



REPORT TO THE CITY COUNCIL BY THE CITY INTERNAL AUDITOR

AUDIT OF THE PUBLIC WORKS DEPARTMENT, SOLID WASTE DIVISION - RECYCLING SERVICES

INTERNAL AUDIT REPORT (IAR) 090117-01

May 16, 2017

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Report Highlights	Page(s)
• No specific benchmarks or performance measures in agreement for recycling services.	9
• Goal of diverting 20%-30% from landfill was not met – only 8% recycled.	12
• Saved \$185,205 by recycling 8% of waste.	13
• 78% of survey respondents were satisfied with recycling program, but citizens desire more recycling education and better customer service.	14



The Council
City of Shreveport

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May 16, 2017

Councilman James Flurry
Chairman, Shreveport City Council

Dear Councilman Flurry:

Subject: IAR 090117-01 – Audit of the Public Works Department, Solid Waste Division -
Recycling Services

Attached please find the report mentioned above. Management comments are included in the report.

Sincerely,

Leanis L. Steward, CPA, CIA
City Internal Auditor

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EXECUTIVE SUMMARY
AUDIT OF THE PUBLIC WORKS DEPARTMENT, SOLID WASTE
DIVISION - RECYCLING SERVICES
INTERNAL AUDIT REPORT (IAR) 090117-01

Why We Did This Audit

We have completed an audit of the Recycling Services provided to the residents of the City of Shreveport. It was one of our regularly scheduled audits included in the 2015 Annual Audit Plan developed by the City Internal Auditor. Our objective was to determine if the Recycling Services was operating efficiently and effectively in accordance with the "Agreement for City Services between the City of Shreveport, Louisiana and Pratt Paper (LA), LLC."

What We Recommended

To improve efficiency and effectiveness we recommend the City:

- Suggest to Pratt other means of continuously educating the public regarding recycling.
- Add a link to direct citizens from the City's website to the recycling program website "Just Curb It" that provides more details about recycling.
- For future agreements:
 - Ensure that audit clause provisions are included
 - Include specific benchmarks or performance measures to promote and increase participation in recycling, and methods of verification
 - Ensure the date of disposal fee change coincides with the date of fee changes from the Landfill Operator
 - Specify the schedule of recycle collection

Performance Audit:
Public Works Department, Solid
Waste Division – Recycling
Services

What We Found

In August 2008, the City launched its "Just Curb It" recycling program in phases. The City's goal was and still is to divert 20% - 30% of the City's waste from the landfill. We found that since 2010 (the first complete year of recorded recyclable tons) the percentage diverted has averaged 8%. In 2015, approximately 6,636 (8%) tons were collected from recycle carts and 79,558 (92%) tons of residential waste (collected from residents by Solid Waste Division) were landfilled. Waste sent to the landfill was down 9% in 2015 compared to 2010. We have identified the following issues that should be improved to enhance the recycling services:

- **Additional methods not being used for continuous education of public about recycling.**
- **No link to direct citizens from City's website to the recycling program website, "Just Curb It."**
- **No audit clause in agreement as required by Code of Ordinance Sec. 26-217.**
- **Lack of specific benchmarks or performance measures in agreement.**
- **Difference in effective date of disposal fee changes.**
- **Lack of specification of schedule of recycle collection in agreement.**

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Introduction

The “Agreement for City Services between the City of Shreveport, Louisiana, and Pratt Paper (LA), LLC” was entered into on October 8, 2007, and will expire in 2017. The purpose of the agreement was for the City to provide curbside recycling services to the citizens of Shreveport. Pratt Paper (Pratt) would be responsible for collecting recyclables (either through a third party or through its own vehicles and employees) from citizens that receive garbage pickup through the City of Shreveport’s Solid Waste Division. Pratt utilizes a third party, Republic Services, to collect recyclables. The agreement describes the responsibilities of Pratt for picking up recyclables as well as providing education programs and public service announcements to try to increase participation in recycling. The Solid Waste Division is responsible for the management of the agreement to ensure the City’s residents are receiving the services spelled out in the contract.

The curbside recycling program “**Just Curb It**” was launched in phases starting during the second half of 2008. In January 2011, the City started charging customers a \$2.50 monthly service fee on their water bills for collection of recyclables in accordance with the City Code of Ordinance Sec 74-31. The recycle fees collected are paid to Pratt which are then paid to Republic Services. The curbside recycling program is single-stream. This allows the residents to place all accepted recyclables in their blue recycle cart, provided by the City, without having to separate the different types of recyclables. The residents are to place their recycle cart at the curb for pick up on the same day as trash collection. **Exhibit A** displays the items that can and cannot be placed in the blue recycle cart.

Exhibit A Recyclable Items	
Yes	No
Newspaper	Food Waste
Corrugated Boxes	Yard Waste
Cardboard	Furniture
Magazines	Appliances
Office Paper	Tires
Telephone Books	Toys
Shopping Catalogs	Automobile Parts
Aluminum Cans	Garden Hoses
Steel Cans	Paint Buckets
Plastic Drink Bottles	Batteries
Plastic Milk Jugs and Juice Boxes	Construction Materials
Washing Detergent Bottles	Aerosol Spray Cans
Glass Bottles	Wood
Mail	Rocks, Bricks, Dirt

Source: City of Shreveport Recycling Website.



