



# Comprehensive Solid Waste Rate Study Final Report



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Solid Waste and Recycling Division  
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09218272.00 | August 27, 2019

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August 27, 2019

Mr. Mike Mundell  
Solid Waste Manager / Public Works  
City of New Braunfels  
424 S Castell Ave  
New Braunfels, Texas 78130

Subject: Comprehensive Solid Waste Rate Study

Dear Mr. Mundell:

SCS Engineers Management Services has completed a Comprehensive Solid Waste Rate Study for the City of New Braunfels' Solid Waste and Recycling Division (SWRD). The goal of this study was to update the City's solid waste rates to reflect the cost to serve your customers and ensure financial sustainability over the projection period of FY 2019 – FY 2028.

The objectives of the Study presented herein were to:

- Review the sufficiency of revenues derived from the current charges for refuse and recycling collection and disposal service and ongoing operations of the SWRD to meet your financial requirements and fund your projected expenditures throughout the projection period;
- Allocate your costs to provide refuse and recycling collection and disposal service to your various customer classes;
- Update your rate structure to reflect the cost to serve your customers;
- Evaluate the sufficiency of the proposed Outside City Surcharge to cover the costs to serve certain identified outside City customers; and
- Compare the City's average monthly refuse and recycling bill to that of comparable entities in Texas.

The analysis described in this report was based on information and kind assistance provided by you and your staff including, but not limited to, identification of billed units and detailed billing data, fund balances, historical budgeted and actual revenues and expenditures, current and preliminary budget information, planned capital expenditures, anticipated hiring and additional vehicle purchases, growth projections, and other financial information.

Based upon the results of our analysis, which should be read in its entirety, SCS recommends the following:

- Given the assumptions used in the Revenue Sufficiency Analysis and the City's current service area, the City does not require a revenue adjustment at this time to fund its annual solid waste operating expenses, capital program, and debt service payments, while maintaining adequate debt service coverage and working capital reserve requirements over a 10-year projection period.
- As the City begins to serve outside city customers and implements an Outside City surcharge, it will need to continue to monitor the cost to serve these additional customers to verify that the surcharge aligns with the cost of providing outside city service.
- SCS recommend that the City align rates with the cost to provide service to each customer class. This requires continuing to refine the cost of service analysis and update the RSA with FY 2020 Adopted Budget numbers as they become available. The results of the updated analysis will be used to restructure the City's solid waste rates to align with cost of service for implementation in FY 2021.
- As the City continues to experience rapid growth that significantly affects the financial projections described herein, the City should update this analysis annually in the near term to be sure that the recommended rate plan continues to be sufficient to fund the City's solid waste operations while meeting all of its financial policies and goals.

We appreciate your participation in the analysis and look forward to working with you again in the future. If you have any questions or would like to discuss this further, please call me anytime at (386) 546-7719.

Regards,



Vita Quinn, MBA  
Project Manager  
SCS Engineers



Michelle Leonard  
Vice President/Project Director  
SCS Engineers

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## 1.0 INTRODUCTION

This report presents the results of the Comprehensive Solid Waste Rate Study (Study) that was conducted for the Solid Waste and Recycling Division (SWRD) of the City of New Braunfels, Texas (City). The following sections of this report describe in detail the base data, assumptions, results, conclusions, and recommendations of the Study.

### 1.1 BACKGROUND

The City of New Braunfels' Solid Waste and Recycling Division operates as an enterprise fund. As a business-type activity defined by the Governmental Accounting Standards Board (GASB), the operations of SWRD are financed and operated in a manner similar to private sector businesses, where the cost of providing services to the City's customers is "financed or recovered primarily through user charges".<sup>1</sup>

SWRD is responsible for serving approximately 29,000 curbside residential accounts and 2,200 commercial accounts. Additionally, the City offers brush and bulky item pickup and roll-off garbage containers. All solid waste is disposed at the Mesquite Creek Landfill, which is operated by Waste Management of Texas. The revenue for SWRD comes from refuse and recycling collection fees, special pickup charges, and penalties.

In 2018, the City contracted with SCS Engineers to prepare a Solid Waste Management Plan (SWMP). The goal of the SWMP was to evaluate the City's solid waste collection, recycling, and disposal systems and facilities. The results of SWMP led the City to evaluate the financial impact of building a Public Works Municipal Service Center and a relocated City Recycle Center.

Additionally, the City has not analyzed the structure of its solid waste rates and the cost to serve its various customers classes in recent years, and felt that this was an appropriate time to update its financial analysis and rates. As a result, SCS was engaged by the City to complete a solid waste rate study to analyze the financial stability of the enterprise fund over a multi-year projection period and to analyze its rate structure and cost to provide services to its residents.



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<sup>1</sup> Statement No. 34 of the Governmental Accounting Standards Board

## 1.2 OBJECTIVES

The objectives of the Study were as follows:

### **Revenue Sufficiency Analysis (RSA)**

Project the sufficiency of the City's solid waste rate revenues to fund its annual solid waste expenditures over a 10-year projection period. Develop a long-term financial management plan that will satisfy the SWRD's operating expenses, capital program, and debt service payments, while maintaining adequate debt service coverage and working capital reserve requirements.

### **Cost of Service Analysis (COSA)**

Using the results of the RSA, allocate all of the SWRD's projected solid waste costs between service types and customer classes to determine the revenue requirement for solid waste collection and disposal for the various customer classes served by the City.

### **Rate Structure Analysis**

Examine the City's current solid waste rate structure and develop modifications, as appropriate, to generate rates that are fair, equitable, easy to understand, conform to accepted industry practice, and reflect the cost to serve City customers.

### **Outside City Service Analysis**

Calculate the cost of serving customers in a planned community outside of the City's current service area. Determine whether the agreed upon surcharge under the existing service agreement the City has with the developer will be sufficient to recover the costs of providing the service.

### **Comparative Rate Surveys**

Compare the FY 2019 monthly solid waste rates for the City's average single-family residential customer and average commercial user fees to the rates of other comparable solid waste systems in the surrounding geographic area.

The following sections describe the source data and assumptions used in the RSA, the analysis that was performed, and the results of the comparative rate surveys performed.



## 2.0 SOURCE DATA AND ASSUMPTIONS

### 2.1 SOURCE DATA

The following presents the source data, provided to SCS by City staff, which was relied upon to conduct the RSA.

#### 2.1.1 BEGINNING FUND BALANCES

Unaudited trial balance schedules for the fiscal year ended 9/30/2017 provided by City staff were used to establish fund balances for the SWRD. These can be found in Schedule 4 of Appendix A.

#### 2.1.2 REVENUES

The revenues utilized in the Study were based upon an evaluation of multiple years of historical results and the FY 2018 Actuals, FY 2019 Year End Estimates and FY 2020 Preliminary Budgets. Revenues consist of Refuse Collection Fees, Recycling Collection Fees, and other minor revenue from miscellaneous service charges. FY 2019 rate revenue is based upon the FY 2018 Actuals, adjusted annually to reflect assumed rate adjustments, customer growth, and changes in demand. Projections of all other revenues are based upon the FY 2020 Preliminary Budget, excluding interest income (which was calculated annually based upon projected average fund balances and assumed interest rates).

*Figure 1*

#### **FY 2020 Revenue Summary**

Refuse Collection Fees	\$	8,605,802	83%
Recycling Collection Fees	\$	1,425,741	14%
Other Revenues	\$	363,953	4%
<b>Total Revenues</b>		<b>10,395,496</b>	<b>100%</b>

The summary of SWRD revenues in FY 2020 are shown in the table above and can be found in line item detail in Schedule 5 of Appendix A.

### 2.1.3 OPERATING EXPENDITURES

The City's operating expenditures include all personal services, operations and maintenance expenses, transfers out, debt service payments, and minor capital outlay. The Study based the FY 2018, FY 2019, and FY 2020 expenses on the FY 2018 Actuals, FY 2019 Year End Estimates, and FY 2020 Preliminary Budget, respectively. In each year thereafter, expenses were based upon the FY 2020 Preliminary Budget and assumed cost escalation factors that were reviewed with City staff.

Figure 2

#### **FY 2020 Expense Summary**

Personal Services	\$	3,920,631	39%
Operations and Maintenance	\$	3,398,600	34%
Debt Service	\$	71,594	1%
Capital Outlay	\$	1,602,678	16%
Transfers Out	\$	950,689	10%
<b>Total Expenditures</b>	<b>\$</b>	<b>9,944,193</b>	<b>100%</b>

The summary of SWRD expenditures in FY 2020 are shown in the table above and can be found in line item detail in Schedule 6 of Appendix A.

### 2.1.4 EXISTING DEBT SERVICE

City staff provided schedules for all existing debt service and input regarding future debt service payments assumed throughout the projection period.

In addition to existing debt service, the City plans to debt fund a Municipal Service Center, which will have an annual debt service obligation of approximately \$345,000 beginning in FY 2021. The cost for the Municipal Service Center was included in the Interfund Transfers in the FY 2020 Preliminary Budget, but was removed in FY 2020, as the debt service is assumed to begin in FY 2021. The debt service payments in each year of the projection period are summarized in the graph below.

Figure 3  
Debt Service



The detailed debt service projections can be found in Schedule 6 of Appendix A.



### **2.1.5 CAPITAL SPENDING**

City staff provided project-level capital improvement spending for FY 2018 – FY 2028, which consists of a Public Works Municipal Service Center and relocating/expanding the City Recycle Center. The Public Works Municipal Service Center project is expected to begin in FY 2021 and the City has provided the estimated debt service for this project. The City Recycle Center project is anticipated to begin in FY 2025 and will cost approximately \$3.0 million. As this project is not included in this year's capital program, it is not reflected in the schedules in Appendix A. However, this project is included in the revenue requirements for the Cost of Service Analysis and Rate Structure Analysis.

### **2.1.6 ADDITIONAL HIRING AND VEHICLES**

The City plans to add vehicles to their fleet in addition to what is included in the budget. The Vehicle Program will include an automated side load truck in FY 2021, FY 2023 and FY 2027, a rear load truck in FY 2021, a rolloff truck in FY 2024, and both a light truck and a service truck in FY 2024 and FY 2025. The total cost of these additional vehicles will be approximately \$2.0 million over the course of the projection period. A detailed list of these vehicles can be found in Schedule 12 of Appendix A.

The addition of these vehicles to adequately maintain the desired level of service in the City necessitates additional hiring as well. This hiring consists of two solid waste operators in FY 2021, one solid waste operator in FY 2023 and another in FY 2027, four recycling center attendants in FY 2024, a foreman in FY 2024, an administration worker in FY 2022 and another in FY 2026, an assistant recycling coordinator in FY 2023, a fleet manager, three heavy technicians, and a parts technician in FY 2025, and a container maintenance worker in FY 2026. By the end of the projection period, the additional annual hiring costs will be almost \$1.3 million per year. A detailed list of positions, costs, and timing can be found on Schedule 11 of Appendix A.

### **2.1.7 ADDITIONAL PERSONAL SERVICES COSTS FROM BUDGET PROJECTION**

The Additional Personal Services Costs from Budget Projection expense is used to account for the fact that the FY 2020 Preliminary and did not account for anticipated salary and benefit costs that Finance staff are anticipating for the finalized FY 2020 Budget. Finance staff estimated this cost to be about \$100,000 beginning in FY 2020. This cost can be found in Schedule 6 of Appendix A.

### **2.1.8 BILLING INFORMATION**

One year of detailed residential and commercial garbage and recycling collection account and billing information from October 2017 through September 2018 was provided by City staff.

## **2.3 ASSUMPTIONS**

The following presents assumptions and policies discussed with City staff and is reflected in the Study.

### **2.3.1 REVENUE/COST ESCALATION**

The assumed revenue/cost escalation factors used in the Study for various types of operating revenues and expenses were based upon relevant indices, historical trends, our industry experience, and discussions with City staff. The escalation factors are included in Schedule 2 of Appendix A.

### **2.3.2 INTEREST EARNINGS ON FUND BALANCES**

The Study assumes interest rate earnings of 1.20% in each year of the projection period, based upon Staff input and recent earnings for the City. These can be found in Schedule 2 of Appendix A.

