

Greenville City Council Agenda

Thursday, December 13, 2012

5:00 p.m.

City Hall Gallery

200 West Fifth Street

- I. Call Meeting to Order
- II. Roll Call
- III. Approval of Agenda
- IV. New Business
 1. Five-Year Plan to Provide More Efficient and Cost Effective City Sanitation Service
- V. Adjournment

City of Greenville
Five Year Plan to Provide More Efficient and
Cost Effective City Sanitation Service

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- Section VIII. Fiscal Analysis – Page 23
- Appendix A: Performance and Cost Comparison Data from North Carolina Local Government Performance Measurement Project (i.e. Benchmarking Study)
- Appendix B: Survey of Refuse Fees from Select Cities (November 2012)
- Appendix C: Draft Voluntary Early Retirement Incentive Program

Report Developed by the City of Greenville
City Manager's Office, Public Works Department,
Financial Services Department and Human Resources Department
December 3, 2012

Section I. Report Purpose

The City's Sanitation Fund is designated as an enterprise fund and, as such, it is intended to be fiscally self supporting. The fund has operated at a deficit the past two fiscal years with a loss of \$86,915 in FY 10-11 and a loss of \$844,383 in FY 11-12.

During the FY 12-13 and FY 13-14 biennial budget development process, staff identified two primary reasons for the fund's operational deficits. First, the rates had not been adjusted during the previous four years, while the cost for service provision had risen substantially during the same period. Second, the City continues to utilize an inefficient service delivery system (i.e. backyard service and manual collection) at a time when many of our peer communities have implemented, or are in the process of implementing, automated service delivery systems. As a result of these circumstances, staff recognized the need for substantial rate increases in FY 12-13 and FY 13-14 to ensure that the fund's revenues would cover expenses.

City Council approved a limited rate increase for FY 12-13 and no additional increase in FY 13-14 (see Table 1 for approved Sanitation Rates). The approved budget included an operational subsidy in the form of a transfer from the General Fund totaling \$139,163 in FY 12-13 and \$439,200 in FY 13-14. In addition to this transfer, the General Fund will absorb an estimated \$749,000 in indirect costs that are not charged to the Sanitation Fund.

It was the general consensus of City Council during this year's budget development process that changes are needed in how sanitation services are provided so as to avoid substantial future rate increases and continued subsidies from the General Fund. To this end, it was determined that an evaluation of sanitation services be conducted by staff and that a plan for providing more efficient and cost effective sanitation service be developed and presented to City Council.

As such, the purpose of this report is to outline a five-year plan that transitions the City's current manual collection processes to automated and semi-automated processes that will result in a service delivery system that will:

1. Continue providing high levels of customer service while utilizing industry best practices;
2. Ensure that the Sanitation Fund operates as an enterprise fund, requiring no direct subsidy from the General Fund;
3. Better define service levels for various sanitation services;
4. Provide mechanisms for customers that need service levels greater than the defined service levels to pay additional fees for additional services; and

5. Ensure that the costs of services for customers are minimized to the greatest extent practicable.

Table 1. Sanitation Rates

Service Type	FY 12 Rate (Per Month)	FY 13 Rate (Per Month)	*FY 14 Rate
Curbside (Basic)	\$9.60	\$11.75	\$11.75
Backyard (Premium)	\$26.00	\$40.80	\$40.80
Multi-Family	\$9.57	\$11.75	\$11.75

*FY 14 rate based on approved financial plan.

Section II: Overview of Current Sanitation Operations

The Sanitation Division provides residential refuse services to the citizens of Greenville. The array and frequency of services are delivered in a manner that ensures public health risks are minimized, the City remains aesthetically pleasing, rules and regulations are abided by, and meets the Division's service goals.

The Sanitation Division is authorized 72 full time positions. Currently, 69 of those positions are filled. The Division has four Supervisors, one Recycling Coordinator, one Pest Control Officer, seven Crew Leader II's, 17 Crew Leader I's, and 39 Refuse Collectors.

The Sanitation Division has 47 pieces of equipment. The fleet is comprised of 18 rear loaders, seven front loaders, six knuckle booms, six leaf collectors, eight pick-up trucks, and one car. Only diesel and gasoline fuels are used to power the Division's vehicles. All of the Division's vehicles and equipment were in compliance with federal exhaust emissions guidelines at their time of purchase. Compliance with emission standards has resulted in higher equipment cost. The fleet consists of equipment that is less than ten years old and is used to provide services described in this report.

Four of the pick-up trucks are assigned to the supervisors for various field services, one is assigned to the Pesticide Officer for mosquito and rodent control activities, one is assigned to a Refuse Collector for roll out cart delivery, and one is used to pull the Division's two recycling trailers to special events and used in the Christmas parade. One pick-up serves as back-up and for picking up missed collections.

The Sanitation Division's only car is assigned to the Recycling Coordinator. It is used for Keep Greenville Beautiful activities and other recycling duties.

Refuse

Single family refuse (sometimes referred to as garbage) collection uses three person crews and 25 cubic yard rear loader trucks. Garbage is collected from residential properties only.

Multi-family units use dumpsters for refuse disposal. Front loader trucks with two person crews are used to empty multi-family residential dumpsters and those of the City, GUC, and the Pitt-Greenville Airport facilities. The trucks have a 40 cubic yard capacity.



Recycling

General recycling collection uses three person crews and 25 cubic yard rear loader trucks. Recycling is collected from single family residences, multi-family residential properties, three City recycling drop off sites, schools within the City limits, and other City buildings.

Recycling collection for white goods (i.e. appliances) and electronics (i.e. computers, televisions, etc.) is collected on a call-in basis, and no fees are charged for collection. All white goods with refrigerants are taken to the Allen Road Transfer Station. Non-refrigerant containing appliances are disposed of at a local metal recycler. Pick-up trucks are used for white good collection, electronic recycling, and missed service calls.

Yard Waste

The knuckle boom trucks operate with two person crews and are used to collect yard waste from single family homes and multi-family units. Truck bodies range between 22 and 28 cubic yard capacity.

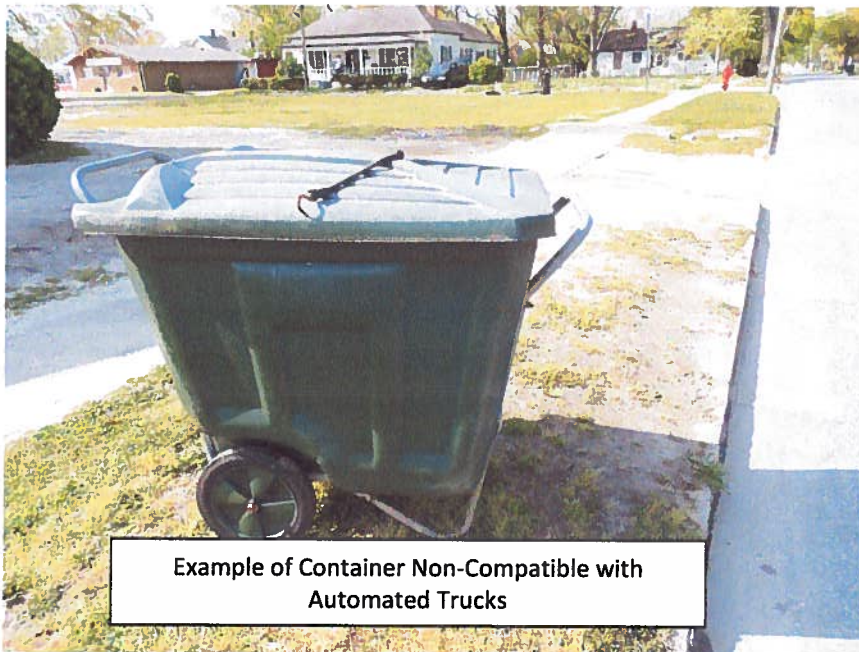
Loose leaf collection services are provided weekly November – February (the peak loose leaf season). Part-time drivers and temporary employees are utilized for loose leaf collection. Residents are allowed to place loose leaves behind the curb for collection. These leaf trucks



utilize vacuum apparatus to collect the loose leaf piles.

