## SCS ENGINEERS















### FINAL REPORT

## **Updated Sanitation Rate Study**

#### Presented to:

City of Pensacola, Florida



100 West Leonard Street Pensacola, Florida 32501 (850) 435-1894

Presented by:

#### SCS ENGINEERS

4041 Park Oaks Blvd #100, Tampa, Florida 33610 (813) 621-0080

March 1, 2017 File No. 09216077.00

Offices Nationwide www.scsengineers.com

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#### 1.0 EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

In May 2016, the City of Pensacola, Florida (City) retained SCS Engineers (SCS) to conduct an updated solid waste cost of services and rate study. Based on data and information provided by City staff, a pro forma rate model (Model) was developed, which enabled SCS to make projections of financial performance of solid waste collection and disposal for the upcoming five-year, planning period (FY 2017-2022) and model different possible rate structures. This report provides a discussion of the methodology used to conduct the analysis, the revenue requirements of the City's solid waste program as determined by the analysis, and proposed fees and charges to be considered by the City of Pensacola City Council.

In 2007, SCS was engaged by the City to evaluate the City's solid waste operations and make recommendations on cost savings and revenue enhancement opportunities. SCS also completed a comprehensive financial rate analysis for solid waste operations. Based on data and information provided by City staff, a rate model was developed, which enabled SCS to make projections of financial performance of refuse collection and transfer operations for the upcoming five-year planning period (2007-2011) and model various user rate structures.

Based on our review and analysis, SCS made the following major recommendations in the 2007 rate study:

- That the City's Sanitation Services continue to remain as an enterprise fund.
- That the City's customer bills reflect an automatic annual CPI adjustment to the rate beginning in FY08.
- That the City should increase fees billed to property owners or occupant for bulk waste collection.
- A surcharge should be added for bulk waste collection of tires.
- That the City's customer billing rates include a provision for a fuel adjustment quarterly, based on the Retail Diesel On-Highway Fuel Price Index published by the U.S. Department of Energy, and provide for a line item to reflect such cost on the customer's monthly bill.
- That the City's customer billing rates should include an annual disposal cost adjustment, based on actual City costs for these services.
- City staff should conduct further research into the feasibility of converting yard trash and bulk waste collection to a single person crew operation.
- That the City should create an Equipment Reserve Fund (sinking fund) for funding of future Sanitation equipment replacement costs.

The City provides a variety of sanitation core services including once a week, automated collection of single-family homes (18,480 customers) and 640 commercial businesses. These accounts are serviced using City-provided rolling carts. In addition, residential customers are provided once a week, single-stream recycling, yard waste and bulk waste collection. Other important services provided include the following: container maintenance, Mayor's neighborhood cleanups, event recycling, and storm cleanup and management.

Current monthly charges (residential and commercial) include the following:

- Container charges \$18.36
- Disposal charges \$4.44
- Fuel surcharge \$0.90

#### 1.2 RATE SCENARIOS

SCS developed the following rate scenario options for consideration by the City Council:

- Option 1, "Status Quo" This option assumes that the estimated deficits in projected annual operating revenues would be met by raising customer rates on an annual basis or transfers from the City's General Fund.
- Option 2, "Annual CPI Increases in Monthly Sanitation Rate" This option assumes a full recovery of projected Department revenue needs through increases in monthly customer fees. The Department would continue to assess individual monthly charges for fuel and landfill services.
- Option 3, "Increase Sanitation Rate by \$1.26 to Account for Increases in Annual Operating Costs and for Changes in the Cost of Recycling Processing" This option assumes a full recovery of projected Department revenue needs through increases in monthly customer fees as in Option 2 and accounts for the continuation of recycling processing fees which began in 2016.
- Option 4, "Implement a Long-Term Funding Program for Fleet Replacement" This option assumes establishing a Sanitation Equipment Surcharge of \$2.17 per month to establish a Sanitation Equipment Fund under the Sanitation Fund. In order to achieve full funding of equipment needs, this surcharge could initially set at \$1.00 per month and increased by \$1.17 per month for the following year. Alternatively, the City could use its LOST Fund for a portion of the needed vehicle replacement cost for yard and transfer station vehicles and set the surcharge at \$1.32 per month.