### **2.3.3 CUSTOMER AND VOLUME GROWTH**

New account and volume/tonnage projections were based upon a review of historical data from FY 2016 through FY 2018, observance of local environmental and economic conditions, population growth expectations, and observed trends in tonnage and diversion.

New Braunfels, just outside of San Antonio, is experiencing rapid population growth. The City is also anticipating new outside city residential and commercial accounts (see Veramendi 2.2.3.1). To be conservative and after conversations with City staff, the Study assumes that only 75% of the estimated growth during the projection period will be realized. As a result, the average annual projected growth during the projection period was assumed to be 5.2% across the city. The growth assumptions and calculations can be found in Schedule 3 of Appendix A.

#### **2.3.3.1 Veramendi Growth**

A development group is converting a 2,400-acre ranch located northwest of the City into a planned community called Veramendi. The community will be adding over 5,000 new dwellings, 480 acres of parkland, 380 acres of commercial space, a new elementary school, and is expecting to occupy 12,000 to 15,000 new residents. Howard Payne University is also building a new campus at the Veramendi development. The development is expected to be realized over the next 10-15 years. Conversations with City staff and assumptions based on population growth and the desire to take a conservative approach to these growth projections led us to assume that starting in FY 2021 and through the remainder of the projection period, the City will add an average of 309 residential accounts and about 38 additional commercial accounts from Veramendi each year.

Figure 4

## Veramendi Growth

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
New Dwelling Units				323	334	670	382	425	400	391	391
% Projected	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
<b>Total Additional Residential Units</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>243</b>	<b>250</b>	<b>502</b>	<b>287</b>	<b>319</b>	<b>300</b>	<b>293</b>	<b>293</b>
New Commercial Units				42	50	50	50	50	50	50	50
% Projected	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
<b>Total Additional Commercial Units</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>31</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>

Figure 4

Shown in Figure 4 above is the number of additional dwelling units and commercial units that are projected to be added to the solid waste system during the projection period. The number of dwelling units added in each fiscal year was based upon information provided by City staff, provided to them by the developer.

### 2.3.4 MINIMUM RESERVE POLICIES

Reserves, or working capital, are funds set aside for cash flow requirements, financial needs, capital project funding, or to comply with legal/debt service covenants. Maintaining adequate reserves is an important consideration in developing a long-term financial management plan for utilities/enterprise funds. These reserves act as a margin or buffer in order to meet short-term cash flow requirements of the fund/utility while minimizing the risk associated with financial obligations, operational costs, and capital requirements in the event that near-term events differ from the budgeted expectations.

The financial management plan reflected herein assumes that the minimum operating fund reserve will equal 25% of annual operations and maintenance expenses for the City's solid waste operations.

This targeted level of reserves is consistent with our industry experience for similar systems, best practices for enterprise funds as determined by the Government Finance Officers Association, and what is considered by the ratings agencies to be a healthy level of reserves for a municipal utility system, which is generally considered to be about 3 months of operations and maintenance expenses.

The level of reserves required for an individual fund/utility is influenced by factors such as:

- Level of support from the General Fund (transfers in or planned subsidies)
- Volatility in cash cycles (e.g. summer vs winter, billed on annual tax bill vs monthly billing)
- Competition and demand for services
- Control over revenues (rates), expenses, and transfers out
- Internal financial policies
- Asset age and condition

- Level of anticipated capital and susceptibility to system impact from natural disasters
- Debt position and risk associated with interest rate volatility

The annual budgeting process should monitor reserve levels and make decisions regarding maintaining, increasing, or spending the reserve balances. Additionally, the basis upon which the reserve balances were established should be reviewed every three to five years, with the understanding that outstanding debt service, capital requirements, and operational changes will change over time and could have an effect upon the required level of reserve balances.

### **2.3.5 FUTURE BORROWING AND CAPITAL FUNDING**

To the extent that any additional new debt would be required in any year of the projection period to fund a portion of the Capital Improvement Plan (CIP), it is assumed to carry the following terms:

<b>Term:</b>	20 Years
<b>Interest Rate:</b>	4.00%
<b>Cost of Issuance:</b>	2.00% of Par
<b>Debt Service Reserve:</b>	None
<b>Debt Service Coverage:</b>	1.00 times annual debt service

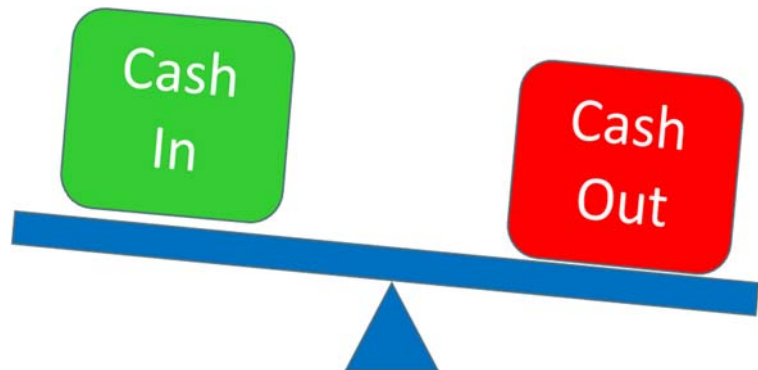
## 4.0 ANALYSIS

### 4.1 REVENUE SUFFICIENCY ANALYSIS (RSA)

#### 4.1.1 DESCRIPTION

In order to conduct the Study, SCS obtained the SWRD's current and historical information. This includes historical and budgeted financial information, customer counts and tonnage data, multi-year capital improvement programs, and debt service amortization schedules. Further, SCS documented the City's current financial and debt policies and spoke with City staff regarding other assumptions and policies that would affect SWRD's financial performance, such as trends in demands, planned developments/customer growth, debt coverage levels, levels of reserves, capital-funding sources, earnings on invested funds, escalation rates for operating costs, impacts of potential regulatory and legislative initiatives, etc.

SCS then input this information into our Revenue Sufficiency Model. The Revenue Sufficiency Model creates a multi-year projection of the City's current rate and fee revenues to determine whether the level of existing revenues can meet the projected financial requirements during each year of the projection period from FY 2018 – FY 2028.



The model then calculates the level of rate adjustments required for the fund to meet its revenue requirements. It replicates the cash flows of the Fund in each year of the projection period, based upon City policies and available fund balances. In each year, the model utilizes unrestricted fund balances, revenues, and capital funds to pay for any operating or capital expenditures in that year. To the extent necessary to fund all of the projects in the capital program, the model can identify the level of borrowing and the resulting debt service payments that would be required.

#### 4.1.2 MEETINGS WITH STAFF

After loading the revenue sufficiency model and calibrating it to City financial dynamics, we conducted several interactive meetings with staff to review the data provided. During these meetings, we projected our models onto a viewing screen, walked City staff through the data and discussed any questions that arose during our analysis. We also discussed assumptions to be used in the analysis, such as working capital reserve targets, interest earnings on fund balances, assumed term and rate for future borrowing, future development that may affect customer growth, policies or regulatory requirements that may affect operational requirements, operating cost escalation rates, etc.

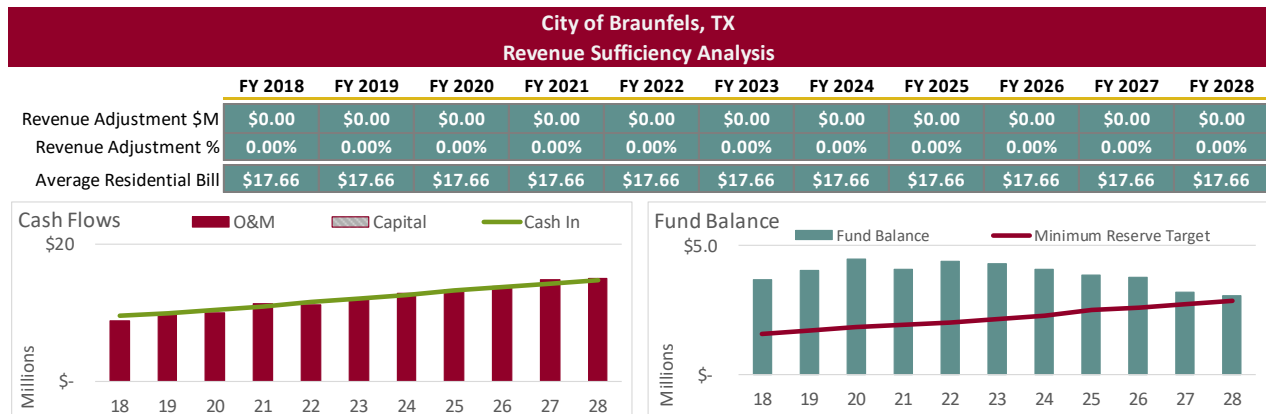
Once we reviewed the model, we began to test the sensitivity of the model outcomes to changes in various variables, such as capital spending or operational changes. For each scenario tested, we developed a corresponding financial management plan and series of annual rate adjustments that would allow the fund to meet its cost requirements while attaining its strategic goals and financial performance objectives.

### 4.1.3 SCENARIOS

Based on the source data and input provided by the City, and the assumptions and policies described herein, the SWRD's current revenues are sufficient to fund its ongoing operating, capital, debt service and coverage requirements, and working capital reserve targets in every year of the projection period within its existing service area. However, as the City begins to serve Veramendi customers, there will be a need for additional revenue to provide for the hiring and vehicle purchases required to serve this area outside of the City. Instead of rate increases for all customer classes to pay for the addition of an outside City service area, the City requested the calculation of an Outside City Surcharge. The basis and calculation of this surcharge is discussed in the following subsection.

Shown in Figure 5 below is the baseline scenario from the revenue sufficiency model. In this scenario, there is no Veramendi growth, additional hiring costs, capital costs, or revenue from the outside city surcharge. In this scenario, the City does not need rate adjustments throughout the projection period. The existing rate revenues from current customers and assumed growth in customers inside the City is sufficient to sustain the City's operations through FY 2028.

Figure 5



Next, the City desired to consider the impact of serving customers in a new service area outside of the City limits.



#### 4.1.3.1 Veramendi/Outside City Surcharge

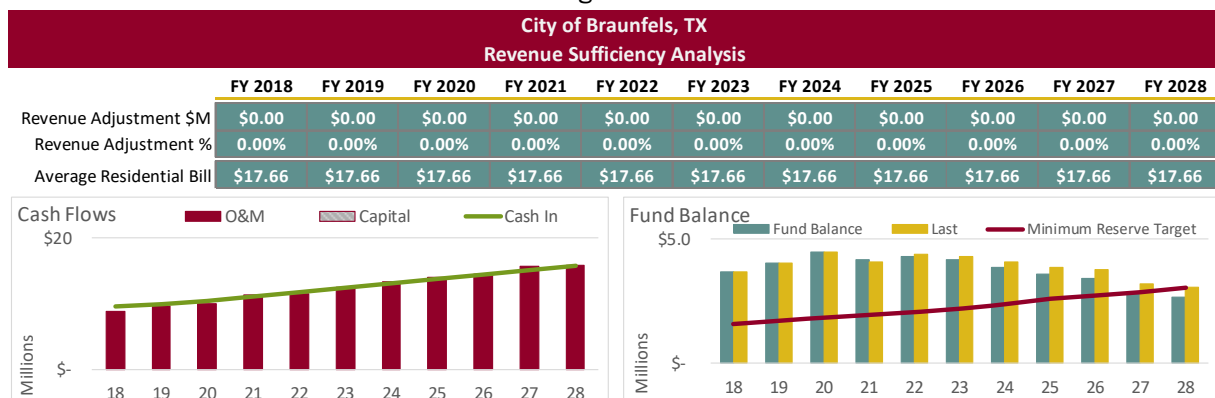
The outside city Veramendi planned development is adjacent to existing city limits and is expected to be built out gradually over 10-15 years. After gathering data on projected development and conversations with City staff, the decision was to take a conservative approach to these growth projections. Starting in FY 2021, the City will add an average of 309 residential accounts and 38 commercial accounts to the Veramendi service area each year. The development is not in the city limits so it is outside of the current SWRD service area. However, the City and the developer have an agreement where the City will provide solid waste services to Veramendi residents and businesses prior to its annexation. Therefore, in order to serve these new customers, there will need to be new routes, which will necessitate the hiring of additional drivers and purchase of additional collections vehicles.