Recommendation Evaluation Risk Criteria

The chart below summarizes the recommendations outlined in the report and our evaluation of risk for the recommendations. We evaluated the importance of each audit recommendation by assigning each a level of risk. The risk levels, as defined in the chart below, were determined based on the possible results for the entity if the recommendation is not implemented. This report contains two findings with six recommendations.

<i>Risk Levels</i>	<i>Recommendations</i>
<p style="text-align: center;">High Risk</p> <p>Possibility of fraud, waste, and abuse of City assets; Interrupted and/or disrupted operations; Entity's mission not being met; Adverse publicity.</p>	<p>None</p>
<p style="text-align: center;">Medium Risk</p> <p>Possibility of continuing, significant operating inefficiencies and high-level non-compliance issues.</p>	<ul style="list-style-type: none"> ➤ Suggest to Pratt other means of continuously educating the public regarding recycling. (Finding: Contract Provisions) ➤ Add a link to direct citizens from the City's website to the recycling program website "Just Curb It". (Finding: Contract Provisions) ➤ Ensure audit clause provisions are included in future agreements for recycling services. (Finding: Opportunities for Improvement to Contract) ➤ Include specific benchmarks/performance measures to promote and increase participation in recycling, and methods of verification in future agreements for recycling services. (Finding: Opportunities for Improvement to Contract) ➤ Ensure the date of disposal fee change coincides with the date of fee changes from the Landfill Operator in future agreements for recycling services. (Finding: Opportunities for Improvement to Contract) ➤ Specify the schedule of recycle collection in future agreements for recycling services. (Finding: Opportunities for Improvement to Contract)
<p style="text-align: center;">Low Risk</p> <p>Possibility of continuing operating inefficiencies and some low-level non-compliance issues.</p>	<p>None</p>



Scope and Methodology

The scope of this audit was limited to the agreement with Pratt Paper for the curbside recycling services. The period reviewed was January 2015 - July 2016. To answer our objectives, we reviewed relevant internal controls and developed audit procedures that included but were not limited to the following:

- Interviewing Solid Waste Division staff
- Reviewing compliance with selected provisions of the agreement
- Reviewing performance and financial reports
- Reviewing City Ordinances
- Reviewing the Electronic Data Processing (EDP) systems
- Conducting survey of recycling services

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings, conclusions, and recommendations based on our audit objectives.

The Internal Audit Office expresses appreciation to the management and personnel of the Public Works Department for their cooperation and assistance provided during the audit.





FINDINGS AND RECOMMENDATIONS



Objective: Determine Compliance with selected provisions of City's agreement with Pratt Paper

Contract Provisions

Currently, the City has a 10-year agreement with Pratt to collect recyclables and educate and provide public service announcements about recycling. The agreement was entered into on October 8, 2007, with the right to and option to extend the contract for 10-year terms. We selected significant provisions from the agreement to determine compliance. The provisions reviewed are listed below:

Pratt Responsibilities:

- "Provide weekly curbside collection services of recyclables either through utilization of a third party or through its own vehicles and employees...";
- "Provide educational programs and public service announcements to try to increase participation levels in the collection program at Pratt Paper's cost and expense."

City Responsibilities: "Provide at least forty-eight (48) gallon roll-out containers for each collection point and will maintain containers during the life of this agreement..."

Charges:

- "Up to one hundred (100) tons per day of the acceptable sludge waste stream ... shall be accepted at no cost to Pratt."
- "Residues from the curbside collection program after separation and removal of all recyclable material will be accepted for disposal at no cost to Pratt Paper."
- "The City will pay Pratt \$2.50 per account per month for Pratt Paper's weekly collection of recyclables..."

It appeared that the provisions reviewed were being complied with, for the most part, by the City and Pratt. However, we noted that although Pratt had produced public service announcements, particularly in the early phases of the recycling program; and, they offer tours of the recycling facilities to schools and the public, there is room for improvement to educate the public. The City has a link to the recycling program, "Just Curb It," website on the City's Solid Waste Division webpage that provides more details about recycling. However, there is no link on the Recycling section webpage. **<Auditor Note: The lid of the recycle cart states what can and cannot be placed in the recycle cart.>**

To ensure compliance with the agreement and potentially increase participation in recycling and the amount recycled, the following are recommended:

Recommendation 1: Management should suggest to Pratt other means of continuously educating the public such as: presenting and/or providing educational materials/pamphlets at schools, libraries, recreation centers, Neighborhood/Homeowner



Association meetings and community events; educational billboards throughout the City; radio advertisements; and, attach on the recycle cart the collection schedule and who to contact for recycle pick up. By continuing to educate and increase participation in the recycling program, the City, through its contract with Pratt, may further reap the benefits of recycling, such as saving energy and resources.

Management Response: Management is in complete agreement with these recommendations. However, it is unclear who the next contractor will be. The contract with Pratt, which ends in October will not be renewed.

Due Date: 6 to 12 Months

Recommendation 2: The City should add a link to the “Just Curb It” website on the Solid Waste Division – Recycling Section webpage that provides more details about recycling, pick up schedules, frequently asked questions, and contact information.