#### 1.3 RECOMMENDATIONS

SCS makes the following recommendations:

• Establish a rate of \$24.06 per month for residential and commercial customers.

- Increase these rates annually based on a CPI adjustment.
- Implement a long-term funding program, as described in the report, for fleet replacement.

#### 2.0 INTRODUCTION

In May 2016, the City of Pensacola, Florida (City) retained SCS Engineers (SCS) to conduct an updated solid waste cost of services and rate study. Based on data and information provided by City staff, a pro forma rate model (Model) was developed, which enabled SCS to make projections of financial performance of solid waste collection and disposal for the upcoming five-year, planning period (FY 2017-2022) and model different possible rate structures. This report provides a discussion of the methodology used to conduct the analysis, the revenue requirements of the City's solid waste program as determined by the analysis, and proposed fees and charges to be considered by the City of Pensacola City Council.

#### 2.1 SCOPE OF SERVICES

SCS completed the following tasks as noted in the paragraphs below to help update the study and the Pro Forma Model.

**Task 1 – Kick-off Meeting.** SCS kicked off the project with a face-to-face meeting after award of this project. To help us frame the scope of this project, SCS requested background information and review reports, data, and any other related information relevant to solid waste operations since 2007 prior to the meeting.

**Task 2 – Gather and Analyze Historical Information.** An important aspect of predicting future revenues and expenditures is to understand the past operating performance since the last rate study. SCS gathered pertinent demographic data, solid waste generation statistics, and financial data on the City's solid waste collection, disposal, recycling, yard waste, bulky waste, household hazardous waste, and administration costs. These data were organized into a Pro Forma Model, which enabled SCS to provide the City with an analysis of the rate impacts of system changes.

Task 3 - Project Revenue Requirements. SCS evaluated the "revenue requirement" to support the City's solid waste operations on a yearly basis. The "revenue requirement" is the total amount of money the City must collect to pay solid waste system expenditures needed to provide its targeted levels of service while meeting its financial requirements. The revenue requirement includes long-term capital expenditures that are paid out of current rates and not paid by existing and proposed bonds for new capital projects. The revenue requirement at the time of ratemaking were be estimated by annualizing the fiscal year-to-date cash expenditures. Additionally, adjustments were made by SCS for any significant non-recurring expenditures (e.g., one-time payments at the end of the fiscal year). Revenue requirements for future years were projected by applying anticipated changes in the expenditures to the current revenue requirement. These changes may include such items as: inflation, increases in worker' wages, fuel adjustments, increased disposal costs, stricter requirements from regulating agencies, and leachate treatment adjustments. They may also include expected costs for new projects and new programs. We reviewed proposed expansion costs for accuracy and omissions. In addition to projected cash expenditures, any adjustments will be made to account for required increases, if any, in the fund balance or City's financial policies.

**Task 4 – Design New Rates for Each Customer Group.** SCS finalized the revised Pro Forma Model to enable development of rate designs. SCS worked with the City to utilize the Pro Forma Model, which will be constructed specifically for this project, to construct a series of sensitivity analyses (scenarios) to evaluate the rate impact of various critical parameters such as changes to the consumer price index (CPI), fuel costs, capital purchase, cash versus debt financing, fund balance and emergency cash reserves, and alternative levels of services.

**Task 5 – Final Report and Presentations Draft Review.** SCS prepared this Draft Report of the conceptual design of the system rate study and issued it to the City for review and comment. Based on comments received, we then modified the Draft Rate Study Report and issued a Final Report. SCS then prepared a PowerPoint slide presentation, which summarized the findings and recommendations of the Final Report.

#### 2.2 DATA COLLECTION AND REVIEW

SCS submitted detailed data and information requests to the City to collect historical and background information on operations and practices. This included:

- Detailed financial reports and budgets
- Solid waste and financial policies
- Waste flow projections
- Estimates of future recycling and disposal programs/facilities
- Personnel rosters and organizational charts
- Capital improvement plans
- Vehicle maintenance plans and anticipated costs
- Solid waste and Interlocal agreements

#### 2.3 STAFF COMMUNICATIONS

SCS held an initial kick off meeting to initiate the Study, which provided a forum to confirm the scope of services, discuss data needs, and identify key issues for City staff. During the course of the Study, SCS conducted a series of conference calls and face-to-face meetings with City staff managing different facets of the overall Program. These conference calls, meetings, and frequent emails gave SCS an opportunity to review Study progress, verify overall assumptions, and receive useful input from City staff.

