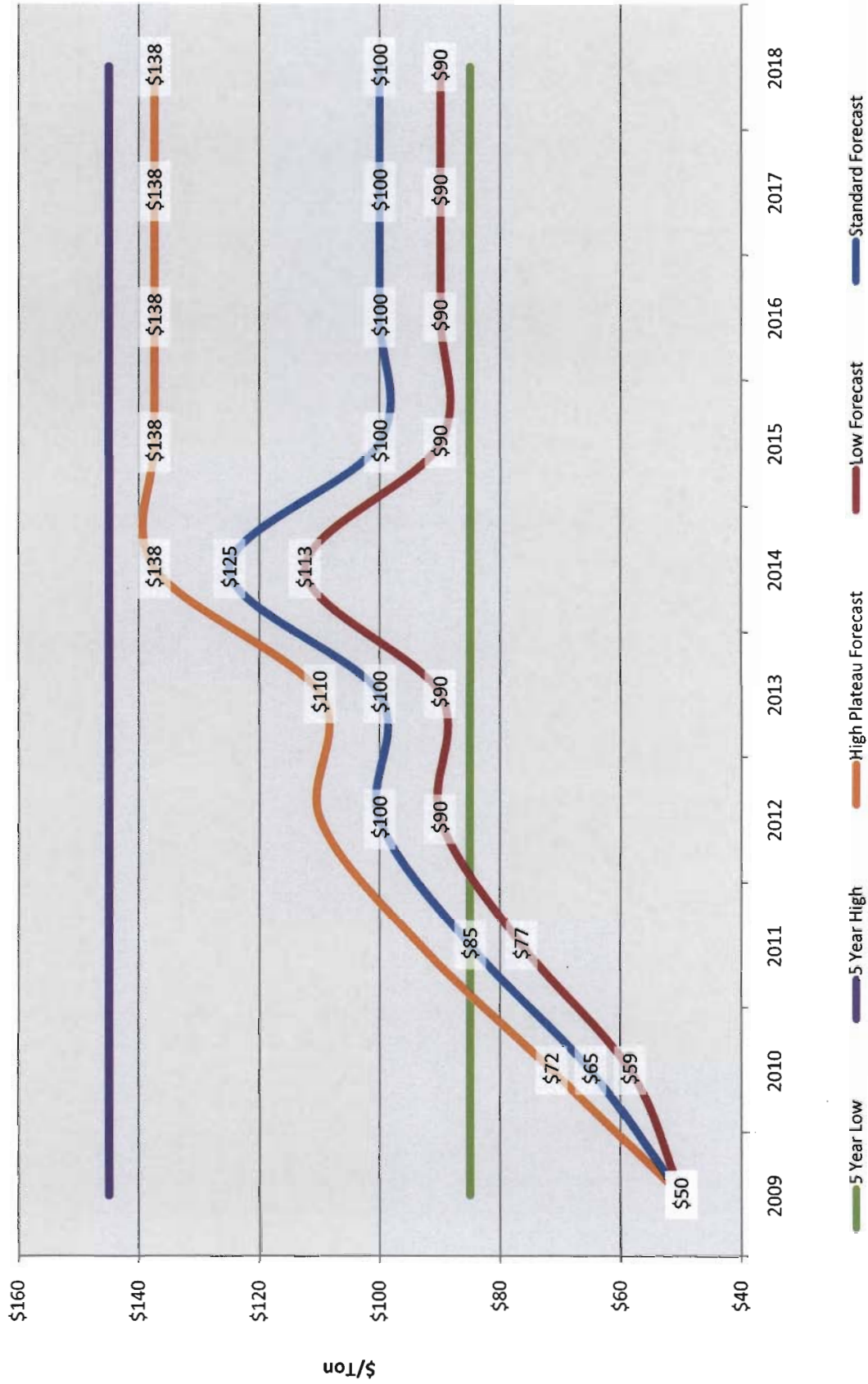
cc: Larry Falkin, Office of Environmental Quality