Management Response: Management has added a link to the “Just curb It” on the Solid Waste website under recycling. A request has been sent to IT to have the link added to the Recycling Section Webpage.

Due Date: 6 to 12 Months

Opportunities for Improvement to Contract

In reviewing the agreement between the City and Pratt we also identified the following weaknesses and opportunities where it could or should be improved:

Audit Clause

There was no audit clause in the recycling contract as required by city ordinance.

Code Ordinance Sec. 26-217 “Specifications and requirements on city contracts to include audit clauses” states:

(a)

The following provisions shall be included in every written contract to which the city is a party:

(1)

A requirement that the contractor maintain financial records pertaining to all matters relative to the contract in accordance with standard accounting principles and procedures and retain all of its records and support documentation applicable to the contract for a period of three years, except that records that are subject to audit findings shall be retained for three years after such findings have been resolved, and

(2)

A requirement that the contractor permit the audit by the city or its designated representative of all its records relative to the contract at any time upon such notice as specified therein.



Without the audit clause the City may not be able to audit records of the contractor and the agreement is not in compliance with the ordinance.

Recommendation 3: Ensure that provisions stated in Code of Ordinance Sec. 26-217 are included in future agreements for recycling services.

Management Response: Management concurs with this recommendation. If there is a future agreement, this will be addressed.

Due Date: 6 to 12 Months

Benchmarks/Performance Measures

Solid Waste Division's goal is to divert 20% - 30% of waste from the landfill due to recycling efforts.

The contract requires Pratt to educate the public via educational programs and public service announcements to promote and increase participation in the recycle program that could result in an increase in the amount of recyclables collected.

However, the contract does not contain specific benchmarks/performance measures or goals such as diversion rate (percentage of waste diverted from landfill), participation rate, or number of missed pickups.

Also, the amount recycled from the city residents' recycle carts is not accounted for separately. Therefore, it is impossible to determine how much of the recyclables collected are actually recycled. < **Auditor Note:** *Currently recyclable materials collected from multiple sources are dumped into one pile and recycled together at the material recycling facility.*>

Performance measures are necessary to determine if goals are being met and to evaluate success of the program.

Recommendation 4: Include in future agreements for recycling services specific benchmarks/performance measures or goals and methods of verification to promote and increase participation in the recycle program and the amount of recyclables collected.

Possible performance measures and methods of verification that could be included in the agreement are listed below:



Performance Measures

- Recycling tonnage goals or Target diversion percentage
- Tons recycled from collection of city residents' recycle carts (will require the contractor to track city residents' recyclables separately)
- Number of educational programs/presentations and public service announcements
- Distribution of educational materials
- Participation rate
- Number of missed pickups
- Contamination rate

Methods of Verification

- Submission of periodic reports to the City
- Monitoring of pickup routes by the City

Management Response: Management concurs with these recommendations. If there is a future agreement, this will be addressed.

Due Date: 6 to 12 Months

Landfill Disposal

According to the contract with Pratt, the City agreed to provide water and sewer service and landfill disposal. Pratt agreed to utilize and pay for the services and fees in accordance with the conditions of the agreement.

The contract states in Section VI. Charges (c) (iv) Beginning April 1, 2008 and every April thereafter, Landfill disposal fees will increase (or decrease)..."

The increase (decrease) in disposal fee to Pratt is every **April 1**; however, the change in disposal rate to the City is every **January 1** per contract with Republic Services, Landfill Operator. This difference in timing can cause the City to either lose or profit on behalf of Pratt. For example, on January 1, 2015, Republic Services, Landfill Operator, increased the disposal rate charged to the City from \$21.44 to \$21.65 to dispose of Pratt Waste. The City could not charge the new rate (\$21.65) to Pratt until April 1. Therefore, for three months the City had to pay the difference of \$.21 per ton to dispose of Pratt's Waste. The total the City had to pay was \$4,672 for January to March.

Recommendation 5: In future agreements for recycling services, ensure the date of disposal fee change coincides with the date of fee changes from the Landfill Operator. This will at least allow the City to breakeven when disposing of the recycling contractor's waste.



Management Response: Management agrees with these recommendations.

Due Date: 1 Year or More

Recycle Collection Schedule

One of the top complaints from customers is missed pickups or inconsistently following the collection schedule. (Refer to Customer Complaints section of the report).

The contract between Pratt and the City states in Section V. "Curbside Recycling Provisions" (a), "Pratt Paper will provide weekly curbside collection services of recyclables either through utilization of a third party or through its own vehicles and employees." Although recyclables are to be collected the same day as regular trash, the contract does not specify the schedule of recycle collection.

Recommendation 6: Specify in future agreements for recycling services the schedule of recycle collection (i.e., the same day as regular trash collection, Mon., Tues. etc; Holiday Schedule, etc.).

Management Response: This has been corrected. Recycling collection does occur on the same days as garbage collection, including the holiday schedule changes. If there is a future agreement, this will be addressed.