After conversations with the City, SCS determined that in order to serve the development they would need to add 13 Full Time Equivalent Employees (FTEs) in the form of Solid Waste Operators and Refuse Collectors, five side load trucks, two front load trucks and four rear load trucks to their existing operations. These will be necessitated gradually over the course of the development time frame, which is assumed to have all Veramendi customers receiving solid waste service by FY 2035. By FY 2028, the additional employees will cost the City over \$660,000 per year, and truck purchases will have cost the City about \$1.8 million.

The City's current agreement with the developer is that customers being served in Veramendi will have to pay 105% of the current solid waste rates to prevent burdening inside City ratepayers with the costs to serve outside city development. However, the analysis found that the surcharge will not cover all the costs associated with serving Veramendi.

The model results are shown in Figure 6 below. The yellow bars on the Fund Balance graph show the annual fund balances in the baseline scenario, without serving outside City customers. The blue bars reflect the fund balances if the City serves the Outside City customers and receives the 5% Outside City Surcharge. The scenario in blue reflects all of the anticipated Veramendi growth, capital costs, hiring, and Outside City Surcharge revenue. This scenario and the line item detail of the data and assumptions described herein are reflected in the detailed schedules in Appendix A.

Figure 6



By the end of the projection period, the fund balance is slightly lower than in the baseline scenario, despite the Outside City Surcharge revenue, compared to where it was before bringing in the costs to serve this outside city area. This means that the City is not projected to adequately recover all of the additional costs incurred in servicing this outside City area through the Outside City Surcharge. The calculation of the revenue deficit is shown in the Figure 7 below.

Figure 7

<b>Outside City Surcharge Revenue Sufficiency</b>	
Average Fund Balance with Veramendi	\$ 3,616,210
Average Fund Balance without Veramendi	\$ 3,838,751
<b>Outside City Surcharge Surplus (Deficit)</b>	<b>\$ (222,541)</b>

The surcharge amount is about \$222,000 less than the anticipated costs to service the outside City customers during the projection period. This is an initial projection, so the City should continue to monitor this as the development and the associated hiring and vehicle expenses begin to be realized in order to determine whether the surcharge will need to be increased to recover the full cost of service.

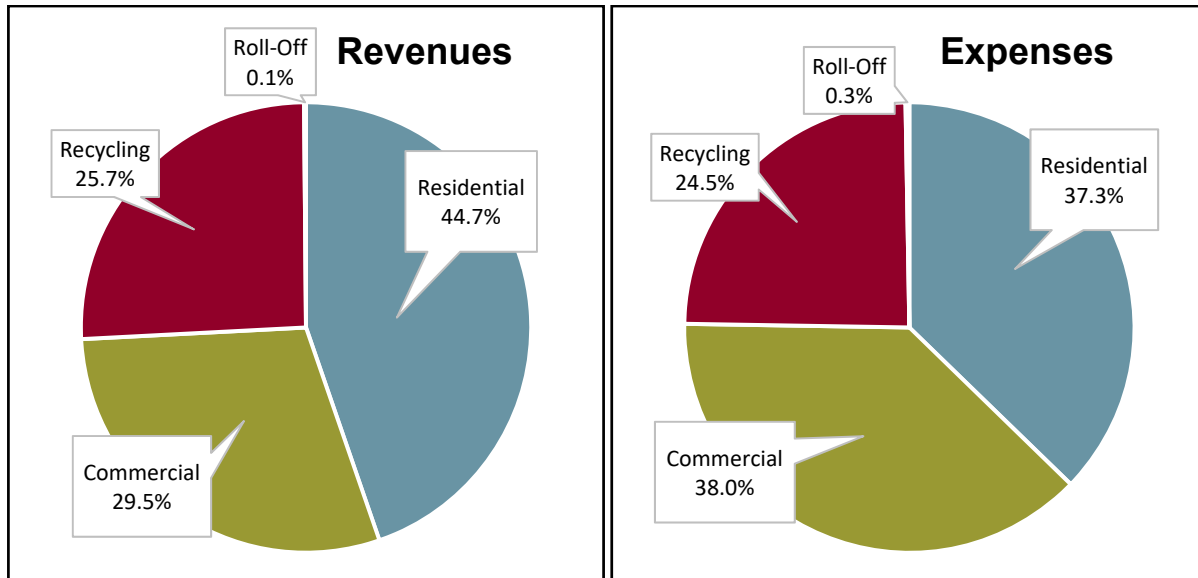
## 4.2 COST OF SERVICE ANALYSIS (COSA) - *IN PROGRESS*

The Cost of Service Analysis (COSA) performed for the SWRD uses the results of the RSA to allocate costs from the City's projected budget to the various functions and customer classes. The COSA first allocates each expense line item in the FY 2020 test year to the functions of Collection and Disposal. Once all the costs were allocated into those cost pools, then the Collection and Disposal costs were further allocated to four service class cost pools: 1) Residential, which includes costs for curbside residential solid waste collection and disposal; 2) Commercial, which includes costs for all commercial dumpster and cart collection and disposal; 3) Recycling and Green Waste, which includes costs for collection of recycling and Green Waste from residential accounts throughout the City; and 4) Roll-off, which includes costs to provide service for roll-off containers provided by City.

### 4.2.1.1 Preliminary COSA Results

The identified cost allocations to each service class were presented to the City in the form of detailed schedules. Shown in Figure 8 are charts summarizing the preliminary results of the cost allocation, comparing the revenues generated by each service class with the expenses associated with serving that class. The City intends to continue refining the cost allocations and allocation factors to accurately determine the cost to provide solid waste services to its customers.

Figure 8



### 4.3 RATE STRUCTURE ANALYSIS - *IN PROGRESS*

In order to develop rates, it is necessary to conduct a detailed billing analysis for residential and commercial solid waste carts, dumpsters, recycling service, and roll-off service that would determine the number and type of charges currently being billed, ensuring that each account is billed for at least one charge, and that the dumpster charges are correct based on the size of dumpster and frequency of pickup.

SCS created a database of all solid waste accounts in the current billing systems, indexed by utility account number, from the FY 2018 account data that was provided to us by the City. The account information ultimately included customer account number, number of containers, number of pick-ups per week, and a rate code for the rate currently charged. Next, SCS used the City's current rates for solid waste and yard debris service to extrapolate the current monthly charge for each type of account. With these rates, SCS could match the rate codes in the account billing data to the various types of charges assigned to each account and begin to analyze the billing data.

After SCS understood the way each account is currently being billed, SCS worked with City staff to adjust any account billed differently than the assigned rate code due to legacy practices, billing inconsistencies, or other billing system errors. The updated billing data was used in collection and disposal rate development for each service class.

### 4.3.1 RATE DEVELOPMENT

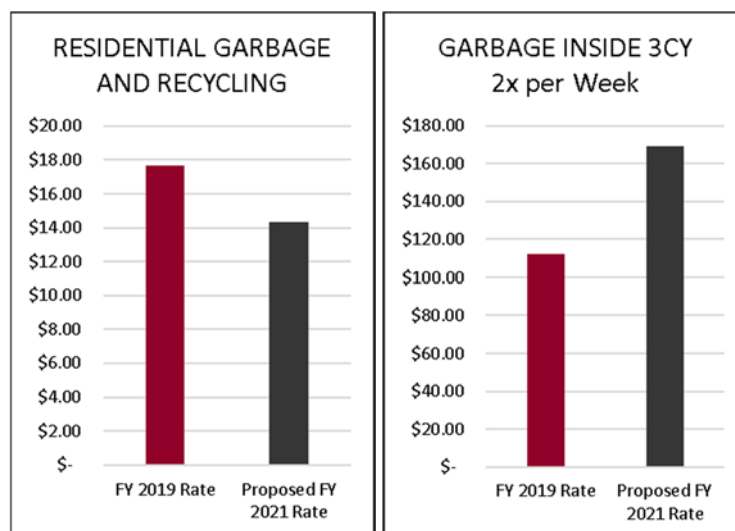
As discussed in earlier sections, the billing data used in the analysis, adjusted for rate increases and the results of the COSA, represents the Net Revenue Requirement (NRR) for the updated rates. The preliminary results of the COSA allocated the NRR into Collection and Disposal cost pools and then further into service class cost pools. These allocated NRR amounts can then be used as the net revenue requirement for the City's collection and disposal rates for each service class.

For several services, the City utilizes a variable rate structure, meaning pricing is based upon container size and frequency of pickup. The City desires to maintain this general rate structure and intends to refine the rates for its various customer classes once the preliminary cost allocation to the City's service classes is finalized.

### 4.3.2 RATE STRUCTURE ANALYSIS PRELIMINARY RESULTS

The preliminary results from the rate structure analysis determined that the City's current combined residential garbage collection and recycling rate recovers more than the cost for providing these services to residents, while the charge for certain commercial dumpster sizes and frequencies of pickup should see an increase in rates to align with the cost of service.

Figure 9



The results shown in Figure 9 above are preliminary and will change as the analysis is updated with FY 2020 budget information and as the COSA is updated.

Additionally, as part of the billing analysis, it was identified that the City currently charges many of its multifamily properties by the dwelling unit, even for those that have dumpster service. SCS recommends, as part of the rate structure changes, that the City identify the multifamily properties that are being served with dumpsters and charge according to the size and number of the containers and the frequency of collection for all multifamily, not by the number of units served.

## 4.4 RATE SURVEYS

As part of the Study, SCS performed a comparative survey of the single-family residential solid waste rates and commercial rates of other communities in the City's surrounding geographic area. The results of the comparative analyses are shown below.

However, it is important to note that the survey cannot account for operational differences between the entities surveyed and, without knowledge of each utility's specific rate adjustment policies, services offered, vehicle and infrastructure condition, or status as a self-supporting enterprise.

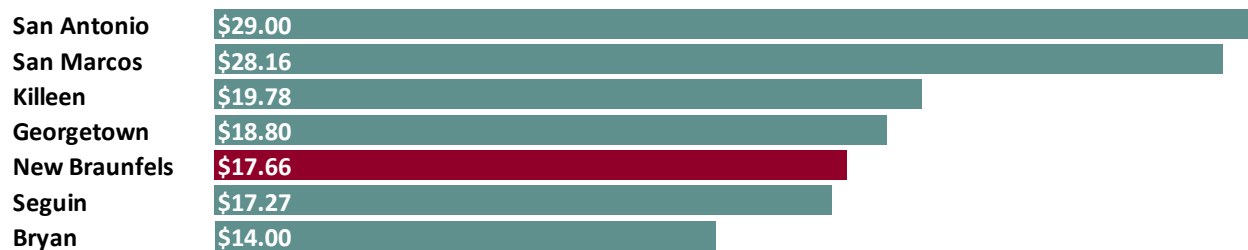
Additionally, since each monthly bill in the survey was calculated based upon each entity's FY 2019 solid waste rates as of June 2019, it is likely that many of the municipalities surveyed will implement future rate adjustments in FY 2020 or in the near term, causing the City's position on this survey may change in FY 2020 and future years.

### 4.4.1 RESIDENTIAL RATE SURVEY

SCS performed a comparative survey of the single-family residential solid waste rates of other communities providing curbside collection service in the City's surrounding geographic area.

*Figure 10*

#### Residential Fees - 96-Gallon Carts



The survey shown in Figure 10 reflects that the solid waste collection charges for comparable entities range from \$14.00 to \$29.00 per month. The average monthly solid waste charge for the entities surveyed is \$20.66.

The results of the above survey indicate that the average residential customer's current monthly bill in New Braunfels is lower than average when compared to the entities surveyed.

#### 4.4.2 COMMERCIAL RATE SURVEY

SCS also performed a comparative survey of the commercial solid waste rate for the City's most common commercial size and frequency of collection to that of other communities providing commercial collection service in the City's surrounding geographic area. The most common rate in New Braunfels, two 96-gallon carts, one pickup per week, was used for comparison.