Attachment

Chart of Results for
 Attachment A "Enterprise Fund Bottom Line" Annual Impact
 July 28, 2009 Version



AVERAGE MRF PRODUCT REVENUE PER TON



ATTACHMENT A - SUMMARY CHARTS FOR ENTERPRISE FUND FORECAST

Phased Implementation Forecast

Scenario A: Enhanced Recycling,
Standard Markets, Four Route
Reduction

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	NPV
RETURN TO FUND BALANCE											
Recycling Collection Services	\$ (2,330,040)	\$ (3,173,370)	\$ (3,201,120)	\$ (3,260,400)	\$ (3,331,536)	\$ (3,390,816)	\$ (3,461,952)	\$ (3,533,088)	\$ (3,604,224)	\$ (3,675,360)	\$ (25,772,337)
Fuel Escalator	\$ 30,786	\$ 109,685	\$ 61,974	\$ 31,571	\$ (3,847)	\$ (3,847)	\$ (93,087)	\$ (148,797)	\$ (213,259)	\$ (287,668)	\$ (328,792)
Hauler Incentive Payment	\$ -	\$ (180,858)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (1,326,333)
Recycling Cart Capital Amortization	\$ -	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (3,213,763)
Cart Maintenance and Participation Data	\$ (10,083)	\$ (234,649)	\$ (246,012)	\$ (247,988)	\$ (249,964)	\$ (251,940)	\$ (252,928)	\$ (254,904)	\$ (256,880)	\$ (258,856)	\$ (1,746,748)
RecycleBank Recycling Rewards System	\$ (5,375)	\$ (292,823)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (278,337)	\$ (278,337)	\$ (2,056,930)
Revenue Share/Volume Incentive from MRI	\$ 1,211	\$ 126,168	\$ 288,990	\$ 529,815	\$ 529,815	\$ 1,332,565	\$ 529,815	\$ 529,815	\$ 529,815	\$ 529,815	\$ 3,722,198
Avoided Landfill Disposal Costs	\$ 42,351	\$ 581,395	\$ 608,673	\$ 626,142	\$ 644,134	\$ 662,667	\$ 681,755	\$ 701,416	\$ 721,667	\$ 742,525	\$ 4,615,053
EECBG 2009/2010/2011 Contribution	\$ -	\$ 450,000	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 674,967
Refuse Collection Cost Reduction	\$ -	\$ 951,364	\$ 760,464	\$ 603,028	\$ 621,119	\$ 639,753	\$ 658,945	\$ 678,714	\$ 699,075	\$ 720,047	\$ 4,928,485
TOTAL RETURN	\$ (2,271,151)	\$ (2,125,116)	\$ (2,385,055)	\$ (2,675,857)	\$ (2,748,303)	\$ (2,010,872)	\$ (2,895,476)	\$ (2,959,378)	\$ (3,056,340)	\$ (3,162,031)	\$ (20,504,200)
DEDUCT CAPITAL UTILIZATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET RETURN TO FUND BALANCE	\$ (2,271,151)	\$ (2,125,116)	\$ (2,385,055)	\$ (2,675,857)	\$ (2,748,303)	\$ (2,010,872)	\$ (2,895,476)	\$ (2,959,378)	\$ (3,056,340)	\$ (3,162,031)	\$ (20,504,200)