Due Date: 1 Year or More





Objective: Determine the benefits and costs of recycling to the City

A significant benefit of recycling is the reduction of trash being sent to landfills. Solid Waste's goal is to divert 20% - 30% of waste from the City's landfill by recycling. Since year 2010 the amount of waste diverted has averaged **8%**. *<Auditor Note: Pratt does not track the tonnage recycled only the tonnage collected in the recycle carts.>*

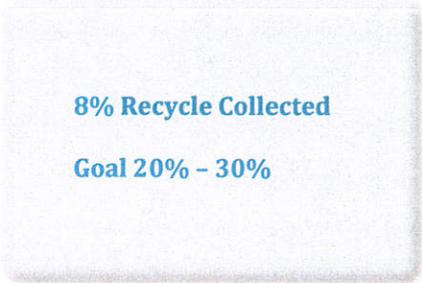


Exhibit B reflects total operational activity with Pratt resulted in a net gain for the City. However, \$2.1 million in revenue was forgone by discounts for Landfill Disposal Fees (\$1.76 million) and Water and Sewer Charges (\$.36 million). Excluding discounted rates and fees for water and sewer services and landfill disposal authorized by the contract with Pratt, revenues (disposal fees and water and sewer revenues from Pratt) exceeded expenses (recycling collection cost and disposal cost) of recycling by **\$959,205**.

Exhibit B					
Year 2015 Revenue and Cost of Recycling					
Description	Amount				
	Recycle Fee (\$2.50) from Water & Sewer Customers	City Paid to Pratt	Pratt Paid to City	City Paid to Landfill Contractor	Revenue (Cost) to City
Recycling Collection Fee	\$1,600,000	\$1,600,000			\$0
Pratt Landfill Disposal Fees			\$2,200,000	\$2,200,000	\$0
Pratt Water and Sewer Revenue			\$1,400,000		\$1,400,000
Disposal Cost for Pratt Waste <i>(Free 100 tons per day)</i>				\$626,000	(\$626,000)
Net Gain to City					\$774,000
Savings in disposal fees from Recycling <i>(See Exhibit C)</i>					\$185,205
Total Net Gain to City					\$959,205
<i>Source: City of Shreveport Enquesta Water Billing System, Logos, and WasteWorks System Note: Does not include the \$2.1 million forgone to discounts described above and numbers have been rounded.</i>					



As illustrated in **Exhibit C**, the City saved **\$185,205** in disposal fees by recycling in 2015. The more trash that is recycled instead of landfilled, the more the City can save in landfill costs, and those savings can be used to fulfill or provide other needs of the City.

Exhibit C
Year 2015 Savings to City by Recycling

Description	Tons	Disposal Fees Paid	Disposal Fees would have paid if no trash was recycled	Savings to City
Residential Trash Landfilled	79,558	\$2,220,476	\$2,220,476	\$0.00
Residential Recycle Collected	6,636	\$0.00	\$185,205	\$185,205
Total	86,194	\$2,220,476	\$2,405,681	\$185,205

Source: Calculated using information from COS Landfill WasteWorks system and Pratt's "Shreveport Curbside Tons" report.
Note: "Shreveport Curbside Tons" report was not audited.





Objective: Determine the effectiveness of the recycling services

To determine how effective the recycling services have been, we conducted an online survey of residents' satisfaction with the Curbside Recycling Services. In addition to the survey, we reviewed data on customer requests/complaints, the change in tons recycled, and tons landfilled from 2010 to 2015.

Survey Responses

We received **225** responses to the survey. Although this is a low response rate of **less than 1% of households**, results of the survey show that **85%** of respondents participate in recycling and **15%** do not currently participate.

The survey reflected **78%** were very or somewhat satisfied, **8%** were neutral, and **14%** were not satisfied. The survey questions and statistics are located in the **Appendix**.

Survey Results

225 Responses
85% Participate
15% Do Not Participate
78% Satisfied
8% Neutral
14% Not satisfied

Exhibit D

Top 5 Reasons for Not Participating in Recycling

- Not sure what items can be recycled
- Recycle not picked up timely
- Sorting items takes too much time
- Do not know schedule for recycle pick up
- Do not have a blue recycle cart

The top five reasons given for not participating are listed in **Exhibit D**.

Comments and suggestions provided by customers to improve the recycling services primarily relate to education and customer service. **Exhibit E** summarizes the customers' comments and suggestions.



Exhibit E	
Summary of Customers' Comments and Suggestions	
Education	Customer Service
<ul style="list-style-type: none"> • Provide contact information on recycle cart. • Educate about what can and cannot be recycled, and guidelines for placing cart on the curb, preferably on the recycle cart. • Educate how recycling is beneficial to the environment, the residents of the City, and the City of Shreveport. • Provide notification of regular and holiday recycle pick up schedule to each household. • Provide progress report of effectiveness of recycling program. 	<ul style="list-style-type: none"> • Provide consistent service – follow pick up schedule. • Clean up debris left after emptying recycle cart. • Replace cart in safe location after emptying. (Do not place cart in driveway or street. Place on curb with right side up and lid closed.) • No charge for recycle collection. • Provide additional and/or replacement recycle cart.

Source: Survey responses

Customer Complaints

The review of the customer complaints regarding recycling recorded in the City's Web QA system (Citizen Request Management system) showed that in 2015 the largest requests/complaints were for Missed Pick Ups, Damaged Carts, and Missed Backdoor Pick Ups as displayed in **Exhibit F**. Four of the five complaints were primarily due to the service provided by the third party (Republic Services) that Pratt contracts with to collect recyclables. Requests for carts are the responsibility of the City Solid Waste Division.