Figure 11

##### Commercial Fees - Two 96-Gallon Carts

New Braunfels	\$29.32
Georgetown	\$28.20
Killeen	\$21.30
Bryan	\$21.00

The survey shown in Figure 11 reflects that the solid waste collection charges for comparable entities range from \$21.00 to \$29.32 per month. The average monthly solid waste charge for the entities surveyed is \$24.96.

The results of the above survey indicate that the average residential customer's current monthly bill in New Braunfels is the highest of the entities surveyed.



## 5.0 RESULTS AND RECOMMENDATIONS

Based upon the results of the study described herein, SCS recommends the following:

- Based on the results of the RSA and the City's current service area, the City does not require a revenue adjustment at this time to fund its annual solid waste operating expenses, capital program, and debt service payments, while maintaining adequate debt service coverage and working capital reserve requirements over a 10-year projection period.
- As the City begins to serve outside city customers and implements an Outside City surcharge, it will need to continue to monitor the cost to serve these additional customers to verify that the surcharge aligns with the cost of providing outside city service.
- SCS recommend that the City align rates with the cost to provide service to each customer class. This requires continuing to refine the cost of service analysis and update the RSA with FY 2020 Adopted Budget numbers as they become available. The results of the updated analysis will be used to restructure the City's solid waste rates to align with cost of service for implementation in FY 2021.
- As the City continues to experience rapid growth that significantly affects the financial projections described herein, the City should update this analysis annually in the near term to be sure that the recommended rate plan continues to be sufficient to fund the City's solid waste operations while meeting all of its financial policies and goals.

**City of Braunfels, TX  
Revenue Sufficiency Analysis**

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**Results as of August 27, 2019**

**Appendix A**

- Schedule 1 - Model Results**
- Schedule 2 - Model Assumptions & Inputs**
- Schedule 3 - Growth**
- Schedule 4 - Trial Balances as of 9-30-17**
- Schedule 5 - Cash In**
- Schedule 6 - Cash Out**
- Schedule 7 - Pro Forma**
- Schedule 8 - Capital Improvement Plan**
- Schedule 9 - Borrowing**
- Schedule 10 - Summary of Funds**
- Schedule 11 - Additional Employees**
- Schedule 12 - Vehicle Replacement Program**
- Schedule 13 - Outside City Surcharge Calculation**



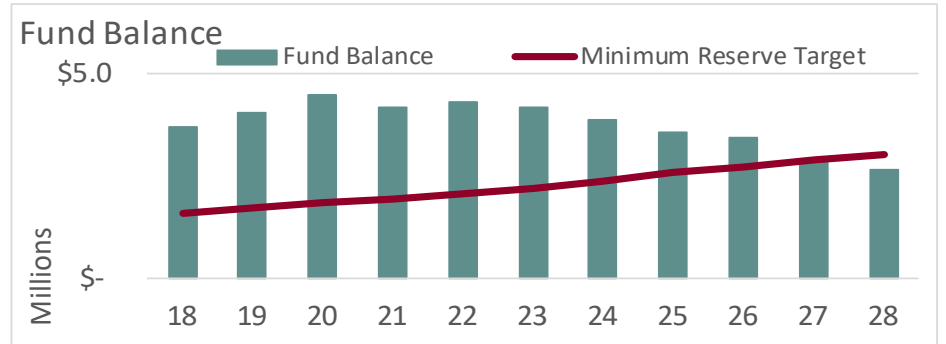
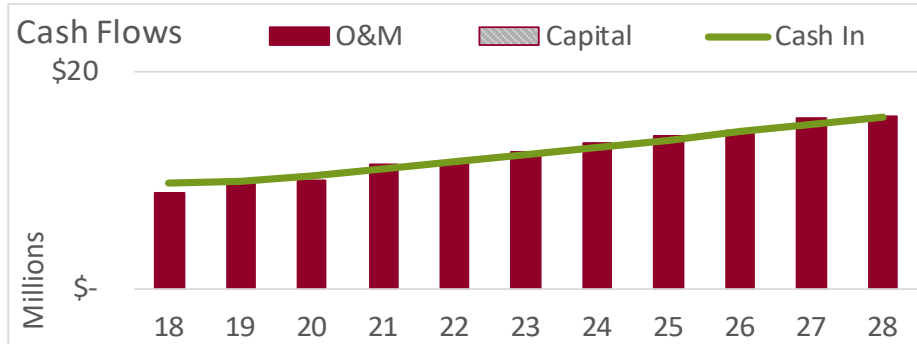
**SCS ENGINEERS**

**Management Services**

## Schedule 1 - Model Results

### City of Braunfels, TX Revenue Sufficiency Analysis

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Revenue Adjustment \$M	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue Adjustment %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Average Residential Bill	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66	\$17.66



## Schedule 2 - Model Assumptions & Inputs

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Spending Execution Assumptions</b>											
Personal Services	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Fixed Operations & Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Variable Operations & Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Capital Outlay	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Cost Escalation Factors</b>											
Rate Increase	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Salaries	N/A	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
O&M	N/A	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Disposal <sup>1</sup>	N/A	5.91%	5.78%	5.66%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%	5.55%
Insurance	N/A	0.00%	7.00%	6.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
CO	N/A	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
TO	N/A	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Carts	N/A	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
<b>Interest Assumptions</b>											
Interest Earnings on Fund Balances	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
<b>Borrowing Assumptions</b>											
Senior Lien Debt Rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
<b>Senior Lien Borrowing Assumptions</b>											
Senior-Lien Debt Svc Coverage	1.00										
Interest Only in 1st Year?	Y										
Term (Years)	20										
Debt Service Reserve (Years)	0										
Cost of Issuance	2.00%										
<b>Working Capital Reserve Target</b>											
Percent of Annual O&M Expense	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%

<sup>1</sup> The disposal cost escalator is based on information provided by City staff.

### Schedule 3 - Growth

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Residential</b>											
Accounts	30,461	32,023	33,457	34,892	36,811	38,729	40,648	42,566	44,485	46,403	48,322
Inside City Growth from Population <sup>1</sup>	1,562	1,435	1,435	1,919	1,919	1,919	1,919	1,919	1,919	1,919	1,919
<b>Total Residential Inside City Accounts</b>	<b>32,023</b>	<b>33,457</b>	<b>34,892</b>	<b>36,811</b>	<b>38,729</b>	<b>40,648</b>	<b>42,566</b>	<b>44,485</b>	<b>46,403</b>	<b>48,322</b>	<b>50,241</b>
Additional Growth from Veramendi <sup>1</sup>	-	-	-	243	250	502	287	319	300	293	293
<b>Total Residential Accounts</b>	<b>32,023</b>	<b>33,457</b>	<b>34,892</b>	<b>37,053</b>	<b>38,980</b>	<b>41,150</b>	<b>42,853</b>	<b>44,804</b>	<b>46,704</b>	<b>48,615</b>	<b>50,534</b>
% Change in Inside City Accounts	5.1%	4.5%	4.3%	6.2%	5.9%	6.3%	5.4%	5.3%	5.0%	4.8%	4.6%
<b>Commercial</b>											
Accounts	2,233	2,277	2,379	2,481	2,618	2,754	2,891	3,027	3,163	3,300	3,436
Inside City Growth from Population <sup>1</sup>	44	102	102	136	136	136	136	136	136	136	136
<b>Total Commercial Inside City Accounts</b>	<b>2,277</b>	<b>2,379</b>	<b>2,481</b>	<b>2,618</b>	<b>2,754</b>	<b>2,891</b>	<b>3,027</b>	<b>3,163</b>	<b>3,300</b>	<b>3,436</b>	<b>3,573</b>
Additional Growth from Veramendi <sup>1</sup>	-	-	-	31	38	38	38	38	38	38	38
<b>Total Commercial Accounts</b>	<b>2,277</b>	<b>2,379</b>	<b>2,481</b>	<b>2,649</b>	<b>2,792</b>	<b>2,928</b>	<b>3,064</b>	<b>3,201</b>	<b>3,337</b>	<b>3,474</b>	<b>3,610</b>
% Change in Accounts	2.0%	4.5%	4.3%	6.8%	6.6%	6.3%	6.0%	5.7%	5.5%	5.3%	5.1%
<b>Total Growth</b>											
Accounts	32,694	34,300	35,837	37,373	39,428	41,483	43,538	45,593	47,648	49,703	51,758
Growth	1,606	1,537	1,537	2,329	2,343	2,595	2,379	2,411	2,393	2,385	2,385
<b>Total Accounts</b>	<b>34,300</b>	<b>35,837</b>	<b>37,373</b>	<b>39,702</b>	<b>41,771</b>	<b>44,078</b>	<b>45,918</b>	<b>48,005</b>	<b>50,041</b>	<b>52,089</b>	<b>54,144</b>
% Change in Accounts	4.9%	4.5%	4.3%	6.2%	5.9%	6.3%	5.5%	5.3%	5.0%	4.8%	4.6%

<sup>1</sup> Assumptions made about the population growth was based on the Solid Waste Management Plan and input from staff. It is assumed that growth from Veramendi will begin coming in 2021. Both population growth inside the City and Veramendi account expectations are assumed at 75% of maximum projected growth.

## Schedule 4 - Trial Balances as of 9-30-17

	Fund	
Restriction	Unrestricted	
Assets		
Beginning Balance	\$	2,893,315
Total Assets	\$	2,893,315
Total Available Fund Balance	\$	2,893,315



## Schedule 5 - Cash In

		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Rate Revenue Assumptions</b>												
Rate Adjustment		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Rate Revenues</b>	<b>Codes</b>											
<b>Total Rate Revenues</b>		\$ 9,206,538	9,619,041	10,031,543	10,656,608	11,289,829	11,995,994	12,651,537	13,320,656	13,989,533	14,660,933	15,336,620
<b>Other Operating Revenues</b>												
Brush/Special Pickups	3441100	\$ 36,089	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Garbage Penalties	3443100	109,028	95,000	95,000	96,900	98,838	100,815	102,831	104,888	106,985	109,125	111,308
Miscellaneous	3890100	54,785	28,151	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000
Reimbursements	3890300	116,202	4,350	-	-	-	-	-	-	-	-	-
Misc - Subject to Sales Tax	3891200	64,910	56,691	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
Misc Licenses and Permits	3220500	-	22,000	-	-	-	-	-	-	-	-	-
Garbage Stickers	3445100	-	445	-	-	-	-	-	-	-	-	-
Veramendi Surcharge Revenue		-	-	-	2,901	5,951	11,670	15,106	18,882	22,459	25,961	29,462
<b>Total Other Operating Revenues</b>		<b>\$ 381,014</b>	<b>246,637</b>	<b>218,000</b>	<b>222,801</b>	<b>227,789</b>	<b>235,485</b>	<b>240,937</b>	<b>246,770</b>	<b>252,445</b>	<b>258,086</b>	<b>263,769</b>
<b>Interest Earnings</b>												
Interest Earnings - Solid Waste Fund		\$ 39,056	46,171	50,953	51,749	50,700	50,721	48,064	44,619	42,025	37,378	32,790
<b>Total Interest Earnings</b>		<b>\$ 39,056</b>	<b>46,171</b>	<b>50,953</b>	<b>51,749</b>	<b>50,700</b>	<b>50,721</b>	<b>48,064</b>	<b>44,619</b>	<b>42,025</b>	<b>37,378</b>	<b>32,790</b>
<b>Transfers In</b>												
Interfund Transfers <sup>1</sup>	3910100	\$ -	-	95,000	95,000	95,000	95,000	95,000	95,000	95,000	95,000	95,000
<b>Total Transfers In</b>		<b>\$ -</b>	<b>-</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>	<b>95,000</b>
<b>Total Cash In</b>		<b>\$ 9,626,608</b>	<b>9,911,849</b>	<b>10,395,496</b>	<b>11,026,157</b>	<b>11,663,318</b>	<b>12,377,200</b>	<b>13,035,538</b>	<b>13,707,045</b>	<b>14,379,003</b>	<b>15,051,397</b>	<b>15,728,179</b>

<sup>1</sup> The Interfund Transfer is used to pay for solid waste services provided to the City.