Roll-Out Carts

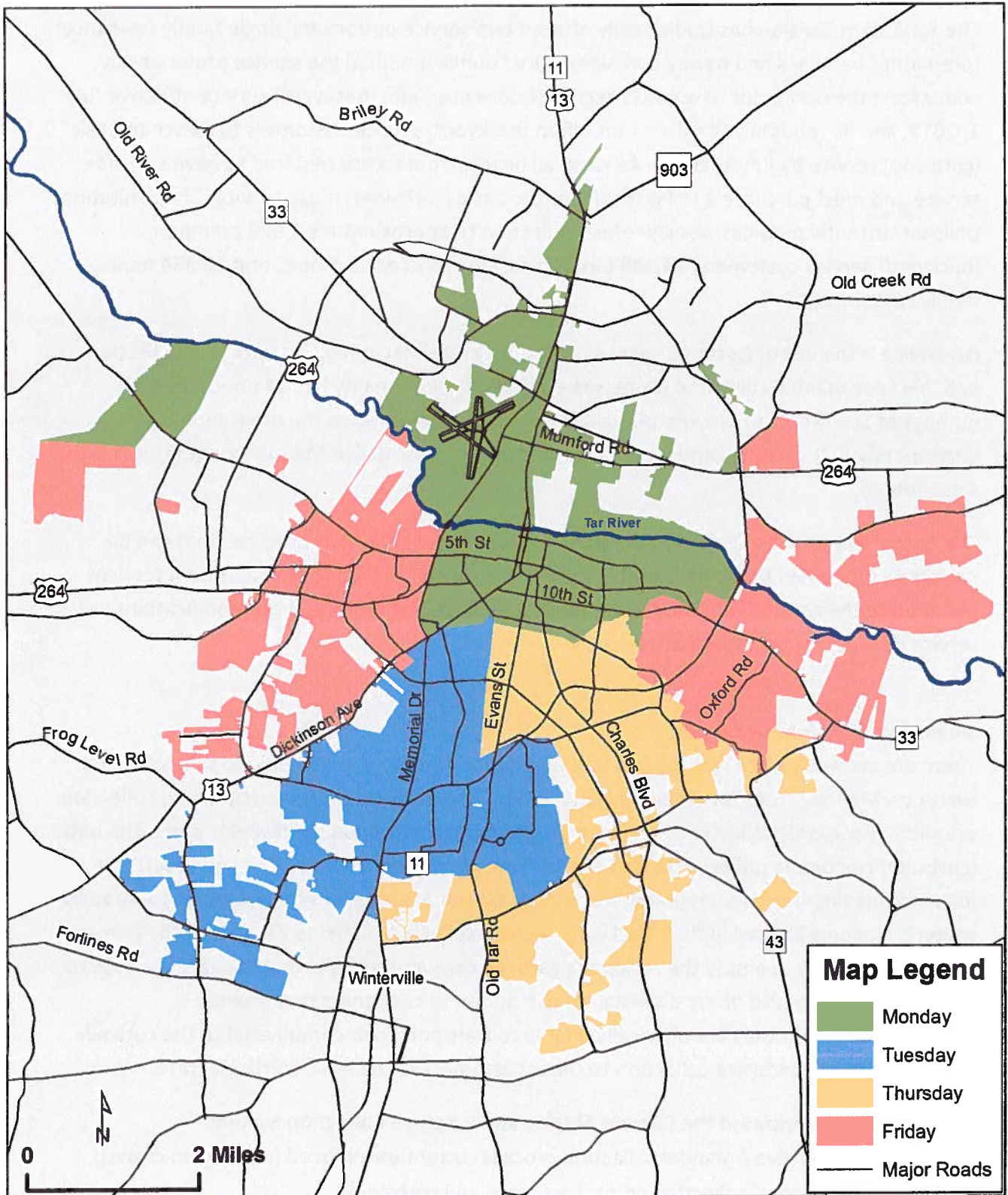
The residents of Greenville purchase their roll out cart for basic (curbside) refuse service and special services. There are many types and styles of carts being used throughout the city, but not all carts currently being used for basic (curbside) refuse service can be utilized for automated collection. Cart performance affects the speed and efficiency of collection routes, the safety of sanitation employees, and the ability to prevent litter. Technology has improved the information that can be gathered from carts through RFID tags and web-based software management. Most of North Carolina's cities provide their residents with roll-out carts.



Collection Routing

Regular refuse collection, recycling collection, and yard waste collection occurs four days per week (Monday, Tuesday, Thursday and Friday). Multi-family bulky item collection and additional yard waste services are provided city-wide on Wednesdays. Figure 1 below depicts the daily routes within the city.

Figure 1. Regular Sanitation Collection Routes



Section III: Refuse Collection

The Sanitation Division has traditionally offered two service options for single family residences (premium / backyard and basic / curbside). City Council modified the service provisions by eliminating the option for new customers to choose premium (backyard) service effective July 1, 2012, and by requiring all existing premium (backyard) service customers to switch to basic (curbside) service by July 1, 2017. As such, all new customers are required to have curbside service and must purchase a roll-out cart for the basic (curbside) refuse service. The Sanitation Division currently provides weekly refuse collection to approximately 3,626 premium (backyard) service customers, 14,149 basic (curbside) service customers, and 20,354 multi-family customers.

Greenville is the last of North Carolina's ten largest cities that still offers backyard collections and, because manual collection processes are still utilized, the City has an unusually high number of Sanitation employees per collection points compared to the other municipalities participating in the North Carolina Local Government Performance Measurement Project (See Appendix A).

The City of Greenville's Sanitation Division has a variety of collection practices that can be changed or modified to increase efficiency and reduce costs. The various sanitation services provided to the citizens will be described below, followed by the proposed modifications in service delivery for that specific service.

Single Family Refuse Collection

There are currently eight rear loaders and twenty-four employees assigned to this collection sector on Monday, Tuesday, Thursday, and Friday. They provide the basic (curbside) collection, premium (backyard) collection, and curbside bulky trash collection on a weekly basis. The basic (curbside) customers utilize curbside carts that are purchased from the City and that fit the rear loaders' cart tipper. Premium (backyard) service customers are allowed to have up to three 32-gallon containers located in their backyard. Refuse collectors travel to the rear of the homes pulling a crew cart to empty the resident's garbage cans and transporting the garbage back to the truck. The City also offers a special service option to customers that provide documentation that they are physically unable to transport their container(s) to the curbside. The City provides backyard collection to these customers at the basic (curbside) rate.

Identified Inefficiencies in the Current Single Family Refuse Collection System

- Labor intensive / manual collection process currently employed (three-man crews);
- Combination of collection points (rear yard and curbside);
- Lack of standardization for collection containers;

- No limitation on the volume (number of containers) for curbside customers;
- Fee for service is not tied to volume (number of containers) and
- Weekly collection of bulky items using labor intensive / manual collection process (three man crews).

Proposed Modifications

Replace the eight rear loader trucks utilizing three-man crews with four single operator fully automated trucks and two semi-automated trucks utilizing two man crews. The net result of this modification will include two fewer trucks and 16 fewer staff assigned to weekly routes. Operational modifications proposed to accommodate and/or supplement this transition include:

1. Standardized Roll-Out Carts

The City will purchase and issue roll-out carts to all customers (basic and premium) that do not currently have carts compatible for automated collection. Basic (curbside) collection will transition to automated and semi-automated collection as new vehicles are purchased and placed into service. Refuse collectors will continue to walk to the backyard, pull the roll-out cart to the truck, empty the cart and return it to the backyard for premium (backyard) customers until this service is discontinued on June 30, 2017. It should be noted that the transition of premium (backyard) accounts to basic (curbside) accounts is occurring more quickly than originally anticipated.

Benefits / Rationale

- Standardized carts are critical to transitioning to automated and semi-automated collection;
- Provides an avenue for the City to own all carts used in collection process ensuring compatibility with collection equipment;
- Eliminates the need for approximately 32 crew carts and associated modifications required to rear loader tipping mechanisms which are currently needed to service premium (backyard) customers;
- Eliminates heavy lifting currently required to service premium



Example of City Approved Roll-Out Cart

(backyard) customers, thus potentially reducing work-related injuries and their associated costs:

- Eliminates the potential for injuries associated with crew cart use;
- Ensures that all carts have appropriate lids attached which, when used properly, will reduce water infiltration and litter spilling onto the streets and private property;
- Saves time as the refuse collectors would no longer be required to remove and replace lids or lift and empty different styles of containers.

2. Volume-Based Pricing

The City will define the amount of refuse to be collected during a scheduled weekly collection as one roll-out cart (96-gallon capacity). If the customer generates additional refuse, they will need to purchase one or more additional roll-out carts (\$75 each) and pay an additional monthly fee for this additional service (\$3.50 per month). The City currently charges a single rate regardless of the amount of refuse generated (i.e. the same basic rate whether the customer uses one 96-gallon roll-out cart or if they use four 96 gallon roll out carts).

Benefits/Rationale

- Fees are more aligned with the customer's service usage;
- Average consumers are not subsidizing those that generate the most refuse;
- Potential incentive for recycling;
- Potential for additional revenues.



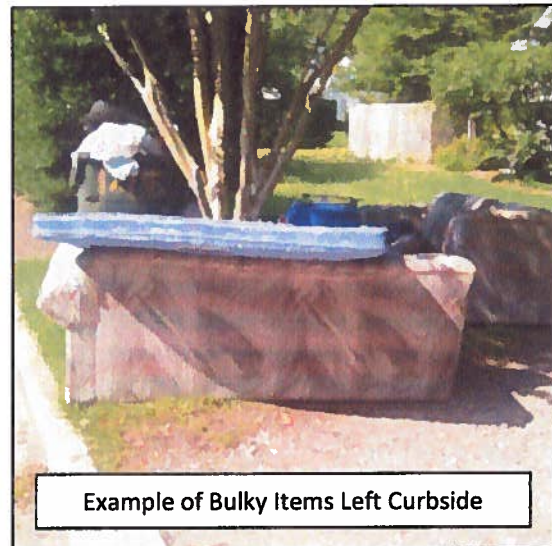
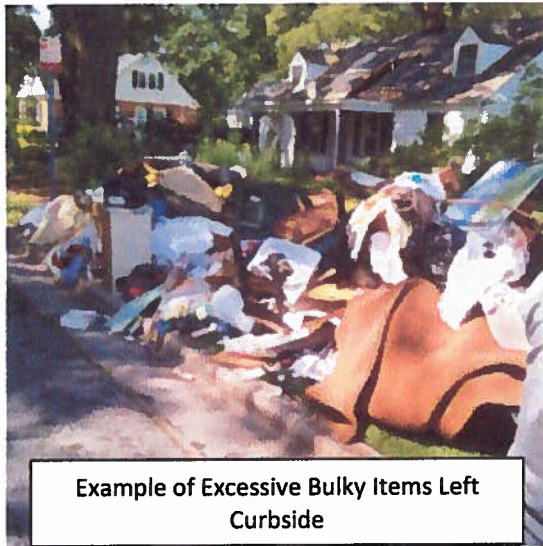
3. Bulky Item Collection / Sofas, Mattresses, Furniture

Currently, bulky refuse is placed at the curb for collection every week. Most collections are performed manually and with rear loader trucks. This current practice is not compatible with automated side loaders; thus, a separate collection method is needed.