Exhibit F	
2015 Top 5 Requests/Complaints	
Request/Complaint	Number Received
Missed Pick Ups	3983
Damaged Carts	789
Missed Backdoor Pick Ups	438
Need a cart	415
Collection Reminder	119

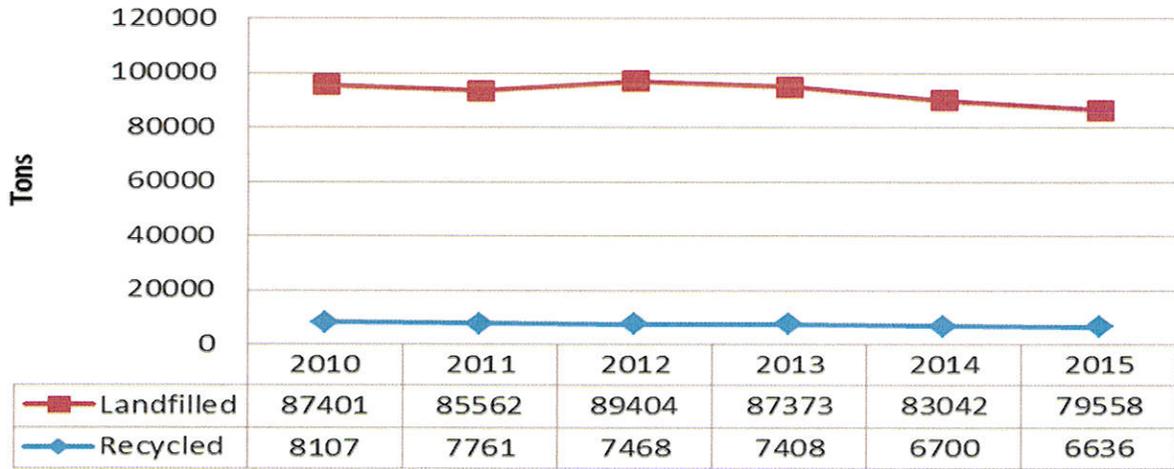
Source: WebQA

Recycled vs. Landfilled

The comparison of recycle collected and trash landfilled (only residential trash collected by City) from 2010 to 2015 revealed that recycling efforts have been declining and an average of 8% of trash is collected as recycle. See the Recycled vs. Landfilled chart below.



Recycled vs. Landfilled



Source: City of Shreveport Landfill - Waste Works System report and Pratt's "Shreveport Curbside Tons" report.

Note: Numbers have been rounded.

The recycling efforts appear to have had little or no effect on the landfill. The useful life of the landfill has been extended based on revised technical calculations that are unrelated to recycling efforts, which have made little impact on the useful life.

In conclusion, recycling efforts improve the environment by reducing pollution caused by waste and decreasing the amount of waste sent to the landfill. The City's goal is to divert 20%-30% of waste from landfill by recycling. The actual results are 8% was recycled. To increase recycling participation, we emphasize the City suggest to Pratt the need to better inform and educate the public about the benefits of recycling. Additionally, any future recycling contracts should be strengthened to add provisions that specify performance measures and verification methods.

Prepared by:

Tamika Ford

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Approved by:

Leanis L. Steward
 Leanis L. Steward, CPA, CIA
 City Internal Auditor



IAR 090117-01
March 29, 2017

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c: City Council
Clerk of Council
Mayor
Chief Administrative Officer
Carr Riggs and Ingram
City Attorney
Director of Public Works