## Schedule 6 - Cash Out

			FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Residential	Codes	Type											
Salaries	41013005215041	PS	\$ 470,839	487,135	499,982	517,481	535,593	554,339	573,741	593,822	614,606	636,117	658,381
Overtime	41031005215041	PS	16,413	16,500	16,500	17,078	17,675	18,294	18,934	19,597	20,283	20,993	21,727
Longevity	41041005215041	PS	8,902	7,296	7,300	7,556	7,820	8,094	8,377	8,670	8,974	9,288	9,613
Certification & Specialty Pay	41051005215041	PS	306	323	300	311	321	333	344	356	369	382	395
Insurance	42011005215041	PS	116,413	142,650	114,120	120,967	127,016	133,366	140,035	147,036	154,388	162,108	170,213
FICA/Medicare Tax	42021005215041	PS	36,110	39,111	40,092	41,496	42,948	44,451	46,007	47,617	49,284	51,009	52,794
Retirement	42031005215041	PS	84,357	87,322	89,225	92,348	95,580	98,925	102,388	105,971	109,680	113,519	117,492
Workers Compensation	42061005215041	PS	13,696	10,911	12,500	12,938	13,390	13,859	14,344	14,846	15,366	15,903	16,460
Uniforms	42091005215041	PS	5,763	5,462	6,000	6,180	6,365	6,556	6,753	6,956	7,164	7,379	7,601
Drug Testing	42095005215041	PS	524	800	750	773	796	820	844	869	896	922	950
Telecommunication and Data	44010005215041	FOM	462	974	545	561	578	596	613	632	651	670	690
Refuse Disposal	44021005215041	FOM	651,280	696,071	754,682	797,397	841,652	888,364	937,668	989,709	1,044,638	1,102,615	1,163,810
Radio Services	44033005215041	FOM	936	1,000	750	773	796	820	844	869	896	922	950
Automotive Maint and Repair	44034005215041	FOM	33,386	112,616	93,120	95,914	98,791	101,755	104,807	107,952	111,190	114,526	117,962
Rental of Equip and Vehicles	44041005215041	FOM	727	500	750	773	796	820	844	869	896	922	950
Facilities Maint and Repair	44051005215041	FOM	-	300	300	309	318	328	338	348	358	369	380
Advertising	45041005215041	FOM	11,487	16,130	17,670	18,201	18,747	19,309	19,888	20,485	21,099	21,732	22,384
Printing Services	45051005215041	FOM	2,070	2,700	2,835	2,920	3,008	3,098	3,191	3,287	3,385	3,487	3,591
Professional Development	45081005215041	FOM	681	450	1,200	1,236	1,273	1,311	1,351	1,391	1,433	1,476	1,520
Dues and Subscriptions	45083005215041	FOM	281	292	300	309	318	328	338	348	358	369	380
Other Purchased Services	45089005215041	FOM	-	48	-	-	-	-	-	-	-	-	-
Operating Supplies	46013005215041	FOM	2,887	3,593	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067
Tools, Parts and Equipment	46014005215041	FOM	687	400	500	515	530	546	563	580	597	615	633
Fuel and Oil	46026005215041	FOM	94,743	88,022	105,010	107,111	109,253	111,438	113,667	115,940	118,259	120,624	123,036
Vehicle & Machinery Parts,Supp	46027005215041	FOM	142,311	123,030	120,000	123,600	127,308	131,127	135,061	139,113	143,286	147,585	152,012
Refuse Containers	46037005215041	CO	79,556	93,000	90,000	91,800	93,636	95,509	97,419	99,367	101,355	103,382	105,449
Safety Equipment	46061005215041	FOM	1,408	2,250	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900
Vehicle Replacement Program	46085005215041	CO	586,445	586,445	586,445	604,039	622,160	640,825	660,049	679,851	700,246	721,254	742,891
Environmental Services	43037005215041	FOM	-	33	-	-	-	-	-	-	-	-	-
<b>Total Residential</b>			<b>\$ 2,362,910</b>	<b>2,525,364</b>	<b>2,566,515</b>	<b>2,668,388</b>	<b>2,772,650</b>	<b>2,881,369</b>	<b>2,994,753</b>	<b>3,113,017</b>	<b>3,236,387</b>	<b>3,365,101</b>	<b>3,499,409</b>
<b>Recycling</b>													
Salaries	41013005215042	PS	\$ 552,355	581,304	577,731	597,952	618,880	640,541	662,960	686,163	710,179	735,035	760,761
Overtime	41031005215042	PS	16,528	18,000	18,000	18,630	19,282	19,957	20,655	21,378	22,127	22,901	23,703
Longevity	41041005215042	PS	7,610	8,093	7,700	7,970	8,248	8,537	8,836	9,145	9,465	9,797	10,139
Certification & Specialty Pay	41051005215042	PS	1,203	1,484	1,500	1,553	1,607	1,663	1,721	1,782	1,844	1,908	1,975
Insurance	42011005215042	PS	146,216	133,140	142,650	151,209	158,769	166,708	175,043	183,795	192,985	202,635	212,766
FICA/Medicare Tax	42021005215042	PS	42,413	46,579	46,277	47,897	49,573	51,308	53,104	54,963	56,887	58,878	60,938
Retirement	42031005215042	PS	98,167	103,997	102,990	106,594	110,325	114,186	118,183	122,319	126,600	131,031	135,618
Workers Compensation	42061005215042	PS	15,946	13,489	16,000	16,560	17,140	17,739	18,360	19,003	19,668	20,356	21,069
Uniforms	42091005215042	PS	6,563	6,100	6,200	6,386	6,578	6,775	6,978	7,187	7,403	7,625	7,854
Drug Testing	42095005215042	PS	310	500	500	515	530	546	563	580	597	615	633
Environmental Services	43037005215042	FOM	89,974	91,140	110,400	113,712	117,123	120,637	124,256	127,984	131,823	135,778	139,851
Telecommunication and Data	44010005215042	FOM	270	278	480	494	509	525	540	556	573	590	608
Utility Svce (Elec,Wtr,WasteW)	44011005215042	FOM	636	724	900	927	955	983	1,013	1,043	1,075	1,107	1,140

Refuse Disposal	44021005215042	FOM	24,832	68,720	284,744	300,861	317,559	335,183	353,786	373,421	394,146	416,021	439,110
Radio Services	44033005215042	FOM	1,245	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267
Automotive Maint and Repair	44034005215042	FOM	18,487	19,000	32,500	33,475	34,479	35,514	36,579	37,676	38,807	39,971	41,170
Other Equip Maint and Repair	44035005215042	FOM	310	1,500	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
Rental of Equip and Vehicles	44041005215042	FOM	1,247	720	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267
Advertising	45041005215042	FOM	19,375	32,870	36,470	37,565	38,692	39,852	41,048	42,279	43,548	44,854	46,200
Printing Services	45051005215042	FOM	4,439	8,456	8,881	9,147	9,422	9,705	9,996	10,296	10,604	10,923	11,250
Professional Development	45081005215042	FOM	302	450	1,200	1,236	1,273	1,311	1,351	1,391	1,433	1,476	1,520
Dues and Subscriptions	45083005215042	FOM	726	837	850	876	902	929	957	985	1,015	1,045	1,077
Other Purchased Services	45089005215042	FOM	6,593	7,316	-	-	-	-	-	-	-	-	-
Operating Supplies	46013005215042	FOM	6,800	3,010	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,305	4,434
Tools, Parts and Equipment	46014005215042	FOM	796	500	750	773	796	820	844	869	896	922	950
Fuel and Oil	46026005215042	FOM	122,821	106,568	95,631	97,544	99,495	101,485	103,514	105,585	107,696	109,850	112,047
Vehicle & Machinery Parts,Supp	46027005215042	FOM	106,741	106,000	115,000	118,450	122,004	125,664	129,434	133,317	137,316	141,435	145,679
Refuse Containers	46037005215042	CO	123,334	194,952	195,408	199,316	203,302	207,369	211,516	215,746	220,061	224,462	228,952
Safety Equipment	46061005215042	FOM	2,955	1,908	375	386	398	410	422	435	448	461	475
Vehicle Replacement Program	46085005215042	CO	327,420	324,720	324,720	334,462	344,495	354,830	365,475	376,439	387,733	399,365	411,346
Software Licenses and Maint	46089005215042	CO	3,600	-	-	-	-	-	-	-	-	-	-

<b>Total Recycling</b>			<b>\$ 1,750,214</b>	<b>1,908,266</b>	<b>2,135,565</b>	<b>2,212,426</b>	<b>2,290,512</b>	<b>2,371,598</b>	<b>2,455,809</b>	<b>2,543,274</b>	<b>2,634,131</b>	<b>2,728,521</b>	<b>2,826,595</b>
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## Commercial

Salaries	41013005215043	PS	\$ 559,204	594,650	625,620	647,517	670,180	693,636	717,913	743,040	769,047	795,963	823,822
Overtime	41031005215043	PS	35,593	36,000	36,000	37,260	38,564	39,914	41,311	42,757	44,253	45,802	47,405
Longevity	41041005215043	PS	13,196	12,576	13,200	13,662	14,140	14,635	15,147	15,677	16,226	16,794	17,382
Certification & Specialty Pay	41051005215043	PS	602	584	600	621	643	665	689	713	738	763	790
Insurance	42011005215043	PS	125,932	104,610	123,630	131,048	137,600	144,480	151,704	159,289	167,254	175,617	184,397
FICA/Medicare Tax	42021005215043	PS	44,320	49,940	51,670	53,478	55,350	57,287	59,292	61,367	63,515	65,738	68,039
Retirement	42031005215043	PS	103,422	111,500	114,990	119,015	123,180	127,492	131,954	136,572	141,352	146,300	151,420
Workers Compensation	42061005215043	PS	15,627	12,698	13,500	13,973	14,462	14,968	15,492	16,034	16,595	17,176	17,777
Uniforms	42091005215043	PS	5,351	5,660	5,700	5,871	6,047	6,229	6,415	6,608	6,806	7,010	7,221
Drug Testing	42095005215043	PS	892	800	800	824	849	874	900	927	955	984	1,013
Telecommunication and Data	44010005215043	FOM	252	276	480	494	509	525	540	556	573	590	608
Refuse Disposal	44021005215043	FOM	914,836	980,271	1,057,740	1,117,608	1,179,635	1,245,105	1,314,208	1,387,147	1,464,133	1,545,393	1,631,162
Radio Services	44033005215043	FOM	715	300	500	515	530	546	563	580	597	615	633
Automotive Maint and Repair	44034005215043	FOM	35,591	55,091	47,000	48,410	49,862	51,358	52,899	54,486	56,120	57,804	59,538
Other Equip Maint and Repair	44035005215043	FOM	-	300	300	309	318	328	338	348	358	369	380
Licenses	44062005215043	FOM	191	69	-	-	-	-	-	-	-	-	-
Advertising	45041005215043	FOM	442	710	800	824	849	874	900	927	955	984	1,013
Printing Services	45051005215043	FOM	156	370	500	515	530	546	563	580	597	615	633
Professional Development	45081005215043	FOM	737	1,404	1,600	1,648	1,697	1,748	1,801	1,855	1,910	1,968	2,027
Dues and Subscriptions	45083005215043	FOM	281	292	300	309	318	328	338	348	358	369	380
Other Purchased Services	45089005215043	FOM	52	48	-	-	-	-	-	-	-	-	-
Operating Supplies	46013005215043	FOM	3,906	3,538	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067
Tools, Parts and Equipment	46014005215043	FOM	997	500	500	515	530	546	563	580	597	615	633
Fuel and Oil	46026005215043	FOM	150,596	151,782	163,518	166,788	170,124	173,526	176,997	180,537	184,147	187,830	191,587
Vehicle & Machinery Parts,Supp	46027005215043	FOM	118,294	137,386	126,000	129,780	133,673	137,684	141,814	146,069	150,451	154,964	159,613
Refuse Containers	46037005215043	CO	61,643	81,000	81,000	82,620	84,272	85,958	87,677	89,431	91,219	93,044	94,904
Safety Equipment	46061005215043	FOM	1,418	2,525	1,375	1,416	1,459	1,502	1,548	1,594	1,642	1,691	1,742