Staff proposes to utilize knuckle-boom trucks for bulky item collection on a call-for-service basis. No more than one collection per residence will be permitted every two weeks. The amount of bulky items collected at one time is limited to five, with a fee of \$3 for each additional item.

Benefits / Rationale

- Fees are aligned with the customer's service usage (volume based pricing);
- Use of knuckle-booms will reduce heavy lifting by employees;
- Citizens can always utilize the Allen Road Transfer Station in addition to City service.



Multi-family Refuse Collection

The City's multi-family refuse collection is provided by eight employees using four front loader dumpster trucks. This service is provided using two person crews. The refuse collector assigned to the crew is responsible for backing assistance and the disposal / pick-up of discarded items left on dumpster pads. Many trucks are now being outfitted with auto-braking systems and cameras. These mechanisms assist with backing, exiting, and servicing urban areas and traditional neighborhoods which typically have more narrow streets / alleys and can be more difficult to maneuver. Most dumpster collections in other municipalities, both private and public, are performed by the driver only. City standards require that all discarded items be placed inside the dumpster (not left on the dumpster pad), but the practice has traditionally been for the refuse collectors to manually pick-up any items left around the dumpster.

Identified Inefficiencies

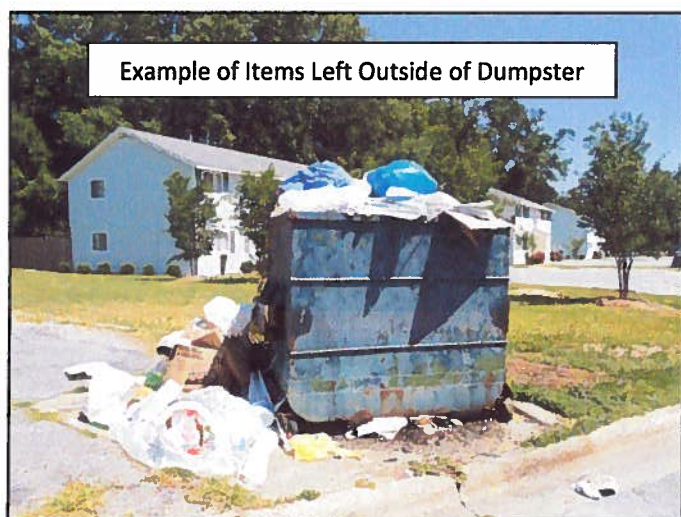
- Utilization of two person crews.
- City allows debris to be placed around the dumpster.

Proposed Modifications

Outfit front loader dumpster trucks with additional safety equipment as needed to facilitate single operator collection. Actively enforce the requirement that all refuse be placed into the dumpster. Utilize four single-operator front loader dumpster trucks for collection. Also make available one refuse collector that will float among the four trucks to assist with backing in more urban areas. The net result of this modification will include three fewer staff assigned to weekly routes.

Benefits / Rationale

- Increased collection efficiency;
- Potential costs savings due to staff reduction.



Section IV: Recycling Collection

The City's recycling collection service has twelve employees and uses four rear loader trucks. Premium (backyard) refuse service includes backyard recycling collection. The City collects commingled recycling materials on the same day as refuse collection. Increased recycling participation, coupled with the city's population growth, has led to significantly greater volumes of recyclable collections than in previous years. This increased work load has placed great demands on current crews, and it is anticipated that a fifth rear loader truck and three additional employees will be needed within the next two years unless a more efficient collection system is implemented.

Identified Inefficiencies

- Labor intensive collection process currently employed (three man crews using rear loader trucks).
- Combination of collection points (rear yard and curbside).
- Lack of standardization for collection containers.

Proposed Modifications

Replace the four rear loader trucks utilizing three-man crews with three single operator fully automated trucks and two semi-automated trucks utilizing two-man crews. The net result of this modification will include five fewer staff assigned to weekly routes. Operational modifications proposed to accommodate and/or supplement this transition include:

1. Standardized Roll-Out Carts

The City will purchase and issue roll-out carts to all customers.

2. Require That All Recycling be Collected at Curbside

Curbside recycling collection is mandated by all of the other benchmark cities and is recognized throughout the solid waste industry as a best management practice. Currently, the City collects recycling for all premium (backyard) service customers in the backyard. The proposed approach requires that all customers except special service



customers bring recycling material to the curbside for automated / semi-automated collection.

Benefits / Rationale

- Helps maintain recycling collection without additional staff;
- Standardized carts are critical to transitioning to automated and semi-automated collection;
- Provides an avenue for the City to own all carts used in collection process ensuring compatibility with collection equipment;
- Allows the City to apply for grants to help pay for residential curbside recycling carts. Such grants up to \$100,000 have been issued by the State of North Carolina. The U.S. Department of Energy also offers grants for municipal curbside carts;
- Eliminates the need for approximately 12 crew carts and associated modifications required to rear loader tipping mechanisms which are currently needed to service premium (backyard) customers;
- Eliminates the potential for injuries associated with crew cart use;
- Saves fuel while increasing efficiency;
- Many cities have reported increased recycling participation when roll-out carts are provided to residents and this is supported by state government's grants to provide roll out carts for curbside collection.

Section V: Yard Waste Collection

The Sanitation Division uses twelve employees and six knuckle boom trucks, operating as two person crews, to collect yard waste from city residences. Yard waste is scheduled to be collected the same day as refuse and recycling. The use of knuckle boom trucks has encouraged residents to put out enormous piles of yard waste, typically consisting of limbs, logs and brush. Additionally, many private landscape contractors perform large projects and leave excessive amounts of yard waste debris by the curb for the City to collect.

Currently, if a resident containerizes yard waste, the crew must dump the container or bag contents on a hard surface and use the grapple to collect the yard waste. The trucks are not made for the collection of containerized yard waste. Knuckle boom trucks also have limited compaction ability, and having no restrictions on the amount of yard waste a resident places at the curb makes the planning of routes and workloads very difficult. This results in residents often complaining about the timeliness of scheduled yard waste collection. Once yard waste service levels become better defined, improved planning will allow more predictable and efficient service delivery.

A common yard waste collection practice among the benchmark cities is the use of rear loaders and requirements for loose material to be containerized. Limbs and brush have size limits to facilitate the use of rear loaders. Some cities require limbs to be tied in bundles for collection. This requirement is for the safety of workers and prevents tree services from using City forces to haul away their work.

Identified Inefficiencies

- Lack of limitations on volumes to be collected.
- No standard for how debris should be placed at the curb (customers are permitted to leave debris in any manner they desire).
- Knuckle boom trucks do not allow for compaction, leading to increased trips to the landfill for emptying.
- Current system does not allow for the efficient collection of containerized yard waste.
- Current practice requires staff time to rake area after collection by knuckle boom.

Proposed Modifications

Replace six knuckle boom trucks utilizing two-person crews with six rear loader trucks utilizing two-person crews. Require that all yard waste (other than loose leaves during designated season) be containerized, bagged in biodegradable bags, or bundled in groups not exceeding 50 pounds or four feet in length. Any collection needs in excess of this defined service will require call-in special collection, typically using a knuckle boom truck, on a fee-for-service basis.

Benefits / Rationale

- Increased ability to maintain service schedule;
- Fuel savings;
- Greater efficiency;
- Reduced equipment maintenance cost.
- Potential for increased revenue.



Loose Leaf Collection

The City's loose leaf collection operates from November through February each year. The City uses up to 18 temporary employees to provide this service utilizing leaf vacuum trucks during this peak period. Outside of the peak leaf season, loose leaves are either collected using knuckle boom trucks and raking up after, or special trips are made with leaf vacuum trucks.

Proposed Modifications

Continue loose leaf collection using vacuum trucks during peak months (November through February). During non-peak months, require that loose leaves and grass clippings be bagged or containerized for collection.

Benefits / Rationale

- Makes yard waste collection more efficient during the months that loose leaves are not collected with vacuum truck.