Scenario E: Enhanced Recycling, Low Markets,
Four Route Reduction

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	NPV
RETURN TO FUND BALANCE											
Recycling Collection Services	\$ (2,330,040)	\$ (3,173,370)	\$ (3,201,120)	\$ (3,260,400)	\$ (3,331,536)	\$ (3,390,816)	\$ (3,461,952)	\$ (3,533,088)	\$ (3,604,224)	\$ (3,675,360)	\$ (25,772,337)
Fuel Escalator	\$ 30,786	\$ 109,685	\$ 61,974	\$ 31,571	\$ (3,847)	\$ (3,847)	\$ (93,087)	\$ (148,797)	\$ (213,259)	\$ (287,668)	\$ (328,792)
Hauler Incentive Payment	\$ -	\$ (180,858)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (1,326,333)
Recycling Cart Capital Amortization	\$ -	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (3,213,763)
Cart Maintenance and Participation Data	\$ (10,083)	\$ (234,649)	\$ (246,012)	\$ (247,988)	\$ (249,964)	\$ (251,940)	\$ (252,928)	\$ (254,904)	\$ (256,880)	\$ (258,856)	\$ (1,746,748)
RecycleBank Recycling Rewards System	\$ (5,375)	\$ (292,823)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (278,337)	\$ (278,337)	\$ (278,337)	\$ (2,056,930)
Revenue Share/Volume Incentive from MRI	\$ 1,211	\$ 126,168	\$ 152,523	\$ 369,265	\$ 369,265	\$ 730,503	\$ 369,265	\$ 369,265	\$ 369,265	\$ 369,265	\$ 2,434,535
Avoided Landfill Disposal Costs	\$ 42,351	\$ 581,395	\$ 608,673	\$ 626,142	\$ 644,134	\$ 662,667	\$ 681,755	\$ 701,416	\$ 721,667	\$ 742,525	\$ 4,615,053
EECBG 2009/2010 Contribution	\$ -	\$ 450,000	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 674,967
Refuse Collection Cost Reduction	\$ -	\$ 951,364	\$ 760,464	\$ 603,028	\$ 621,119	\$ 639,753	\$ 658,945	\$ 678,714	\$ 699,075	\$ 720,047	\$ 4,928,485
TOTAL RETURN	\$ (2,271,151)	\$ (2,125,116)	\$ (2,521,523)	\$ (2,836,407)	\$ (2,908,853)	\$ (2,612,934)	\$ (3,056,026)	\$ (3,119,928)	\$ (3,216,890)	\$ (3,322,581)	\$ (21,791,862)
DEDUCT CAPITAL UTILIZATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET RETURN TO FUND BALANCE	\$ (2,271,151)	\$ (2,125,116)	\$ (2,521,523)	\$ (2,836,407)	\$ (2,908,853)	\$ (2,612,934)	\$ (3,056,026)	\$ (3,119,928)	\$ (3,216,890)	\$ (3,322,581)	\$ (21,791,862)