Vehicle Replacement Program	46085005215043	CO	274,262	274,262	274,262	282,490	290,965	299,694	308,685	317,945	327,484	337,308	347,427
Temporary Help	41021005215043	PS	-	9,000	-	-	-	-	-	-	-	-	-
<b>Total Commercial</b>			<b>\$ 2,468,676</b>	<b>2,635,642</b>	<b>2,745,585</b>	<b>2,861,630</b>	<b>2,980,532</b>	<b>3,104,819</b>	<b>3,234,752</b>	<b>3,370,603</b>	<b>3,512,660</b>	<b>3,661,225</b>	<b>3,816,616</b>

#### Administration

Salaries	41013005215044	PS	\$ 362,091	399,529	406,142	420,357	435,069	450,297	466,057	482,369	499,252	516,726	534,811
Overtime	41031005215044	PS	639	1,150	1,250	1,294	1,339	1,386	1,434	1,485	1,537	1,590	1,646
Longevity	41041005215044	PS	4,113	4,503	4,800	4,968	5,142	5,322	5,508	5,701	5,900	6,107	6,321
Certification & Specialty Pay	41051005215044	PS	903	881	900	932	964	998	1,033	1,069	1,106	1,145	1,185
Car Allowance	41071005215044	PS	3,319	3,297	3,390	3,492	3,596	3,704	3,815	3,930	4,048	4,169	4,294
Insurance	42011005215044	PS	72,854	76,080	80,835	85,685	89,969	94,468	99,191	104,151	109,358	114,826	120,568
FICA/Medicare Tax	42021005215044	PS	27,027	31,316	31,861	32,976	34,130	35,325	36,561	37,841	39,165	40,536	41,955
Retirement	42031005215044	PS	63,071	69,919	70,906	73,388	75,956	78,615	81,366	84,214	87,162	90,212	93,370
Workers Compensation	42061005215044	PS	5,755	5,023	6,500	6,728	6,963	7,207	7,459	7,720	7,990	8,270	8,559
Uniforms	42091005215044	PS	672	1,000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267
Drug Testing	42095005215044	PS	63	100	300	309	318	328	338	348	358	369	380
Licensed Professional Services	43031005215044	FOM	60,081	84,886	-	-	-	-	-	-	-	-	-
Telecommunication and Data	44010005215044	FOM	1,441	1,586	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
Radio Services	44033005215044	FOM	491	1,500	400	412	424	437	450	464	478	492	507
Automotive Maint and Repair	44034005215044	FOM	-	1,408	800	824	849	874	900	927	955	984	1,013
Other Equip Maint and Repair	44035005215044	FOM	-	300	300	309	318	328	338	348	358	369	380
Rental of Equip and Vehicles	44041005215044	FOM	2,187	2,300	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800
Building Rental	44042005215044	FOM	200	720	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267
Facilities Maint and Repair	44051005215044	FOM	193	300	900	927	955	983	1,013	1,043	1,075	1,107	1,140
Licenses	44062005215044	FOM	53	138	-	-	-	-	-	-	-	-	-
Liability Insurance	45021005215044	FOM	16,677	17,054	17,000	18,020	18,921	19,867	20,860	21,903	22,999	24,149	25,356
Property Insurance	45022005215044	FOM	50,955	39,325	50,000	53,000	55,650	58,433	61,354	64,422	67,643	71,025	74,576
Banking Services	45029005215044	FOM	1,864	1,527	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
Printing Services	45051005215044	FOM	7,045	10,300	10,815	11,139	11,474	11,818	12,172	12,538	12,914	13,301	13,700
Professional Development	45081005215044	FOM	4,900	6,296	8,650	8,910	9,177	9,452	9,736	10,028	10,329	10,638	10,958
Travel and Reimbursement	45082005215044	FOM	50	-	-	-	-	-	-	-	-	-	-
Dues and Subscriptions	45083005215044	FOM	1,810	1,879	1,888	1,945	2,003	2,063	2,125	2,189	2,254	2,322	2,392
Other Purchased Services	45089005215044	FOM	16	50	-	-	-	-	-	-	-	-	-
Office Supplies	46011005215044	FOM	2,371	5,815	5,815	5,989	6,169	6,354	6,545	6,741	6,943	7,152	7,366
Postage	46012005215044	FOM	8,132	11,500	11,500	11,845	12,200	12,566	12,943	13,332	13,732	14,144	14,568
Operating Supplies	46013005215044	FOM	3,129	3,000	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800
Tools, Parts and Equipment	46014005215044	FOM	315	500	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267
Fuel and Oil	46026005215044	FOM	8,000	8,128	8,663	8,836	9,013	9,193	9,377	9,564	9,755	9,951	10,150
Vehicle & Machinery Parts,Supp	46027005215044	FOM	4,803	4,593	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800
Food	46032005215044	FOM	1,818	2,500	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167
Employee Recognition and Honor	46039005215044	FOM	495	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
Safety Equipment	46061005215044	FOM	300	622	625	644	663	683	703	725	746	769	792
Vehicle Replacement Program	46085005215044	CO	24,723	24,723	24,723	25,465	26,229	27,015	27,826	28,661	29,521	30,406	31,318
Other Equipment	47043005215044	CO	-	64,545	-	-	-	-	-	-	-	-	-
Interfund Transfers	48010005215044	TO	916,161	925,618	950,689	969,703	989,097	1,008,879	1,029,057	1,049,638	1,070,631	1,092,043	1,113,884
Software Licenses and Agreement:	46089005215044	FOM	-	-	361	372	383	394	406	418	431	444	457
Vehicles	47044005215044	CO	-	22,392	-	-	-	-	-	-	-	-	-
<b>Total Administration</b>			<b>\$ 1,658,718</b>	<b>1,838,303</b>	<b>1,720,513</b>	<b>1,769,581</b>	<b>1,818,721</b>	<b>1,869,390</b>	<b>1,921,642</b>	<b>1,975,532</b>	<b>2,031,118</b>	<b>2,088,458</b>	<b>2,147,615</b>

## Public Works - Service Center

Software Licenses and Agreement:	46089005215044	FOM	\$ 288,566	322,761	336,133	347,898	360,074	372,677	385,720	399,221	413,193	427,655	442,623
Salaries	41013005215050	PS	1,310	1,600	2,000	2,070	2,142	2,217	2,295	2,375	2,459	2,545	2,634
Overtime	41031005215050	PS	3,759	4,062	4,250	4,399	4,553	4,712	4,877	5,048	5,224	5,407	5,596
Longevity	41041005215050	PS	7,742	7,684	8,000	8,280	8,570	8,870	9,180	9,501	9,834	10,178	10,534
Certification & Specialty Pay	41051005215050	PS	68,353	76,080	76,080	80,645	84,677	88,911	93,356	98,024	102,925	108,072	113,475
Insurance	42011005215050	PS	21,689	25,712	26,804	27,742	28,713	29,718	30,759	31,835	32,949	34,103	35,296
FICA/Medicare Tax	42021005215050	PS	51,214	57,407	59,653	61,741	63,901	66,138	68,453	70,849	73,328	75,895	78,551
Retirement	42031005215050	PS	3,886	3,416	4,000	4,140	4,285	4,435	4,590	4,751	4,917	5,089	5,267
Workers Compensation	42061005215050	PS	3,787	3,600	3,600	3,708	3,819	3,934	4,052	4,173	4,299	4,428	4,560
Uniforms	42091005215050	PS	310	200	200	206	212	219	225	232	239	246	253
Compensated Absences	43420105215050	PS	824	890	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267
Telecommunication and Data	44010005215050	FOM	9,690	9,827	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768
Utility Svce (Elec,Wtr,WasteW)	44011005215050	FOM	1,996	3,719	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929
Gas Utilities Service	44012005215050	FOM	199	150	150	155	159	164	169	174	179	184	190
Radio Services	44033005215050	FOM	345	140	500	515	530	546	563	580	597	615	633
Automotive Maint and Repair	44034005215050	FOM	105	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
Other Equip Maint and Repair	44035005215050	FOM	7,394	2,000	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534
Facilities Maint and Repair	44051005215050	FOM	-	138	-	-	-	-	-	-	-	-	-
Licenses	44062005215050	FOM	1,384	4,060	4,060	4,182	4,307	4,436	4,570	4,707	4,848	4,993	5,143
Travel and Reimbursement	45082005215050	FOM	1,150	1,025	1,035	1,066	1,098	1,131	1,165	1,200	1,236	1,273	1,311
Dues and Subscriptions	45083005215050	FOM	6	-	-	-	-	-	-	-	-	-	-
Office Supplies	46011005215050	FOM	19,724	15,044	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002
Operating Supplies	46013005215050	FOM	6,383	12,500	12,500	12,875	13,261	13,659	14,069	14,491	14,926	15,373	15,835
Tools, Parts and Equipment	46014005215050	FOM	4,694	4,336	4,587	4,678	4,772	4,867	4,965	5,064	5,165	5,269	5,374
Fuel and Oil	46026005215050	FOM	1,923	3,460	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800
Facilities Maint & Improvement	46054005215050	FOM	1,075	1,342	750	773	796	820	844	869	896	922	950
Safety Equipment	46061005215050	FOM	23,369	23,369	23,369	24,070	24,793	25,536	26,302	27,092	27,904	28,741	29,604
Computer, Telecomm Hardware	46087005215050	CO	2,707	2,750	2,750	2,833	2,917	3,005	3,095	3,188	3,284	3,382	3,484
Janitorial Supplies	46015005215050	FOM	-	411	-	-	-	-	-	-	-	-	-
<b>Total Public Works - Service Center</b>			<b>\$ 533,599</b>	<b>589,683</b>	<b>604,421</b>	<b>626,969</b>	<b>649,601</b>	<b>673,070</b>	<b>697,408</b>	<b>722,651</b>	<b>748,830</b>	<b>775,983</b>	<b>804,147</b>

## Debt Service

### Senior Lien Debt

CO's Series 2008	ELTB	\$ 45,923	-	-	-	-	-	-	-	-	-	-	-
GO&R Series 2015	ELTB	16,944	16,944	16,944	16,944	16,944	75,444	72,444	74,319	71,069	73,394	76,172	
GO&Ref Bonds Series 2016	ELTB	8,150	52,025	54,650	47,950	51,250	-	-	-	-	-	-	
Municipal Service Center <sup>1</sup>	ELTB	-	-	-	345,000	345,000	345,000	345,000	345,000	345,000	345,000	345,000	
<b>Subtotal Senior Lien Debt</b>		<b>\$ 71,017</b>	<b>68,969</b>	<b>71,594</b>	<b>409,894</b>	<b>413,194</b>	<b>420,444</b>	<b>417,444</b>	<b>419,319</b>	<b>416,069</b>	<b>418,394</b>	<b>421,172</b>	
<b>Total Debt Service</b>		<b>\$ 71,017</b>	<b>68,969</b>	<b>71,594</b>	<b>409,894</b>	<b>413,194</b>	<b>420,444</b>	<b>417,444</b>	<b>419,319</b>	<b>416,069</b>	<b>418,394</b>	<b>421,172</b>	

**Additional Personal Services Costs**

Additional Personal Services from Hiring <sup>2</sup>	PS	\$	-	-	-	121,959	248,451	455,046	842,434	1,325,248	1,569,045	1,790,048	1,947,016
Additional Personal Services Costs from Budget Projection <sup>3</sup>	PS		-	-	100,000	103,500	107,123	110,872	114,752	118,769	122,926	127,228	131,681
<b>Total Additional Personal Services Costs</b>		<b>\$</b>	<b>-</b>	<b>-</b>	<b>100,000</b>	<b>225,459</b>	<b>355,574</b>	<b>565,918</b>	<b>957,186</b>	<b>1,444,017</b>	<b>1,691,971</b>	<b>1,917,276</b>	<b>2,078,697</b>

**Additional Vehicle Purchases**

Additional Vehicle Purchases <sup>4</sup>	CO	\$	-	-	-	570,403	238,769	630,811	659,287	390,046	268,736	709,983	285,102
<b>Total Additional Vehicle Purchases</b>		<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>570,403</b>	<b>238,769</b>	<b>630,811</b>	<b>659,287</b>	<b>390,046</b>	<b>268,736</b>	<b>709,983</b>	<b>285,102</b>
<b>Total Cash Out</b>		<b>\$</b>	<b>8,845,134</b>	<b>9,566,227</b>	<b>9,944,193</b>	<b>11,344,752</b>	<b>11,519,552</b>	<b>12,517,419</b>	<b>13,338,282</b>	<b>13,978,458</b>	<b>14,539,902</b>	<b>15,664,942</b>	<b>15,879,353</b>

<sup>1</sup> Debt Service for the Municipal Public Works Service Center is based on estimates from City staff on 6/28/2019 to fund construction of Public Works Service Center.