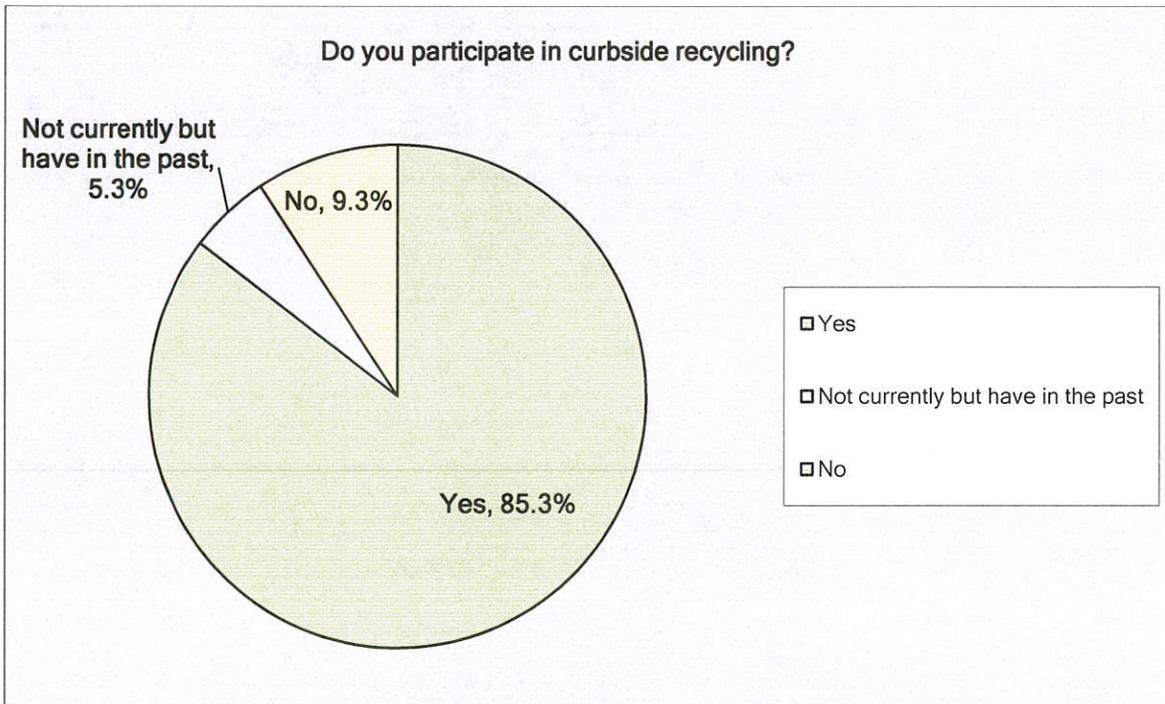
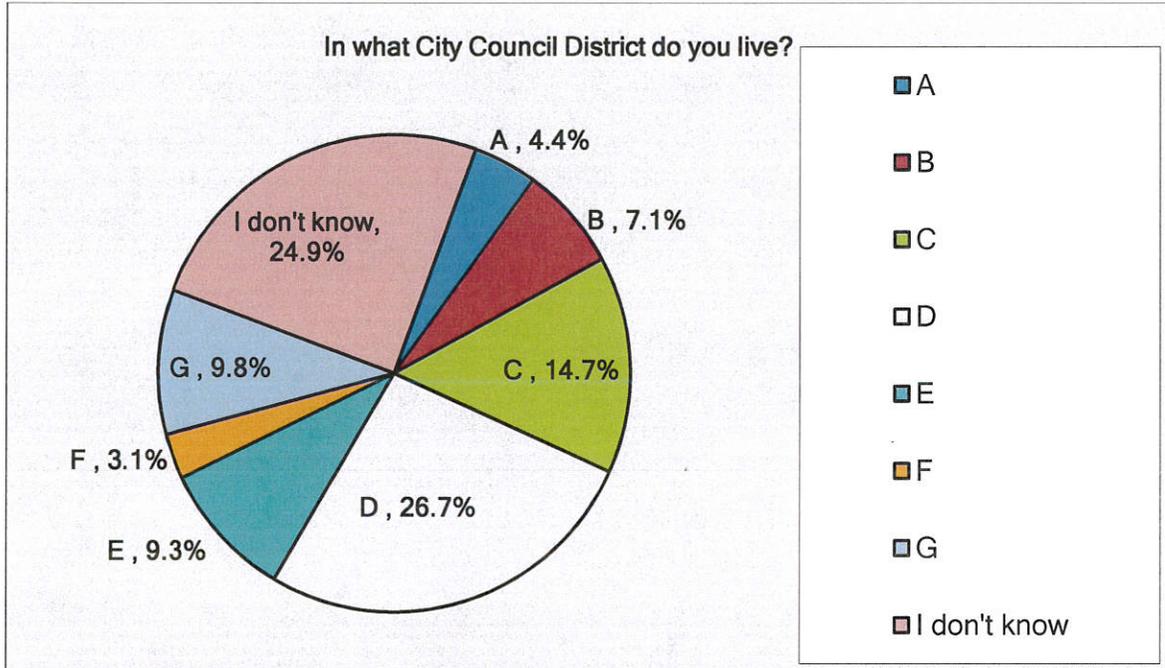
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