#### 2.4 REPORT ORGANIZATION

This report is organized in four sections, plus an Executive Summary and Appendix.

The report sections are listed below:

- Section 1 Executive Summary.
- Section 2 Introduction.
- Section 3 Changes to the City's Sanitation System.
- Section 4 Pro Forma Model.

- Section 5 References
- Appendix Schedules.

#### 3.0 CHANGES TO THE CITY'S SANITATION SYSTEM

#### 3.1 2007 RATE STUDY

In 2007, SCS was engaged by the City to evaluate the City's solid waste operations and make recommendations on cost savings and revenue enhancement opportunities. SCS also completed a comprehensive financial rate analysis for solid waste operations. Based on data and information provided by City staff, a rate model was developed, which enabled SCS to make projections of financial performance of refuse collection and transfer operations for the upcoming five-year planning period (2007-2011) and model various user rate structures.

Based on our review and analysis, SCS made the following major recommendations:

- That the City's Sanitation Services continue to remain as an enterprise fund.
- That the City's customer bills reflect an automatic annual CPI adjustment to the rate beginning in FY08.
- That the City should increase fees billed to property owners or occupant for bulk waste collection.
- A surcharge should be added for bulk waste collection of tires.
- That the City's customer billing rates include a provision for a fuel adjustment quarterly, based on the Retail Diesel On-Highway Fuel Price Index published by the U.S. Department of Energy, and provide for a line item to reflect such cost on the customer's monthly bill.
- That the City's customer billing rates should include an annual disposal cost adjustment, based on actual City costs for these services.
- City staff should conduct further research into the feasibility of converting yard trash and bulk waste collection to a single person crew operation.
- That the City should create an Equipment Reserve Fund (sinking fund) for funding of future Sanitation equipment replacement costs.

#### 3.2 CURRENT SERVICES

The City provides a variety of sanitation core services (Exhibit 1) including once a week, automated collection of single-family homes (18,480 customers) and 640 commercial businesses. These accounts are serviced using City-provided rolling carts. In addition, residential customers are provided once a week, single-stream recycling, yard waste and bulk waste collection. Other important services provided include the following: container maintenance, Mayor's neighborhood cleanups, event recycling sponsorship, and storm cleanup and management.

#### Exhibit 1. Core Services Provided By Sanitation Services

# Core services provided









Garbage Collection Recycling Collection Yard Trash Collection

Transfer Station

# Other services provided









Container Maintenance

Mayor's Neighborhood Event Recycling Cleanups

Storm Cleanup & Management





Exhibit 2 graphically illustrates current sanitation staffing by program area. Current monthly charges (residential and commercial) include the following:

- Container charges \$18.36
- Disposal charges \$4.44
- Fuel surcharge \$0.90

Residential Garbage
13 Employees

Recycling
5 Employees
\$3,101,300

Transfer Station
2 Employees
\$403,300

Yard Trash/Bulk Waste
13 Employees
\$1,662,000

Exhibit 2. Current Sanitation Staffing

#### 3.3 COST SAVINGS AND EFFICIENCIES

In helping ensure regulatory compliance and value to the City's ratepayers, the Division has implemented a number of cost saving programs recommended as part of the 2007 Rate Study. These are briefly discussed in the paragraphs that follow below.

- Reduced personnel costs by implementing MSW collection to once a week.
- Signed Interlocal Agreement with Escambia County This agreement requires the City to provide 10 neighborhood cleanups in return for free disposal for yard trash. This equates to an annual savings to the City of \$350,000 per year.
- Compressed Natural Gas (CNG) Collection Vehicles The City has been purchasing CNG vehicles for its collection fleet to take advantage of the fuel savings associated with natural gas. These vehicles are also expected to reduce the City's greenhouse gas emissions and carbon footprint.
- Recycling Savings and Rate Increases The City transports city-collected recyclables to Tarpon Paper at a reduced tipping fee (when compared to the Perdido Landfill). When the City's recycled yard trash volume is considered, the city's recycling rate is approximately 46 percent.