<sup>2</sup> Additional Personal Services from Hiring is used to reflect the cost of hiring additional employees from Schedule 11.

<sup>3</sup> Additional Personal Services Costs from Budget Projection is based on a number provided by City staff on 6/28/2019 but not yet reflected otherwise in FY 2020 Preliminary Budget.

<sup>4</sup> Additional Vehicle Expense is used to reflect the cost of purchasing additional vehicles from Schedule 12.



## Schedule 7 - Pro Forma

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Rate Adjustment</b>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Refuse</b>											
Refuse Rate Revenue	\$ 7,898,052	7,898,052	8,251,927	8,605,802	9,142,029	9,685,254	10,291,054	10,853,427	11,427,448	12,001,260	12,577,237
Revenue from Growth	-	353,875	353,875	536,227	543,225	605,800	562,373	574,020	573,812	575,977	579,654
<b>Revenue Before Rate Increase</b>	<b>\$ 7,898,052</b>	<b>8,251,927</b>	<b>8,605,802</b>	<b>9,142,029</b>	<b>9,685,254</b>	<b>10,291,054</b>	<b>10,853,427</b>	<b>11,427,448</b>	<b>12,001,260</b>	<b>12,577,237</b>	<b>13,156,890</b>
Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Revenue from Rate Increase	-	-	-	-	-	-	-	-	-	-	-
<b>Total Refuse Rate Revenue</b>	<b>\$ 7,898,052</b>	<b>8,251,927</b>	<b>8,605,802</b>	<b>9,142,029</b>	<b>9,685,254</b>	<b>10,291,054</b>	<b>10,853,427</b>	<b>11,427,448</b>	<b>12,001,260</b>	<b>12,577,237</b>	<b>13,156,890</b>
<b>Recycling</b>											
Recycling Rate Revenue	\$ 1,308,486	1,308,486	1,367,114	1,425,741	1,514,579	1,604,576	1,704,940	1,798,110	1,893,209	1,988,273	2,083,697
Revenue from Growth	-	58,627	58,627	88,838	89,997	100,364	93,170	95,099	95,065	95,423	96,032
<b>Revenue Before Rate Increase</b>	<b>\$ 1,308,486</b>	<b>1,367,114</b>	<b>1,425,741</b>	<b>1,514,579</b>	<b>1,604,576</b>	<b>1,704,940</b>	<b>1,798,110</b>	<b>1,893,209</b>	<b>1,988,273</b>	<b>2,083,697</b>	<b>2,179,729</b>
Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Revenue from Rate Increase	-	-	-	-	-	-	-	-	-	-	-
<b>Total Recycling Rate Revenue</b>	<b>\$ 1,308,486</b>	<b>1,367,114</b>	<b>1,425,741</b>	<b>1,514,579</b>	<b>1,604,576</b>	<b>1,704,940</b>	<b>1,798,110</b>	<b>1,893,209</b>	<b>1,988,273</b>	<b>2,083,697</b>	<b>2,179,729</b>
<b>Total Rate Revenues</b>	<b>\$ 9,206,538</b>	<b>9,619,041</b>	<b>10,031,543</b>	<b>10,656,608</b>	<b>11,289,829</b>	<b>11,995,994</b>	<b>12,651,537</b>	<b>13,320,656</b>	<b>13,989,533</b>	<b>14,660,933</b>	<b>15,336,620</b>
<b>Plus: Other Operating Revenues</b>	<b>\$ 381,014</b>	<b>246,637</b>	<b>218,000</b>	<b>222,801</b>	<b>227,789</b>	<b>235,485</b>	<b>240,937</b>	<b>246,770</b>	<b>252,445</b>	<b>258,086</b>	<b>263,769</b>
<b>Operating Income</b>	<b>\$ 9,587,552</b>	<b>9,865,678</b>	<b>10,249,543</b>	<b>10,879,408</b>	<b>11,517,618</b>	<b>12,231,479</b>	<b>12,892,474</b>	<b>13,567,426</b>	<b>14,241,978</b>	<b>14,919,019</b>	<b>15,600,389</b>
<b>Less: Operating Expenses</b>											
Personal Services	\$ (3,535,895)	(3,743,534)	(3,920,631)	(4,193,103)	(4,470,482)	(4,833,667)	(5,383,570)	(6,035,054)	(6,453,914)	(6,856,621)	(7,202,194)
Fixed Operations & Maintenance	(2,815,002)	(3,135,948)	(3,398,600)	(3,554,554)	(3,715,240)	(3,883,877)	(4,060,878)	(4,246,681)	(4,441,746)	(4,646,557)	(4,861,626)
Variable Operations & Maintenance	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ (6,350,897)</b>	<b>(6,879,482)</b>	<b>(7,319,231)</b>	<b>(7,747,656)</b>	<b>(8,185,722)</b>	<b>(8,717,544)</b>	<b>(9,444,448)</b>	<b>(10,281,735)</b>	<b>(10,895,660)</b>	<b>(11,503,178)</b>	<b>(12,063,819)</b>
<b>Net Operating Income</b>	<b>\$ 3,236,655</b>	<b>2,986,196</b>	<b>2,930,312</b>	<b>3,131,752</b>	<b>3,331,896</b>	<b>3,513,935</b>	<b>3,448,026</b>	<b>3,285,691</b>	<b>3,346,319</b>	<b>3,415,841</b>	<b>3,536,570</b>
<b>Non-Operating Revenues/Expenses Included in Debt Service Coverage Test</b>											
Non-Operating Revenue	\$ -	-	-	-	-	-	-	-	-	-	-
Interest Earnings	39,056	46,171	50,953	51,749	50,700	50,721	48,064	44,619	42,025	37,378	32,790
<b>Total Non-Operating</b>	<b>\$ 39,056</b>	<b>46,171</b>	<b>50,953</b>	<b>51,749</b>	<b>50,700</b>	<b>50,721</b>	<b>48,064</b>	<b>44,619</b>	<b>42,025</b>	<b>37,378</b>	<b>32,790</b>
<b>Net Income Before Debt Service</b>	<b>\$ 3,275,711</b>	<b>3,032,367</b>	<b>2,981,265</b>	<b>3,183,501</b>	<b>3,382,597</b>	<b>3,564,656</b>	<b>3,496,089</b>	<b>3,330,309</b>	<b>3,388,343</b>	<b>3,453,219</b>	<b>3,569,359</b>

# Debt Service & Coverage

Existing Senior Lien Debt Service	\$	71,017	68,969	71,594	409,894	413,194	420,444	417,444	419,319	416,069	418,394	421,172
New Senior Lien Debt Service		-	-	-	-	-	-	-	-	-	-	-
<b>Total Senior Lien Debt Service</b>	<b>\$</b>	<b>71,017</b>	<b>68,969</b>	<b>71,594</b>	<b>409,894</b>	<b>413,194</b>	<b>420,444</b>	<b>417,444</b>	<b>419,319</b>	<b>416,069</b>	<b>418,394</b>	<b>421,172</b>
Senior Lien Debt Service Coverage		46.13	43.97	41.64	7.77	8.19	8.48	8.37	7.94	8.14	8.25	8.47
Existing Subordinate Debt Service	\$	-	-	-	-	-	-	-	-	-	-	-
New Subordinate Debt Service		-	-	-	-	-	-	-	-	-	-	-
<b>Total Subordinate Debt Service</b>	<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Subordinate Debt Service Coverage		-	-	-	-	-	-	-	-	-	-	-
Existing Short-Term Debt Service	\$	-	-	-	-	-	-	-	-	-	-	-
New Short-Term Debt Service		-	-	-	-	-	-	-	-	-	-	-
<b>Total Short-Term Debt Service</b>	<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Short-Term Debt Service Coverage		-	-	-	-	-	-	-	-	-	-	-
<b>Total Debt Service</b>	<b>\$</b>	<b>71,017</b>	<b>68,969</b>	<b>71,594</b>	<b>409,894</b>	<b>413,194</b>	<b>420,444</b>	<b>417,444</b>	<b>419,319</b>	<b>416,069</b>	<b>418,394</b>	<b>421,172</b>
<b>Net Income After Debt Service</b>	<b>\$</b>	<b>3,204,694</b>	<b>2,963,398</b>	<b>2,909,671</b>	<b>2,773,607</b>	<b>2,969,403</b>	<b>3,144,212</b>	<b>3,078,645</b>	<b>2,910,990</b>	<b>2,972,274</b>	<b>3,034,825</b>	<b>3,148,187</b>
<b>Non-Operating Revenues/Expenses Not Included in Debt Service Coverage Test</b>												
Transfers In		-	-	95,000	95,000	95,000	95,000	95,000	95,000	95,000	95,000	95,000
Capital Outlay		(1,507,058)	(1,692,158)	(1,602,678)	(2,217,498)	(1,931,539)	(2,370,552)	(2,447,332)	(2,227,766)	(2,157,542)	(2,651,327)	(2,280,478)
Transfers Out		(916,161)	(925,618)	(950,689)	(969,703)	(989,097)	(1,008,879)	(1,029,057)	(1,049,638)	(1,070,631)	(1,092,043)	(1,113,884)
Other Below the Line Expenses		-	-	-	-	-	-	-	-	-	-	-
<b>Total Non-Operating</b>	<b>\$</b>	<b>(2,423,219)</b>	<b>(2,617,776)</b>	<b>(2,458,368)</b>	<b>(3,092,201)</b>	<b>(2,825,636)</b>	<b>(3,284,431)</b>	<b>(3,381,389)</b>	<b>(3,182,404)</b>	<b>(3,133,173)</b>	<b>(3,648,370)</b>	<b>(3,299,362)</b>
<b>Net Cash Flow</b>	<b>\$</b>	<b>781,475</b>	<b>345,622</b>	<b>451,303</b>	<b>(318,594)</b>	<b>143,767</b>	<b>(140,219)</b>	<b>(302,744)</b>	<b>(271,413)</b>	<b>(160,899)</b>	<b>(613,545)</b>	<b>(151,175)</b>
<b>Fund Balance</b>												
Balance at Beginning of Fiscal Year	\$	2,893,315	3,674,790	4,020,412	4,471,715	4,153,121	4,296,887	4,156,669	3,853,925	3,582,511	3,421,612	2,808,067
Net Cash Flow		781,475	345,622	451,303	(318,594)	143,767	(140,219)	(302,744)	(271,413)	(160,899)	(613,545)	(151,175)
<b>Total Funds Available</b>	<b>\$</b>	<b>3,674,790</b>	<b>4,020,412</b>	<b>4,471,715</b>	<b>4,153,121</b>	<b>4,296,887</b>	<b>4,156,669</b>	<b>3,853,925</b>	<b>3,582,511</b>	<b>3,421,612</b>	<b>2,808,067</b>	<b>2,656,892</b>
Less: Planned Cash Funded Capital		-	-	-	-	-	-	-	-	-	-	-
<b>Balance of Working Capital</b>	<b>\$</b>	<b>3,674,790</b>	<b>4,020,412</b>	<b>4,471,715</b>	<b>4,153,121</b>	<b>4,296,887</b>	<b>4,156,669</b>	<b>3,853,925</b>	<b>3,582,511</b>	<b>3,421,612</b>	<b>2,808,067</b>	<b>2,656,892</b>
Less: Working Capital Reserve Target		(1,587,724)	(1,719,870)	(1,829,808)	(1,936,914)	(2,046,430)	(2,179,386)	(2,361,112)	(2,570,434)	(2,723,915)	(2,875,795)	(3,015,955)
<b>Surplus/Deficit of Working Capital</b>	<b>\$</b>	<b>2,087,066</b>	<b>2,300,541</b>	<b>2,641,907</b>	<b>2,216,207</b>	<b>2,250,457</b>	<b>1,977,282</b>	<b>1,492,812</b>	<b>1,012,077</b>	<b>697,697</b>	<b>(67,728)</b>	<b>(359,062)</b>
Less: Additional Cash Funded Capital		-	-	-	-	-	-	-	-	-	-	-
Add Back: Working Capital Reserve		1,587,724	1,719,870	1,829,808	1,936,914	2,046,430	2,179,386	2,361,112	2,570,434	2,723,915	2,875,795	3,015,955
<b>Balance at End of Fiscal Year</b>	<b>\$</b>	<b>3,674,790</b>	<b>4,020,412</b>	<b>4,471,715</b>	<b>4,153,121</b>	<b>4,296,887</b>	<b>4,156,669</b>	<b>3,853,925</b>	<b>3,582,511</b>	<b>3,421,612</b>	<b>2,808,067</b>	<b>2,656,892</b>