ATTACHMENT B-2 2010 MONTH BY MONTH BUDGET FORECAST PHASED IN CINCINNATI RECYCLING EXPANSION

	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	2010 TOTAL
Number of Households													
Old Contract + Extension	41,500	5,200	5,200	5,200	5,200	5,200	98,800	98,800	98,800	98,800	98,800	98,800	98,800
Status Quo Program	62,500	98,800	98,800	98,800	98,800	98,800	98,800	98,800	98,800	98,800	98,800	98,800	98,800
New Program	104,000	104,000	104,000	104,000	104,000	104,000	98,800	98,800	98,800	98,800	98,800	98,800	98,800
Total	208,000	208,000	208,000	208,000	208,000	208,000	208,000	208,000	208,000	208,000	208,000	208,000	208,000
GENERATION RATES AND TONNAGE													
Lbs HH Old Contract-Status Quo	20	54	54	54	54	54	54	54	54	54	54	54	54
Lbs HH New Contract	2,108	2,676	2,676	2,676	2,676	2,676	2,676	2,676	2,676	2,676	2,676	2,676	2,676
Tons	2,108	4,784	7,459	10,135	12,811	15,487	18,163	20,839	23,514	26,190	28,866	31,542	31,542
Cumulative Tons/Year	36	36	36	32	32	32	32	32	32	32	32	32	32
Refuse Routes													
MONTHLY UNIT FEES													
Old Contract													
Extension													
Status Quo Program	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86	\$ 1.86
New Side Load Program	\$ 2.60	\$ 2.60	\$ 2.60	\$ 2.60	\$ 2.60	\$ 2.60	\$ 2.65	\$ 2.65	\$ 2.65	\$ 2.65	\$ 2.65	\$ 2.65	\$ 2.65
HAULER INCENTIVE PAYMENT						\$ 2,439	\$ 4,198	\$ 26,758	\$ 19,335	\$ 21,094	\$ 53,517	\$ 53,517	\$ 180,858
Diversion Rate									Not More Than				Total for 25,700 tons
<15%									14,999	\$0	\$0		\$0
>15% & < 20%									19,999	\$5	\$24,995		\$24,995
>20% & < 25%									24,999	\$10	\$49,990		\$49,990
>25% & < 30%									29,999	\$15	\$74,985		\$74,985
>30%										\$20			\$20
RECYCLERANK REWARDS SYSTEM-UNIT COST													
\$/HH/Month/Car	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10
\$/HH/Month/Bin	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
RecycleBank Per Unit Cost	\$6,719	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621	\$10,621
RECYCLING COLLECTION SERVICES													
Old Contract + Extension for Curbside	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
Old Contract Other Services (MF, DOs, Com)	\$ 77,190	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672	\$ 9,672
Status Quo Program	\$ 162,800	\$ 256,880	\$ 256,880	\$ 256,880	\$ 256,880	\$ 256,880	\$ 261,820	\$ 261,820	\$ 261,820	\$ 261,820	\$ 261,820	\$ 261,820	\$ 261,820
New Program	\$ 242,190	\$ 269,052	\$ 269,052	\$ 269,052	\$ 269,052	\$ 269,052	\$ 264,320	\$ 264,320	\$ 264,320	\$ 264,320	\$ 264,320	\$ 264,320	\$ 264,320
Total	\$ 584,680	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504	\$ 808,504
Fuel Escalator	\$ (2,964)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,964)
Status Quo Program	\$ (5,804)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)
New Program	\$ (8,768)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)	\$ (9,174)
Total	\$ (14,572)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)	\$ (18,348)
RECYCLING CARTS													
Status Quo Program	\$ -	\$ 462,028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New Program - Cart Capital Amortization	\$ 12,760	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172
New Program - Cart Maintenance/Participation Data	\$ 12,760	\$ 482,199	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172	\$ 20,172
Total	\$ 25,520	\$ 944,399	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344	\$ 40,344
MRF REVENUE SHARING/TONNAGE INCENTIVE													
Standard Market - New Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Low Market - New Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
High Market - New Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
High Plateau Market - New Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RecycleBank Rewards System Per Ton Cost	\$ -	\$ 462,028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OTHER CITY COSTS AND REVENUES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Proposed to be Paid from DPW Landfill Line Item	\$ (33,852)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)
Avoided Landfill Disposal Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ECEBG 2009 Contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Refuse Collection Cost Reduction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Budget Total - OEQ	\$ 252,901	\$ 752,698	\$ 290,670	\$ 290,670	\$ 290,670	\$ 290,670	\$ 285,938	\$ 285,938	\$ 285,938	\$ 285,938	\$ 285,938	\$ 285,938	\$ 285,938
Budget Total - DPW/Other	\$ (33,852)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)	\$ (49,777)
Combined Impact	\$ 219,049	\$ 702,921	\$ 240,894	\$ 240,894	\$ 240,894	\$ 240,894	\$ 236,162	\$ 236,162	\$ 236,162	\$ 236,162	\$ 236,162	\$ 236,162	\$ 236,162