The Emerald Utility Authority (ECUA) recently constructed and began operating a materials recovery facility (MRF) located at the County's Perdido Landfill. It was anticipated that this facility would enable more cost-effective recycling processing alternatives for residents of Escambia and neighboring communities. However, city staff was unable to reach an equitable agreement with ECUA on the contract and the City continues to use Tarpon Paper for recycling processing.

#### 3.4 CUSTOMER SATISFACTION SURVEY

In January 2016, the Haas Center for Business Research and Economic Development (Haas Center) was commissioned by the City to conduct a customer satisfaction survey with a variety of City-provided services. The report provided by the Hass Center provides details about residents' attitudes and opinions regarding their satisfaction with City services, as well as their perception of other elements of life within City limits. Overall, 84 percent of residents were either satisfied (41 percent) or very satisfied (43 percent) with their recycling, garbage, and yard waste services. Moreover, six of the seven City districts had less than 10 percent of their residents reply that they were either dissatisfied or very dissatisfied with Sanitation Services.

#### 3.5 ANNUAL RATE ADJUSTMENTS

The rate ordinance, which was established as part of the SCS rate study in 2007, provides for the monthly garbage collection fee to be automatically adjusted, based upon the percentage difference in the most recent annual Consumer Price Index (CPI). Exhibit 1 shows CPI increases from 2009 to 2016. Since the effective date of the ordinance (October 1, 2008), however, the City Council has only raised sanitation rates only once (Fiscal Year 2012).

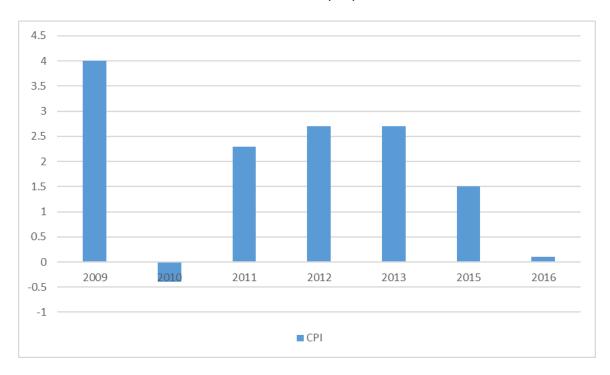


Exhibit 3. CPI Rates (%) 2009 - 2016

The rate ordinance established in 2007 also established a vehicle fuel and lubricant pass-through surcharge, which is added as a separate line item to monthly bills issued to sanitation customers. The surcharge is reviewed monthly and has been increased and decreased as necessary. Currently, the surcharge is set at \$0.90 and is reflective of the current price of fuel used in the city's Sanitation Services operation.

#### 4.0 PRO FORMA MODEL

#### 4.1 DATA COLLECTION

At the beginning of SCS's engagement, City staff provided background data and information concerning residential collection revenues and operating expenses. This included the following critical information:

- Staffing and organizational charts.
- Wages and benefit rates.
- Rate schedules.
- Loans.
- Fund account summaries (totals and comparisons).
- Past and current operating budgets by cost centers.
- Equipment replacement and maintenance schedules.
- Waste and recyclables deliveries to Escambia County and Tarpon Paper.
- Fleet replacement plan.
- Ordinances.
- Administrative costs.

#### 4.2 RATE MODEL

At the outset of the work effort, SCS developed an updated Microsoft Excel<sup>TM</sup> spreadsheet-based, pro-forma model (Model) to assist in the completion of the rate analysis. This model includes the following facets:

- An analysis of operational expenditures (personnel, contract and purchased services, materials and supplies, transfers).
- Analysis of capital outlays (equipment replacement and capital projects).
- Revenue sufficiency analysis (annual revenue projections and rate plan to provide sufficient revenues).
- Funds analysis (reserve requirements, transfers to general fund, administrative costs, beginning and ending fund balances). Based on data and information provided by the City, these individual spreadsheets were linked to develop an overall model to conduct the rate and assessment analysis.