Section VI: Plan Implementation Tables

Table 2: Implementation Table for Single Family Refuse Collection Modifications

FY 2012 – 2013	FY 2013 - 2014	FY 2014 – 2015	FY 2015 - 2016	FY 2016 - 2017
Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism
<ul style="list-style-type: none"> 8 rear loader trucks utilizing 3-man crews 	<ul style="list-style-type: none"> 6 rear loader trucks utilizing 3 man-crews 2 single-operator automated trucks <p>Note: 2 automated trucks to be in service effective January 2014.</p>	<ul style="list-style-type: none"> 3 rear loader trucks utilizing 3-man crews 4 single-operator automated trucks 	<ul style="list-style-type: none"> 1 rear loader truck utilizing 3 man crew 2 automated 2-person crew side-loader trucks 4 single-operator automated trucks 	<ul style="list-style-type: none"> 2 automated 2-person crew side-loader trucks 4 single-operator automated trucks
Personnel	Personnel	Personnel	Personnel	Personnel
<ul style="list-style-type: none"> 8 Crew Leaders (Drivers) 16 Refuse Collectors 	<ul style="list-style-type: none"> 8 Crew Leaders (Drivers) 12 Refuse Collectors 	<ul style="list-style-type: none"> 7 Crew Leaders (Drivers) 6 Refuse Collectors 	<ul style="list-style-type: none"> 7 Crew Leaders (Drivers) 4 Refuse Collectors 	<ul style="list-style-type: none"> 6 Crew Leaders (Drivers) 2 Refuse Collectors
Action	Action	Action	Action	Action
<ul style="list-style-type: none"> Issue RFP and accept formal bids for 2 single-operator automated trucks (January 2013) Purchase routing software (March 2013) Incorporate Mobile 311 to assist with bulky item collection (June 2013) Purchase and deliver roll-out carts that are compatible with automated collection (June 2013) Proposed refuse fee adjustment for single family residences 	<ul style="list-style-type: none"> Issue RFP and accept formal bids for 2-single operator automated trucks (July 2013) Implement new routing to accommodate automated trucks (January 2014) Put into service 2-single operator automated trucks (January 2014) Proposed refuse fee adjustment for single family residences 	<ul style="list-style-type: none"> Put into services 2 single- operator automated trucks (July 2014) Issue RFP and accept formal bids for 2 automated 2-person side-loader trucks (July 2014) Proposed refuse fee adjustment for single family residences 	<ul style="list-style-type: none"> Put into service 2 automated 2-person crew side-loader trucks (July 2015) Issue RFP and accept formal bids for 2 automated trucks as (July 2015) Proposed refuse fee adjustment for single family residences 	<ul style="list-style-type: none"> Notify remaining premium (backyard) service customers that all service will be curbside effective July 1, 2017 Issue RFP and accept formal bids for 2 single-operator automated trucks to be placed in the reserve fleet Proposed refuse fee adjustment for single family residences
Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact
<p>Anticipated Costs</p> <ul style="list-style-type: none"> Purchase of 2 automated trucks (\$520,000) Routing software (\$75,000) Refuse cart purchase, assembly and delivery (8,000 carts \$400,000) 	<p>Anticipated Costs</p> <ul style="list-style-type: none"> Purchase of 2 automated trucks (\$550,000) 	<p>Anticipated Costs</p> <ul style="list-style-type: none"> Purchase of 2 automated trucks (\$550,000) 	<p>Anticipated Costs</p> <ul style="list-style-type: none"> Purchase of 2 automated trucks as back-up vehicles (\$550,000) 	<p>Anticipated Costs</p> <ul style="list-style-type: none"> None
Anticipated Savings/Revenues	Anticipated Savings/Revenues	Anticipated Savings/Revenues	Anticipated Savings/Revenues	Anticipated Savings/Revenues
<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Reduction of 4 FTE for ½ year @ \$40,000 per year (\$80,000) 10% Fuel savings from routing efficiency Surplus 2 rear loader trucks (\$15,000) 	<ul style="list-style-type: none"> Reduction of 11 FTE for full year @ \$40,000 per year (\$440,000) 10% Fuel savings from routing efficiency Surplus 2 rear loader trucks (\$15,000) 	<ul style="list-style-type: none"> Reduction of 13 FTE for full year @ \$40,000 per year (\$520,000) 10% Fuel savings from routing efficiency Surplus 2 rear loader trucks (\$15,000) 	<ul style="list-style-type: none"> Reduction of 16 FTE for full year @ \$40,000 per year (\$640,000) 10% Fuel savings from routing efficiency Surplus 2 rear loader trucks (\$15,000)

Table 3: Implementation Table for Multi-Family Refuse Collection Modifications

FY 2012 – 2013	FY 2013 - 2014	FY 2014 - 2015	FY 2015 - 2016	FY 2016 - 2017
Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism
<ul style="list-style-type: none"> • 4 Front loaders utilizing 2-person crews 	<ul style="list-style-type: none"> • 4 front loaders with single operators and one floating Refuse Collector 	<ul style="list-style-type: none"> • 4 front loaders with single operators and one floating Refuse Collector 	<ul style="list-style-type: none"> • 4 front loaders with single operators and one floating Refuse Collector 	<ul style="list-style-type: none"> • 4 front loaders with single operators and one floating Refuse Collector
Personnel	Personnel	Personnel	Personnel	Personnel
<ul style="list-style-type: none"> • 4 Crew Leaders • 4 Refuse Collectors 	<ul style="list-style-type: none"> • 4 Crew Leaders • 1 Refuse Collector 	<ul style="list-style-type: none"> • 4 Crew Leaders • 1 Refuse Collector 	<ul style="list-style-type: none"> • 4 Crew Leaders • 1 Refuse Collector 	<ul style="list-style-type: none"> • 4 Crew Leaders • 1 Refuse Collector
Action	Action	Action	Action	Action
<ul style="list-style-type: none"> • Develop Routes with Routing software • Education and notice to all multi-family property managers / owners that all refuse (bags, clothes) is required to be in the dumpster for collection (January 2013 through June 2013) • Bulky items will be collected weekly by call-in for service appointments • Address site distance / backing issues associated with dumpster locations where feasible • Proposed refuse fee adjustment for multi-family residences 	<ul style="list-style-type: none"> • Shift from 4 two-person crews to 4 single operators with one Refuse Collector to float among routes to assist with backing maneuvers • Continue education efforts • Proposed refuse fee adjustment for multi-family residences 	<ul style="list-style-type: none"> • Study alternative fuels for savings • Proposed refuse fee adjustment for multi-family residences 	<ul style="list-style-type: none"> • Study alternative fuels for savings • Proposed refuse fee adjustment for multi-family residences 	<ul style="list-style-type: none"> • Study alternative fuels for savings • Proposed refuse fee adjustment for multi-family residences
Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact
<u>Anticipated Costs</u> <ul style="list-style-type: none"> • Printing education materials, direct mailing and dumpster stickers (\$1,000) 	<u>Anticipated Costs</u> (\$0)	<u>Anticipated Costs</u> • (\$0)	<u>Anticipated Costs</u> • (\$0)	<u>Anticipated Costs</u> (\$0)
<u>Anticipated Savings/Revenues</u> • None	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> • Reduction of 3 FTE for 1 year @\$40,00 (\$120,000) • Fuel savings from routing efficiency 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> • Reduction of 3 FTE for 1 year @\$40,00 (\$120,000) • Fuel savings from routing efficiency 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> • Reduction of 3 FTE for 1 year @\$40,00 (\$120,000) • Fuel savings from routing efficiency 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> • Reduction of 3 FTE for 1 year @\$40,00 (\$120,000) • Fuel savings from routing efficiency

Table 4: Implementation Table for Recycling Collection Modifications

FY 2012 – 2013	FY 2013 - 2014	FY 2014 - 2015	FY 2015 - 2016	FY 2016 - 2017
Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism
<ul style="list-style-type: none"> 4 rear loader trucks utilizing 3-man crews 	<ul style="list-style-type: none"> 3 rear loader trucks utilizing 3-man crews 2 single operator automated trucks Note: 2 automated trucks to be in service effective January 2014 	<ul style="list-style-type: none"> 3 rear loader trucks utilizing 3-man crews 2 single-operator automated trucks 	<ul style="list-style-type: none"> 1 rear loader truck utilizing 3-man crew 4 single-operator automated trucks Note: 2 automated trucks to be in service effective January 2015 	<ul style="list-style-type: none"> 2- 2-person side loader trucks 3 single-operator automated trucks Note – 1 2-person side loader automated truck to be in service effective July 2016
Personnel	Personnel	Personnel	Personnel	Personnel
<ul style="list-style-type: none"> 4 Crew Leaders (Drivers) 8 Refuse Collectors 	<ul style="list-style-type: none"> 5 Crew Leaders (Drivers) 6 Refuse Collectors 	<ul style="list-style-type: none"> 5 Crew Leaders (Drivers) 6 Refuse Collectors 	<ul style="list-style-type: none"> 5 Crew Leaders (Drivers) 2 Refuse Collectors 	<ul style="list-style-type: none"> 5 Crew Leaders (Drivers) 2 Refuse Collectors
Action	Action	Action	Action	Action
<ul style="list-style-type: none"> Issue RFP and accept formal bids for 2 single operator automated trucks (January 2013) Apply for State Recycling roll out cart grant (\$75,000) Issue RFP and accept formal bids for assembly and delivery of 17,000 recycling carts (65-gallon) (delivery prior to July 2013) 	<ul style="list-style-type: none"> Implement automated routes Reduction of 2 Refuse Collectors and addition of one Crew Leader 	<ul style="list-style-type: none"> Issue RFP and accept formal bids for 2 single-operator automated trucks (January 2014) 	<ul style="list-style-type: none"> Issue RFP and accept formal bids for 2 automated 2-person crew side-loader trucks (June 2015) 1 single-operator automated truck to be backup 	<ul style="list-style-type: none"> None
Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact
<u>Anticipated Costs</u> <ul style="list-style-type: none"> Purchase, assemble and delivery of 17,000 recycling carts (\$890,000) Purchase of 2 automated trucks (\$520,000) 	<u>Anticipated Costs</u> <ul style="list-style-type: none"> None 	<u>Anticipated Costs</u> <ul style="list-style-type: none"> Purchase of 2 single operator automated trucks (\$550,000) 	<u>Anticipated Costs</u> <ul style="list-style-type: none"> Purchase of 2 automated 2- person crew side loader trucks (\$550,000) 	<u>Anticipated Costs</u> <ul style="list-style-type: none"> \$ (0)
<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> City to accept cart maintenance and replacement Refuse fee adjusted for single family residences 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> Reduction of 1 FTE for ½ year @ \$40,000 per year (\$20,000) 10% fuel savings from routing efficiency Surplus 1 rear loader truck (\$7,500) 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> Reduction of 1 FTE for full year @ \$40,000 per year (\$40,000) 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> Reduction of 4 FTE for ½ year @ \$40,000 per year (\$80,000) and 1 FTE for 1 year @ \$40,000 per year (\$40,000) Surplus 2 rear loader trucks (\$15,000) 	<u>Anticipated Savings/Revenues</u> <ul style="list-style-type: none"> Reduction of 5 FTE for full year @ \$40,000 per year (\$200,000)