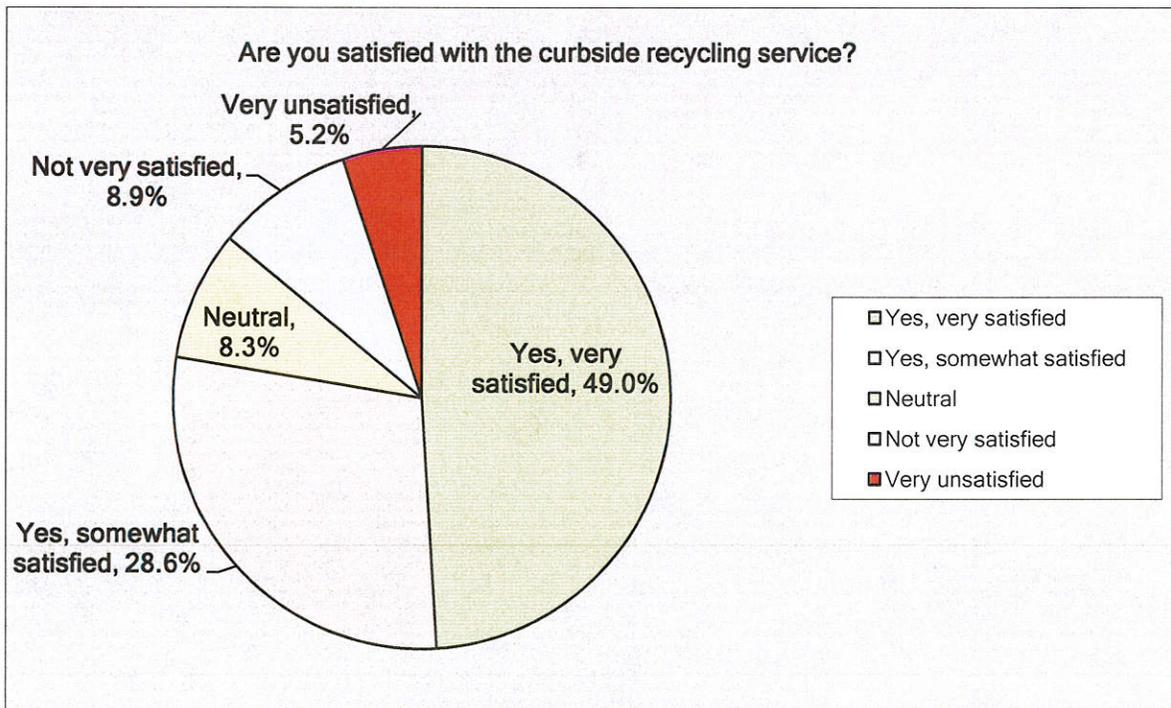
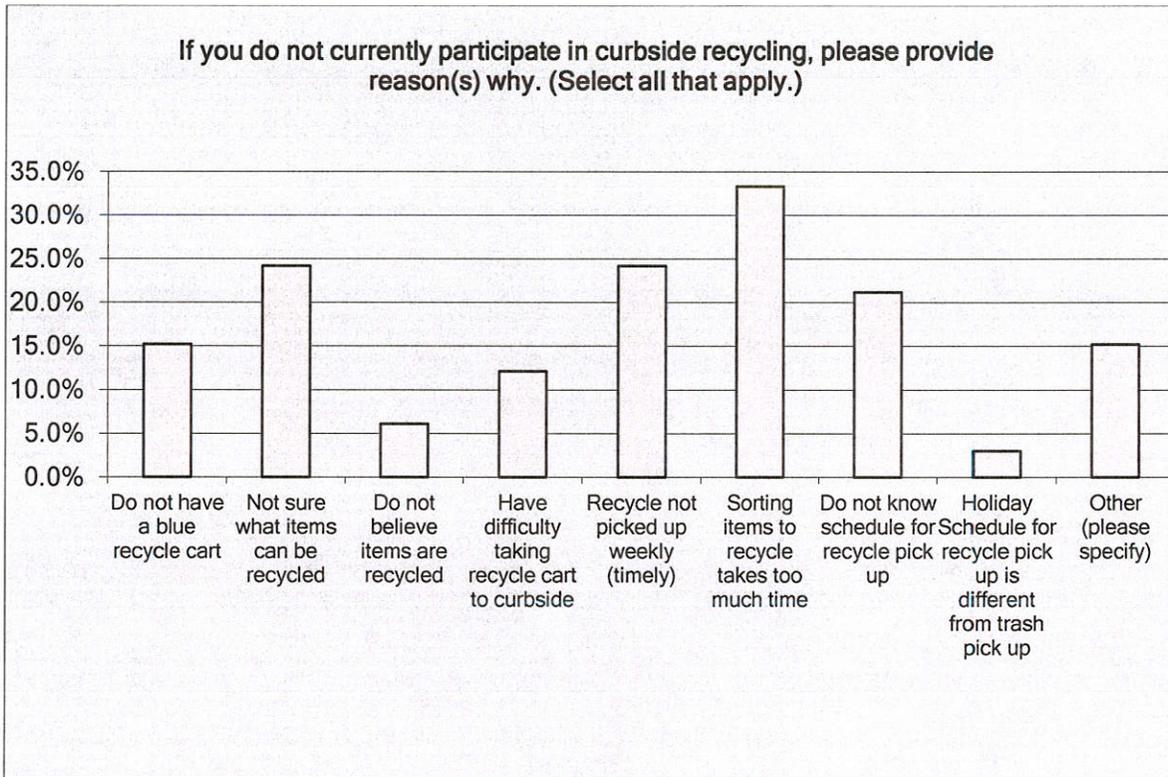
APPENDIX