Scenario F: Enhanced Recycling, 2007 Markets,
Four Route Reduction

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	NPV
RETURN TO FUND BALANCE											
Recycling Collection Services	\$ (2,330,040)	\$ (3,173,370)	\$ (3,201,120)	\$ (3,260,400)	\$ (3,331,536)	\$ (3,390,816)	\$ (3,461,952)	\$ (3,533,088)	\$ (3,604,224)	\$ (3,675,360)	\$ (25,772,337)
Fuel Escalator	\$ 30,786	\$ 109,685	\$ 61,974	\$ 31,571	\$ (3,847)	\$ (45,075)	\$ (93,087)	\$ (148,797)	\$ (213,259)	\$ (287,668)	\$ (328,792)
Hauler Incentive Payment	\$ -	\$ (180,858)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (192,170)	\$ (1,326,333)
Recycling Cart Capital Amortization	\$ -	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (462,028)	\$ (3,213,763)
Cart Maintenance and Participation Data	\$ (10,083)	\$ (234,649)	\$ (246,012)	\$ (247,988)	\$ (249,964)	\$ (251,940)	\$ (252,928)	\$ (254,904)	\$ (256,880)	\$ (258,856)	\$ (1,746,748)
RecycleBank Recycling Rewards System	\$ (5,375)	\$ (292,823)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (303,827)	\$ (2,056,930)
Revenue Share/Volume Incentive from MRI	\$ 1,211	\$ 126,168	\$ 425,458	\$ 690,365	\$ 690,365	\$ 690,365	\$ 690,365	\$ 690,365	\$ 690,365	\$ 690,365	\$ 7,377,156
Avoided Landfill Disposal Costs	\$ 42,351	\$ 581,395	\$ 608,673	\$ 626,142	\$ 644,134	\$ 662,667	\$ 681,755	\$ 701,416	\$ 721,667	\$ 742,525	\$ 4,615,053
EECBG 2009/2010 Contribution	\$ -	\$ 450,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 674,967
Refuse Collection Cost Reduction	\$ -	\$ 951,364	\$ 760,464	\$ 603,028	\$ 621,119	\$ 639,753	\$ 658,945	\$ 678,714	\$ 699,075	\$ 720,047	\$ 4,928,485
TOTAL RETURN	\$ (2,271,151)	\$ (2,125,116)	\$ (2,248,588)	\$ (2,515,307)	\$ (2,587,753)	\$ (1,709,840)	\$ (1,791,895)	\$ (1,855,597)	\$ (1,952,558)	\$ (2,058,249)	\$ (16,849,241)
DEDUCT CAPITAL UTILIZATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET RETURN TO FUND BALANCE	\$ (2,271,151)	\$ (2,125,116)	\$ (2,248,588)	\$ (2,515,307)	\$ (2,587,753)	\$ (1,709,840)	\$ (1,791,895)	\$ (1,855,597)	\$ (1,952,558)	\$ (2,058,249)	\$ (16,849,241)

Scenario G: Status Quo Services, No Recycling
Increase, No Route Reduction

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	NPV
RETURN TO FUND BALANCE											
Recycling Collection Services	\$ (2,293,040)	\$ (2,367,706)	\$ (2,415,060)	\$ (2,463,361)	\$ (2,512,628)	\$ (2,562,881)	\$ (2,614,138)	\$ (2,666,421)	\$ (2,719,749)	\$ (2,774,144)	\$ (19,941,160)
Fuel Escalator	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hauler Incentive Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recycling Cart Capital Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cart Maintenance and Participation Data	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RecycleBank Recycling Rewards System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue Share/Volume Incentive from MRI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Avoided Landfill Disposal Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EECBG 2009/2010 Contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Refuse Collection Cost Reduction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL RETURN	\$ (2,293,040)	\$ (2,367,706)	\$ (2,415,060)	\$ (2,463,361)	\$ (2,512,628)	\$ (2,562,881)	\$ (2,614,138)	\$ (2,666,421)	\$ (2,719,749)	\$ (2,774,144)	\$ (19,941,160)
DEDUCT CAPITAL UTILIZATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET RETURN TO FUND BALANCE	\$ (2,293,040)	\$ (2,367,706)	\$ (2,415,060)	\$ (2,463,361)	\$ (2,512,628)	\$ (2,562,881)	\$ (2,614,138)	\$ (2,666,421)	\$ (2,719,749)	\$ (2,774,144)	\$ (19,941,160)