Table 5: Implementation Table for Yard Waste / Bulky Item Collection Modifications

FY 2012 – 2013	FY 2013 - 2014	FY 2014 - 2015	FY 2015 - 2016	FY 2016 - 2017
Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism	Collection Mechanism
<ul style="list-style-type: none"> • 7 Knuckle boom trucks utilizing 2 person-crews 	<ul style="list-style-type: none"> • 7 Knuckle boom trucks utilizing 2 person-crews 	<ul style="list-style-type: none"> • 7 Knuckle boom trucks utilizing 2-person crews 	<ul style="list-style-type: none"> • Combination of 6 rear loaders and 3 knuckle booms utilizing 2-person crews (no more than 7 vehicles in service at one time). 	<ul style="list-style-type: none"> • Combination of 6 rear loaders and 3 knuckle booms utilizing 2-person crews (no more than 7 vehicles in service at one time).
Personnel	Personnel	Personnel	Personnel	Personnel
<ul style="list-style-type: none"> • 7 Crew leaders (Drivers) • 7 Refuse Collectors 	<ul style="list-style-type: none"> • 7 Crew leaders (Drivers) • 7 Refuse Collectors 	<ul style="list-style-type: none"> • 7 Crew leaders (Drivers) • 7 Refuse Collectors 	<ul style="list-style-type: none"> • 7 Crew Leaders (Drivers) • 7 Refuse Collectors 	<ul style="list-style-type: none"> • 7 Crew Leaders (Drivers) • 7 Refuse Collectors
Action	Action	Action	Action	Action
<ul style="list-style-type: none"> • Citizen education for bagging, bundling or containerizing (BBC) yard waste (GTV, newspapers, direct mail flyers) • Set new parameters for yard waste quantities and proper preparation • Yard Waste Recycling Promotion • Encourage citizen use of biodegradable paper bags for loose yard waste collection • Use Mobile 311 system to enhance collection efficiency 	<ul style="list-style-type: none"> • Citizen education (BBC) • Incorporate residential bulky item collection within the yard waste system 	<ul style="list-style-type: none"> • Citizen education (BBC) • Use rear loaders / knuckle boom combination for collections • Yard Waste Recycling Promotion 	<ul style="list-style-type: none"> • Citizen education (BBC) • Yard Waste Recycling Promotion • Use rear loaders / knuckle boom combination for collections (Rear loaders previously designated for refuse service will be used) • Reduction in Knuckle boom trucks (4) • Implement new standards for yard waste preparation • Implement service collection fee for yard waste that is not properly prepared for rear loader collection 	<ul style="list-style-type: none"> • Citizen education (BBC) • Yard Waste Recycling Promotion
Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact	Fiscal Impact
Anticipated Costs	Anticipated Costs	Anticipated Costs	Anticipated Costs	Anticipated Costs
<ul style="list-style-type: none"> • Printed Material (\$500) 	<ul style="list-style-type: none"> • (\$0) 	<ul style="list-style-type: none"> • (\$0) 	<ul style="list-style-type: none"> • (\$0) 	<ul style="list-style-type: none"> • (\$0)
Anticipated Savings/Revenues	Anticipated Savings/Revenues	Anticipated Savings/Revenues	Anticipated Savings/Revenues	Anticipated Savings/Revenues
<ul style="list-style-type: none"> • Fuel savings by routing to specific collection points resulting from call-in for collection of bulky items 	<ul style="list-style-type: none"> • Fuel savings by routing to specific collection points 	<ul style="list-style-type: none"> • Fuel savings by routing to specific collection points 	<ul style="list-style-type: none"> • Surplus 3 Knuckle boom trucks (\$24,000) • Fuel savings by routing to specific collection points • Yard waste special collection fee 	<ul style="list-style-type: none"> • Fuel savings by routing to specific collection points • Yard waste special collection fee

Note: The anticipated costs provided in Tables 2-5, above, do not include costs associated with increased vehicle rents to be paid to the Vehicle Replacement Fund.

Section VII: Employee Transition Plan

Automated sanitation collection utilizes technology to provide greater efficiency to the collection process. As such, changing from a manual collection process to an automated / semi-automated collection process will result in the Sanitation Division needing 24 fewer Refuse Collectors over the next five years (See Section VI, herein). Recognizing that the City organization's greatest asset is its human capital / employees, staff has evaluated how best to address this proposed reduction in staffing.

Staff has reviewed historic personnel trends for employees of the Sanitation Division and for other positions requiring similar skill sets to Refuse Collectors. Staff has also reviewed the division's personnel service records to identify those employees with the requisite combination of years of service and age to qualify for retirement. Based on this analysis, staff estimates that the following opportunities will exist to address the proposed reduction in staffing:

1. Full Retirement

Staff estimates that **four** sanitation employees will retire with full benefits over the next five years. This estimate includes Refuse Collector, Crew Leader I, and Crew Leader II positions.

2. Early Retirement

Staff estimates that **six** sanitation employees will take early retirement with the incentive plan outlined in Appendix C of this report. This estimate assumes that 50% of those eligible for early retirement will do so with the proposed incentive plan. This estimate includes Refuse Collector, Crew Leader I, and Crew Leader II positions.

3. Resignation or Dismissal

It is estimated that **three** sanitation employees will resign or be dismissed from City employment over the next five years. This estimate includes Refuse Collector, Crew Leader I, and Crew Leader II positions.

4. Reassignment to other City Positions

It is estimated that there will be the opportunity to reassign **eight** sanitation employees to other vacant City positions over the next five years. This estimate includes Refuse Collector, Crew Leader I, and Crew Leader II positions.

5. Freezing Vacant Positions

The Sanitation Division currently has **three** Refuse Collector positions unfilled. These positions will remain unfilled to assist in implementing the proposed reduction in staffing.

The approach outlined above would accommodate all 24 Refuse Collectors without any being terminated due to personnel reductions; however, there is no guarantee that:

- Those eligible for full retirement will do so;
- Those eligible for early retirement will utilize the proposed incentive and do so;
- Attrition within the division and for other positions requiring similar skill sets will continue at historic rates.

As such, it is recognized that a Reduction in Force Procedure is needed to outline the process and benefits to be provided to any employees that, through no fault of their own, cannot be accommodated as described above.

Section VIII: Fiscal Analysis

The greatest costs associated with transitioning to an automated / semi-automated collection system comes in the form of vehicles. Automated / semi-automated vehicles cost approximately \$260,000 each. Rear loader trucks traditionally utilized for single family refuse and recycling collection cost approximately \$145,000 each.

The plan to transition to an automated / semi-automated collection system is based on a five-year implementation schedule; however, fleet modifications will occur over eight-years to accommodate the purchase of back-up vehicles. The difference between the budgeted contributions to the Vehicle Replacement Fund over the eight-year period and the increased cost of the modified fleet totals \$1,353,845. Staff recommends that the Vehicle Replacement Fund cover this deficit as it has sufficient funds to do so with a current balance of \$7.2 million, has increased fund balance each year since it was created in 2007, and includes an initial General Fund contribution of \$2.5 million. This is a one-time contribution from the Vehicle Replacement Fund as future Sanitation Fund budgets will be adjusted to pay the increased “rent” for the more expensive vehicles.

While the transition to an automated / semi-automated collection system will provide greater efficiency and lead to cost savings, it will not, in and of itself, balance the Sanitation Fund. Tables 7, 8 and 9, below, depict financial projections for the Sanitation Fund through FY 2020 under three different scenarios. Table 7 projections assume no changes in service delivery and no rate increases. Table 8 projections assume no changes in service delivery, but with rate increases as depicted in Table 6, below. Table 9 projections assume implementation of the service delivery modifications proposed by this plan with the rate increases as depicted in Table 6, below.