#### 4.3 METHODOLOGY OVERVIEW

The following methodology was utilized by SCS to conduct the cost of service analysis:

- Collect Historical Actual Expenses and Revenues for the City System The first task was to gather available historical actual revenue and cost data from 2008 and include these into a financial database.
- **Develop of the "Test Year"** The second task was the development of an annual revenue requirement for a "Test Year". The revenue requirement represents the total revenue for the System to recover during a year to fund all sanitation costs. SCS worked with City staff to select a period that reflected a typical year for the System. Actual expenses for FY 15/16 were used as the basis of the Test Year for the Study. SCS then worked with City staff to make these costs more representative of anticipated conditions during the upcoming five-year financial planning horizon. The resulting Test Year was used as the basis for forecasting expenses for the five-year forecast (FY 16/17 to FY 21/22).
- **Develop of a Revenue Requirement Projection** After developing the revenue requirement for the Test Year, SCS worked with City staff to project changes in anticipated costs due to inflation, labor increases, facility and vehicle maintenance, planning costs, etc. This resulted in a five-year revenue requirement forecast for the entire system including collection, recycling, and disposal of solid waste.
- **Revenue Offsets** SCS worked with City staff to develop estimates of other revenues such as bulk item collection charges, business refuse container charges, new accounts/transfer fees, fuel surcharge, County landfill fees, interest income, rebates, sale of assets, and miscellaneous.
- **Determination of the Number of Customer Units** SCS worked with City staff to develop reasonable estimates of future number of customers over the next five-year period (assumed to be 18,460 residential and 640 commercial customers).
- Calculation of the Monthly Customer Service Fee SCS then distributed the revenue needs across the proper billing units to estimate the cost of service.

# 4.4 DEVELOPMENT OF THE REVENUE REQUIREMENT PROJECTION

In addition to developing the Test Year revenue requirements, SCS forecasted the annual revenue requirement for FY 16/17 to FY 21/22. In order to develop the forecast, SCS projected how costs would change over the forecast period due to factors such as inflation, solid waste and customer growth. The assumptions used to develop the forecast include the following annual increases:

- CPI 2.1 percent (12-year average 2004-2015, U.S. Department of Labor).
- Solid waste and recyclables growth 0 percent.
- Customer growth 0 percent.

The Department manages the following cost centers to support solid waste operations:

- Residential Garbage Collection Cost Center 0507010.
- Recycling Collection Cost Center 0507015.
- Transfer Station Cost Center 0507030.
- Yard Waste Collection Cost Center 0507050.

Exhibit 4 identifies the revenue needs for the Department for FY 16/17 to FY 21/22, if monthly charges are not increased. As shown, the Sanitation Fund is projected to have a small deficit in FY 2017, but increases substantially over the next five years to account for increases in operating expenses for the four cost centers over this time period.

#### 4.5 FLEET REPLACEMENT PLAN

The Department has developed a 10-year Fleet Replacement Plan (Plan) to replace equipment and vehicles (Exhibit 5). The fleet has seen a substantial rise in repair and maintenance expenses as these vehicles have aged. Typically, most "best-in-class" sanitation collection systems are on a six to eight-year replacement cycle for automated side-loaders. The Department's current vehicles are well beyond that preferred replacement cycle with many being replaced in 2008. Similarly, the Department's yard waste collection and ancillary vehicles are also well beyond the preferred replacement cycle for these equipment. The Plan is designed to establish a reasonable vehicle and equipment replacement cycle over the next decade and enable the Department to reduce maintenance expenses. As shown, the Plan projects a funding need for the Department's fleet of \$6.5 million over this planning period.

Many municipal sanitation departments have developed long-term fleet funding programs in lieu of annually cash expensing these vehicle purchases. These funding plans vary from a long-term, direct surcharge on their customers to transfers from the General Fund or use of local option sales tax programs (LOST). The later funding option is oftentimes chosen if some of the vehicles are used for community-wide activities. For example, the Department typically utilizes its fleet of yard trash collection trucks and ancillary rolling stock such as transfer station tractor/trailers in response to major and minor natural disasters (e.g. hurricanes, tornados, microbursts, etc.). Their use is somewhat different than traditional yard waste collection and can be viewed as extraordinary in nature and provides an essential betterment of the City as a whole. Consequently, a reasonable argument can be made for funding these vehicles solely or partially from the City's LOST Program.