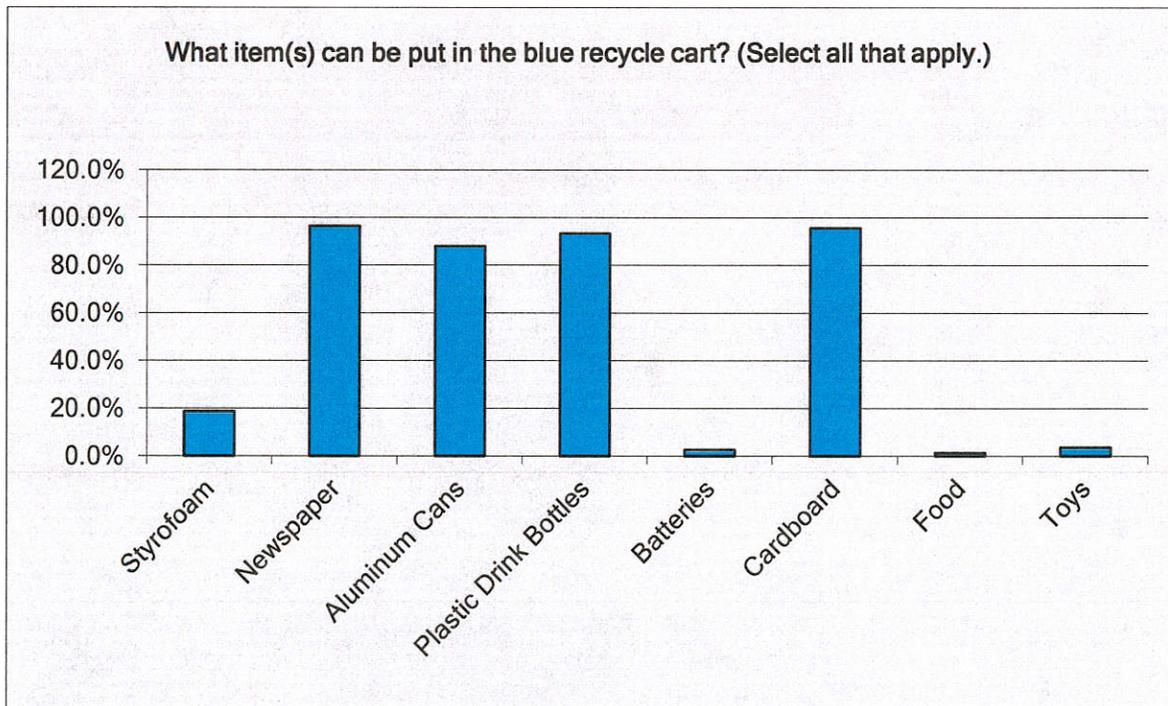
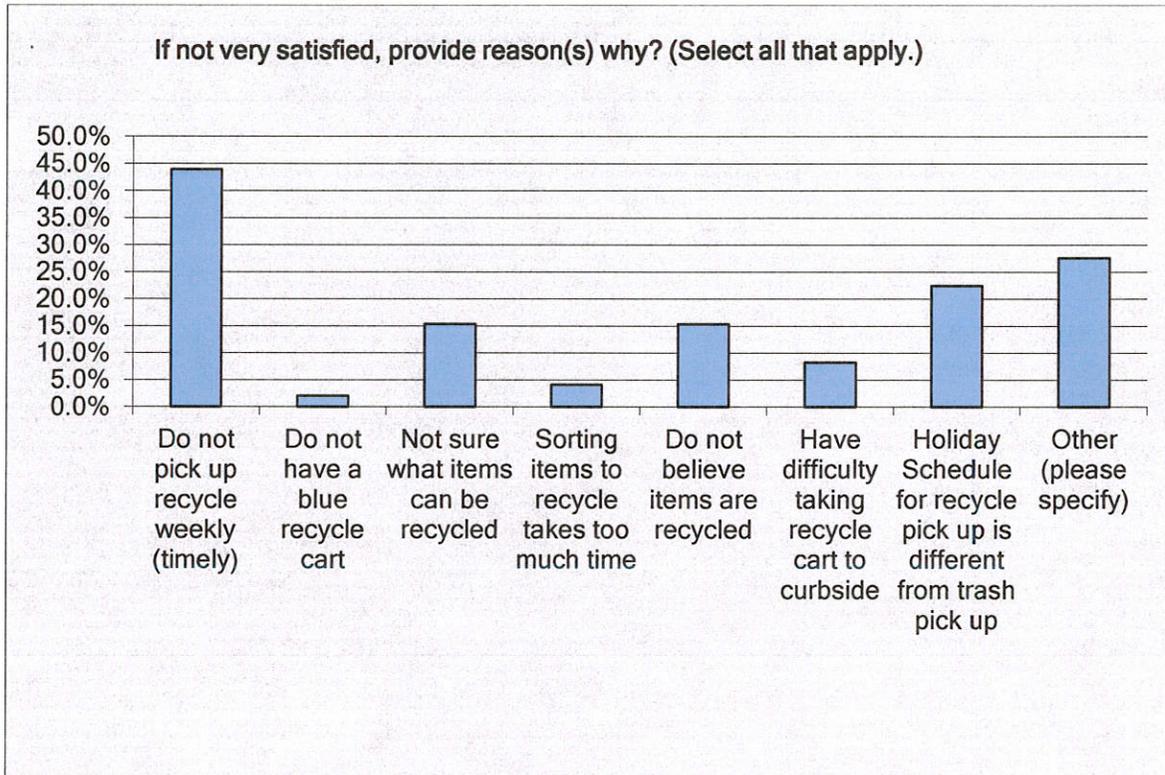


Survey Questions and Statistics

The survey was advertised by way of the City's website, notification on water bills, and email and/or mail to neighborhood associations that provided their contact information to the Metropolitan Planning Commission or City Council Office, and posted in City office buildings.









Who should you call when

Answer Options	City of Shreveport Solid Waste	Pratt	Both	Don't Know	Response Count
You need recycling picked up	64	51	19	91	225
You need a recycle cart	96	33	10	86	225
You have a question about what can be recycled	67	51	21	86	225
Your recycle was not picked up because it had prohibited (wrong) items in it	58	42	16	109	225
You need to know recycle pick up schedule	82	38	22	83	225