Table 6. Proposed Rate Increases Through 2020

Fiscal Year	Proposed Rate Increase	% Increase (Based on Basic and Multi-Family)	Proposed Monthly Rate
2014	\$1.25	10.6%	\$13.00
2015	\$1.00	7.7%	\$14.00
2016	\$.75	5.4%	\$14.75
2017	\$.50	3.4%	\$15.25
2018	\$.50	3.3%	\$15.75

Fiscal Year	Proposed Rate Increase	% Increase (Based on Basic and Multi-Family)	Proposed Monthly Rate
2019	\$.50	3.2%	\$16.25
2020	\$.50	3.1%	\$16.75

* FY 13 monthly rate is \$11.75 for basic (curbside) and multi-family customers.

Table 7. Sanitation Fund Financial Projections Through 2020: No Changes in Service Delivery and No Rate Increases

SANITATION FUND REVENUE HISTORY AND PROJECTIONS
No Change in Process/No Fee Increases

	2012	2013	2013 (Updated)	2014	2015	2016	2017	2018	2019	2020
	ACTUAL	ADJUSTED BUDGET	No new trucks	ADJUSTED PLAN	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS
TOTAL REVENUES	5,789,597	7,335,212	7,039,231	6,441,622	5,993,686	5,866,273	5,861,364	5,909,243	5,947,656	5,996,099
Operating-	6,214,703	6,926,678	7,067,950	7,317,405	7,615,799	7,937,127	8,262,880	8,561,570	8,867,540	9,213,577
Capital Improvement-	192,593	303,614	303,614	320,000	-	-	-	-	-	-
Transfer Out (Debt/Others)-	226,686	104,920	104,920	104,920	-	-	-	-	-	-
TOTAL EXPENSE	\$6,633,982	\$7,335,212	\$ 7,476,484	\$ 7,742,325	\$ 7,615,799	\$ 7,937,127	\$ 8,262,880	\$ 8,561,570	\$ 8,867,540	\$ 9,213,577
Total Annual Net (Loss)/Income	\$ (844,384)	\$ -	\$ (437,253)	\$ (1,300,702)	\$ (1,622,112)	\$ (2,070,854)	\$ (2,401,516)	\$ (2,652,328)	\$ (2,919,884)	\$ (3,217,479)
Total Cumulative Net (Loss)/Income	\$ (214,522)		(651,775)	(1,952,478)	(3,574,590)	(5,645,444)	(8,046,960)	(10,699,288)	(13,619,172)	(16,836,651)

Table 7, above, demonstrates that the continued use of the current collection system with no rate increases would result in increasing large annual deficits from FY 14 – FY 20, with a FY 20 net loss of \$3.2 million and a total cumulative fund loss of \$16.8 million.

Table 8. Sanitation Fund Financial Projections Through 2020: No Changes in Service Delivery, but Including Proposed Rate Increases

SANITATION FUND REVENUE HISTORY AND PROJECTIONS

No Change in Process

Fee Increase: \$1.25 FY 2014, \$1 FY 2015, \$.75 FY 2016, \$.50 thereafter

	2012	2013	2013 (updated)	2014	2015	2016	2017	2018	2019	2020
	ACTUAL	ADJUSTED BUDGET	No new trucks	ADJUSTED PLAN	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS
TOTAL REVENUES	5,789,597	7,335,212	7,039,231	7,014,071	7,032,135	7,261,654	7,502,006	7,798,906	8,090,100	8,395,137
Operating-	6,214,703	6,926,678	7,067,950	7,317,405	7,615,799	7,937,127	8,262,880	8,561,570	8,867,540	9,213,577
Capital Improvement-	192,593	303,614	303,614	320,000	-	-	-	-	-	-
Transfer Out (Debt/Others)-	226,686	104,920	104,920	104,920	-	-	-	-	-	-
TOTAL EXPENSE	\$6,633,982	\$7,335,212	\$ 7,476,484	\$ 7,742,325	\$ 7,615,799	\$ 7,937,127	\$ 8,262,880	\$ 8,561,570	\$ 8,867,540	\$ 9,213,577
Total Annual Net (Loss) /Income	\$ (844,384)	\$ -	\$ (437,253)	\$ (728,253)	\$ (583,664)	\$ (675,472)	\$ (760,874)	\$ (762,665)	\$ (777,440)	\$ (818,440)
Total Cumulative Net (Loss)/Income	\$ (214,522)		(651,775)	(1,380,029)	(1,963,692)	(2,639,165)	(3,400,039)	(4,162,704)	(4,940,144)	(5,758,584)

Table 8, above, demonstrates that the continued use of the current collection system with rate increases as proposed herein would result in annual deficits each year from FY 14 – FY 20, with a FY 20 net loss of \$818,440 and a total cumulative fund loss of \$5.7 million.

Table 9. Sanitation Fund Financial Projections Through 2020: Includes Implementation of Proposed Service Delivery Modifications

SANITATION FUND REVENUE HISTORY AND PROJECTIONS

Fee Increase: \$1.25 FY 2014, \$1 FY 2015, \$.75 FY 2016, \$.50 thereafter

	2012	2013	2013 (updated)	2014	2015	2016	2017	2018	2019	2020
	ACTUAL	ADJUSTED BUDGET	If Side Loader Plan is worked	ADJUSTED PLAN	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS	PROJECTIONS
TOTAL REVENUES	5,789,597	7,335,212	7,039,231	7,027,402	6,979,882	7,221,240	7,430,183	7,723,793	8,020,131	8,323,769
Operating	6,214,703	6,926,678	6,951,655	6,921,714	6,945,893	6,987,307	7,128,809	7,351,119	7,562,726	7,876,600
Capital Improvement -	192,593	303,614	379,500	175,000	-	-	-	-	-	-
Transfer Out (Debt/Others)-	226,686	104,920	207,763	310,606	205,686	205,686	205,686	205,686	205,686	102,843
TOTAL EXPENSE	6,633,982	7,335,212	7,538,918	7,407,320	7,151,579	7,192,993	7,334,495	7,556,805	7,768,412	7,979,443
<i>Total Annual Net (Loss)/Income</i>	\$ (844,384)	\$ -	\$ (499,687)	\$ (379,918)	\$ (171,697)	\$ 28,247	\$ 95,688	\$ 166,988	\$ 251,719	\$ 344,326
<i>Total Cumulative Net (Loss)/Income</i>	\$ (214,522)		\$ (714,209)	\$ (1,094,127)	\$ (1,265,824)	\$ (1,237,578)	\$ (1,141,890)	\$ (974,901)	\$ (723,183)	\$ (378,857)

Table 9, above, demonstrates the recommended combination of service delivery modifications and rate increases. This projection would result in manageable deficits in FY 14 and FY 15, but then increasing positive net income through FY 20. It is anticipated that the cumulative fund balance would be positive beginning FY 21.

Potential Opportunities

It should be noted that other communities that pay tipping fees at landfills have decreased costs by encouraging and /or incentivizing recycling. Based upon this model, increased recycling leads to less waste being sent to the landfills, resulting in less tipping fees paid by the cities. In some instances, the cities can even receive revenues from their recycling partners based upon the volume of recyclable material transferred.

Staff has recently communicated with a company that specializes in these types of initiatives called Waste Zero. While staff is very interested in having this firm provide additional information regarding potential costs savings and revenue producing opportunities, it should be understood that these opportunities will be limited unless Pitt County and/or ECVC, the City's depositories for refuse and recycling materials, modify their current arrangements with the City (i.e. the City does not pay tipping fees at the landfill because the County bills all County

households directly for this service and ECVC does not pay the City for the volume of recyclable materials transferred to their facility).

APPENDIX A: Performance and Cost Comparison Data from North Carolina Local Government Performance Measurement Project (i.e. Benchmarking Study)

Greenville, like many other North Carolina municipalities, is continually looking for ways to improve efficiency and effectiveness related to the delivery of municipal services. To this end, the city has participated in the North Carolina Local Government Performance Measurement Project over the past several years. As part of this collaborative project with the UNC School of Government and 13 other municipalities, performance and costs data for multiple municipal service have been compiled.

Portions of the data provided in the project’s most recent report, including data for fiscal year 2010 – 2011, are summarized below. This data provides the opportunity for quantitative comparisons of performance measures associated with residential refuse collection, household recycling, and yard waste / leaf collection.