Exhibit 5 provides detailed analysis of two alternative, long-term funding options: (1) enacting a \$2.17 per month fleet replacement surcharge for the entire vehicle need; or (2) utilizing the LOST Program to fund the purchase of yard waste and transfer station vehicles and enacting a \$1.50 per month fleet replacement surcharge for purchase of the garbage collection/recycling/pickup vehicles.

#### 4.6 RATE SCENARIOS

SCS developed the following rate scenario options for consideration by the City Council:

- Option 1, "Status Quo" This option assumes that the estimated deficits in projected annual operating revenues would be met by raising customer rates on an annual basis or transfers from the City's General Fund.
- Option 2, "Annual CPI Increases in Monthly Sanitation Rate" This option assumes a full recovery of projected Department revenue needs through increases in monthly customer fees. The Department would continue to assess individual monthly charges for fuel and landfill services.
- Option 3, "Increase Sanitation Rate by \$1.26 to Account for Increases in Annual Operating Costs and for Changes in the Cost of Recycling Processing" This option assumes a full recovery of projected Department revenue needs through increases in monthly customer fees as in Option 2 and accounts for the continuation of recycling processing fees which began in 2016.
- Option 4, "Implement a Long-Term Funding Program for Fleet Replacement" This option assumes establishing a Sanitation Equipment Surcharge of \$2.17 per month to establish a Sanitation Equipment Fund under the Sanitation Fund. In order to achieve full funding of equipment needs, this surcharge could initially set at \$1.00 per month and increased by \$1.17 per month for the following year. Alternatively, the City could use its LOST Fund for a portion of the needed vehicle replacement cost for yard and transfer station vehicles and set the surcharge at \$1.32 per month.

#### 4.7 RECOMMENDATIONS

SCS makes the following recommendations:

- Establish a rate of \$24.06 per month in FY 15/16 for residential and commercial customers.
- Increase these rates annually based on a CPI adjustment.
- Implement a long-term funding program, as described in the report, for fleet replacement.

Exhibit 4. Department Projected Revenue Needs, Status Quo

	ACTUAL					PROJECTED							
Financial Metrics													
	2014	201	.5	2016	2017	_	2018	2019	2020	2021	2022		
Operating Revenues	5,782,948	5,821	,743	5,828,729	5,972,60	00	6,068,800	6,113,600	6,113,600	6,113,600	6,113,600		
Deduct for Fuel and Lubicants that are included					(500,00	_	(510,542)	(521,306)	(532,296)	(543,519)	(554,978		
Deduct for non-rate revenues that are included					(225,00	00)							
Deduct for Equipment Surcharge						0							
Deduct for \$.35 projected rate increase that is included						0							
Total Rate Revenues to be considered as part of the Monthly Rate					5,247,60	00							
Operating Expenses By Cost Center													
Collection	2,764,433	3,02	0,364	3,254,299	3,255,4	50	3,320,888	3,387,948	3,456,360	3,526,155	3,597,362		
Recycling	698,960	72	5,577	893,605	940,9	00	956,554	892,267	911,079	930,287	949,901		
Transfer Station	651,468	36	5,296	347,695	403,0	00	411,497	420,172	429,031	438,076	447,312		
Yard Trash	1,694,204	1,55	2,308	1,638,029	1,662,0	00	1,697,041	1,732,820	1,769,353	1,806,657	1,844,748		
Subtotal Operating Expenses	5,809,065	5,66	3,545	6,133,628	6,261,3	50	6,385,979	6,433,207	6,565,823	6,701,176	6,839,322		
Deduct for Fuel Surcharge					(500,00	00)							
Deduct for Non-Rate Expenses	5,584,065	5,438	,545	5,908,628	(225,00	00)	6,160,979	6,208,207	6,340,823	6,476,176	6,614,322		
Deduct for capital truck purchase						0							
Total of Rate Related Expenses					5,536,35	0							
Net Revenues of Rate Related Rev vs Expenses (Deficits)	(26,117)		,198	(304,899)	(288,75	_	418,363	426,699	305,073	180,944	54,256		