## Schedule 8 - Capital Improvement Plan

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
City Recycle Center	-	-	-	-	-	-	-	-	-	-	-
<b>Total Projects</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Execution %	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Escalation %	103%	106%	108%	111%	115%	118%	121%	124%	128%	131%	135%
<b>Total Executed Projects</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Schedule 9 - Borrowing

### Senior Lien Borrowing

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Required Proceeds	\$ -	-	-	-	-	-	-	-	-	-	-
<b>Sources of Funds</b>											
Par Amount	-	-	-	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-	-	-	-
<b>Total Sources of Funds</b>	\$ -	-	-	-	-	-	-	-	-	-	-
<b>Uses of Funds</b>											
Proceeds	\$ -	-	-	-	-	-	-	-	-	-	-
Cost of Issuance	-	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve	-	-	-	-	-	-	-	-	-	-	-
Other Costs	-	-	-	-	-	-	-	-	-	-	-
<b>Total Uses of Funds</b>	\$ -	-	-	-	-	-	-	-	-	-	-
<b>Debt Bundling</b>											
Fiscal Years for Issuance	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Bundled Bond Proceeds	\$ -	-	-	-	-	-	-	-	-	-	-
First Year Interest Payment	-	-	-	-	-	-	-	-	-	-	-
Annual Payment	-	-	-	-	-	-	-	-	-	-	-
<b>Cumulative Annual Payment</b>	\$ -	-	-	-	-	-	-	-	-	-	-

### Subordinate Borrowing

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Required Proceeds	\$ -	-	-	-	-	-	-	-	-	-	-
<b>Sources of Funds</b>											
Par Amount	-	-	-	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-	-	-	-
<b>Total Sources of Funds</b>	\$ -	-	-	-	-	-	-	-	-	-	-
<b>Uses of Funds</b>											
Proceeds	\$ -	-	-	-	-	-	-	-	-	-	-
Cost of Issuance	-	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve	-	-	-	-	-	-	-	-	-	-	-
Other Costs	-	-	-	-	-	-	-	-	-	-	-

<b>Total Uses of Funds</b>	\$	-	-	-	-	-	-	-	-	-	-	-	-
<b>Debt Bundling</b>													
Fiscal Years for Issuance		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	
Bundled Bond Proceeds	\$	-	-	-	-	-	-	-	-	-	-	-	-
First Year Interest Payment		-	-	-	-	-	-	-	-	-	-	-	-
Annual Payment		-	-	-	-	-	-	-	-	-	-	-	-
<b>Cumulative Annual Payment</b>	<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

### Short-Term Borrowing

		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	
Required Proceeds	\$	-	-	-	-	-	-	-	-	-	-	-	-
<b>Sources of Funds</b>													
Par Amount		-	-	-	-	-	-	-	-	-	-	-	-
Other Sources		-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Sources of Funds</b>	<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Uses of Funds</b>													
Proceeds	\$	-	-	-	-	-	-	-	-	-	-	-	-
Cost of Issuance		-	-	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve		-	-	-	-	-	-	-	-	-	-	-	-
Other Costs		-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Uses of Funds</b>	<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Debt Bundling</b>													
Fiscal Years for Issuance		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	
Bundled Bond Proceeds	\$	-	-	-	-	-	-	-	-	-	-	-	-
First Year Interest Payment		-	-	-	-	-	-	-	-	-	-	-	-
Annual Payment		-	-	-	-	-	-	-	-	-	-	-	-
<b>Cumulative Annual Payment</b>	<b>\$</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Schedule 10 - Summary of Funds

<b>Solid Waste Fund</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>
Balance at Start of FY	\$ 2,893,315	3,674,790	4,020,412	4,471,715	4,153,121	4,296,887	4,156,669	3,853,925	3,582,511	3,421,612	2,808,067
Cash In	9,587,552	9,865,678	10,344,543	10,974,408	11,612,618	12,326,479	12,987,474	13,662,426	14,336,978	15,014,019	15,695,389
Interest	39,056	46,171	50,953	51,749	50,700	50,721	48,064	44,619	42,025	37,378	32,790
Cash Out	(8,845,134)	(9,566,227)	(9,944,193)	(11,344,752)	(11,519,552)	(12,517,419)	(13,338,282)	(13,978,458)	(14,539,902)	(15,664,942)	(15,879,353)
Planned Cash Funded CIP	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>\$ 3,674,790</b>	<b>4,020,412</b>	<b>4,471,715</b>	<b>4,153,121</b>	<b>4,296,887</b>	<b>4,156,669</b>	<b>3,853,925</b>	<b>3,582,511</b>	<b>3,421,612</b>	<b>2,808,067</b>	<b>2,656,892</b>
Less: Working Capital Reserve	(1,587,724)	(1,719,870)	(1,829,808)	(1,936,914)	(2,046,430)	(2,179,386)	(2,361,112)	(2,570,434)	(2,723,915)	(2,808,067)	(2,656,892)
<b>Amount Available for Projects</b>	<b>\$ 2,087,066</b>	<b>2,300,541</b>	<b>2,641,907</b>	<b>2,216,207</b>	<b>2,250,457</b>	<b>1,977,282</b>	<b>1,492,812</b>	<b>1,012,077</b>	<b>697,697</b>	-	-
Less: Amount Paid for Projects	-	-	-	-	-	-	-	-	-	-	-
<b>Amount Available After Projects</b>	<b>\$ 2,087,066</b>	<b>2,300,541</b>	<b>2,641,907</b>	<b>2,216,207</b>	<b>2,250,457</b>	<b>1,977,282</b>	<b>1,492,812</b>	<b>1,012,077</b>	<b>697,697</b>	-	-
Plus: Restricted Funds	1,587,724	1,719,870	1,829,808	1,936,914	2,046,430	2,179,386	2,361,112	2,570,434	2,723,915	2,808,067	2,656,892
<b>Available at End of FY</b>	<b>\$ 3,674,790</b>	<b>4,020,412</b>	<b>4,471,715</b>	<b>4,153,121</b>	<b>4,296,887</b>	<b>4,156,669</b>	<b>3,853,925</b>	<b>3,582,511</b>	<b>3,421,612</b>	<b>2,808,067</b>	<b>2,656,892</b>

## Schedule 11 - Additional Employees

Position	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Solid Waste Operator	-	-	-	2.0	-	1.0	-	-	-	1.0	-
Solid Waste Operator - Veramindi - Res	-	-	-	-	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Refuse Collector - Veramindi - Res	-	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Solid Waste Operator - Veramindi - Com	-	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Recycle Center Attendant	-	-	-	-	-	-	4.0	-	-	-	-
Foreman	-	-	-	-	-	-	1.0	-	-	-	-
Admin	-	-	-	-	1.0	-	-	-	1.0	-	-
Asst Recycling Coordinator	-	-	-	-	-	1.0	-	-	-	-	-
Fleet Manager	-	-	-	-	-	-	-	1.0	-	-	-
Heavy Technician	-	-	-	-	-	-	-	3.0	-	-	-
Parts Technician	-	-	-	-	-	-	-	1.0	-	-	-
Container Maintenance Worker	-	-	-	-	-	-	-	-	1.0	-	-
<b>Yearly Salary Totals</b>											
Solid Waste Operator	\$ -	-	-	121,959	126,228	195,968	202,827	209,926	217,273	299,837	310,332
Solid Waste Operator - Veramindi - Res	-	-	-	-	44,180	91,452	141,979	195,931	253,486	314,829	380,156
Refuse Collector - Veramindi - Res	-	-	-	-	19,924	41,243	64,030	88,361	114,317	141,982	171,444
Solid Waste Operator - Veramindi - Com	-	-	-	-	12,623	26,129	40,565	55,980	72,424	89,951	108,616
Recycle Center Attendant	-	-	-	-	-	-	213,433	220,903	228,635	236,637	244,919
Foreman	-	-	-	-	-	-	75,836	78,491	81,238	84,081	87,024
Admin	-	-	-	-	45,497	47,089	48,738	50,443	104,418	108,072	111,855
Asst Recycling Coordinator	-	-	-	-	-	53,164	55,025	56,951	58,944	61,007	63,143
Fleet Manager	-	-	-	-	-	-	-	102,960	106,564	110,294	114,154
Heavy Technician	-	-	-	-	-	-	-	206,556	213,785	221,268	229,012
Parts Technician	-	-	-	-	-	-	-	58,745	60,801	62,929	65,132
Container Maintenance Worker	-	-	-	-	-	-	-	-	57,159	59,159	61,230
<b>Total Salary</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>	<b>121,959</b>	<b>248,451</b>	<b>455,046</b>	<b>842,434</b>	<b>1,325,248</b>	<b>1,569,045</b>	<b>1,790,048</b>	<b>1,947,016</b>

## Schedule 12 - Vehicle Replacement Program

Vehicle Type	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
ASL	-	-	-	1.0	-	1.0	-	-	-	1.0	-
REL	-	-	-	1.0	-	-	-	-	-	-	-
Rolloff	-	-	-	-	-	-	1.0	-	-	-	-
Light Truck	-	-	-	-	-	-	1.0	1.0	-	-	-
FEL	-	-	-	-	-	-	-	-	-	-	-
Service Truck	-	-	-	-	-	-	1.0	1.0	-	-	-
ASL Trucks - Veramindi - Res	-	-	-	-	0.4	0.4	0.4	0.4	0.4	0.4	0.4
FEL Trucks - Veramindi - Com	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RL Trucks - Veramindi - Res	-	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3
<b>ASL</b>											
ASL	\$ -	-	-	362,785	-	384,879	-	-	-	433,185	-
REL	-	-	-	207,618	-	-	-	-	-	-	-
Rolloff	-	-	-	-	-	-	280,602	-	-	-	-
Light Truck	-	-	-	-	-	-	29,851	30,747	-	-	-
FEL	-	-	-	-	-	-	-	-	-	-	-
Service Truck	-	-	-	-	-	-	95,524	98,390	-	-	-
ASL Trucks - Veramindi - Res	-	-	-	-	133,453	137,457	141,580	145,828	150,203	154,709	159,350
FEL Trucks - Veramindi - Com	-	-	-	-	44,216	45,543	46,909	48,316	49,766	51,259	52,797
RL Trucks - Veramindi - Res	-	-	-	-	61,099	62,932	64,820	66,765	68,768	70,831	72,955
<b>ASL</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>	<b>570,403</b>	<b>238,769</b>	<b>630,811</b>	<b>659,287</b>	<b>390,046</b>	<b>268,736</b>	<b>709,983</b>	<b>285,102</b>



## Schedule 13 - Outside City Surcharge Calculation

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### Outside City Surcharge

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Average Fund Balance without Veramendi	\$	3,838,751
Average Fund Balance with Veramendi	\$	3,616,210
<b>Difference</b>	<b>\$</b>	<b>222,541</b>