Table 1. Benchmark Community Profiles

City or Town	City / Town 2010 Census Population	State Population Rank	County / Primary County
Apex	37,486	22	Wake
Asheville	83,393	11	Buncombe
Burlington	49,963	17	Alamance and Guilford
Cary	135,234	7	Wake
Charlotte	731,424	1	Mecklenburg
Concord	79,066	12	Cabarrus
Greensboro	269,666	3	Guilford
Greenville	84,554	10	Pitt
Hickory	40,010	21	Catawba
High Point	104,371	9	Guilford
Salisbury	33,663	24	Rowan
Wilmington	106,476	8	New Hanover
Wilson	49,167	18	Wilson
Winston-Salem	229,617	4	Forsyth

Table 2: Residential Refuse Collection Data

City or Town	Normal Coll. Location	Coll. Pts	Tons Collected	Weekly Routes	% Contracted	Crew Size	City FTE Positions	Packers	Automated Trucks
Apex	Curbside	11,432	11,580	13	100%	Contracted	N/A	N/A	N/A
Asheville	Curbside	29,150	23,734	33	0%	1&3 person	13.5	1	7
Burlington	Curbside	17,854	13,285	27	0%	1&2 person	8.9	1	5
Cary	Curbside	43,637	30,562	48	0%	1&4 person	29	2	10
Charlotte	Curbside	211,613	172,111	310	0%	1&2 person	77	7	55
Concord	Curbside	27,676	23,757	38	100%	Contracted	1.9	(Contracted) 8	N/A
Greensboro	Curbside	80,251	55,698	86	0%	1&2 person	26.17	3	23
Greenville	Curbside & BY	17,431	28,287	32	0%	3 person	27	8	0
Hickory	Curbside	12,100	9,306	15	0%	1&2 person	4.25	2	3
High Point	Curbside	35,544	25,490	38	0%	1&3 person	26	1.5	8
Salisbury	Curbside	10,817	9,320	15	0%	1&2 person	10	7	0
Wilmington	Curbside	28,371	28,834	36	0%	2&3 person	34	13	0
Wilson	Curbside	17,900	18,545	17	0%	1&3 person	11	2	5
Winston-Salem	Curbside	76,064	50,269	128	0%	3 person	96	29	3

Table 2 Notes:

1. Data provided for FY 2010 – 2011.
2. Data includes regularly scheduled collection of household refuse from residential premises and other locations, including small businesses, using containers small enough that residents and/or workers can move or lift them manually. The service excludes collection of waste from dumpsters. Transportation of refuse to a landfill or transfer station is included, but the disposal of refuse and tipping costs are excluded.

Figure 1. Tons Collected per Collection Point

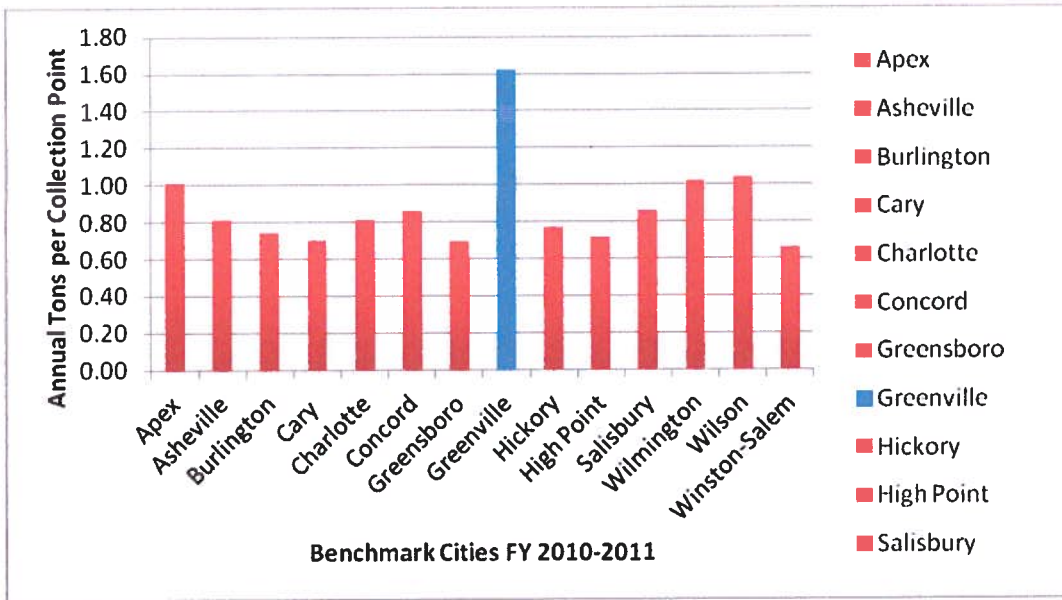


Figure 2. Collection Points per FTE

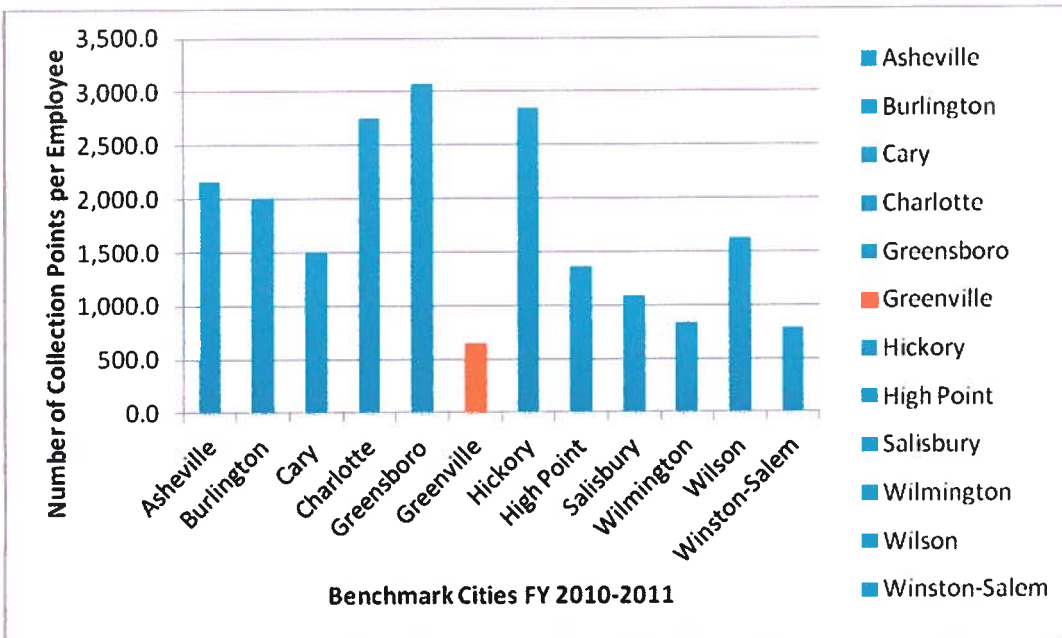


Table 3. Household Recycling Collection Data

City or Town	Collection Frequency	Sorted at curb	Collection Points	Tons Collected	% waste diverted from landfill	% Contracted	FTE Positions
Apex	1 x week	No	12,082	3,634	24%	100%	0
Asheville	1 x 2 weeks	Yes	27,597	6,662	22%	98%	0
Burlington	1 x 2 weeks	Yes	17,854	2,084	14%	99%	0
Cary	1 x 2 weeks	Yes	44,754	11,154	27%	0%	12
Charlotte	1 x 2 weeks	Yes	207,738	41,770	20%	100%	0
Concord	1 x week	No	27,676	3,579	13%	100%	1.5
Greensboro	1 x 2 weeks	No	80,251	18,269	25%	0%	15
Greenville	1 x week	No	17,431	3,599	11%	0%	15
Hickory	1 x week	Yes	12,100	1,787	16%	70%	0.5
High Point	1 x 2 weeks	No	35,544	8,816	26%	0%	3
Salisbury	1 x week	Yes	10,427	929	9%	100%	0
Wilmington	1 x week	No	16,974	5,253	15%	0%	10.25
Wilson	1 x week	No	19,900	1,468	7%	0%	6
Winston-Salem	1 x week	Yes	76,064	10,947	18%	100%	0

Table 3 Notes:

1. Data provided for FY 2010 – 2011.
2. Data includes both curbside collection and processing of household recyclable materials from residences and other drop-off locations. The service excludes collection of commercial recycling.