Exhibit 5. Proposed Department Fleet Replacement Plan

		Fiscal Year									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Ten Year Totals
Garbage/Recycling Truck Replacement	1	0	1	1	1	1	1	1	1	1	9
Per Truck Cost	\$290,000	\$296,114	\$302,357	\$308,732	\$315,241	\$321,887	\$328,674	\$335,603	\$342,679	\$349,904	
Total Cost	\$290,000	\$0	\$302,357	\$308,732	\$315,241	\$321,887	\$328,674	\$335,603	\$342,679	\$349,904	\$2,895,078
Yard Trash Truck Replacement	0	1	1	1	1	1	1	1	1	1	9
Per Truck Cost	\$0	\$120,000	\$122,530	\$125,113	\$127,751	\$130,445	\$133,195	\$136,003	\$138,870	\$141,798	
Total Cost	\$0	\$120,000	\$122,530	\$125,113.34	\$127,751.15	\$130,444.57	\$133,194.77	\$136,002.96	\$138,870.36	\$141,798.21	\$1,175,705
	•		•	•	•		•	•			•
Transfer Station Truck Replacement	0	0	1	0	0	1	0	0	0	1	3
Per Truck Cost	\$0	\$0	\$150,000	\$153,163	\$159,689	\$170,004	\$184,800	\$205,121	\$232,475	\$269,032	
Transfer Station Trailer Replacement	0	0	0	0	1	0	0	1	0	0	2
Per Trailer Cost	\$0	\$0	\$0	\$0	\$85,000	\$86,792	\$90,490	\$96,335	\$104,720	\$116,235	
Total Cost	\$0	\$0	\$150,000	\$0	\$85,000	\$170,004	\$0	\$96,335	\$0	\$269,032	\$770,371
Pickup Trucks Replacement	l ol	1	1	ام		0	-1	ol	1	0	I -
Per Truck Cost	\$0	\$35.000	\$35.738	\$0	\$27,000	\$27,569	\$28,151	\$28,744	\$29,350	\$0	-
Total Cost	\$0	\$35,000	\$35,738	\$0 \$0	\$27,000	\$27,569	\$28,151	\$28,744	\$29,350	\$0	
Total Cost	30	\$55,000	\$30,/30	\$0	\$27,000	\$0	\$20,131	\$0	\$29,330	\$0	\$100,200
Number of Vehicles Replaced	1	2	4	2	4	3	3	3	3	3	28
				FUNDING O	PTIONS						
ALL VEHICLES @ \$2.17 SURCHA	ARGE										
Annual Cash Purchase Cost	\$290,000	\$155,000	\$610,625	\$433,845	\$554,992	\$622,336	\$490,019	\$567,942	\$510,899	\$760,734	\$4,996,393
Truck Capital Fund at \$2.17 surcharge	\$497,364	\$497,364	\$497,364	\$497,364	\$497,364	\$497,364	\$497,364	\$497,364	\$497,364	\$497,364	\$4,973,640
Truck Capital Fund Year Endi Balance	\$207,364	\$549,728	\$436,467	\$499,986	\$442,357	\$317,386	\$324,731	\$254,153	\$240,617	-\$22,753	
											ļ
COLLECTION VEHICLES @ 1.32 S	SURCHARGE AN	D LOST FU	NDING FOR	YARD AND	TRANSFER	STATION V	EHICLES				
Annual Cash Purchase Cost	\$290,000	\$35,000	\$338,095	\$308,732	\$342,241	\$321,887	\$356,824	\$335,603	\$372,029	\$349,904	\$3,050,316
Truck Capital Fund at \$1.32 surcharge	\$302,544	\$302,544	\$302,544	\$302,544	\$302,544	\$302,544	\$302,544	\$302,544	\$302,544	\$302,544	\$3,025,440
Truck Capital Fund Year Endi Balance	\$12,544	\$280,088	\$244,537	\$238,349	\$198,652	\$179,308	\$125,028	\$91,969	\$22,484	-\$24,876	I

### 5.0 REFERENCES

- 1. City of Pensacola, Annual Budgets, 2008-2016.
- 2. Haas Center, Pensacola Community Survey, 2016.



SCS ENGINEERS

Appendix A

Pro Forma Model Schedules