Figure 3. Percentage of Waste Diverted from Landfill by Recycling Collection

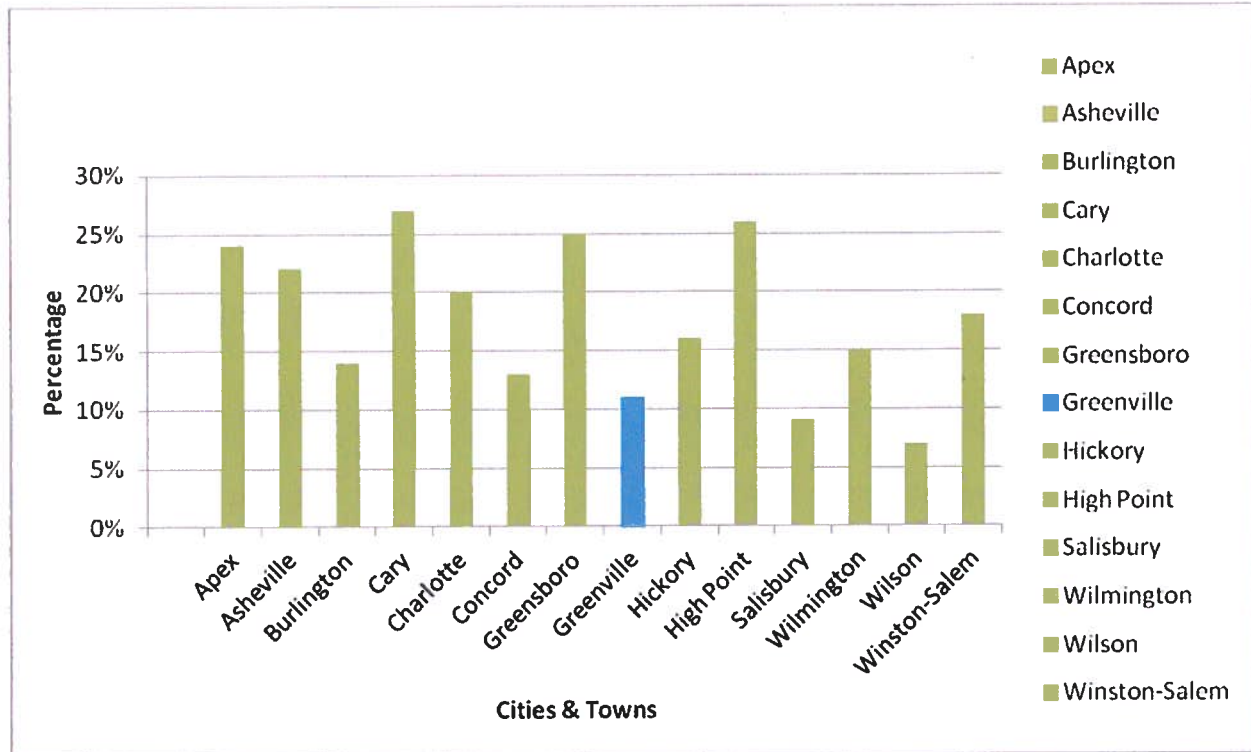


Table 4. Yard Waste / Leaf Collection Data

City or Town	Yard Waste Collection		Seasonal Loose Leaf Collection	Collection Points	Tons Collected		FTE Positions
	Location	Frequency			Yard Waste	Loose Leaves	
Apex	Curbside	1 x week	NA	11,337	4,944	NA	10.25
Asheville	Curbside	2 x month	2 sweeps	29,150	6,364	2,502	17.8
Burlington	Curbside	1 x week	4 sweeps	17,854	5,292	2,998	14.32
Cary	Curbside	1 x week	2 sweeps	43,637	13,394	3,160	26.9
Charlotte	Curbside	1 x week	NA	207,738	51,503	NA	77
Concord	Curbside	1 x week	3 sweeps	27,676	6,489	1,767	24.6
Greensboro	Curbside	1 x week	2 sweeps	80,251	15,568	9,306	41.2
Greenville	Curbside	1 x week	1 x week	20,000	21,000		20.75
Hickory	Curbside	1 x week	2 sweeps	12,100	3,522	2,903	9.75
High Point	Curbside	1 x week	2 sweeps	35,544	5,407	1,700	15.5
Salisbury	Curbside	1 x week	1 x 3 weeks	12,000	4,650	4,890	7
Wilmington	Curbside	1 x week	NA	27,583	11,598	NA	21.6
Wilson	Curbside	1 x week	1 x 3 weeks	19,900	6,958	1,435	15.5
Winston-Salem	Curbside	1 x week	Yard Waste Cart 1 x week; Brush every 10 days	14,040 for yard waste cart; 76,064 for other	23,544	13,450	84.96

Table 4 Notes:

1. Data provided for FY 2010 – 2011.
2. Data includes both regularly scheduled and special collection of yard waste and leaves. Yard waste and leaves may be bagged, placed in containers, or loose.
3. City of Greenville data related to tons collected is provided for combined collection (yard waste and loose leaves). Separate data on tons collected is not available.

APPENDIX B: Survey of Refuse Fees from Select Cities (November 2012)

Municipality	Rate / Frequency	Collection Method	Recycling Rate / Frequency	Yard Waste Rate / Frequency	Bulky Items Rate / Frequency	Enterprise / Subsidized
Pitt County:						
Greenville	\$11.75/month Collected weekly	Semi-automated Manual	Included Collected weekly	Included Collected weekly	Included Collected weekly	Enterprise, but subsidized by GF
Ayden	\$11.50/month Collected weekly	Semi-automated	Included Collected weekly	Included Collected weekly	Included Collected weekly	Subsidized by GF
Farmville (contracts w/Waste Ind)	\$18.00/month Collected weekly	Semi-automated	Included Collected bi-weekly	N/C (if fits in cart) Collected weekly	\$15 1 st load \$50 2 nd load pre-pay; call schedule	Subsidized by GF
Winterville (contracts w/Waste Ind)	\$11.50/month per container / weekly	Semi-automated	Included Collected weekly	Included Collected weekly	Included Collected weekly	Subsidized by GF
Eastern NC:						
Goldsboro	\$22.00/month Collected weekly	Automated	Included (mandatory) Collected bi-weekly	Included Collected bi-weekly	\$5: up to 3 items \$10: 4 to 6 items Call to schedule	
Kinston	\$22.50/month Collected weekly	Automated	Included Collected monthly	Included Collected weekly	Included Collected weekly	100% Enterprise
Rocky Mount	\$9.75/month Collected weekly	Semi-automated	\$2.25(SF) \$1.25(MF) Collected bi-weekly	Included Collected weekly	Included Collected weekly	Subsidized by GF
Wilson	\$17.50/month Collected weekly	Automated	Included Collected weekly	Included Collected weekly	Included Call to schedule	Subsidized by GF
Other NC Towns:						
Asheville	N/C (taxes) Collected weekly	Automated	\$3.50/month Collected bi-weekly	Included Collected 2x month	Included Call to schedule	General Fund
Burlington	\$3.71/month Collected weekly	Automated	\$2.29/month Collected bi-weekly	Included <3cu yds Collected weekly	Included <3cu yds Collected weekly	Subsidized by GF
Cary	\$14.00/month Collected weekly	Automated	Included Collected bi-weekly	Included Collected weekly	\$13 1 st item \$7 ea adtl. item Call to schedule	Subsidized by GF
Gastonia	\$4.00/cart/month (max 4 carts) Collected weekly	Automated	Included Collected bi-weekly	Included Collected weekly	\$15 < 99 lbs. \$25 > 100 lbs. Call to schedule	General Fund
Hickory	\$14.00/month Collected weekly	Automated	Included Collected weekly	Included Collected weekly	Included Collected weekly	General Fund and Enterprise

APPENDIX C: Draft Voluntary Early Retirement Incentive Program

PURPOSE

The purpose of the Early Retirement Incentive Program is to provide a retirement incentive to eligible employees who are eligible to retire under the North Carolina Local Governmental Employees' Retirement System (LGERS) with either unreduced or reduced service retirement benefits.

This Program is completely **voluntary**. Eligible employees will not be coerced or pressured to retire or to take advantage of this benefit. Employees with concerns relating to this process are encouraged to contact the Director of Human Resources.

PROCEDURE

Eligibility Requirements:

To be eligible for the Voluntary Early Retirement Incentive Program, participants must meet all requirements listed below:

- Be a regular, full-time employee in the job classification of Refuse Collector, Sanitation Crew Leader I, or Sanitation Crew Leader II;
- Meet the qualifications for service retirement (unreduced benefits) or early retirement (reduced benefits) under the LGERS;
- Elect to retire under the LGERS with an effective date of no later than August 1, 2013;
- Complete and sign the election and release form and submit to the Human Resources Department by May 1, 2013. Eligible employees who voluntarily elect to participate in the Program are required to execute and submit the election and release form to the Human Resources Department and have seven calendar days to revoke their election and release and withdraw from the Program, resulting in the eligible employee not being qualified for program incentive;
- Make an appointment and meet with Human Resources before April 1, 2013 to complete the LGERS retirement application.

Eligibility Requirements under LGERS:

To qualify for service retirement (unreduced benefits) under LGERS, local government general employees must have:

- Attained at least age 65 and completed at least 5 years of creditable service,
- Attained at least age 60 and completed at least 25 years of creditable service, or
- Completed 30 years of creditable service, at any age.

To qualify for early retirement (reduced benefits) under LGERS, local government general employees must have:

- Attained at least age 50 and completed 20 years of creditable service, or
- Attained at least age 60 and completed 5 years of creditable service.

Creditable service determination may include current accumulated sick leave and other service which is allowed as creditable service under LGERS such as time purchased/carried from prior system employment and purchase of military service credit.

Program Incentive:

Eligible employees who are eligible to retire under the LGERS and elect to retire with an effective date of no later than August 1, 2013 shall receive a one-time lump sum payment of \$20,000. The lump-sum payment will be paid as a separate check within thirty (30) days following the effective date of retirement and will be subject to normal statutory deductions. Such payment will not be considered in the final compensation amount used for the calculation of retirement benefits as LGERS rules do not allow this type of lump sum payment to be included in the benefits calculation formula to increase monthly retirement benefits.

Payment for accrued vacation and longevity will be handled in accordance with City policy and procedures and will be in addition to the lump sum payment. Eligible employees who retire under this Program will be eligible for group health and hospitalization insurance in accordance with applicable City policy.

Other Provisions:

- Employees will be given at least 45 days written notice of the program prior to the deadline to submit an election and release form.
- Employees are advised and encouraged to consult with their private attorney and/or financial consultant before participating in this Program and signing the form. This Program does not set a maximum age limit for participation, nor are any incentives based upon age.
- This Program does not alter any benefits or requirements of the LGERS.
- Participating retiring employees will not be eligible for rehire into regular, full-time positions with the City.
- This Program may be modified or terminated by the City at any time. In the event of a modification or termination of this Program, existing agreements with participants will be honored.